

UNIVERSITY OF OXFORD



**LAND RIGHTS, TENURE SECURITY AND
SUSTAINABLE LAND USE IN RURAL GHANA**



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SCHOOL OF GEOGRAPHY AND THE ENVIRONMENT

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of Doctor of Philosophy in Geography and the Environment**

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DECLARATION

I confirm that this submitted thesis is wholly my own work, and that no part of my thesis has been accepted or is concurrently being submitted for any degree, diploma or certificate or other qualification in the University of Oxford or elsewhere.

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Date: October 2017

DEDICATION

I dedicate this thesis;

Firstly, to the memory of my late father David Asaaga who continually encouraged and supported me to focus on my education but never lived to see how far the Lord has brought me. The Lord knows best and I would be eternally grateful to Him for the memorable times we shared on this earth as a family and for the many sacrifices you had to make especially for my sake. May your soul continually rest in the bosom of our Lord Jesus Christ.

and

Secondly, to all farmers in Ghana who toil day in day out to feed our dear nation, Ghana.

ABSTRACT

The return to the customary or integration of customary and statutory tenure systems to continue gain currency in both contemporary policy and academic discourses on land tenure as an alternative pathway towards enhancing security of access and tenure in the sub-Saharan African context. Central to the debates are issues concerning the relevance of customary land tenure arrangements and appropriate pathways to successfully engineer the process of harmonization toward improved tenure security whilst preserving of the communitarian principles of local tenure systems. Using two case studies in rural Ghana, this study investigated the prevailing land tenure arrangements, practices and socio-political dynamics that underpin them, highlighting the challenges and opportunities that need to be addressed for the successful adaptation of customary tenure rules and institutions into the statutory system towards improved tenure security and sustainable land management. The research employed a mixture of qualitative and quantitative methods including interviews, focus group discussions and questionnaires to collate and analyse data from sampled respondents in Kakum and Ankasa in southern Ghana.

The results of the investigation revealed that contrary to the mainstream view that customary tenure arrangements are incapable of providing tenure security in the face on ongoing transformations, the perceived tenure security of respondents was generally high in the study areas. This notwithstanding, it was observed that the emerging patterns of access and control (occasioned by increasing land scarcity and commodification) have resulted in social differentiation and inequalities in land access and distribution amongst the poor and vulnerable members of the landholding groups including women and the youth. The research also showed that aside from tenure security, other important contextual factors including access to credit, modernised agricultural inputs and targeted extension service support significantly influence households' investment decisions regarding adoption of sustainable land management practices. These findings have far-reaching implications for current land tenure interventions aimed at harmonising customary and statutory tenure structures for improved tenure security and sustainable land management.

Results of the investigation were used to develop a three-phase incremental framework on formalisation of customary land rights which could serve as bespoke framework to guide the design of land tenure intervention strategies and implementation towards

addressing local tenure insecurity in the specific context of the study areas and sub-Saharan Africa generally. The major conclusion of the research is that balancing the market efficiency and social equity considerations is necessary and should be pursued under the ongoing land tenure reforms for inclusive and equitable outcomes at the local level. This derives from the fact that the existing tenurial challenges are complex and context-specific, equally requiring well-balanced and nuanced solutions to effectively address them.

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“Being confident of this very thing, that he which has begun a good work in you will perform it until the day of Jesus Christ.” (Philippians 1:6)

“The hands of Zerubbabel have laid the foundation of this house; his hands shall also finish it...” (Zechariah 4: 9)

“But as it is written, Eye hath not seen, nor ear heard, neither have entered into the heart of man, the things which God hath prepared for them that love him.” (1 Corinthians 2:9)

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LIST OF ABBREVIATIONS AND ACRONYMS

ACA	Ankasa Conservation Area
ANCOFA	Assin Young Cocoa Farmers Association
CICOL	Civil Society Coalition on Land
CLS	Customary Land Secretariats
COR	Certificate of Rights
CREMA	Community Resource Management Areas
DFID	Department for International Development
ECOLIMITS	Ecosystem Limits to Poverty Alleviation in African Forest-Agriculture Landscapes
EPA	Environmental Protection Agency
ETLR	Evolutionary Theory of Land Rights
FAO	Food and Agricultural Organisation
FGDs	Focus Group Discussions
FIG	International Federation of Surveyors
FSD	Forest Services Division
GDP	Gross Domestic Product
GEM-TRAITS	Global Ecosystem Monitoring Network
GLSS	Ghana Living Standards Survey
GNA	Ghana News Agency
GOG	Government of Ghana
GPRS	Ghana Poverty Reduction Strategy
GSIF	Ghana Strategic Investment Framework
GWD	Game and Wildlife Division
GYEEDA	Ghana Youth Employment and Entrepreneurial Development Agency
HFZ	High Forest Zone
HIPC	Highly Indebted Poor Country
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute

IIED	International Institute for Environment and Development
IITA	International Institute of Tropical Agriculture
ISSER	Institute of Statistical, Social and Economic Research
IUCN	International Union for the Conservation of Nature
KCA	Kakum Conservation Area
LAP	Land Administration Project
LEAP	Livelihood Empowerment Against Poverty
LTC	Land Tenure Center
MASLOC	Microfinance and Small Loans Centre
MEA	Millennium Ecosystem Assessment Report
MEST	Ministry of Environment, Science and Technology
MLGRD	Ministry of Local Government and Rural Development
MLNR	Ministry of Lands and Natural Resources
MIDA	Millennium Development Authority
MOFA	Ministry of Food and Agriculture
NCRC	Nature Conservation Research Centre
n. d.	Not Dated
NDPC	National Development Planning Commission
NGO	Non-Governmental Organisation
NSLMC	National Sustainable Land Management Committee
OASL	Office of the Administrator of Stool Lands
ODI	Overseas Development Institute
PNDCL	Provisional National Defence Council Law
RRA	Rapid Rural Appraisal
SIDA	Swedish International Development Agency
SLM	Sustainable Land Management
SPSS	Statistical Package for Social Sciences
TCPD	Town and Country Planning Department
UK	United Kingdom
UN	United Nations

UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
USA	United States of America
USAID	United States Agency for International Development
VLC	Village Land Committee
WCED	World Commission on Environment and Development
WRI	World Resources Institute
WWF	World Wide Fund for Nature

LIST OF STATUTES

Administration (Northern Territories) Ordinance of 1902 (Cap. 111)

Alternative Dispute Resolution Act, 2010 (Act 798)

Public Lands Ordinance, 1876 (Cap. 134)

Land and Native Rights (Northern Territories) Ordinance of 1931 (Cap. 143)

Land Planning and Soil Conservation (Amendment) Act, 1957 (No. 35)

Land Registry Act, 1962 (Act 122)

Chieftaincy Act, 1971 (Act 370)

Intestate Succession Law, Provisional National Defence Council Law, 1985 (PNDCL 111)

Land Title Registration Law, Provisional National Defence Council Law, 1986 (PNDCL 152)

National Land Policy, 1999

The Forest Ordinance No. 13 of 1927 (Cap. 157)

The Conveyancing Decree, 1973 (NRCD 175)

The Lands Act, 2016 (Draft Bill)

Town and Country Planning Ordinance, 1945 (CAP 84) (as amended)

The 1979 Constitution of Ghana

The 1992 Constitution of the Republic of Ghana

CHAPTER ONE

GENERAL INTRODUCTION

The topic of land has long been, and continues to be, central to the lives of most Africans and to the politics and economies of African countries. The debate on land tenure and reform has raged for many years and from many perspectives. Many authors and researchers have tried to play the blame game on who is really responsible for the current situation... We can't change the past. What needs to be done is that we openly and soberly look at where we stand today, and what the problems or challenges are, and what can be done to resolve them (H.E. Jerry John Rawlings, Former President of Ghana, April 2009).

1.1 Chapter Overview

This thesis is underscored by the need to find a lasting solution to the seemingly insurmountable problems of land tenure insecurity, social inequities and conflicts over land as well as natural resource degradation and decline in the wake of increasing land scarcity, advancing commoditization and individualisation of land in many rural parts of sub-Saharan Africa (SSA), including Ghana. Despite the several efforts and attempts by successive sub-Saharan African governments to address these challenges, they have continued to persist and even worsened in some SSA countries (Krantz, 2015; Amanor, 2010; Peters, 2004). Against this backdrop, recent scholarship has thus far advocated for a re-turn to customary land tenure arrangements or proposed a marriage between customary and statutory tenure as pathways towards enhancing tenure security especially for the rural poor in Ghana and SSA generally (Arko-Adjei, 2011; Adoko et al. 2011; Djokoto and Opoku, 2010; Knight, 2010; Blocher, 2006; Nkwae, 2006). Whereas there is a general recognition on the importance of harmonising these disparate systems of land administration, there seems to be no consensus on how it should be achieved especially in the Sub-Saharan African context (Krantz, 2015; Arko-Adjei, 2011; Knight, 2010). Governments in many SSA countries are currently grappling with the challenge of engineering the process of integration in a way that can provide sufficient tenure security

without disruptive consequences for the land rights of the poor and vulnerable social groups, and at the same time, preserve the communitarian principles of local tenure systems (Krantz, 2015; Arko-Adjei, 2011). A corollary of this challenge is the ongoing transformations in local tenurial relations, towards marketization, which have contributed to the erosion of customary safeguards that hitherto guaranteed security of access to land by the poor and vulnerable social groups (Garber, 2012; Kasanga and Kotey, 2001). To balance these objectives, there is a need to sufficiently understand the nature of customary tenure arrangements, institutions and the socio-political dynamics that underpin them in order to effectively design and implement appropriate intervention strategies towards enhancing security of access and tenure in the sub-region.

Consequently, the focus of this research is to investigate the alternative pathways to securing customary land rights highlighting the challenges and opportunities that need to be addressed for these alternative approaches to engender inclusive and equitable outcomes using two case studies in rural Ghana. In so doing, the thesis contributes to the complex debates about the harmonisation of the disparate customary and statutory tenure structures towards improved tenure security and sustainable land management. The remainder of this chapter elucidates the research problem for analysis, the research objectives and questions which the study addresses, and the overall outline of the thesis chapters.

1.2 Background to the Research Problem

Over the last two decades or so, the ‘good governance’ agenda has gained currency both in theory and practice within the context of contemporary natural resource management as a plausible strategy in navigating a sustainable development trajectory in the global South, particularly in sub-Saharan Africa (UNECA, 2010; FAO, 2012; Ostrom, 2012;

Byamugisha, 2013, 2016). This stance has also invariably reinvigorated debate among the developmental agenda of several sub-Saharan African governments and their international development partners, about ‘the land question’ (i.e. ownership, access and control over land and other natural resources) and its interrelationship with resource management concerns and livelihoods. Well-defined and secure property rights have been viewed as the *sine qua non*, not only for sustainable land management but broader socio-economic development and poverty reduction in sub-Saharan Africa where tenurial systems have been conflated with several challenges including tenure insecurity, social inequities, conflicts over land and unsustainable land use (Toulmin and Quan, 2000; De Soto, 2000; World Bank, 2003; Peters, 2004; Pagiola et al. 2005; Arnot et al. 2011; Byamugisha, 2013; Falk, 2016).

More recently, the rising global climate change concerns, environmental change and food insecurity issues in some parts of SSA have given additional impetus to the relevance of effectively tackling issues related to safeguarding secure access to and control of land by the rural poor in order to promote sustainable livelihoods and inclusive development. This is envisioned as a viable pathway to avert the perils of a looming environmental crisis in most rural parts of sub-Saharan Africa, including Ghana (Falk, 2016; Persha et al. 2015; Antwi-Adjei et al. 2015; GoG, 2003, 2011, 2014; World Bank, 2006; Smucker, 2002). Of particular concern is the majority of sub-Saharan Africa’s rural poor whose livelihoods are inextricably linked to secure access and use of land and other natural resources. Available statistics suggest that whereas 65-70% of sub-Saharan Africa’s total population is directly dependent on rain fed agriculture and natural resources (FAO, 2011), much of the sub-region’s remaining arable land is subject to ‘land grabs’ by foreign investors (UNECA, 2010; Deininger et al. 2011; Anseeuw et al. 2012; German et al. 2013; Kabia, 2014). Thus, in the wake of increasing land scarcity, rapid population growth, progressing

commodification and individualisation of land, the resultant effect is increasing pressure on existing land use leading to environmental degradation, including deforestation (ibid; IUCN, 2010; Kirui, 2016; Nkonya et al. 2016; Byamugisha, 2016). In fact, recent studies (e.g. IUCN, 2010; Damnyag et al. 2013) suggest that the spate of increasing land scarcity in sub-Saharan Africa has resulted in encroachment of some forest reserve areas by farmers and other land users. For instance, it is estimated that between 2000 and 2010, the total forest loss in Africa was 3.4 million hectares annually corresponding to an annual deforestation rate of 0.5% (FAO, 2010). Although there have been several efforts to promote sustainable land management (SLM) to rural smallholder farmers (as an effective pathway to combat and even reverse environmental degradation) in SSA, adoption is still strikingly low (Cordingley et al. 2015; Persha et al. 2015; Mbow et al. 2014; Insaidoo et al. 2013; FAO, 2011; World Bank, 2010).

Many prescriptions to resolve the challenges of low agricultural productivity and environmental degradation in sub-Saharan Africa hinge on re-structuring land tenure systems to guarantee equitable access, tenure security, improve productivity and investments in sustainable land management (Nkonya et al. 2016; Antwi-Adjei et al. 2015; Damnyag et al. 2012; Alden Wily, 2011). Although about 80% of sub-Saharan Africa's total land area is under the control of the customary sector (Augustinus, 2003), the customary land tenure system has often been blamed as the core bane to progressive agriculture and SLM in Africa (Nkonya et al. 2016; Hartwig and Hounghbedji, 2015; Antwi-Adjei et al. 2015; Bruce et al. 2010; Unruh, 2008; de Soto, 2000; Platteau 1996). Some early writers (e.g. Dorner, 1972; World Bank 1974; Ault and Rutman, 1979) argue that customary land tenure systems by their inherent communal nature are ill-defined and insecure impeding investment in productivity and sustainable land management. Thus, the institution of well-defined and secure tenurial structures would stimulate efficient

resource use by the lowering of land transaction costs and associated risk invariably resulting in the reallocation of land to more efficient users (Sjaastad and Bromley, 1997; IFPRI, 2012; Falk, 2016). This conceptual view of African tenurial systems has served as a basis to propel successive sub-Saharan African governments (in collaboration with western donors and the World Bank) to undertake ‘western-styled’ individualised statutory tenure as a panacea to the afore-mentioned tenurial problems (Atwood, 1990; Bruce and Migot-Adholla, 1994; Platteau, 1996; World Bank, 2003; Bromley, 2009; Udry, 2011; IFPRI, 2012).

In counter arguments, proponents of customary land tenure systems have questioned the rationale for tenure formalisation particularly in the sub-Saharan African context often labelling the foregoing criticisms as a ‘reductionist’ conceptual view of the customary land tenure systems (Okoth-Ogendo, 1994, 2000; Bruce, 1993; Migot-Adholla and Bruce 1994; Platteau, 2000; Bromley, 2009). They go on to argue that customary tenure arrangements are neither communal nor ambiguous but are flexible and dynamic allowing them to cope with socio-economic changes to permit ‘autonomous individualisation’ of land rights (Okoth-Ogendo, 1994, 2000; Platteau, 1996, 2000; Sjaastad Bromley, 1997; Kasanga and Kotey, 2001; Bromley, 2009). For instance, Okoth-Ogendo (1989, 1994) asserted that African tenurial systems were pivotal institutions through which communities ensured sustainable land management and that challenges of environmental degradation result from population growth, political and socio-economic changes which are corollaries of modernisation. These counter-arguments have gained traction within land policy circles consequently prompting the World Bank and other international development agencies to amend their land policies on Africa so as to reflect the importance of customary land tenure in sustainable livelihoods and land management (Quan, 2000; World Bank, 2003).

Against this background, much of the research on customary tenure systems in the sub-Saharan Africa context that examines land tenure security, agricultural productivity and environmental sustainability nexus have found a weak or ambiguous relationship which is altogether inconclusive (Persha et al. 2015; Lawry et al. 2014; Place, 2009). For instance, some studies (e.g. Place and Otsuka, 2002; Deininger and Ali, 2008; Mbow et al. 2014) have identified tenure insecurity as one of the principal constraints to agricultural productivity and investments in SLM practices. On the contrary, others (e.g. Migot-Adholla et al. 1991; Besley, 1995; Platteau, 1996; Jacoby and Minten, 2007) have found little or no evidence of increased investment in land or improved agricultural yields when comparing restrictive land laws to more flexible policy allowing land transfers. Some scholars (e.g. Bugri, 2008; Okoth-Ogendo, 2000) have therefore concluded that other factors other than the customary tenure is largely responsible for the poor agricultural performance and environmental management. Pagiola (1999) has argued that even if individual title under statutory land tenure does lead to tenure security, it does not necessarily follow that security of tenure would result in higher agricultural production or investments. In a more recent study, Lawry et al. (2014: 10) also concluded that “customary tenure systems in Africa may already provide a level of pre-existing tenure security to landholding groups or communities without formalisation. In effect, gains to formalisation may be more limited because tenure insecurity which formalisation seeks to remedy is often not present to the degree that designers of reform programs assume”. The current policy discourse on land tenure in sub-Saharan Africa seems to be torn between the pursuit of full-scale tenure reforms (formalisation) and the preservation of customary tenure arrangements as panacea to guaranteeing security access and tenure and by extension sustainable land management (Chimhowu and Woodhouse, 2006; Knight, 2010). Recent scholarship has navigated this dilemma by advocating for a return to the

customary tenure arrangements (Ubink, 2008; Djokoto and Opoku, 2010; Adoko et al. 2011) or a ‘marriage’ between customary and statutory tenure arrangements (Blocher, 2006; Ubink and Quan, 2008; Clarke, 2009; Knight, 2010; Arko-Adjei, 2011) in order to guarantee equitable land access and safeguard the rights of landowners and users. The underlying premise for such an adaptation is that the ills of one tenurial system would be offset by the strengths of the other thereby effectively addressing the questions of security of access and tenure and their implications for productivity, investment, livelihood security as well as general socio-economic development (Kasanga and Kotey, 2001; World Bank, 2003; Anyidoho et al. 2008; Arko-Adjei et al. 2011). Nevertheless, there is still insufficient understanding of the nature of customary land tenure institutions, the social and power relations that underpin them within their localised contexts to engender clear and appropriate pathways in order to effectuate or implement the above prescriptions. As argued by Anyidoho et al. (2008: 3), “the process of adaptation cannot happen in isolation from the historical, political and legal context; that change cannot be imposed, but must be built upon the institutional structures and processes that have evolved over time”. Cleaver (2002: 11) also concluded that the effectiveness of such [tenure] interventions is predicated on “a socially informed analysis of the content and effects of [informal] institutional arrangements rather than their form alone”. Consequently, there has been a clarion call (e.g. Mwesigye et al. 2017; Lawry et al. 2014; Cao, 2012; Appiah, 2012; Udry, 2011; Djokoto and Opoku, 2010) for an understanding of customary tenure arrangements and the social and power relations within which they are embedded in particular settings. Yet empirical research in this direction remains patchy and scant.

As a point of departure therefore, this thesis argues that to effectively design and implement appropriate intervention strategies towards secure access and tenure for

sustainable land management, it is first essential to sufficiently understand the prevailing customary tenure arrangements, practices and the socio-political dynamics that underpin them. Put differently, understanding customary land tenure institutions and their inherent socio-political dynamics in an evolving context is critical for evaluating the current and potential role of the customary in safeguarding the land rights of different social groups (particularly the poor and vulnerable including women and the youth) to proffer livelihood security and investments in sustainable land management. Peters (2013) asserts that the questions of access to and control of land rights as well as tenure security need to be considered within the purview of the social dynamics at work especially in the wake of increasing pressures on land and other natural resources. Moreover, such an understanding will serve as a basis for devising evidence-based strategies and/ or shaping the implementation of national and regional policy guidelines on land rights and security of tenure to engender both developmental and environmental benefits. It is against this background that this thesis uses an exploratory and mixed methods case-based approach to enhance understanding on the dynamics of customary land tenure arrangements, institutions, the power relations and socio-political processes that determine conditions of local people use and control of land and their implications for livelihoods and investment in sustainable land management in rural Ghana. Ghana provides an excellent case to examine the complexities of land tenure and resource-use dynamics considering: (1) the centrality of land and other natural resources to its overall socioeconomic development; (2) the current spate of tenurial and socioeconomic transformations around land and resource-use dynamics resulting in increasing land use pressure and associated conflicts in the rural forested areas, and (3) it has since 2003 embarked on a 25-year land administration reform aimed at enhancing land tenure security and efficient land administration.

1.3 Statement of Research Problem and Justification

Despite Ghana's recent socio-economic transformation (evidenced by the attainment of a lower-middle income status in 2010), the country's economy is still largely agrarian. Available statistics suggest that the agricultural sector alone contributes 20.2% of the overall Gross Domestic Product (GDP) and employs 45% of the active population (~60% of the rural labour force) in Ghana (GSS, 2012, 2016). Yet, the natural resources which provide the necessary support for rural livelihoods and economic processes are fast depleting (World Bank, 2006:1, 2012: 11; Marfo, 2010; GoG, 2010, 2011,2012). Whereas evidence on the actual extent of deforestation in Ghana is patchy, it is estimated that the country's forest cover has dwindled from 32.7% of the total land surface area in 1990 to 21.7% in 2010 with the highest percentage decline of about 26% loss occurring between 2005 and 2009 alone (Nketiah et al. 2009; GoG, 2014: 90). Recent empirical studies (e.g. Damnyag et al. 2012; GoG, 2012) have observed that the increasing pressures on land for agriculture and other developmental purposes have exacerbated the decline of forest loss with long-term negative implications for rural livelihoods, socio-economic welfare and environmental sustainability. According to the Government of Ghana (2014: 90), the cost of environmental degradation is estimated at ~10% of GDP lost annually through unsustainable management of land and other natural resources. This puts into focus the empirical validity and essence of the land question in ensuring the sustainable resource use and management given the changing social, economic and environmental conditions of the country. Available statistics suggest that majority of Ghana's land (~80% of total landholding falls under customary ownership controlled by stools, skins¹ and/ or families

¹ A stool represents the traditional symbol of authority in the southern parts Ghana. In the same vein, the skin represents the traditional symbol of authority in northern Ghana.

on behalf of and in trust for their subjects) with the remaining 20% controlled by the state (Kasanga and Kotey, 2001; Aryeetey et al., 2007).

Against this backdrop, a critical aspect of Ghana's land question and sub-Saharan Africa generally is the inherent disconnect between customary and statutory tenure systems which are poorly articulated and seem to be on a collision course (Obeng-Odoom, 2014; Knight, 2010; Agbosu et al., 2007; Kasanga and Kotey, 2001). As the tenurial system defines the conditions of access, use and control of land and its associated resources in a particular socio-political context, it also invariably underpins livelihood security and sustainable land use and management. Nonetheless, issues of inequities in access to and control of land, tenure insecurity and protracted land conflicts are characteristic of Ghana's existing tenurial regime (GoG, 1999; Whitehead and Tsikata, 2003; Seini and Tsikata, 2004; USAID, undated). Within this purview, there seem to be little consensus on the importance of customary tenure arrangements and institutions in promoting equitable land management and sustainable development in general. The ensuing debate has been dominated by the 'formalisation', 'communitarian' and 'merged/ adaptation' perspectives. Proponents of the formalisation school of thought chiefly argue that the customary tenure system is an impediment to agricultural development and sustainable land management in that it does not guarantee access to land, tenure security and equitable distribution of land resources (La Anyane, 1962; GoG, 1999; Whitehead and Tsikata, 2003; Quan and Antwi, 2008; Goldstein and Udry, 2008; USAID, undated). Indeed, there are also observations that the customary tenure institutions are not transparent and suffer from manipulation by some elites and traditional authorities to the detriment of the poor and vulnerable groups (Whitehead and Tsikata, 2003; Amanor, 2006; Ubink, 2008, 2009; Schoneveld and German, 2014).

On the contrary, advocates of the communitarian view argue that customary tenure system is not an impediment to agricultural development and sustainable land management in the sense that its inherent ‘social security’ features ensure equitable access to land to the extent that there is no landlessness as well as promotes ecological preservation (Berry, 1993, 2008; Kasanga, 1996: 2001). Supporters of this view further argue that the customary tenure arrangements are resilient and dynamic not constraining investments in sustainable land management (Abdulai and Ndekugri, 2007; Bugri, 2008; Kasanga and Kotey, 2001; Kasanga, 2002). They prescribe a decentralised approach to land management at the local level as opposed to a state-centric approach. A corollary of the on-going debate is the polarised understanding of the terminology ‘customary’ which some scholars (e.g. Peters, 2009; Ubink, 2009; Amanor, 2001) contend may be an outcome of manipulation and reinterpretation to serve the interests of the elites in society.

In light of the foregoing, empirical evidence continues to show that customary tenure arrangements are undergoing some evolutionary changes (spurred by population growth, land scarcity and changing environmental factors) towards individualisation (Kasanga and Kotey, 2001; Quisumbing et al. 2001; Yaro, 2010). Consequently, the idea of the return to the customary or integration into the statutory system of land administration as a plausible strategy to ameliorate the above weaknesses seem to be gaining currency in the land tenure policy discourse in Ghana (Djokoto and Opoku, 2010; Arko-Adjei, 2011, Bugri, 2012; USAID, undated). This stance also appears to be one of the frontline objectives of Ghana’s National Land Policy and its on-going operationalisation framework (the Land Administration Project) to harmonize the customary and statutory tenure systems (a move away from the mere recognition of customary tenure arrangements) as a way of delivering tenure security, efficient and equitable land management.

Nevertheless, as noted earlier, the critical success of such an adaptation or integration requires a systematic examination of the functioning of customary tenure institutions, the power relations and social dynamics embedded therein and its interaction with the formal statutory system within their localised contexts. In a recent diagnosis of the tenurial challenge in Ghana, Bugri (2012) underscores that “the failure in land tenure reform has been the lack of understanding of the complexity of customary tenure systems resulting in an over-simplified approach of making radical attempts at supplanting these tenure systems with western-styled (statutory) forms of tenure”. Thus, prioritising the economic aspects of tenurial reforms to the relative neglect of the socio-political processes and power relations that underpin customary tenure institutions would translate into heightening inequities in land access, conflicts and tenure insecurity of majority of the rural poor and the marginalised groups such as women and the youth (Peters, 2004; Aryeetey et al. 2007; Amanor, 2010; Ninsin, 2015). Therefore, the litmus test for the ongoing land administration reform in Ghana lies in enhancing security of access and tenure in order to engender livelihood security, productivity and environmental sustainability which at present is still elusive. Whilst recognising that there have been previous attempts at addressing the land question particularly its implications for livelihoods and agricultural development in rural Ghana (Bugri, 2008; Goldstein and Udry, 2008; Amanor, 2001: 2010; Abdulai et al. 2011; Twerefou et al. 2011), an effective solution has yet to be found and the tenurial problems still persists (GoG, 2014: 95). Besides, the lack of conceptual and policy consensus on nature of customary tenure arrangements as noted earlier, further betrays the fact that not much is known at least empirically, about these supposedly informal institutions and the socio-political dynamics that underpin them within the contemporary context (Okoth-Ogendo, 2000, Whitehead and Tsikata, 2003; Appiah, 2012; Verma, 2014). There is therefore need to better understand the specific

nature and magnitude of tenurial problems, their causes and implications for sustainable land management as well as avenues for effectively resolving them within a complex and yet evolving tenurial context. Understanding these nuances in local tenurial arrangements especially from the purview of the poor and marginalised social groups provides a valuable baseline information to inform pragmatic policy decisions towards addressing existing power asymmetries for inclusive and equitable outcomes on the ground. As Broegaard (2013:15) argues, “this remains necessary given the resource-intensive nature of reforms and the propensity of titling initiatives to facilitate land transfers from small-scale farmers to wealthier farmers causing further inequality and poverty.” Without due cognisance of the local dynamics at play on the ground, the top-down implementation of ‘exogenous’ land policy interventions may continue to address the symptoms rather than the actual causes of land tenure insecurity, social inequities and conflicts over land as aforementioned. This thesis therefore adds to the existing body of knowledge by seeking suitable avenues to successfully build on customary tenure arrangements or their integration into the statutory tenure system for improved tenure security and sustainable land management at the local level.

1.4 Research Aim and Objectives

The overarching aim of the thesis is to contribute towards a nuanced understanding on the dynamics of customary land tenure arrangements and how they determine farmers’ access, use and control of land and their implications for livelihoods and investments in sustainable land management in rural Ghana. Against the backdrop of evolving local tenurial arrangements, this thesis also contributes to identifying the challenges and opportunities for the effective harmonisation (or adaptation) of customary and statutory tenure structures to deliver security of tenure and sustainable land management in Ghana. Through a comparative case study approach of the Kakum and Ankasa conservation

areas, the study explores the evolving tenurial practices and conditions of farmers in terms of ownership, access to and control of land, conflicts, tenure security and how these conditions operate to influence or shape their investments in sustainable land management. The specific objectives of the study are to:

1. Examine the patterns of land ownership, distribution, mechanisms and processes of access to and control of land by the various social groups within the evolving local tenurial context in the study areas.
2. Determine the perceptions of different key social groups about land tenure security, the factors informing such perceptions and assess how these influence their investments in sustainable land management practices.
3. Evaluate the challenges and prospects of the changing dynamics of customary tenure arrangements in relation to enhancing security of tenure and the implications for livelihoods and sustainable land management.
4. Make appropriate suggestions towards promoting security of access and tenure and sustainable land management for sustainable development.

1.4.1 Research Questions

Following from the above research objectives, the study addresses the underlying research question: whether, how and to what extent are customary tenure arrangements and institutions able to guarantee sufficient security of access and tenure to local land users, and support for investments in sustainable land use and management?

The foregoing question is further divided into sub-research questions as follows:

1. What patterns of land ownership, distribution, and access mechanisms currently exist in the study areas, and how are these being shaped by the shifts in the local land tenurial arrangements?

2. How and to what extent are the shifting customary land tenure arrangements influencing variations in land rights among different social actors (farmers) in the study areas?
3. How do various categories of farmers perceive and define their land tenure security?
4. What are the variations and sources of tenure (in)security and how do these differentially influence farmers' investments in sustainable land use and management?
5. How and to what extent are local customary tenure institutions responding to problems of tenure insecurity and associated conflicts in the study areas, and what are the implications for promoting security of access and tenure for sustainable land management?

1.5 Structure of the Thesis

This thesis is organised as follows: Chapter Two sets out the conceptual and theoretical framework of the study. It reviews the relevant literature on customary land tenure, property rights, tenure security and sustainable land management. The chapter further reviews the theoretical and empirical arguments on the tenure security-investments nexus and the historical evolution of land tenure reforms and policies specifically focusing on developments in the sub-Saharan African context. The chapter aims to provide a theoretical background for situating the subsequent analysis of the relevant concepts in the succeeding empirical chapters of the thesis.

Chapter Three builds on the conceptual discussion in Chapter Two focussing on the nature of the land tenure system in Ghana tracing its historical evolution through three significant political epochs (precolonial, colonial and the current post-independence era) in the country's socio-political development. The chapter also analyses how the various state

interventions and policies on land tenure (including the current institutional reforms by the LAP) aimed at restructuring customary land tenure system have been implemented and the extent to which they have shaped contemporary land management in Ghana.

Chapter Four provides a detailed discussion on the specific research design and methodology applied in this study. The first section outlines the underlying philosophical foundations of the study based on which the merits of adopting a mixed methods approach to underpin the research design is elucidated. Afterwards, the adoption of an exploratory case-based approach is also justified followed by a brief discussion on the selection of the case study sites (i.e. Kakum and Ankasa) for the investigation. This chapter also describes the procedure for the field investigation including stakeholder identification and overall sampling strategy. The concluding aspects of the chapter then explains the specific approach to data gathering, analysis and reporting before presenting the methodological limitations, ethical and reflexivity considerations of the research.

Chapter 5 presents an empirical analysis on the changing patterns of land access, control and ownership arrangements in the study areas. It also examines the implications of the ongoing shifts in local tenurial arrangements for land access and control dynamics across by different social groups (including indigenes, migrants and women) in the study areas.

Chapter 6 examines the state of land tenure (in) security in the context of the study areas. It focuses on farmers' perceptions about what constitutes land tenure security, factors that promote or undermine land tenure security, and the mechanisms for protecting and securing land rights in the study areas. The chapter also discusses the extent of dynamism of local tenure institutions in providing adequate responses to problems of tenure insecurity and associated conflicts over land.

Chapter 7 builds on the empirical analysis in Chapter 6 to examine how land tenure differences (tenure security) shapes or influences households land management decision-making and pursuit of different investment strategies at the farm plot level. It also discusses the interplay of other important contextual factors that influences households' investment decisions regarding the uptake of sustainable land management practices.

Chapter 8 concludes the research. It first presents a summary of the research findings based on the key research questions outlined in Section 1.4.1 above. Afterwards, the main conclusions drawn and a review of the thesis contributions to knowledge and its implications for policy and practice are discussed. The chapter also outlines some recommendations towards improved tenure security and sustainable land management as well as avenues for future research. Table 1.1 below summarises the research objectives, the overarching aim of this thesis and associated research questions.

Table 1.1: Summary of the Research Problem, Aim, Objectives and Questions

Research Problem:	The complexities of land tenure and resource-use dynamics highlighted by tenure insecurity, social inequities in land access and unsustainable land use practices threaten long-term sustainable land resource management and livelihoods in rural Ghana.		
Research Aim:	Use an exploratory case-based approach to improve understanding on the dynamics of land tenure arrangements that determine access to and control of land, in order to contribute towards identifying the challenges and opportunities for effective adaptation of customary and statutory tenure structures to deliver tenure security and sustainable land management in rural Ghana		
Research Objectives:	RO1. Examine the patterns of land ownership, distribution, mechanisms and processes of access to and control of land by the various social groups within the evolving local tenurial context in the study areas.	RO2. Determine the perceptions of different key social groups about land tenure security, the factors informing such perceptions and assess how these influence their investments in sustainable land management practices.	RO3. Evaluate the challenges and prospects of the changing dynamics of customary tenure arrangements in relation to enhancing security of tenure and the implications for livelihoods and sustainable land management.
Research Questions:	RQ1.1 What patterns of land ownership, distribution, and access mechanisms currently exist in the study areas, and how are these being shaped by the shifts in the local land tenurial arrangements?	RQ2.1 How do various categories of farmers perceive and define their land tenure security?	RQ3.1 How and to what extent are local customary tenure institutions responding to problems of tenure insecurity and associated conflicts in the study areas, and what are the implications for promoting security of access and tenure for sustainable land management?
	RQ1.2 How and to what extent are the shifting customary land tenure arrangements influencing variations in land rights, among different social actors (farmers) in the study areas?	RQ2.2 What are the variations and sources of tenure (in)security and how do these differentially influence farmers' investments in sustainable land use and management?	

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This chapter outlines the conceptual and theoretical framework for the study by examining relevant concepts on customary land tenure systems and formalisation strategies that have been implemented in order to engender security of land rights and sustainable land management, specifically focusing on developments in the sub-Saharan African (SSA) context. As was highlighted in Chapter 1, sufficient understanding of African customary tenure institutions and the social and political dynamics underpinning them in an evolving context is necessary in the process of adaptation towards achieving greater security of tenure and sustainable land management. This chapter therefore proceeds with an overview discussion on the concept of sustainable land management (SLM) before delving into the evolution of Africa's pluralistic tenurial systems, highlighting the influence of colonialism and other contemporary factors instigating their transformation. It also discusses the theories that underpin land (tenure) reform strategies implemented to promote the security of customary land rights in Section 2.4. In addition, the various debates pertaining to formalisation strategies adopted to enhance the security of customary land rights in SSA are also analysed. Section 2.5 discusses the concept of tenure security and its operationalisation after which debates about the relationship between tenure security and farm-level investments are considered. Section 2.7 discusses tenurial dynamics and social differentiation issues by focussing on the debates about safeguarding the land rights of poor and vulnerable social groups including women, the youth and migrants in the SSA context. The final section (Section 2.8) synthesises the key conclusions from the literature review based on which a conceptual framework is developed to guide the ensuing empirical analysis. The rationale of the literature review

is essentially to provide a theoretical background for situating the subsequent analysis of the relevant concepts from the perspective of rural Ghana in the succeeding chapters of this thesis. It also sheds light on why previous formalisation strategies have failed in the SSA context.

2.2 The Concept of Sustainable Land Resource Management – An Overview

Although issues of environmental degradation are not new, unprecedented rate of resource overexploitation and depletion, climate variability and change and declining productivity caused by progressing anthropogenic land use activities (such as agriculture and mining etc.) have propelled debates on natural resource sustainability to the top of the sustainable development agenda. This is evidenced by the increasing number of international conferences, academic debates and policy initiatives aimed at mainstreaming environmental sustainability concerns into development (MEA, 2005; IPCC, 2007, 2013; FAO, 2011; UN, 2015). Sustainable land use and management (SLM) is central to these environment-development debates as it is posited as an essential prerequisite for achieving sustainable development and poverty alleviation (MEA, 2005; UN, 2015; Kabubo-Mariara and Linderhof, 2015; Nkonya et al. 2016). This is especially so in the sub-Saharan Africa context considering the growing competition over access and control of land, mounting pressure on existing land use and the dependence of livelihoods on agriculture and natural resources.

Against this backdrop, sustainable land management has been defined variously in the literature. Hurni (1997) for instance defined sustainable land management as a system of technologies and/ or planning that aims to integrate ecological with socio-economic and political principles in the management of land for agricultural and other purposes to achieve intra and intergenerational equity. According to the Liniger et al. (2011),

sustainable land management involves all those land management practices that are aimed at managing land and other natural resources to produce economic, social and ecological benefits to support livelihoods of the present and future generations. This latter definition serves as a working definition for this research. Essentially, SLM covers the three interconnected dimensions of sustainability viz. environmental, economic and social (ibid; Hurni, 1997). Ecologically, SLM focuses on the preservation of the natural environment through measures such as soil erosion control, water improvements and forest management, thereby effectively tackling environmental degradation (Cordingley et al. 2015). Socially, SLM safeguards livelihoods by ensuring equitable and secure access to land resources by different categories of land users. Economically, SLM incentivises farmers' investments in land productivity which ultimately leads to poverty reduction.

Despite SLM being widely recognised (e.g. Nyanga et al. 2016; Nkonya et al. 2016; Kirui, 2016; Kabubo-Mariara, 2006) as the best way to effectively address environmental degradation challenges, the concept is deeply contested with relatively little consensus in the development debate on how to achieve broadly accepted normative goals (cf. Cordingley et al. 2015; Mbow et al. 2014). This is reflected in the very limited uptake of SLM practices by smallholder farmers especially in sub-Saharan Africa (World Bank, 2010; Mbow et al. 2014; Cordingley et al. 2015; Nkonya et al. 2016). Evidence suggests that several factors including ecological, social, economic and political operate to constrain smallholder farmers' adoption of SLM practices (Persha et al. 2015; Mbow et al. 2014; Cordingley et al. 2015; Nkonya et al. 2016). Nonetheless, most studies have focussed on understanding the biophysical problems associated with environmental degradation such as deforestation, biodiversity loss and climate change to the relative neglect of the socioeconomic conditions influencing the process of land resource

degradation (Nkonya et al. 2016; Persha et al. 2015; Mbow et al. 2014). Socioeconomic factors influence the process of environmental degradation and by extension SLM practices as they ultimately determine farmers' decisions regarding resource allocation, access and use to achieve their livelihoods (Kabubo-Mariara, 2006; Kassie et al. 2013; Nyanga et al. 2016; Nkonya et al. 2016). Against this backdrop, there is a considerable literature on technical and institutional change in agricultural development (see, e.g. Boserup, 1965; Hayami and Ruttan 1985; Feder et al. 1985; Binswanger and Pingali, 1989; Otsuka and Runge, 2014; Otsuka and Place, 2014; Kirui, 2016) which identify several relevant factors including physical (farm-level) characteristics, technology-specific features (such as the technology availability and knowledge, technical and economic viability of the SLM technology), land tenure characteristics and farmers' socio-economic attributes as important for SLM adoption. Of particular concern to the purposes of this research however is the role of land tenure arrangements (institutions) in providing the appropriate incentives necessary for SLM adoption and livelihood security (see empirical discussion in Chapter 7). Land tenure in this context is understood as both formal and informal institutions² that define rules and conditions regarding the allocation and use of land and other natural resources (FAO, 2002). Thus, to the extent that land tenure arrangements are critical for the achievement of SLM, then it is important to better understand the role of land tenure arrangements in sustainable land management to which attention is now drawn.

² In this study, institutions are defined as the set of rules and norms designed to constrain the behaviour of individuals and groups in relation to land resource utilisation following after North (1990). To afford conceptual clarity, a distinction is made between formal and informal tenure institutions. On the one hand, tenure rules and norms which are unwritten deriving from local customs, norms and practices fall under the domain of informal customary land tenure. Conversely, tenure rules that are codified and administered by the state commonly constitute formal statutory land tenure (Agbosu et al. 2007).

2.2.1 The Role of Institutions in Sustainable Land Management

There is widespread consensus that better institutions matter for sustainable land use and management and for that matter sustainable development (Demsetz, 1967; Acemoglu and Robinson, 2012; Robinson et al. 2014). Within this purview, it is widely argued that more secure property rights (land tenure security) stimulates agricultural development and investments in sustainable land use (Besley, 1995; Goldstein and Udry, 2008; Fenske, 2011; Arnott et al. 2011; Abdulai et al. 2011; Nkonya et al. 2016). Yet it remains unclear as how appropriate institutions should be designed in order to deliver net environmental and socioeconomic benefits without leading to resource over-exploitation and depletion (cf. Persha et al. 2015). Central to these debates on an appropriate governance mechanism to addressing “the commons³” problem is the diversity and complexity of ownership, control and use arrangements which several scholars (e.g. Ostrom and Nagendra, 2006; Ostrom, 2012) have underscored as underpinning the natural resource sustainability arrangements. In this context, choices of property rights and land tenure arrangements which spell out the rules and or conditions of resource appropriation are at the heart of the decisions-making process of resource users. Whilst it is now widely accepted that there is no single one-size-fits-all approach for the sustainable resource management given the varied contextual factors at play across various spatial and temporal scales (Ostrom, 2012), two main opposing concepts have been prevalent in the literature particularly in the context of developing countries – the state (centralised) oriented and decentralised (communal) systems of natural resource management (cf. Easterly, 2008). A brief review on these approaches to sustainable land resource management is useful for two main reasons: (1) to give a broader overview understanding of the evolution of

³ According to Ostrom (2012), common pool resources include resources that are sufficiently large that excluding beneficiaries from using them for consumptive and non-consumptive purposes is non-trivial.

relevant debates to be explored within the confines of this thesis and, (2) to provide a conceptual basis that helps situate and develop the ensuing discussion on the linkages between land rights, tenure security and sustainable land use.

2.2.1.1 The Centralised Paradigm

The ‘centralised’ (top-down) approach to resource management largely derives from the earlier works of Gordon (1954), Coase (1960) and Garrett Hardin’s *Tragedy of the Commons* (1968). Using the illustration of fisheries in a similar vein as the pastoral commons in Hardin’s case, Gordon (1954) showed that unrestricted “open access” could lead to over-exploitation of the resource. Coase (1960) also argued that clear assignment of rights leads to *pareto-optimal* outcomes regardless of whom the rights were assigned (Sjaastad and Bromley, 1997). In Hardin’s seminal paper, *Tragedy of the Commons*, he observed the likelihood of over-exploitation of resources in a communal ownership setting by the collective actions of self-interested “rational” actors without any formal regulation by an external authority (Hardin, 1968). Though admitting that there is no technical solution to avert the ‘*tragedy of the commons*’, Hardin proposed a state regulatory mechanism – either a centralised governance framework and/ or privatisation – based on the presumption that local resource users are unable to “self-organise” and devise solutions (Hardin, 1968; Ostrom et al. 1999; Dietz et al. 2003). A direct consequence of these writings was private property becoming universally extolled as the only efficient property regime for achieving sustainable resource management (cf. Sjaastad and Bromley, 1997). As will be seen later, several development economists (e.g. Dorner, 1972; Johnson, 1972; Alchian and Demsetz, 1973; World Bank 1974) inspired by Hardin’s thesis have thus suggested changes to African customary tenure systems on the basis that they are ill-defined, insecure and lead to inefficient resource allocation.

Nevertheless, postmodernist understanding of resource management has debunked the above assertions as an over-simplification of the commons problem (Dasgupta, 1996; Ostrom, 1990; Ostrom et al. 1999; Dietz et al. 2003). Some property theorists (e.g. Bromley, 1989; Ostrom et al. 1999; Okoth-Ogendo, 2002; Dietz et al. 2003) have observed that the above prescriptions largely derive from the confusion of common property with open access. Ostrom et al. (1999) for instance, asserts that whereas there is the complete absence of enforced property rights in an open access regime, common property is not unregulated but have rules limiting resource use by a defined group of users. In this vein, many studies (e.g. Okoth-Ogendo, 1989, 1994, 2002; Kasanga, 1996, 2001) have underlined that land is rarely ‘open access’ in the African context as there exist local rules and norms ensured sustainable resource-use by local communities. Ostrom et al. (1999), drawing on several empirical investigations, concluded convincingly that “tragedies of the commons’ problems are real, but not inevitable”. In this light, several studies (e.g. Ostrom, 1990; Ostrom et al. 1999; Dietz et al. 2003; Easterly, 2008) have emphasised a move away from the ‘top-down’ approach to resource governance towards a more decentralised framework which revolves around the involvement of local communities and groups as a plausible agency for achieving sustainable resource management.

2.2.1.2 The Community Oriented (Bottom-Up) Paradigm

Following this, critics of the state paradigm observe that the ‘top-down’ approach coalesced with the lack of recognition of communal systems and participation of local groups in natural resource management decision-making is a major contributory factor in the unsustainable use and depletion of resources. Instead, advocates of the communal paradigm propose a move away from the presumption that a centralised approach is the best way to achieve sustainable resource management (Ostrom, 2012). At the core of their

argument is the underlying presumption that, local communities and/ or resource users have the ability “self-organise” and create local institutions for the sustainable resource management (Ostrom, 1990: 2005; Pagdee et al. 2007; Agrawal and Angelsen, 2009; Danielsen et al. 2014).

Nonetheless, other empirical case-based evaluation of the efficacy of the community-oriented model just like the state control of natural resources have also resulted in mixed outcomes. Indeed, some studies on communally managed forests have shown evidence of the unequal distribution of accrued benefits and in some cases the exclusion of poor and vulnerable community members (Ostrom, 2012). Thus, whilst some writers have endorsed wholly community-based conservation, at the same time, other analysts (e.g. Agrawal and Angelsen, 2009) caution of likely challenges arising from such a panacea oriented stance. Ostrom (2012) therefore reflects that debates over effectiveness of institutions ought to be extended to a larger landscape of tenure regimes instead of community ownership. Agrawal and Angelsen (2009) implicitly alluded to this observation by pointing out that, some salient factors including the features of the resource systems and their context, formal property rights arrangements, informal practices of use and governance and relations of power and inequality operate to determine the long-term viability of community resource management.

2.2.1.3 Towards a Co-Management Approach: The Need to Restructure Tenurial Arrangements?

Given the growing recognition that neither the ‘top-down’ nor ‘bottom-up’ approach is sufficient to guarantee sustainable resource use, contemporary debates are now geared towards the pursuit of a more decentralised and balanced governance framework within which the involvement of local resource-users is formally recognised and encouraged (Nepstad et al. 2006; Porter-Bolland et al. 2012). Within this purview, co-management is

a governance approach that affords multiple actors including local communities, government actors, the private sector (for profit) and NGOs to participate in the decision-making process (Fisher et al. 2014; Ballet et al. 2009). Theoretically, co-management approaches attempt to combine the advantages of local communities with those of the state and other allied organisations to ensure the effective management of natural resources (Ballet et al. 2009).

Nevertheless, while the involvement of local communities in the co-management process is largely relative (i.e. could range from passive participation to active participation), the devolution of some power and level of autonomy to local communities is deemed necessary for effectiveness (Agrawal, 2003; Ballet et al. 2009). As Fischer et al. (2014) rightly points out, the mere presence of interaction between government and local communities in the governance of natural resources does not necessarily imply co-management. They argue that the recognition and legitimisation of informal local level management systems is critical in balancing the dynamics of power which is often problematic in most resource governance arrangements (ibid). Although various writers (e.g. Ribot et al. 2006; Ballet et al. 2009) concur on this logic, more importantly, the absence of well-defined and secure tenure arrangements (which provides the framework for statutory recognition and legitimisation of local level involvement in the co-management process) could facilitate the opportunist behaviour of free-riders and other social inequalities leading to counter-productive outcomes.

Against this background, the debate has drifted from identifying the optimal governance model as indicated earlier, to a long-standing debate about the dynamics of reconceptualising property rights in a way that provides greater security of access and control to local stakeholders in the co-management process. This debate derives from the understanding that land tenure arrangements define the rules and conditions of use and

access to natural resources, thereby ultimately shaping the behaviour of property rights holders (Schlager and Ostrom, 1992; Luckert, 2001; Bromley, 2006). In this regard, there are still divergent views as to whether restructuring property rights is necessary to provide the needed ‘cure’ for the supposedly ill-defined and insecure customary tenure systems and by extension stimulate sustainable resource management in most developing countries. Given that land tenure and resource-use dynamics in the specific context of SSA is still poorly understood, this area of debate is central to this thesis. A more nuanced and deeper theoretical and empirical understanding of the land tenure-resource use relationship and its effects on landholders’ investment decision-making is required to understand the complexities of sustainable land management so as to inform the design and implementation of appropriate land use policy interventions. The remainder of this chapter therefore navigates away from the broader debates on sustainable land resource management to focus on the concepts of land tenure and tenure security and its interrelationship with land use with emphasis on the SSA context. It proceeds with a brief overview of the evolution of tenurial systems in sub-Saharan Africa which sets the tone for a detailed discussion on formalisation of customary land rights, operationalisation of tenure security and investment dynamics

2.3 Development and Changes in Customary Tenure Systems in SSA – An Introduction

To contextualise issues and afford better understanding of the ongoing shifts in local tenurial arrangements as well as their implications for tenure security and sustainable land use, this section discusses the historical and contemporary factors that have shaped the evolution of customary tenure arrangements in the SSA context. In doing so, the discussion also sheds light on the backdrop of the contemporary debates on the formalisation of customary land rights for improved tenure security.

Despite the several efforts and policy interventions geared towards replacing customary tenure systems with statutory tenure of landholding by colonial and post-independence governments in Africa, customary tenure continues to govern the land relations of over 90 percent of the rural population in SSA (Deininger, 2003; Cotula, 2007; Knight, 2010; Garber, 2012; Byamugisha, 2013). Available statistics suggest that only between 2 and 10 percent of rural land is held under formal freehold title in SSA (cf. Deininger, 2003: 78; Chimhowu and Woodhouse, 2006: 346). Yet recent evidence shows an increasing incidence of customary tenure systems evolving towards individualisation accelerated by growing population pressures and changing socio-economic conditions (Lund, 2000; Quisumbing et al. 2001; Chimhowu and Woodhouse, 2006; Cotula, 2007; Woodman, 2011; Otsuka and Place, 2014). While this evolution of customary tenure institutions is somewhat unsurprising directly reflecting Platteau's (1996, 2000) evolutionary thesis on land rights development in the sub-region, on the other hand; this phenomenon has raised some concerns about the long-term security of customary land rights (especially those of rural landholders) and the implications for rural livelihoods and environmental sustainability given the growing scarcity and commodification of land (Otsuka and Place, 2014). Whereas the evolutionary changes in customary tenure systems in sub-Saharan Africa were particularly pronounced from the 19th century up to the middle 20th century following the 'scramble for Africa' (Mamdani, 1999); they have continued in the post-colonial period to date. The ensuing paragraphs therefore discusses the major drivers of change contributing to the evolution of customary tenure systems in SSA specifically focussing on the role of colonisation and other contemporary drivers of change. Prior to that, Section 2.3.1 as a way of putting the discussion in context reviews the two dominant theoretical postulations (schools of thought) in relation to the development of land rights in sub-Saharan Africa as identified by Platteau (1996, 2000). A review of the major

drivers of change (historical and contemporary) and the underlying theoretical paradigms, particularly the evolutionary theory of land rights sheds light on how Africa's pluralistic tenurial arrangements have been constituted, and lays the foundation for the conceptual framework of the thesis (Section 2.8.1).

2.3.1 Characterising the Development of Property Rights in SSA – The Underlying Theoretical Paradigms

A much-debated issue concerning the rural land rights challenge particularly in Africa is the inherent disconnect between statutory and customary land tenure (Knight, 2010). Although customary tenure systems remain the dominant legal paradigm in many parts of rural Africa they have often been labelled as an impediment progressive agricultural development and sustainable land management (Platteau, 1996, 2000; Unruh, 2008; de Soto 2000). Conversely, other scholars (e.g. Okoth-Ogendo, 1994; 2000; Kasanga, 1996; 2001; Abdulai and Ndekugri, 2007) have maintained that the flexibility and resilience of customary tenure systems safeguards access to land as well as facilitates judicious use of land resources. Against this backdrop, contemporary theorists have attempted to explain the development of tenurial systems in sub-Saharan Africa often guided by two dominant theoretical postulations:

- The first school of thought deriving from the property rights theory (Demsetz, 1967) highlights the ambiguity and negotiability of customary land rights as defining features that impede investments in agricultural development and sustainable land management (Dorner, 1972; World Bank, 1974; Ault and Rutman, 1979). This conceptual view calls for a drastic alteration of customary tenure systems as the only viable option to make African tenurial systems conducive to agricultural growth and investments in sustainable land management (Platteau, 1996; 2000). Statutory intervention through land reforms and

individualised land titling or registration is thus needed to rectify the existing deficiencies in indigenous tenurial systems by providing security of tenure. This viewpoint has for several decades influenced numerous land reforms and titling programmes (spearheaded by international donor organisations and successive African governments) and recently given renewed prominence by de Soto (2000).

- In contrast, the second viewpoint highlights that African tenurial systems are not static but dynamic evolving autonomously (spontaneously) towards individualisation in the face of changing land market conditions. Advocates of this second view therefore call for the recognition and strengthening of customary tenure systems (Migot-Adholla and Bruce, 1994; Toulmin and Quan, 2000; Okoth-Ogendo, 2000; Platteau, 2000; Bromley, 2009; Cousins, 2009). These theorists emphasise the need for a decentralised as opposed to a state-centric approach to land management at the local level. This latter school of thought seems to reflect the current developments in tenurial relations in rural Ghana and SSA at large.

The ensuing sub-section therefore presents a detailed discussion of the second theoretical paradigm (the evolutionary theory of land rights (ETLR)) which is adopted for the subsequent empirical analysis. While recognising its limitations (see Yngstrom, 2002; Garber, 2012), drawing on the ETLR helps to capture and shed light on how various land ownership structures and access mechanisms within customary tenure arrangements are evolving and the implications for the land rights of different categories of people in the case study areas (see Chapters 5 and 6).

2.3.1.1 The Evolutionary Theory of Land Rights (ETLR) as Applied in SSA

The evolutionary theory of land rights (ETLR) as proposed by Platteau (1996, 2000) has been widely used to explain the nature and development of customary tenure systems in

the specific context of sub-Saharan Africa. A central tenet of this theory is that ‘under the combined impact of increasing population pressure and market integration, land rights spontaneously evolve towards individualisation and this evolution ultimately leads landholders to demand for the establishment of formalised private property rights – a demand which the state will have an incentive to respond’ (Platteau, 1996: 29). Thus, contrary to the assumption of the property rights school, proponents of the ETLR (Boserup, 1965; Bruce, 1986; Feder and Noronha, 1987; *ibid*) suggest that customary tenure systems in SSA have considerable flexibility to generate the autonomous (spontaneous) response needed to rectify the challenges of growing land scarcity occasioned by increased population and changes in agricultural dynamics. Essentially, the evolutionary theory of land rights assumes a linear progression from communal land ownership to individualised land rights as certain externalities such as population growth and increasing competition for land arise and the need for boosting agricultural productivity (cf. Garber, 2012: 6). In this vein, the introduction of formal property rights is seen as a logical step in climbing up the evolutionary ladder (*ibid*). This theoretical postulation has served as justification for the several land reforms and land titling programmes implemented across SSA. Yet the evolutionary theory of land rights as applied in SSA’s context is not without shortcomings. Yngstrom (2002) criticised the theory on the basis that it fails to sufficiently account for gender (women’s land rights) in the land rights development process. Yngstrom’s (2002) critique is founded on the understanding that multiple land rights in the same parcel of land exist in a hierarchical relationship in SSA (Bruce et al. 1994: 252). Within this hierarchical organisation, the right of the male household head is super-ordinate to other rights exercised by household members. As such, the land management decision-making process is largely skewed in favour of men to the relative disadvantage of women and vulnerable social groups (e.g.

youth, migrants and the poor) whose rights are lower in the hierarchy across SSA (Bruce and Migot-Adholla, 1994; Whitehead and Tsikata, 2003; Duncan and Brants, 2004; Bugri, 2008; Sewornu, 2010). The views of women are therefore captured to the extent that they are recognised as household heads (cf. Place et al. 1994).

Other writers (e.g. Yngstrom, 2002; Mathieu et al. 2003; Chimhowu and Woodhouse, 2006; Cousins, 2009; Garber, 2012) have also critiqued the evolutionary theory of land rights on the basis of its presumption of a social demand for more individualised, precise and formalised property rights as an oversimplification of the actual reality on the ground. Yngstrom (2002: 24) for instance, argues that the increased land scarcity and commercialisation have not resulted in a homogenous demand for formalised property rights, but have simultaneously triggered a proliferation of customary claims and counter-claims over land, and struggles over how “custom” is defined (Peters, 2004, Cousins, 2009; Garber, 2012). In any case, this criticism also raises some fundamental questions as to the usefulness of the several interventions implemented by successive governments in SSA in order to promote their adaptation and ultimately tenure security (see also Section 2.4 and sub-Section 2.6.1). Additionally, advocates of the evolutionary theory fail to take into consideration that the “non-final” or tentative character of customary rules (not as a source of insecurity), can also serve as a positive feature that ensures continuing access to land by the poor through social negotiations at the local level (Chimhowu and Woodhouse, 2006: 348; cf. Garber, 2012: 10). In light of these several shortcomings of the theoretical assumptions underpinning recent land policy interventions, it is not surprising that many land reforms that have been implemented in sub-Saharan Africa have failed to achieve their expected outcomes (see Section 2.4.1).

2.3.2 Changes to African Customary Tenure Systems – Different Interacting Factors in the Evolutionary Process

As underscored in the preceding chapter (Chapter 1), a more nuanced and deeper understanding of customary tenure arrangements is vital for evaluating their potential role in safeguarding tenure security for SLM in light of the changing tenurial contexts. Historicising African tenurial relations therefore affords a better appreciation of the changes over time by illuminating aspects of their evolution that are “path dependent, or circumstances and specific ways in which history structures the present” (cf. Batterbury and Fernando, 2006: 1858). This sub-Section provides a synthesis of the literature on the specific ways in which colonialism has impacted and contributed to changes in local tenurial relations and practices. In addition, it also discusses how other contemporary drivers of change have contributed to the evolution of customary tenure systems with emphasis on SSA.

2.3.2.1 Colonialism and Changes to Customary Tenure Systems

Colonialism has had a major impact on the evolution of customary tenure systems across sub-Saharan Africa. The pre-existing customary law which served as a framework for socio-political organisation was adulterated and modified (through the introduction of western legal concepts and principles) by the collaborative efforts of the colonial administrators, their elite indigenous associates and some traditional authorities for their own ends (Firmin-Sellers, 1995; Amanor, 2002, 2009, 2012; Berry, 2002; Pottier, 2005; Peters, 2009). Of particular importance are the changes to indigenous tenure institutions and arrangements which provided the basis for the systems of administration adopted by the colonial governments in their various colonies. In the British colonies, for example, the application of the indirect rule policy resulted in the redefinition of the pre-existing local tenurial relations as land ownership was vested in chiefs who were co-opted into the

colonial administration (Njoh and Akiwumi, 2012; Amanor, 2012; Mamdani, 1999). This had far-reaching negative implications for customary claims to land as they were effectively reduced to usufructuary rights at the behest of the colonial authorities (cf. Garber, 2012).

By contrast, the French adopted a different approach known as the direct rule of administration (assimilation) as sought to integrate the indigenous population into the socio-cultural system of the colonising state, France. The resultant effect was supplanting all indigenous structures and institutions with ‘modern’ Eurocentric alternatives, concentrating all decision-making powers in the colonial administration (cf. Delville, 2000; Njoh and Akiwumi, 2012). In any event, the major highlight from the concurrent application of the direct and indirect rule of administration in colonial Africa was the resultant state of legal dualism – ‘modern’ and customary laws subsisting side by side especially in relation to land tenure which has existed to date in almost all SSA countries, except Ethiopia (Kalabamu, 2000; Cotula, 2007; Joireman, 2011; Garber, 2012; McAuslan, 2013). A detailed discussion of the impact of colonial land policies and interventions on Ghana’s customary land tenure system is presented in Section 3.4.2 (Chapter 3).

While the above discussion seems to highlight colonialism as a key precursor of the changes and adaptation that have occurred in African tenurial systems, it is recognised that some of these changes were in flux even before the advent of colonialism (cf. Woodman, 2011). Some writers (e.g. Kasanga, 2002; Nkwae, 2006; Cotula, 2007) have therefore argued that the colonial impact on customary tenure systems though important, it should not be overemphasised in the post-independence era. Aside from colonialism, other impelling contemporary factors have and continue to influence the process of transformation towards individualisation (cf. Pottier, 2005; Nkwae, 2006; Arko-Adjei,

2011; Kalabamu, 2014). This therefore begs the question as to what are the contemporary drivers of change contributing to the evolution of customary tenure systems? The ensuing paragraphs examine these drivers and their specific effects on tenurial relations with emphasis on SSA.

2.3.2.2 Contemporary Drivers of Change in the Evolution of Customary Tenure Systems

While colonialism has had a profound impact in the evolution and changes to customary tenure systems, and the changes are still in motion instigated by the interplay of several different factors including demographic growth, urbanisation, socio-economic, cultural and environmental changes (Okoth-Ogendo, 2000; Nkwae, 2006; Cotula, 2007; Arko-Adjei, 2011). It therefore follows that the evolutionary process also needs to be understood in the context of other factors driving recent changes in tenurial relations. This would provide a useful backdrop from which to appreciate the contemporary customary tenure challenges and the probable impact of new policy reforms aimed at improving equitable access to land and security of land rights as analysed in the subsequent chapters.

Against this backdrop, demographic change remains one of the predominant factors contributing to changes in tenurial relations given the strong demographic growth in many parts of SSA over the past decades (Cotula, 2007; Nkwae, 2006). Available statistics on demographic trends indicate that between 1962 and 2015, sub-Saharan Africa's population increased by 760.6 million, rising from about 239.4 million to almost 1.001 billion (World Bank, 2016). These demographic changes have had significant impact on customary tenure arrangements given the increased competition for available land resources occasioned by the high population growth (cf. Cotula, 2006; Nkwae, 2006; Arko-Adjei, 2011). This follows the evolutionary theory of land rights postulation that demographic growth increases the value of land which triggering the progressive

transition from communal tenure toward individualisation of land rights (cf. Platteau, 1996). Yet recent empirical evidence seems to suggest that the processes may be much more complex than assumed under the evolutionary theory (see also Section 2.3.1).

The increasing integration of agricultural markets into the global market economy is yet another factor contributing to the recent tenorial transformation in the sub-region. The recent trade and fiscal policies introduced in many sub-Saharan African countries, including Ghana in a bid to attract foreign direct investment has also contributed to surge in demand for land for various purposes such as commercial agriculture. This is evidenced in the replacement of food crops by cash crops (e.g. cocoa, mango and pineapple) leading to the rise in land values and competition for land resources, thereby triggering processes of individualisation of tenure, reinterpretation of custom, increased insecurity and land disputes (cf. Cotula, 2007; Amanor, 2012). A related issue is the increasing peri-urbanisation which has also had considerable impact on local land relations following the unregulated land use conversion from agricultural to residential ultimately leading to the erosion of customary tenure systems particularly in the peri-urban areas (Cotula, 2007; Arko-Adjei, 2011; Kalabamu, 2014). This has also resulted in the displacement of the native farmers especially the poor and vulnerable groups given the associated forced evictions occasioned by increasing marketization of land (cf. *ibid*, Amanor, 2009). For instance, as land values rise, powerful and interested parties (including urban elites, chiefs and politicians) may take advantage of the situation of poor farmers through monetary inducements to give up their farmlands for housing and other development. Such developments may ultimately lead to increased landlessness, insecurity and contestations over land (*ibid*; Kasanga and Kotey, 2001).

It is evident from the foregoing that the above-mentioned factors in conjunction with contemporary land policies and legislations have also played pivotal roles in the evolution

of customary tenure systems. The transformation process has in turn resulted in situations of increased competition and monetisation of land ultimately leading to inequities in land access, exclusion, insecurity and conflicts to the detriment of poor and vulnerable segment of society (Peters, 2004; Cotula, 2007; Amanor, 2009; Garber, 2012). Thus, inferring from the above discussion, the following conclusions can be drawn. First, customary tenure systems are not static, but dynamic constantly evolving and adapting to changing social, economic, environmental and political processes. Yet, their ability to withstand the pressures of changing demographic and socio-economic conditions as well as sufficiently address the associated tenurial problems is questionable. Second, it should not be assumed that colonialism alone is responsible for the current state of customary tenure arrangements. Other external and internal factors have also contributed significantly to this evolutionary process. Third, the process of transformation of customary tenure towards individualisation may be more complex than the evolutionary theory of land rights seems to suggest. Thus, the presumption that the evolutionary process is taking place in a linearized fashion (from communal land tenure to individualised land ownership) is also questionable. Yet recent empirical evidence in this direction remain very limited (cf. Mwesigye et al. 2017), highlighting the need for further investigation especially in the rural context of Ghana (see Section 1.3). It is on this basis that the extent to which customary tenure institutions are dynamic and adaptable in engendering equitable access to land and tenure security was investigated in the Kakum and Ankasa contexts (see Sections 5.5-5.8, Chapter 5). In addition, the foregoing discussion has also highlighted the existence of dualistic legal framework occasioned by the introduction of the western land laws (through the British policy of indirect rule) and the persistence of customary tenure arrangements in SSA. The ensuing section therefore examines the concepts, models and debates about the contemporary approaches adopted

by post-independence governments (in collaboration with external donor partners) in a bid to address the emergent challenges arising out of the bifurcated tenure systems across SSA.

2.4 Customary Tenure Formalisation in Sub-Saharan Africa

Following the aftermath of colonialism, successive post-independence governments across SSA continue to grapple with tenurial challenges that have bedevilled their countries since the colonial era. The crucial challenge is therefore not so much about what must be done but how the ‘customary’ should be reformed to promote tenure security and pro-poor development (Firmin-Sellers, 1995; Appiah, 2012). Several land reform strategies have been suggested in the literature, many of which have been implemented in some sub-Saharan African countries (Krantz, 2015; McAuslan, 2013; Bromley, 2009; Fitzpatrick, 2005; de Soto, 2000).

Nevertheless, many of these strategies and policies (supported by international donor agencies, notably the World Bank) were predominantly focussed on replacing customary tenure with individualised statutory tenure, albeit with limited success (cf. Sjaastad and Cousins, 2009; Arko-Adjei, 2011; Njoh and Akiwumi, 2012; Gilbert, 2012; van Asperen, 2014). Many scholars (e.g. Lawry et al. 2014; Gilbert, 2012; Bruce, 2012; Cousins, 2009; Sjaastad and Cousins, 2009; Bromley, 2009; Sikor and Muller, 2009; Okoth-Ogendo, 2002) have thus questioned the suitability of these formalisation strategies in the sub-region. The related debates have often revolved around four main arguments viz. (1) the economic efficiency argument, (2) the social equity argument, (3) the sustainability of private property rights versus common property argument, and (4) the security of common property rights argument (cf. Arko-Adjei, 2011; Obeng-Odoom, 2013; Bruce, 2012; Otto and Hoekema, 2012). It is therefore intended in this section to provide a synthesis of the literature on the dominant customary tenure reform approaches with

respect to these debates with emphasis on sub-Saharan Africa. The focus here is on three main formalisation models viz. the replacement (market-based approach), tenure pluralism and adaptation as they are the most relevant in terms of understanding the contemporary debates on Ghana's approach to addressing issues about the 'land question'. In this regard, analyses of these three formalisation approaches affords a deeper appreciation of their prospects and challenges thereby providing as a useful backdrop for situating the subsequent analysis on securing customary land rights in the context of rural Ghana.

2.4.1 The Replacement Model

The replacement model ('market-based' model) underlines land markets as the basis for economic development. Within this purview, it is believed that the individualised tenure (through land titling and registration) affords a plausible avenue to promote efficient land management, increased credit opportunities, land-related investments and promotion of land markets (Otto and Hoekema, 2012; Sjaastad and Cousins, 2009; Nkwae, 2006; de Soto, 2000). This derives from the perception that customary tenure systems are anachronistic, inefficient and an impediment to economic development and therefore should be replaced (Peters, 2009; Arko-Adjei, 2011). Thus, replacing customary tenure with individualised tenure is deemed as the effective way to tackle land disputes, informal tenure arrangements, 'unofficial' land markets and litigation (cf. *ibid*; Delville, 2014). The relevance of the market-based model in the context of this thesis is highlighted by the fact that the ongoing land administration reforms in principle mimics this approach by emphasising the need for promote market efficiency. Therefore, analysis of the conceptual basis of this model is instructive in shedding more light on its merits and weaknesses in its replication in the context of rural Ghana.

Against this backdrop, the replacement or market-based models are not without shortcomings. Replacement formalisation models have been criticised on the basis that they ignore: (1) the multi-functional importance of land, (2) the multi-layered nature of rights and interests subsisting in customary land, and (3) fail to reflect the local realities in rural African communities (Okoth-Ogendo, 1989; Platteau, 2000; Mathieu et al. 2003; Nkwae, 2006; Arko-Adjei, 2011). The argument of the critics derives from the fact that the traditional African conception of land transcends the conventional utilitarian notion, as it constitutes the foundation of the wider socio-economic and political systems (Okoth-Ogendo, 1989; Nkwae, 2006; Toulmin, 2009; Section 2.3.1). It therefore follows that the overemphasis on private property rights and land markets (to the relative neglect of non-market customary tenure arrangements) imply establishing exclusionary rights that enure to the benefit of primary land rights holders, as the issuance of freehold titles invariably extinguishes other secondary land rights that may subsist in land (cf. Benjaminsen et al. 2009; Meinzen-Dick and Mwangi, 2009; Arko-Adjei, 2011). This may ultimately result in the consolidation of existing inequalities and increased land conflicts given the potential for opportunistic land acquisition by local elite and powerful groups (ibid, Peters, 2009; Meinzen-Dick and Mwangi, 2009).

Moreover, the assumption that governments in SSA have the capability to establish pro-poor institutional mechanisms that effectively safeguards against abuses by powerful local and external interests, and to enforce formally established rights have been called into question (Nkwae, 2006; Toulmin, 2009; Sjaastad and Cousins, 2009; Arko-Adjei, 2011). Meinzen-Dick and Mwangi (2009) assert that the introduction of state-led formalised property systems rather operates to disempower local or customary institutions responsible for land management, thereby creating the avenue for opportunism and abuse by powerful local and external interests especially in rural areas (Arko-Adjei, 2011).

Other critics (Bromley 2006, 2009; Toulmin, 2009) have even argued that formalisation tend to erode and displace existing social networks and arrangements that do offer security. This derives from the fact that most governments agencies in SSA lack the requisite capacity (financial, human and technical) and local knowledge to effectively regulate land management and allocation in a fair and equitable manner (cf. *ibid*; Cotula, 2007; Joireman, 2011). The lack of political capital and perceived legitimacy of formal rules and institutions have also contributed to limit the outreach of state-led formalisation especially in the rural areas (cf. Cotula, 2007; Nkwae, 2006).

Empirical evidence on the impacts of market-based land reforms (mainly land title and registration programmes) on access to credit, smallholder agricultural investment and productivity across sub-Saharan Africa is mixed (see Sections 2.6.1 and 2.6.2). On the one hand, some countries implementing various land reforms (e.g. Ethiopia and Mozambique) have witnessed improved tenure security, agricultural investment and productivity and land market activity (Deininger and Jin, 2006; Holden et al. 2011). Conversely, such reforms have rather contributed to tenure insecurity, protracted disputes and environmental destruction in some instances. A classic example is the South African experience where evidence shows that series of previous land reforms (mainly aimed at redistribution of land) undertaken have proven counterproductive and resulted in various forms of insecurity and land based inequalities (for a detailed discussion, see Toulmin, 2009; Peters, 2009; Obeng-Odoom, 2012). In light of the failure of replacement model in several SSA countries, customary tenure systems have persisted and continuously adapted to changing socio-economic circumstances. Recent theoretical arguments in the literature have thus drifted towards the stance that privatisation of property rights is not *a priori* the most efficient means of achieving tenure security (IFPRI, 2012). Accentuating this position, the World Bank's 2003 Report '*Land Policies for Growth and Poverty*

Reduction’ underlined that “the almost exclusive focus on formal title in the 1975 paper was inappropriate, and much greater attention to the legality and legitimacy of existing institutional arrangements will be required” (World Bank, 2003: xiv).

2.4.2 Tenure Pluralism

Following the impracticability of total replacement vis-à-vis the persistence and resilience of customary tenure systems, tenure pluralism has been advanced as a viable solution to the seemingly insurmountable tenurial challenges bedevilling most countries in the sub-region (Kasanga and Kotey, 2001; Arko-Adjei, 2011). A brief discussion on this model is appropriate as it provides a useful backdrop for understanding the subsequent analysis on the existing challenges of Ghana’s dualised tenurial regime and ongoing efforts to harmonise the system. In this light, tenure pluralism emphasises the co-existence of informal customary and formal statutory tenure systems, effectively endorsing legal pluralism. Whereas land held under customary tenure is regulated by customary tenure institutions and practices, statutory tenure, on the other hand, is regulated by statute and state land management institutions (Arko-Adjei, 2011; Sections 3.4.2 and 3.4.3).

Tenure pluralism has been criticised on the basis that they it fails to harness the potential benefits accruing from synergising customary and statutory tenure systems as both legal paradigms are kept apart (cf. Arko-Adjei, 2011). This argument derives from the understanding that the co-existence of customary with statutory tenure systems in rural areas leads to complex legal, tenure, and management uncertainties (cf. *ibid*; Knight, 2010). Besides, both legal systems appear to be on a collision course given the competition between customary and statutory laws (Kasanga and Kotey, 2001; Nkwae, 2006). For example, the differences between the conditions of access to land and enforcement of land rights under customary and statutory tenure mechanisms courts tenure uncertainty as rights legitimate under the former are not recognised by the latter

(Dowuona-Hammond, 2003; Arko-Adjei, 2011). Moreover, it is also argued that multiple institutional and legal structures risks contradictions and insecurity regarding whose rights would be upheld in the event of a contestation, and which decision-making structures are paramount (cf. Benjaminsen et al. 2008; Toulmin, 2009; Arko-Adjei, 2011). Multiple structures lead to ‘institutional shopping’, whereby people seeking to enforce their land rights will try different options in a bid to secure a favourable judgment (Toulmin, 2009; Knight, 2010). It therefore follows that with the increasing competition for land, the resultant effect of tenure pluralism is increased tenure insecurity and conflicts given the inherent risk of “uncertainty, negotiation and opportunistic behaviours” (cf. *ibid*: 13). In this light, the possibility of legal integration is perceived as a plausible avenue to addressing some of the underlying differences of the formal and customary tenure systems (cf. Knight, 2010: 6). Several governments of SSA (including Ghana) are therefore currently implementing land policy reforms geared towards the harmonisation of customary and statutory tenure systems towards improved tenure security (see Section 3.5).

2.4.4 The Adaptation Model

The adaptation model is emerging from recent scholarship in the social sciences. The model is premised on the idea of the return to autonomous land management by local communities as a viable pathway to tackling tenure insecurity and encouraging investments in sustainable land use (Otto and Hoekema, 2012; Deville, 2014; Arko-Adjei, 2011; Knight, 2010). This follows the understanding that customary tenure is derived from social relationships and institutions, and that changes in tenure and property rights have far-reaching implications for the social, spiritual and political ties that bind kinship groups (cf. Arko-Adjei, 2011: 36). As such, customary tenure reform approaches driven by economic efficiency alone are deemed inappropriate in that they may rather operate to

undermine the social cohesion of groups and communities (ibid; Nkwae, 2006). The underlying argument of proponents of this model is founded on the flexibility and responsiveness of customary tenure arrangements to changing social and economic circumstances (Nkwae, 2006; Cotula, 2007; Arko-Adjei, 2011; Delville, 2014; van Asperen, 2014). This argument has recently gained currency in the land policy circles prompting the World Bank's acknowledgement that informal customary tenure arrangements can provide a sufficient level of tenure security (World Bank, 2003). Proponents thus reject the idea of forceful replacement of customary land tenure with individualised tenure system. Instead, they argue that the former should be left to evolve with changing circumstances (Nkwae, 2006; Arko-Adjei, 2011). They further highlight the need for the establishment of locally-based land management systems based on indigenous institutional structures (cf. ibid; Platteau, 1996; Kasanga and Kotey, 2001; Toulmin, 2009). In this view, the adaptation model also supports hybrid institutional systems and the recognition of communal and individual rights in land administration (Arko-Adjei, 2011; Delville, 2014). Proponents of the adaptation model endorse incremental or gradualist approach to tenure reform and argue that land titling and registration programmes should be implemented where customary tenure is weak (Nkwae, 2006).

The conclusion emerging from the foregoing discussion is that there is no one-size-fits-all formalisation model for engendering tenure security and pro-poor development across different contexts. A useful lesson is that the design and implementation of such interventions ought to be context-specific taking due-cognisance of the underlying socio-cultural and political arrangements influencing peoples access to and control of land. In this vein, which ever formalisation approach is adopted, an important consideration is that it should ultimately enhance tenure security of landholders regardless of their social,

political and/ or economic status. This invariably implies the need for sufficient understanding of land tenure security and its operationalisation as manifested on the ground to which attention is now drawn.

2.5 Concepts of Tenure Security and Operationalisation – Towards a Tripartite Conceptualisation

As previously discussed, a central objective of this research is to afford a better understanding of the dynamics of land tenure security and how it shapes households' investments in SLM practices. It is therefore instructive in this section of the chapter to review the literature on the concept of tenure security in terms of its meaning and operationalisation in the context of this research. This will shed additional light on the debates underpinning the different approaches to safeguarding customary land rights in Section 2.4 as well as provide a backdrop for situating the subsequent analysis on farmers' perspectives about the state of land tenure security in the case study areas. Against this backdrop, while there is a general consensus on the importance of tenure security, defining what it constitutes is still an evasive issue both across the academic and policy circles. This is especially so in the developing country context where there is no common baseline definition let alone agreement on how it can be achieved (Van Gelder, 2010; Arnot et al. 2011; Obeng-Odoom and Stilwell, 2013; Simbizi et al. 2014). According to Obeng-Odoom and Stilwell (2013), "part of the controversy pertaining to what constitutes tenure (in) security lays in the plethora of meanings ascribed to secure tenure and the means of measuring it". Recognisably, land tenure security connotes different meanings often depending on the context and angle from which one considers and measures it. Over time, several leading definitions have been proposed by academicians and some international development agencies alike, each defining or interpreting the terminology

to suit their theoretical inclinations and practical orientation (see Lund, 2000; Arnot et al. 2011).

As a point of departure, it is often accepted that tenure security refers to the probability of losing one's right(s) in a land resource. However, drawing from Schlager and Ostrom's (1992) 'bundle of rights' classification; such conception of tenure security has been regarded as narrow (Sjaastad and Bromley, 1997) since ownership rights, at least in the African customary tenure sense, are seldom held by one individual or institution (IFPRI, 2012). Accordingly, Roth and Haase (1998: 1) proposed a much broader definition as "the individual's perception of his/her rights to a piece of land on a continuous basis, free from imposition or interference from outside sources, as well as the ability to reap the benefits of labour or capital invested in the land, either in use or in alienation." Bruce et al. (2010) also extended this definition of tenure security to read "the assurance aspect of property rights, or the expectation that rights will be protected or renewed." They further explain that tenure security is dependent upon the robustness of the right as well as upon a legal and political environment that supports property rights" (ibid).

Embedded in these definitions as Place et al. (1994) observed are three elements – breadth, duration and assurance with legal and economic connotations. The breadth of rights represents the quantity of rights held by a resource user, the duration of rights refers to the length of time for which a given right is legally valid, and the assurance of rights refers to the guarantee-ship of given right(s) by a recognised authority. Sjaastad and Bromley (2000) however, critiqued this definition of tenure security arguing that tenure security should be restricted to only the certainty (assurances) of rights. The authors contend that the inclusion of breadth and duration of rights as determinants of tenure security should be jettisoned as these operate to confound researchers in their ability to clearly analyse the issue. Nonetheless, Sjaastad and Bromley (2000) concede that breadth

and duration of rights have the propensity to influence resource use in a similar way as the certainty of rights but should be exempted from the definition of tenure security. In so doing, the ambiguity in understanding and empirically investigating tenure security would be eliminated (ibid). Lund (2000:16) however raises a cautionary note in his analysis stating: “when we talk about increasing tenure security, there is most of the time a corresponding aspect of tenure insecurity as well, something which has a much less benign ring to it”. The succeeding sub-section delves deeper into some perspectives of what constitutes tenure security and approaches to measuring it as evidenced in the literature.

2.5.1 Notions and Kinds of Tenure Security – Differing Theoretical Perspectives

Given the varied notions or perspectives in the land policy literature as to what constitutes land tenure security and the sources of such security, this sub-section briefly discusses these perspectives in the light of the sub-Saharan African context where the concept has generated lots of controversy. Domeher and Abdulai (2012) explains that, security of tenure involves two forms – the recognition and validation – where the said land rights of a particular person or group is upheld by a known institution or entity and also by one’s neighbours. This conception of the concept of tenure security has also yielded a dual representation in terms of scholastic views as to which source works best in the sub-Saharan African environment. On the one hand, market-oriented or neoliberal-inspired scholars (e.g. Byamugisha, 2013, 2016; Deininger, 2003; de Soto, 2000; Feder et al. 1988) argue that formal land registration or individualised titling is important in safeguarding tenure security of the rural poor. Tenure security is thus rooted in the issuance of a title certificate with the state (through the legal system) acting as the main guarantor of tenure security (de Soto, 2000; Byamugisha, 2013, 2016). Conversely, other writers (e.g. Bromley 2009; Toulmin, 2009) view the architecture of tenure security to be rooted in

the customary tenure institutions with the community acting as the main source of security, that is a form of a social contract. Tenure security however conceptualised, an important consideration is the effect on the rural poor and how appropriate interventions can be designed to benefit them.

In navigating the conceptual muddle, Van Gelder (2010) proposed a tripartite model of tenure security based on three (3) notions namely (1) tenure security as perceived, (2) legal tenure security, and (3) *defacto* tenure security. Acknowledging that tenure security does not solely depend on (legally) secure and well-defined rights, but a host of other interactive factors (i.e. the cultural, political, historical processes and administrative practices), he argues that tenure security should be viewed as a composite concept with three constituent elements as identified above (ibid). Per Van Gelder's (2010) legal definition of tenure security, it follows that; once there is the assurance of a "legal" protection landholders (e.g. farmers) are more willing and able to undertake investments in land without any fear of opposing claims to their rights of usage and enjoyment. Under the *defacto* definition, he explains it as reflecting the actual situation on the ground i.e. the actual control of the property regardless of the legal status in which it is held. The perceived tenure security also relates to the perceptions of land users often at the household level of their estimation of risk of eviction or expropriation of their rights (ibid). Although the above postulation communicates a wider domain of the concept of tenure security, it has been critiqued on the basis of it failing to perceive the concept as a system founded on a particular land tenure regime (for a discussion, see Simbizi et al. 2014). In this light, Simbizi et al. (2014) argues that "to the extent that, the three forms of tenure security are elements of one composite concept, the three elements may not generate a full picture of security for any land tenure system as well as do not reflect all interactions that explain security". Instead, they proposed an alternative system based

approach to conceptualizing tenure security which gives an integrated picture of the concept via an analysis of the land tenure components (or elements), attributes, functions of each element, relationships, and interactions between elements and the environment of the system. Also, in an earlier study, Stamm (2004) attempted to clarify what constitutes tenure security by categorising the concept into four (4) perspectives – the clarity of rights, the precision of the demarcation of boundaries, the likelihood that rights are violated, and the ability to obtain redress by an authoritative institution. He argued that deficiencies in any of these aspects can severely undermine tenure security and by extension incentives for investments and exchange (ibid). This in a simplistic way reflects the key elements of tenure security as presented in the latter models of Van Gelder (2010) and Simbizi et al. (2014).

Thus, drawing on these somewhat differing notions of what constitutes tenure security as documented in the literature, three (3) main cross-cutting perspectives (elements or constituents) of the concept i.e. the economic, legal and social notions are identifiable. These are briefly summarised below:

2.5.1.1 The Economic or Market Oriented Notion

This conception of tenure security derives its basis from the evolutionary theory (supported by many neoclassical economists) but deviates from the legal or social meaning of tenure security. Under this notion, the extent of security of tenure is seen to directly correlate with the extent of guaranteed full individual ownership of land evidenced by a registered land title certificate (Van Gelder, 2010; Arnot et al. 2011; Simbizi et al. 2014). This implies that the issuance of title certification upon registration of an individual's interest *prima facie*, confers ownership and resultantly secured tenure. This notion of securing security of tenure has formed the basis of various donor-backed land reforms (see Section 2.4) who often view title registration as the panacea to ensuring

tenure security and increasing the admissibility of property as collateral for credit arrangements (de Soto, 2000; Domeher and Abdulai, 2012). Critics (including the socialist and political economists) however see this as a reductionist perspective of the concept arguing that whilst landholders would possess documentary proof of land ownership, they need to be certain that their land will not be taken away from them and if so, they would receive adequate and fair compensation (Obeng-Odoom and Stilwell, 2013).

2.5.1.2 The Legal Oriented Notion

In a somewhat identical fashion as the economic oriented notion elucidated above, the legal construct of tenure security emphasises the protection and enforcement of one's rights or interest in land (Van Gelder, 2010; Simbizi et al. 2014). It follows that, all other factors being equal, once there is that 'legal' assurance of the protection of a landholder's rights against any form of opposing claims; he or she is more willing and able to undertake investments in land without any fear of expropriation (ibid: 2010). This construction of tenure security finds expression in some of the leading definitions of the concept that stresses the guarantee of the protection of a person's right to resources (for some definitions of tenure security, see FAO, 2012). In this view, tenure insecurity emanates from the probability of losing all or part of one's right to resources and or the uncertainty associated with the nature of the rights (Sjaastad and Bromley, 2000). However, some observers (e.g. Sjaastad and Bromley, 2000; Broegaard, 2013) have argued that tenure security is more of an issue of perception than just the 'legal' assurance through the issuance of land titles. Proponents of this perspective contend that landholders perceived tenure security is a function of all their experiences with respect to their tenure situation (Sjaastad and Bromley, 2000); although perception alone may be insufficient in understanding security in view of varying contextual conditions (Cronkleton and Larson,

2015). Various empirical studies especially in sub-Saharan Africa buttress this latter observation (see discussion in sub-Section 2.5.1).

2.5.1.3 The Socialist or Communitarian Oriented Notion

The socialist otherwise known as the communitarian construction of understanding tenure security is premised on the observation that the customary individual land rights are secure with the “community” acting as the main source of security. This is contrary to the conventional viewpoint expressed under the evolutionary theory that customary or communal land rights are by nature insecure and unable to stimulate investments (Ostrom, 1990; Amanor 2001, 2010; Obeng-Odoom, 2013; Simbizi et al. 2014). Within the communitarian circles, the mechanism for the recognition and enforcement of one’s right to resources is seen to be rooted in the framework of community norms and values. The community, represented by the existing customary tenure institutions is regarded as the main source of security. By implication therefore, legitimacy of land rights by the community is central to achieving tenure security (Simbizi et al. 2014). Simbizi et al. further argue that regardless of the scope and duration of land rights, what is important for tenure security is the recognition of such rights by the landholding community. However, in line with Domeher and Abdulai’s (2012) distinction of the two forms of tenure security i.e. recognition and validation, other writers of the communitarian perspective have conceded the need for a state validation of legitimate rights beyond the mere recognition by the customary institutions to afford maximum tenure security (see Toulmin, 2009).

From the foregoing discussion on the constitution and sources of tenure security, it can be concluded that the narrow framings of formal land titling or registration as equating to tenure security is questionable. Aside from land titling, tenure security can also be achieved from *defacto* sources. However, the extent to which *defacto* conditions

contribute positively to tenure security differs across contexts and therefore subject to empirical verification. It is on this basis that this study investigated farmers' perceptions about what constitutes tenure security and the factors that influenced their tenure status in order to understand the actual state of land tenure security in the study areas (see Sections 6.2-6.4, Chapter 6).

2.5.2 Operationalisation and Measurement of Tenure Security

Owing to the several controversies surrounding the concept of tenure security and other confounding contextual factors, tenure security is not directly measurable or quantifiable (FAO, 2002: 18; Van Gelder, 2010; Arnot et al. 2011). However, a variety of approaches notable of which include the bundle of rights, hazard analysis of individual plot tenures and perceptual based measures have been adopted by researchers to empirically assess tenure (in)security which remains context specific. Brasselle et al. (2002) for instance, applied the bundle of rights approach in measuring tenure security among rural households in the province of Houet in southwestern Burkina Faso. Similarly, Place and Hazell (1993) focused on property rights (transferability of rights) in their assessment of tenure security at the household level in Ghana, Kenya and Rwanda. Besley (1995) also used the property rights approach in his earlier assessment of tenure security of farmers in sampled villages in Wassa and Angola in the southern part of Ghana. Conversely, other studies (including Jacoby et al. 2002, and Brandt et al. 2002 all in China) employed the hazard analysis approach which essentially relates to the probability of the risks of expropriation as an indicator of tenure (in) security. Finally, the perceptual measure of tenure security also relates to the individual or household's experiences of their tenure situation which is the probability of losing all or some of one's rights in land or other natural resource. Several studies have also employed this approach in their investigation (see, for example, Benin et al. 2005; Deininger and Jin, 2006 in Ethiopia).

In operationalising tenure security in this study, however, the tripartite notion of tenure security as (i) legal, (ii) *defacto* and (iii) perceived is adopted following after Van Gelder (2010) and Simbizi et al. (2014). The importance of the tripartite framework to the present research is underscored by the fact that land rights in rural contexts like the study areas are predominantly undocumented or unregistered implying that land tenure security is largely attained through other sources other than legal. As such, the tripartite conceptualisation affords the unique opportunity to comprehensively assess the actual state of land tenure security and the different factors (legal and extra-legal) influencing security in the context of Kakum and Ankasa (see Sections 4.6.3 and 6.3). To operationalise this tripartite conceptualisation of tenure:

- The legal aspect of tenure security pays attention to farmers' possession of formal legal/ extra-legal documentation as proof of land ownership or use.
- The *defacto* tenure security is a measure of the quality of land rights based on the duration of land use.
- Finally, the assessment of perceived tenure security is based on the farmers' own assessment of their tenure status taking into consideration the legal and *defacto* situation of their land rights. This latter measure of tenure security is often critiqued on the grounds that it says little about the factual state of tenure or legal status of a tenure situation and is largely subjective reflecting one's understanding of the tenure status, expectations regarding enforcement, investments etc. (Van Gelder, 2010; Broegaard, 2013). Therefore, to overcome the problem of a highly subjective measure of perceived measure of tenure security in this research, Broegaard (2013: 45) suggestion of a land tenure security ranking index is followed in the evaluation of the overall perceived tenure security of farmers in the studied communities (see Sections 4.6.3 and 6.3.2).

The use of a land tenure security ranking index in the context of this research afforded the plausibility of statistically representing respondents' agreement about categories of different levels of tenure security (cf. Broegaard, 2013). Having conceptualised tenure security, the ensuing section evaluates the different theoretical postulations and findings of empirical research based on the tenure security and investment nexus in SSA's context. This lays the foundation for the subsequent analysis on how land tenure differences influences farmers land investment decision-making regarding pursuit of different SLM practices in the case study areas.

2.6 Tenure Security and Farm-Level Investments: Theory and Reality

As stated earlier, many writers have blamed customary tenure systems in Africa (e.g. Dorner, 1972; Johnson, 1972; World Bank, 1974; Unruh, 2008; Nkonya et al. 2016) and in Ghana (e.g. La Anyane, 1962; GoG, 1999; Damnyag et al. 2012) for the poor agricultural development and environmental degradation. The core argument of the critics is founded on the assumption of insecurity of customary land rights and their inability to generate the requisite investments incentives for sustainable land use, as postulated by the property rights school (cf. Demsetz, 1967; Ault and Rutman, 1971). Within this purview, the argument on land tenure security in sub-Saharan Africa have centred on four main issues: (1) the investment demand or security effect argument (2) the collateral effect argument, (3) the land market efficiency argument, and (4) the environmental benefits argument (cf. Platteau, 1996, 2000; Bugri, 2008; Fenske, 2011). The focus of this section is therefore to synthesise the literature on the state of land tenure security provided under informal customary and 'modern' statutory tenure systems and the associated debates with emphasis on sub-Saharan Africa. This provides as a useful background for situating the subsequent analysis on how land tenure differences influence the pursuit of different investment strategies in the context of the study areas.

2.6.1 The Investment Demand or Security Effect Argument

Central to investigating the land rights and investment relationship in this research is the argument that uncertainty in land ownership reduces farmers' investment propensity in long-term SLM practices. Increased individualisation of land rights therefore improves the tenure security and certainty of farmers' recouping their investments made on land (Feder, 1990; Pagiola, 1999; IFPRI, 2012). Whilst this argument is theoretically compelling, it should not be assumed that the lack of formal individualised titles to land automatically equates to tenure insecurity (Platteau, 1996, 2000; Bugri, 2008; Lawry et al. 2014). A related observation is the question of whether the security provided by African customary tenure systems engender the appropriate incentives to stimulate investments in land productivity.

Against this backdrop, Pagiola (1999) concluded that even if individual title to land does lead to tenure insecurity, it does not necessarily imply that security of tenure would result in higher agricultural production or investment in sustainable land use. A number of empirical studies on the land titling (security) and investment nexus have corroborated Pagiola's (ibid) conclusion. In Ghana for instance, Migot-Adholla et al. (1991) found that individualised land rights do not seem to have any effect on agricultural investments and productivity. The study reached the same conclusion for Rwanda and Kenya. Similar studies conducted earlier in Niger (Gavian, 1993) and Kenya (Migot-Adholla and Place, 1998) all identified that tenure security had little effect on agricultural production. Some studies have however, found positive effects of tenure security (via the institution of formal land titling) on agricultural production and investments in sustainable land use. In the case of Ghana, Besley (1995) found that improved tenure security enhanced agricultural investments in the Wassa area, but no evidence of a relationship between tenure security and investment in Angola. Abdulai et al. (2011) also concluded that full

individual land ownership rights significantly influenced investments in soil improvements in the Brong Ahafo region of Ghana. Elsewhere in Madagascar, Jacoby and Minten (2007) possession of title had no significant effect on plot specific investment and little effect on land productivity. Similarly, Brasselle et al. (2002) expressed doubt about the existence of a systematic influence of land tenure security on investment. They concluded that the traditional village order, where it exists, provides the land rights required to stimulate small-scale investment.

Considering the mixed and inconclusive empirical evidence on the titling and investment nexus, some writers (e.g. Platteau, 1996; Bugri, 2008; Bromley, 2009; Sjaastad and Cousins, 2009; Ayamga and Dzanku, 2013) have thus concluded that simplistic prescriptions of land titling as a pathway to enhancing investment incentives can be misleading. In fact, Berry's (2009) cross-country study of Ghana, Cote d'Ivoire and Benin concluded that the privatisation of land rights may rather operate in the opposite direction—entrenching inequalities within communities, and fuelling contestations over land based on origin and social belonging. Other studies have corroborated Berry's (ibid) assertion highlighting instances of social exclusion and inequalities in land distribution amongst the poor and vulnerable groups occasioned by the introduction of formal land titling approaches (see Peters, 2009; Meinzen-Dick and Mwangi, 2009; Section 2.3.1). It therefore follows that there is more to tenure security than just formal titles and more factors influencing investments than land tenure security (cf. Bugri, 2008; Goldstein and Udry, 2008; Lawry et al. 2014). Some studies (Bugri, 2008; Robinson et al. 2014) have thus concluded that tenure security is a necessary, but not a sufficient condition for investment in agricultural production and environmental management. Without addressing other impelling non-tenurial factors such as financial, labour and input constraints, improved tenure security (through land titling) may not engender the

appropriate incentives for increased investments (cf. *ibid*; Lawry et al. 2014). Besides, it is even possible that plots registered by farmers already benefit from comparatively high levels of investments, in which case formalised private tenure does not stimulate investment but is only positively associated (cf. Roth et al. 1994; Bugri, 2008). In any event, some scholars (e.g. Besley, 1995; Sjaastad and Bromley, 1997; Brasselle et al. 2002; Berry, 2009) have observed a reverse causality between investment and tenure security as insecure land users may undertake certain long-term investments on land, which invariably enhances their *de facto* tenure security. Sjaastad and Bromley (1997) for instance, argue that long-term investments may provide a litigant in land with an unassailable case and that even though tenure insecurity is a disincentive to invest, it is paradoxically, also an incentive to invest for tenure security. However, this argument has been challenged on the grounds that investment in a land parcel that one does not rightfully own will in itself instigate dispute or insecurity rather than safeguarding land ownership. Thus, the assertion that permanent investments on a disputed land parcel provides a disputant with an unassailable case may be misleading (Abdulai and Ochieng, 2017; Abdulai and Owusu-Ansah, 2014; Abdulai and Domeher, 2012). It therefore follows that empirical investigations need to shed light on causal relationships between land titling and security on one hand, and security and investment on the other, especially in customary dominant rural contexts.

2.6.2 The Collateral Effect Argument

As previously discussed, individualisation of land rights (through land titling or registration) is also posited as improving farmers' credit-worthiness and by extension their access to formal credit, thereby leading to increased investments in SLM practices (cf. Feder et al. 1988; Pagiola, 1999; Platteau, 1996, 2000; Bugri, 2008). This derives from the notion that fixed assets, like land, provides a tradable collateral, particularly if

held under individualised ownership as financial institutions can easily foreclose and sell off land in the event of default in loan repayment (cf. Feder et al. 1988; Feder and Nishio, 1999). A further review of the applicability of this argument in the rural contexts of SSA (including Ghana) is particularly instructive considering the general lack of credit opportunities and farmers' limited uptake of SLM technologies. Within this purview, whereas the collateral effect argument seems to imply the penetration of financial institutions into the business of agricultural lending as well as the existence of institutionalised structures for mortgaging land (cf. Jacoby and Minten, 2007), in reality, these conditions are virtually absent in the rural regions of sub-Saharan Africa. Available empirical evidence indicates that the impact of formal land titling on credit availability in the sub-region is largely negligible (cf. Platteau, 1996; Garber, 2012). In rural Madagascar, Jacoby and Minten (2007) for instance found no significant correlation between possession of land title and households' access to formal credit. Titled plots are no more likely to be used as collateral for formal loans than are untitled plots. They thus concluded that intensive land titling has not opened up institutional credit opportunities for rural farmers in *Lac Alaotra* in Madagascar (ibid). Similarly, previous evidence from Ghana and Rwanda did not show any significant relationship between private property rights and access to formal credit (Place and Hazell, 1993; Migot-Adholla et al. 1994). In the Ugandan district of *Kigezi*, where the colonial protectorate implemented a pilot systematic land registration scheme in 1958, the effect of land registration on credit use to be negligible. Of the limited credit used, most was obtained via informal sources and by unregistered landholders (cf. Platteau, 1996: 60).

A number of possible explanations have been adduced for the minimal improvement in rural farmers' access to credit and use despite the introduction of formal land titling

mechanisms in sub-Saharan Africa. Notable explanations of these explanations are as follows:

(a) It has been argued that land titling would not reduce the high transaction cost associated with rural credit, thus financial institutions may continue to avoid them. A related factor is that rural financial markets are often in disarray due to years of ill-advised government interventions, often leaving state-owned financial institutions incapacitated to provide credit and commercial banks, where they exist at all, reluctant to participate (Pagiola, 1999: 5). Besides, other important delimiting factors such as the remoteness, low value and marketability of rural land operate to decrease the suitability of rural farmers' for accessing formal credit from financial institutions. To the extent that registration is unlikely to raise rural land values or make such lands more marketable, financial institutions will be less willing to advance credit to rural landholders, given the difficulty in disposing off land in the event of a default in loan repayment (cf. Abdulai and Domeher, 2012; Pagiola, 1999). However, in a recent study on the relationship between secure property titles and admissibility of landed property as collateral in the Ashanti region of Ghana, it was found that collateral security, depending on the kind of financial institution, may be not be a prerequisite in securing credit by small-scale enterprises (Domeher et al. 2016).

(b) From a demand-side perspective, it is argued that land registration per se is incapable of changing peoples' attitudes and preferences. Granted that the possession of formal land title is a prerequisite for credit supply, potential borrowers necessarily ought to be willing to use their land as collateral (Abdulai and Domeher, 2012). Yet the reality in most sub-Saharan African countries, like

rural Ghana, is that land is a critical safety net and the fear of losing it on default in loan repayment (through foreclosure) could render smallholder farmers less willing to use land as collateral security where it is required (cf. *ibid*). This argument is supported by experiences in Kenya's Kitui District (Pagiola, 1999).

(c) Access to credit for agricultural purposes may not improve following land registration because of the existence of other important considerations other than collateral security in granting credit by financial institutions. As Abdulai and Domeher (2012) observed, the mere fact that a borrower can offer collateral does not automatically guarantee that credit will be granted. Other relevant factors such as cash flow, profitability and credit history may be considered by a lender to safeguard against non-payment and collateral foreclosure (cf. *ibid*; Pagiola, 1999). It therefore follows that in most of rural regions of sub-Saharan Africa, including Ghana, characterised by the lack of agricultural inputs and limited market opportunities for agricultural produce, smallholder farming may be an unattractive investment from lenders' perspective.

(d) The absence of effective mechanisms and/ or legal barriers may impede easy foreclosure on property, thus decreasing lenders' willingness to grant credit to smallholder farmers (Sjaastad and Bromley, 1997; Barrows and Roth, 1989). This is especially so in most sub-Saharan African countries characterised by weak and inefficient judicial structures (cf. Platteau, 1996, 2000). Even in instances where a property has been foreclosed, the administrative cost of realising the asset value held may pose a significant challenge, especially in rural areas where the existence of strong kinship ties is likely to complicate the process of auctioning off the mortgaged land of defaulters to outsiders (cf. *ibid*, 2000: 59; Garber, 2012: 11). A case in point is the Tanzanian Lands Act 2004 (as amended) which stipulates that

all banks must seek approval from the courts for any intended repossession of residential property or agricultural lands. Consequently, monies owed banks to the tune of 100 billion Tanzanian shillings are reportedly locked up in courts (cf. Abdulai and Domeher, 2012: 172). To the extent that these constraining factors exist imply that land titling may be inefficient as rural land is not considered reliable collateral security by lenders either because it is difficult to repossess or foreclose in the event of default in loan repayment (Barrows and Roth, 1989; *ibid*; Pagiola, 1999).

2.6.3 The Land Market Efficiency Argument

In light of the foregoing, the emergence of efficient land markets is often touted as another important benefit of a formalised property rights regime. The argument follows that the institution of clearly defined property rights improves the functioning of local land markets (by reducing transaction costs and increasing investment propensity) leading to the re-allocation of land to its highest and best use (cf. Platteau, 1996; 2000; IFPRI, 2012). In other words, land transactions will generally increase the efficiency of resource-use as producers with higher (potential) marginal productivity are encouraged to acquire land from less efficient producers (Pagiola, 1999: 6). It therefore follows that with the emergence of land markets vis-à-vis improved tenure security, farmers (hitherto insecure) have the confidence to lease or rent-out land without any fear of possible counter-claims to land by would-be tenants (cf. *ibid*).

Notwithstanding its theoretical cogency, the land market efficiency bears two fundamental flaws. First, there is an implicit assumption of the existence of a system of formalised property rights as prerequisite for efficient land market functioning (Garber, 2012). Yet evidence demonstrates that informal transactions do take place despite the absence of formal land markets and titles in most parts of sub-Saharan Africa, especially

in the rural areas (see, e.g. Amanor, 2010; Chimhowu and Woodhouse, 2006; Mathieu et al. 2003). Second, perhaps more importantly, many advocates of formalisation fail to recognise the multi-faceted meanings of land (embodying religious, political and social conceptions) beyond its commercial value in much of sub-Saharan Africa (Okoth-Ogendo, 2002; Pottier, 2005; Arko-Adjei, 2011, Anafo, 2015). Apart from being the main source of livelihood in much of SSA, land is also considered a source of political power and prestige in many societies (Garber, 2012; Arko-Adjei, 2011; Platteau, 1996, 2000). In this vein, Platteau (ibid) thus observed that the emotive value attached to land in Africa is partly responsible for the high degree of sensitivity to the risk of losing ancestral land through the market or otherwise. This may also partly explain why African customary tenure systems in the midst of the on-going evolutionary changes have maintained some of their distinctive features such as non-outright alienation of land, especially to outsiders (Okoth-Ogendo, 2002; Pottier, 2005; Arko-Adjei, 2011). Moreover, the absence of mutual insurance facilities in most rural parts of sub-Saharan Africa has meant that the local community performs an important insurance (social security) function to safeguard the interest of its members, especially the poor and vulnerable groups (cf. Platteau, 1996; Garber, 2012). Within this purview, the express consent of customary authorities and landholding families remains crucial in any land transaction so as to safeguard the communal interest. Thus, the notion that the institution of formalised property rights (through land titling) will increase land transactions, alter peoples' perception about land and the informal dynamics of local land markets is questionable (cf. Garber, 2012). Formalisation especially in the rural parts of sub-Saharan Africa, including Ghana, should be based on sufficient contextual understanding of the nature of customary tenure systems and the socio-political dynamics underpinning them.

The prevailing tenorial practices and farmers' perceptions about mechanisms for safeguarding their land rights was investigated in this study (see Sections 6.3 and 6.6).

2.6.4 The Environmental Benefits Argument

Finally, it has also been observed that the formalised property rights regime through land titling has environmental benefits (Feder et al. 1988; Pagiola, 1999). Synonymous to the investment effect argument, it is argued that land registration may result in more sustainable resource use by stimulating investments, which improve the long-term productivity of the land (Pagiola, 1999; Bugri, 2008). Put differently, improvement in tenure security occasioned by land titling removes disincentives to investment in land improvements and environmental conservation. This derives from the idea that landholders with long-term security would be inclined to invest their labour or capital in land improvement practices with long payback periods such as on-farm tree planting, soil and water improvements (Deininger and Ali, 2008; Abdulai et al. 2011; Damnyag et al. 2012; Mbow et al. 2014). Conversely, individualised ownership through land titling may not necessarily stimulate investments in environmental conservation. Land titling could rather operate to incentivise for example, investments in environmentally deleterious practices, hitherto discouraged by tenure insecurity (cf. Pagiola, 1999). Besides, the higher the profitability of agriculture production in frontier areas (occasioned by improved tenure security) might result in substantial influx of new migrants, thereby encouraging more land clearing (ibid). It therefore follows that the environmental benefits of land titling should be verified for their existence rather than assumed (ibid; Bugri, 2008; Robinson et al. 2014), especially in the case of Kakum and Ankasa considering their 'special' status as protected areas (see Section 4.3.1).

From the foregoing discussion, the following conclusions can be drawn. First, the presumption that customary land rights are insecure and therefore an impediment to

investment is questionable. Customary tenure systems may provide sufficient tenure security and investment incentives to both members and non-members of the landholding group, a feature that is often overlooked (cf. Bugri, 2008; van Asperen, 2014; Lawry et al. 2014). Second, it should not be assumed that formalisation of customary land rights is a panacea for the problems of tenure insecurity and limited investments in agricultural productivity and environmental conservation in SSA. Third, it should not be assumed that tenure security is the only precondition for increased investment in sustainable land use. Other non-tenorial factors may also influence rural farmers' investment propensity and decision-making. These viewpoints are subject to the lack of empirical evidence. It is therefore on this basis that this study investigated land tenure differences in shaping households' investment decisions regarding adoption of SLM practices in Sections 7.5.1-7.5.3 (Chapter 7).

2.7 Tenorial Dynamics and Social Differentiation Issues in SSA Context – An Overview

In order to afford a deeper appreciation and useful backdrop for situating the subsequent empirical analysis on how the socio-political dynamics that undergird customary tenure arrangements shape patterns of land access and control, it is necessary to review the literature on the relevant debates about safeguarding the land rights of different social groups particularly the poor and vulnerable. This is against the backdrop of growing concerns about social differentiation and deepening inequalities (regarding access to and control of land under customary tenure systems⁴) in the face of increasing commoditisation and land scarcity in contemporary policy discourses on tenorial relations across SSA (Amanor, 2010; Ubink and Amanor, 2008; Peters, 2004, 2013; Boone and

⁴ The concept of access used in this context generally refers to all possible means by which people (individually or collectively) benefit from land be it rooted in *dejure* or *defacto* claims to land following after Ribot and Peluso (2003).

Duku, 2012; Tsikata, 2015). As Ribot and Peluso (2003) argued in their seminal paper, *theory of access*, the ability (“bundle of powers” so-called) to benefit from a resource [land] is predicated on the existing power structures which are embedded in a wider socio-political framework that either operate to promote or constrain access. In this light, the subject of land tenure in much of SSA, as indicated earlier, is an intricate web of relations in which social, cultural, economic and political factors interact at different scales to either strengthen or weaken land rights of different categories of land users and their ultimate land investment decisions (Bugri, 2008; Meinzen-Dick and Mwangi, 2009; Antwi-Adjei et al. 2015; Dery, 2015). An aspect of the on-going debate that is central to this thesis concerns the appropriate pathway to addressing issues of social differentiation and inequalities (regarding access to and control of land) considering the existing legal dualism of customary and statutory tenure arrangements subsisting in several SSA countries, including Ghana (see Sections 2.3.1 and 2.4.2).

In general terms, the debate about the merits and demerits of building on customary tenure arrangements is twofold. There are those who maintain a mainly positive view that the flexibility and negotiability of customary tenure systems affords the unique opportunity for poorer and vulnerable individuals and households (whose status and/ or social standing otherwise precludes them from automatic access to land resources) to access land through negotiation with traditional authorities or other landholders within their communities (Berry, 1993; Benneh et al. 1996; Kasanga, 1996; Kasanga and Kotey, 2001; Blocher, 2006). Conversely, many others have questioned the so-called flexibility and negotiability of the customary highlighting inherent power imbalances and inequities in access arrangements (occasioned by commoditisation and liberalisation) that operate to the disadvantage of the poor and vulnerable segment of the society (Lambrecht, 2016; Amanor, 2001, 2008; Peters, 2004, 2009; Whitehead and Tsikata, 2003). In any event,

the various arguments on the appropriate pathway to safeguarding the land rights of marginalised social groups in local tenurial relations have often centred on efficiency, equity and empowerment issues. This thesis focuses on three main dimensions of social relations which are widely recognised in the literature as critical determinants of the degree of access to and control of land in much of SSA, including Ghana, these are: (i) gender, (ii) age, and (iii) ethnicity (Platteau, 2000; Kasanga and Kotey, 2001; Bugri, 2008; Lund, 2011; Lastarria-Cornhiel et al. 2014; Tsikata, 2015). Although these dimensions of social relations do not operate in isolation, they are discussed separately for analytical clarity (cf. Tsikata, 2015). Before then, it would seem instructive to briefly explain the concepts of equity and equality as applied in this research given that they underpin the various arguments for and against the legal formalisation of customary land rights as a means of guaranteeing tenure security of the poor and other marginalised social groups in tenurial relations including women, youth and migrants.

Against this background, it is recognised that the terms “equity” and “equality” are somewhat intertwined but may be subject to different interpretations. Whereas equity draws on the notion of equality in something (say access to land), equality in some things necessarily involves inequality in others (e.g. rewards in proportion to output). Therefore, reference to equity in this context should be understood as fairness of outcomes both present and future with respect to who benefits and participation in land management decision-making (Brown and Corbera, 2003; McDermott et al. 2013). In this view, Broegaard (2013) offered a useful distinction between two aspects of equality viz. (1) equality of outcomes and (2) equality of opportunities. Drawing from his conceptualisation, equality of outcomes in a distributive sense relates to the analysis of unequal distributions of property rights leading to tenure insecurity and reduced investment incentives as advanced by critics of the property school (ibid). In this light,

pro-poor land reform programmes are often envisioned as necessary in addressing problems of unequal distribution of land, tenure insecurity and poverty (Deininger, 2003). Theorised as inequality of opportunities, equality concerns the unequal access to land institutions and authorities for the protection and legitimation of land rights (cf. Roemer, 2005; Broegaard, 2013). This is manifested in the form of information asymmetry resulting in uncertainty and manipulation of both the customary and statutory tenure institutions by powerful interested parties to the detriment of the poor and vulnerable social groups such as women, migrants and the youth (Platteau, 1996; Broegaard, 2013). In the context of this study, equality should therefore be understood as all members of the landholding community (i.e. native and non-native men, women and youth) having the same access to land tenure information, justice delivery and benefits accruing from land and its resources regardless of any differences in their socio-political and/ or economic status (cf. Curry, 2001; Kaufmann et al. 2007; Arko-Adjei, 2011; McDermott et al. 2013). Having clarified the meaning of terms equity and equality as applied in the context of this research, attention is now focussed on three dimensions of social relations as identified above.

2.7.1 Gendered Land Relations

Central to debates on customary land rights is the issue of gendered differentiation, which is theorised as being deeply rooted in the power imbalances of existing tenurial arrangements of society (Daley, 2010; Antwi-Adjei et al. 2015; Lambrecht, 2016). Although farming operations in SSA is largely dominated by women, inequality in property rights (especially amongst rural households) is pervasive in most countries, even in jurisdictions where gender-equality is formally recognised and upheld (Ik Dahl et al. 2005; Gaway, 2008; Sewornu, 2010; Braunstein and Folbre, 2001; Hughes and Knox, 2011; Dery, 2015; Lambrecht, 2016). In other words, whilst the *de jure* rights to land is

guaranteed by law, *de facto* rights to land on the contrary are mostly skewed in favour of men. Rittich (2005) has argued that such disparities in land rights may translate into perceived tenure insecurity and uncertainty thereby affecting resource-use and distribution efficiency as well as overall sustainability (Meinzen-Dick et al. 1997). Gendered differentiation is often theorised in the literature to take two forms – the situation where women own but have access to less than men (e.g. Deere and Leon, 2003; Jacobs and Kes, 2015) and where women have less secure rights than men and may be restricted from exercising certain rights such as undertaking long-term tree planting investments (Meinzen-Dick et al. 1997; Bugri, 2008). Whereas the former relates directly to a situation of less physical access to land (a characteristic feature of patriarchal rules and norms in most rural communities in SSA where women are perceived to be dependent on male family members i.e. husbands, fathers, uncles, brothers etc. within their families), the latter implies a more nuanced situation in which certain groups of women are generally constrained in terms of their usage of land. In the case of most rural parts of SSA, patriarchal-oriented tenorial practices have largely operated to relegate majority of women to the status of secondary land rights holders at the behest of male family members (Ik Dahl et al. 2005; Bugri, 2008; Dery, 2015). The latter view of gender differentiation is of primary concern to this thesis as the differences in land rights is often theorised as directly influencing women farmers perceived tenure security and ultimately their land investment decisions.

Against this backdrop, there are contrasting perspectives as to how best to safeguard women's land rights. There are mainly two sides of the debate. On the one hand, some feminist scholars advocate for replacement of customary tenure with statutory law (through legal formalisation) to increase certainty and security of women's land rights. Their underlying argument is that existing norms and rules under customary tenure have

often been applied selectively in a way that perpetuates practices that subordinate women (Tripp, 2004; Lastarria-Cornhiel et al. 2014; Antwi-Adjei et al. 2015). Conversely, other scholars (e.g. Benneh et al. 1996; Adoko and Levine, 2008; Daley and Englert, 2010; Sewornu, 2010; Adoko, 2011; Ossome, 2014) have suggested a bottom-up approach that builds on local customary tenure institutions as a plausible pathway towards women's land tenure security. The underlying premise of their argument is that customary tenure arrangements unlike statutory law, are flexible affording different forms of access and multiplicity of rights in land (Garber, 2012; Ndulo, 2011). In any event, advancing these arguments and developing appropriate pathway to effectively address gendered differentiation requires further detailed empirical understanding of the contemporary context.

2.7.2 Kinship and Intergenerational Land Relations

Despite the youth constituting the largest segment of SSA's population, most research on land access under customary tenure arrangements has tended to focus on gender with women at the centre as the vulnerable segment of society (Amanor, 2010; Kidido et al. 2017; Section 2.7.1). Nonetheless, recent evidence suggests that the assuming hegemony of traditional authorities (comprising chiefs, elders and lineage heads) in the face of growing land scarcity and commodification results in access difficulties, intergenerational conflicts (between older and younger family members) and general insecurity amongst the youth (see *ibid*; Amanor, 2010; Boni, 2008). Several writers have thus questioned the exercise of the so-called fiduciary powers of traditional authorities which has sometimes served as a conduit for discrimination against less powerful and vulnerable community members within the local socio-political hierarchy, including the youth (Peters, 2004; Toulmin, 2009; Boone and Duku, 2012; Kidido et al. 2017). Again, further empirical evidence is required to understand the current context.

2.7.3 Host-Migrant Tenorial Relations

Following the above, ethnicity or local citizenship is also widely recognised in the literature as an important dimension within which spheres patterns of differentiation regarding access and control mechanisms are manifested (Aryeetey et al. 2007; Peters, 2009; Lund, 2011). Conventional analysis on African tenorial dynamics have often regarded non-members of landholding communities (i.e. migrant farmers) as a category of land users whose land rights are insecure and susceptible to loss or unilaterally modifications by landowners particularly in the face of growing land scarcity (cf. Tsikata, 2015; Antwi-Adjei et al. 2015; Lund, 2011; Boone and Duku, 2012). Yet, some studies on host-migrant relations (e.g. Hill, 1963; Chimhowu and Woodhouse, 2006; Mathieu et al. 2003) have observed some migrant farmers with secure land rights (through outright purchase) duly recognised within local tenorial arrangements. More recently, there is burgeoning evidence that commoditisation of land has created new opportunities for rich and powerful migrants to obtain relatively more secure land at the expense of poor members of landholding groups (see Amanor, 2010; Tsikata, 2015; Section 5.5).

From the foregoing discussion, the following conclusions can be drawn: First, the presumption that existing customary tenure systems guarantee equitable access to land to the extent that there is no landlessness is questionable. Second, it should not be assumed that customary tenure systems and their underlying institutional structures automatically guarantee adequate protection of the land rights of the poor and vulnerable segment of the local community in all contexts. A systematic investigation is needed to sufficiently understand the specific challenges across different social groups and the promising strategies employed to alleviate these challenges on the ground in order to for future policies to build on them. The current research therefore examined the patterns of land access and control across different key social groups, gender, age and ethnicity.

2.8 Summary

The chapter which constitutes the conceptual basis of the study has undertaken a literature review of the relevant theoretical concepts. Essentially, it proceeded with an overview of the concept of sustainable land management and institutional approaches to SLM which laid the foundation for the subsequent discussion on the interrelationship between land rights, tenure security and sustainable land use in SSA context. Next, the evolution of Africa's pluralistic tenurial systems and the various formalisation approaches adopted to improve the security of customary land rights were evaluated. This was to afford sufficient understanding of the transformation and persistence of customary tenure systems in the face of the socio-demographic, economic, political and environmental changes as well as several formalisation efforts in the SSA context. The concept of tenure security was then discussed to explain what constitutes the concept, its operationalisation and interrelationship with investments in sustainable land use. An important conclusion that emerged from the literature review is that there is no one-size-fits-all approach to securing customary land rights. A more flexible and context-specific approach that takes due cognisance of the peculiarities of the local setting is important. In this view, the socio-cultural and political dynamics that undergird customary tenure institutions should be adequately accounted for and formalisation strategies should strive towards balancing the efficiency and social equity concerns as highlighted in the foregoing discussion. It therefore follows that the emerging paradigm of harmonising the disparate customary and statutory tenure systems can only be successful to the extent that the social and economic imperatives are adequately accounted for. Nevertheless, whilst customary tenure arrangements are dynamic, it remains to be seen how successive SSA governments can successfully build on these customary tenure institutions in a way that safeguards and/ or improves tenure security with little or no disruptions to the social and political

arrangements that may already provide a level of *de facto* security. This invariably implies a critical examination of the capability and extent to which customary tenure institutions and arrangements provide equitable, effective and secure land delivery in accordance with the tenets of good governance. Such an understanding will provide useful information that will aid the design and implementation of effective strategies towards improving tenure security and sustainable land management at the local level. The succeeding chapter therefore looks at the development of the land question and the transition towards the adaptation paradigm in the specific context of Ghana. This analysis serves a useful framework for a comprehensive understanding of the empirical analysis on land tenure and resource-use dynamics in the subsequent chapters. Before then, the conclusions drawn from the foregoing discussion have been conceptualised into a framework to guide the detailed analysis in the specific context of rural Ghana, as outlined below (see figure 2.1).

2.8.1 Conceptual Framework

The various components of problems identified with land tenure and resource-use dynamics can be linked together through an integrative framework for the role of land tenure security in shaping farm-households land management and investment decision-making in rural Ghana. The conceptual model as shown in Figure 2.1 is premised on the postulation that the existing tenorial arrangements that define the access to and control of land and its resources operate to determine the behaviour of households' in terms of their decisions relating to sustainable land use and management. It therefore stands to reason that an individual farmer's willingness to invest in sustainable land management (SLM) practices would be influenced by his or her tenure status, prevailing household and other institutional level factors (see Section 2.6).

The framework proceeds from the starting point of problem identification (i.e. changing environmental, socio-demographic, economic and political contexts characterised by depleting natural resources and unsustainable land use practices) towards the goal of ensuring land tenure security's contribution to sustainable land management and livelihood security in rural Ghana. As shown in Figure 2.1, the framework defines a role for the changing customary tenure arrangements highlighted by ill-defined, insecure property rights, social, political and economic exclusion of some groups of people including the poor, women, migrants and the youth. Such conditions of insecurity operate to constrain farmers' investments in land improvement practices as they lack the requisite incentives to do so. The resultant effect is the increasing natural resource depletion leading to environmental degradation with negative implications for long-term livelihood sustainability of rural land users. Within this paradigm, improving tenure security of local landholders is seen as a plausible mechanism that provides the basis for incentivising widespread investments in SLM practices in order to reverse environmental degradation and boost farm productivity for 'win-win' environmental and livelihood outcomes.

As underscored in the broader literature review, the changing socio-demographic and economic context vis-à-vis increasing land scarcity and commodification resulting in increased tenure insecurity and severe environmental degradation is recognised as a major problem in Ghana and SSA generally. As issues are identified, the prevailing tenurial arrangements is introduced to determine what actions (if any) should be undertaken to resolve the situation. Once well-defined and secure tenure arrangements are in place, it influences the problem perception. Thus, a feedback loop exists between land tenure security (property rights) as a regulatory mechanism and the identified land management problems, allowing for revisions in the determination of problems as the tenurial arrangements progress through various iterations. Within this purview, the harmonisation

of the disparate customary and statutory tenure structures towards enhancing the security of the multiplicity of property rights (use rights, control rights and ownership rights) in the study areas represent the central component of the framework. From Figure 2.1, land tenure security is operationalised in a tripartite view (as legal, defacto and perceived) as legal and extra-legal practices is envisioned as operating in tandem with other contextual factors to differentially influence plot-level land use and investment dynamics regarding SLM adoption. The control effect of improved land tenure security is seen in its outcomes including certainty of land rights, protection against arbitrary expropriation and enhanced investment incentives as households are guaranteed access to benefits accruing from investments in land. The final component of the framework highlights the potential outcomes of improved land tenure security which include improved access to credit opportunities, reduction in plot-level disputes and ultimately increased investment in SLM practices or technologies as posited in neoclassical economic theory. The overall effect is improvement in existing land use and management dynamics contributing to sustainable resource management and livelihood security in the study areas and rural Ghana as a whole.

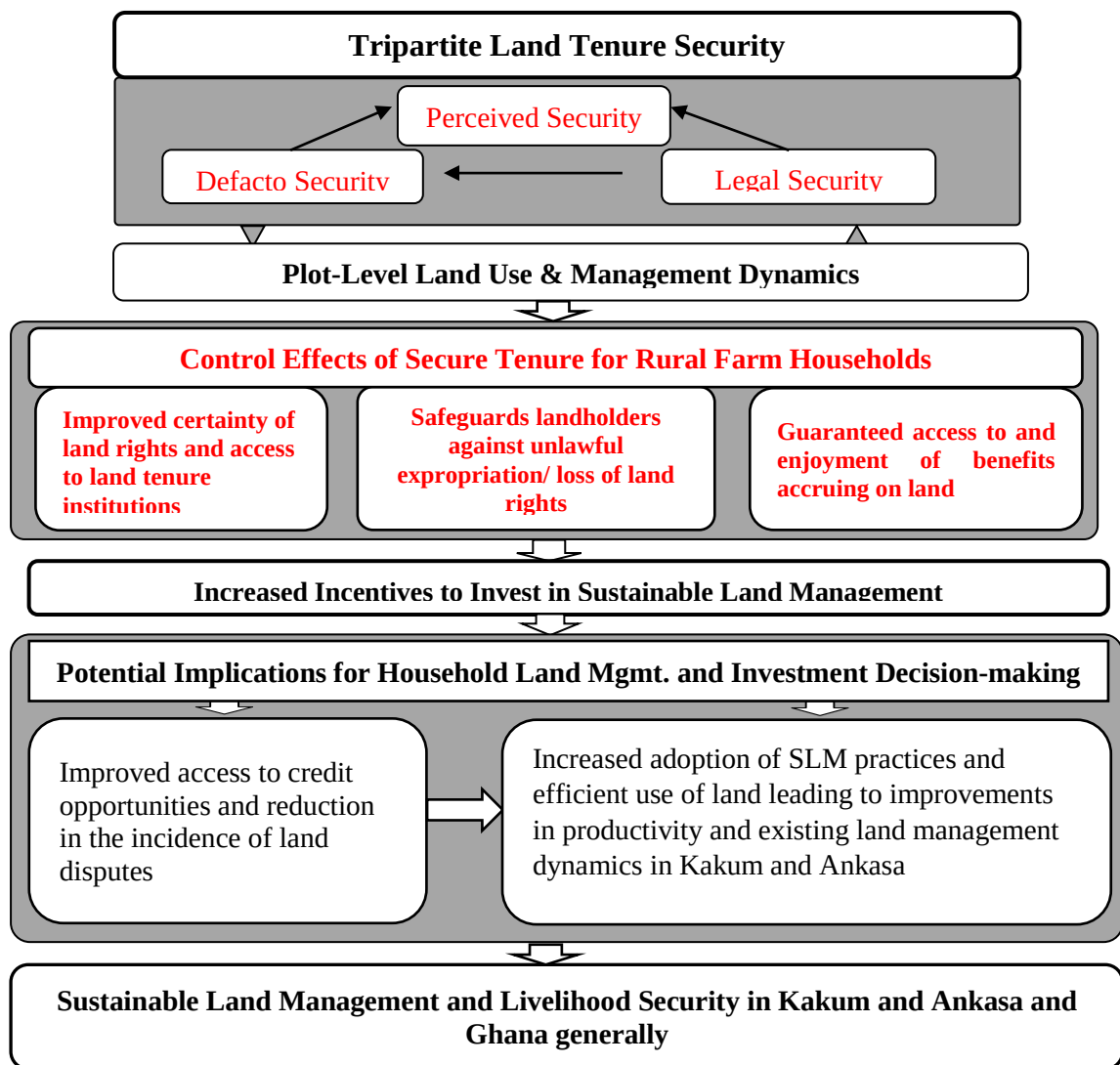


Figure 2.1: Conceptual Framework of the Study

Source: Original to the Author derived from Henley (2013) and Olale (2015).

CHAPTER THREE

LAND MANAGEMENT AND ADMINISTRATION IN GHANA

3.1 Chapter Overview

In Chapter 2, the theoretical debates underpinning the several legislative interventions and land reform (formalisation) programmes aimed at improving tenure security, agricultural productivity and sustainable land use within customary land tenure systems in the sub-Saharan Africa context were presented. This chapter situates the empirical setting of the study in context by focussing on the land tenure system in Ghana tracing its historical evolution through three significant political epochs (precolonial, colonial and the current post-independence era) in the country's socio-political development. Essentially, the chapter analyses how the various state interventions and policies on land tenure aimed at restructuring the customary land tenure system have been implemented and the extent to which they have shaped contemporary land management in Ghana particularly at the local level. In doing so, it also provides a useful basis for contextualising the ensuing empirical analysis and discussion reported in chapters 5 through to 7.

The underlying premise of this chapter is that sufficient understanding of the current policy framework on land tenure in Ghana and its associated challenges necessitates an examination of its historical antecedents. This derives from the view that property rights in Ghana and sub-Saharan Africa generally do not exist in vacuum but are situated within specific physical, demographic, economic and socio-cultural settings (Gildea, 1964; Berry, 1993). Therefore, a context-specific understanding of property right regimes within the purview of political and demographic change in sub-Saharan Africa is

important in appropriately designing and targeting land policy interventions in order to engender efficient and equitable social and economic outcomes. This is especially so in the case of Ghana given the long history of land policy interventions meant to restructure the customary tenure system so as to improve tenure security and increase investments in land. To this end, Blocher (2006: 171) underscored that “well-drafted property laws do more than simply set down clearer regulations for people to follow and rules for them to respect. They build on social understandings already in place”. It therefore stands to reason that the success of Ghana’s on-going land administration reforms may well depend on the extent to which they assimilate and build on the socio-political dynamics relating to land allocation and use at the local level. The remainder of this chapter is structured as follows: The first section outlines a background information on Ghana followed by an overview of the land tenure system in Ghana. The subsequent section discusses the historical evolution of the land tenure system in Ghana from the precolonial to the post-independence era. Afterwards, a critical analysis of the post-independence land reforms is presented with particular focus on the ongoing land administration reforms under the Ghana Land Administration Project. The chapter concludes by sharing some final thoughts on the extent to which the current land administration reforms are better-placed to engender tenure security and sustainable land management in Ghana.

3.2 Ghana – Background Information

As an agrarian based economy with a total land area of 238,540 sq.km and a current population estimated at 27.41 million people (2015 World Bank estimate), Ghana has experienced massive economic transformation over the last decade⁵ propelling the

⁵ This comes against the backdrop of Ghana embarking on a massive Economic Recovery Programme in 1983, series of IMF and World structural adjustment policies and a US\$ 4 billion debt relief received in 2006 under the Highly-Indebted-Poor-Country HIPC Initiative (ISSER, 2013).

country from a low-income country to a lower-middle income status with a Gross Domestic Product (GDP) pegged at US \$ 37.86 billion as of 2015 (World Bank, 2016). This is against the backdrop of various economic reforms and associated favourable trade and fiscal policies that have significantly increased the inflows of foreign direct investments into the country notwithstanding the recent economic hiccups largely attributable to the continuing devaluation of the Ghana cedi, increasing fiscal deficit and the general slump in international prices of the country's major export commodities, which are cocoa, timber and gold⁶.

In terms of the socio-political landscape, Ghana became the first sub-Saharan African country to attain independence from Britain on the eve of 6th March, 1957. Since then, the country has transitioned from an era of unstable military regime to a civilian regime premised on the tenets of democracy and the rule of law. Ghana currently operates a decentralised system of government in which the country is divided into ten (10) administrative regions with Greater Accra as the national capital and the seat of government. The regions are further sub-divided into 6 metropolitans, 49 municipal and 161 district assemblies forming a total of 216 local level metropolitan, municipal and district assemblies (MLGRD, undated). The country has so far, successfully undertaken seven (7) successive national elections held in 1992, 1996, 2000, 2004, 2008, 2012 and 2016. In the light of this relatively long period (~25 years) of political stability, Ghana has been widely epitomised as not only the beacon of democracy in Africa but also closely

⁶Over the last four years, Ghana's economy has experienced a downturn evidenced by high budget and current account deficit and the depreciation of the country's currency, the Ghana cedi. The government of Ghana is currently undertaking a fiscal consolidation programme (by lowering the high fiscal deficit and public debt) agreed with the International Monetary Fund (IMF) under the extended credit facility arrangement as a plausible strategy to rejuvenate the economy. <http://www.mofep.gov.gh/?q=content/government-and-imf-agree-programme-worth-940-million> (Accessed on 07/12/2016).

associated with the narrative of ‘Africa rising’. Moreover, the implementation of successive poverty reduction programmes (i.e. the Growth and Poverty Reduction Strategy, GPRS 2002-2005 and GPRS II 2006-2009) and the Millennium Development Goals (MDGs) initiative have witnessed a decline in the proportion of the population below the national poverty line (from some 50% in 1990 to less than 30% in 2006) by more than half (ISSER, 2013). To this end, projections on the medium to long-term economic performance remains high (following the commencement of commercial oil exploration in 2010) with emphasis on the country’s capability of achieving the targeted upper middle-income status by the year 2020.



Figure 3.1: Political Map of Ghana showing the Case Study Sites (Circled in Red)

Source: United Nations Cartographic Section (2005).

Against this background, it is imperative to underscore that Ghana's land and natural resource endowments have played a significant role in the process of socio-economic transformation with agriculture and industry collectively contributing about 46.8% of the overall Gross Domestic Product (GDP) in 2015 (GSS, 2016). The agricultural sector which currently employs about 60% of the working population is estimated to contribute 35% of household income and 20.2% of Ghana's Gross Domestic Product respectively (GSS, 2008, 2016). At the same time, various country-level assessments and other regional studies (e.g. FAO, 2001; GoG, 2012) have observed that much of the chalked socio-economic gains of Ghana have come at the huge expense of the country's key natural resources, particularly the forests. Over the last four decades, Ghana's primary forest cover has dwindled by about 90% with an estimated 26% loss between 2005 and 2009 alone (Nketiah et al. 2009; GoG, 2014).

Consequently, with the increase in population, food (in)security and other developmental concerns, there is an upsurge in the competition for access and use of land and other natural resources which almost invariably places a huge strain on Ghana's existing natural resource base; thereby threatening its long-term sustainability. The prevailing situation is further exacerbated by the recent spate of large-scale commercial land acquisition by foreign investors especially in the rural areas of Ghana (Schoneveld and German, 2014). This has brought to the fore the importance of addressing the land question in order to ensure easy access to land, tenure security and sustainable land use considering the changing social, economic and environmental conditions of the country. The policy and institutional framework for land management in Ghana has a long history of several land reforms highlighted by struggles and contestations within and across ethnic groups and families. Against this backdrop, the ensuing discussion predominantly focuses on analysing the evolution of land administration in Ghana from the purview of pre-colonial,

colonial and post-independence land reforms aimed at restructuring customary land tenure (the predominant source of access to land) and their impacts on local population and broader socio-economic relations. This lays the foundation for understanding the roots and resolution of the land tenure and resource-use complexities currently bedevilling the country.

3.3 The Land Tenure System in Ghana

Land tenure in Ghana is still characterised by a pluralistic legal framework consisting of statutory and customary laws operationalized within a multi-sectoral governance environment (Delville, 1998; Kasanga, 2001; Agbosu et al. 2007). Bugri (2012: 25) aptly surmised that, “land tenure in Ghana is the foundation of an intricate web of social, economic, political and mystical relations between people and land that underlies not only the basis of agricultural production but also the entire social and economic system of the country”. This amalgam of the customary and statutory laws underpinning the basis of Ghanaian land tenure as Kasanga and Kotey (2001) rightly noted are however ‘poorly articulated and appear to be on a collision course’. Thus, understanding the rather complex institutional framework of land tenure remains important in detailing out how the distinct but intertwined ownership and management structures that collectively affect land use and management decision-making especially in the case of rural smallholder farmers.

Broadly, two main tenure systems are discernible in Ghana – statutory and customary land tenures. Agbosu et al. (2007) in elucidating the composition of these two tenure systems identified that customary land tenure is characterised by mostly unwritten laws derived from local customs, practices and norms that are said to be flexible, negotiable and location-specific. Statutory land tenure on the other hand, consists of codified, written statutes and regulations with colonial law delineating acceptable standards and

consequences for non-compliance (ibid). Available statistics indicate that customary lands constitute about 78% of Ghana's total land with the remaining 22% falling under the domain of state (~20% which is exclusively owned by the state) and vested lands (~2% which is managed by the state but communally owned) respectively (GoG, 2003). The disparate customary and statutory tenure systems have developed overtime and undergone several reforms to reach their present state today. All the prominent studies on Ghanaian land tenure (e.g. Ollenu, 1962; Bentsi-Enchill, 1964; Kasanga and Kotey, 2001; Kasanga, 2001; Agbosu et al. 2007) have underscored how customary law is formally recognised and remains an important body of law in all aspects of the Ghanaian society.

In Ghana, even though statutory tenure is formally in place, native customs and traditions in the embodiment of customary law as evidenced above are still highly regarded in land management. The existence of customary law does not only define the ownership of land but invariably dictates peoples' perceptions and use of land and other natural resources. According to Ollenu (1962), Ghanaian customary law is premised on the assumption that "land belongs to a vast family of which many are dead, few are living and countless host yet unborn...Nana Sir Ofori Atta I, Chief of Akyem Abuakwa" which presupposes that the members of a community obtain a usufructuary right over land which they can use and enjoy but not alienate to another (Baryeh, 1997; Djokoto and Opoku, 2010). This highlights the customary notion of land ownership embedded in the historical and socio-cultural relations within a community of people. In the famous case of *Hammond v. Randolph et al.* (1936-3) 3 WACA at 43, the West Africa Court of Appeal judgement accentuated the above conception summarising the nature of customary land tenure in Ghana as follows:

"[T]he notion of individual ownership is quite foreign to native ideas. Land belongs to the community, the village or the family, never to the individual. All members of the community, village or family have an equal right to the

land, but in every case the chief or headman of the community or village or head of the family, has charge of the land, and in loose mode of speech is sometimes called the owner. He is to some extent in the position of a trustee, and as such holds the land for the use of the community or family. He has control of it, and any member who wants a piece of it to cultivate or build a house upon, goes to him for it. But the land so given still remains the property of the community or family.”

In this light, both the Ghanaian statutory tenure and customary law recognise different layers of ownership of and rights to land and other natural resources which are capable of subsisting concurrently in any given piece of land. These typologies of land rights are summarised in Appendix 1.

3.4 Evolution of the Land Tenure System in Ghana: A Historical Overview

In order to sufficiently understand the contemporary debates about land tenure and resource-use dynamics in Ghana, it is instructive to consider the historical antecedents of land policies and interventions that have shaped the evolution of customary tenure institutions and arrangements in the country (see Section 2.3). Against this backdrop, the restructuring of the customary land tenure system in Ghana, like other sub-Saharan African countries, can best be understood as an on-going process highlighted by three (3) significant epochs – pre-colonial, colonial and post-independence eras that characterised the country’s political (and land) administrations. This section provides a synthesis of the literature on the significance of these timescales to the overall development of Ghana’s current bifurcated tenurial system.

3.4.1 Pre-colonial era (Traditional era)

Prior to colonial rule in Ghana (then Gold Coast), there already existed well established political systems and institutions that served as the framework for social organisation and the management of land and other natural resources (Akuffo, 2009). Under this ‘traditional’ system land resources were held communally (under the exclusive

jurisdiction of chiefs, clan and family heads of the landholding community) and managed via local set of rules and practices known as customary law (Djokoto and Opoku, 2010). These set of rules governed the use of land and other natural resources by local communities and they varied from place to place (Agbosu et al. 2007). Three categories of interests subsist under the customary law setup: the allodial (which is the paramount interest in land often held by the community symbolized by the stool, skin, clan, family or *tendana* (earth priest) on behalf of its members), usufructuary “customary law freehold”— held by an individual or group of people who are part of the landholding community and customary tenancies (Bentsi-Enchill, 1964; Kasanga and Kotey, 2001).

An essential feature of the customary land tenure is the differing means of acquisition of land for various purposes which is centred on community membership. Whereas access to communal lands by indigenes is fairly straightforward and free, acquisitions by strangers are subject to clearly defined rules which are variable depending on the area although there exist some traces of similarities (Kasanga and Kotey, 2001). Typically, strangers include people in a traditional area who have no inherent right to occupy stool land. They are unable to pledge, sublet or sell land without the consent and concurrence of the landowner(s). Importantly, the allocation of use-rights in land was mainly through the lineage heads of the landholding groups who granted out on the basis of social relations and not for monetary considerations. For instance, the popular arrangement for acquisition of communal lands by strangers was usually through a process of social negotiation where some consideration in the form of a tribute (e.g. token fee, local drink or kola depending on traditions and norms of the landholding community) is paid by the former to the landholding group. Upon completion of the negotiation process, land transactions were orally executed with the breaking of the *guaha* or twig (which signified the transfer of land from the grantor to the grantee) without any written contractual

agreement. Key highlights of the pre-colonial period were the availability of large tracts of wholly communally owned lands coupled with low population and subsistence economy. Whereas land ownership was fragmentary, thus touted as “inefficient”, the system was socially efficient in the sense that it safeguarded against the monopolisation of communal lands by a few (Obeng-Odoom, 2014). Nevertheless, this phenomenon completely changed since the advent of colonial rule marked by the transition in the traditional perception of land as a communal asset or resource to its contemporary notion as a marketable commodity based on western conceptions of individualised ownership.

3.4.2 The Colonial Era of Legislative Interventions (1850-1957): A ‘Replacement’ Agenda

The advent of the colonial era in SSA including Ghana (then Gold Coast) during the late nineteenth century, as discussed in Chapter 2, had far-reaching ramifications for the pre-existing social, political and economic systems. This sub-section extends the discussion by focussing on how some of the key colonial (and post-colonial) laws have shaped the existing institutional framework of customary land administration in Ghana. Of particular importance is the British introduction of the policy of indirect rule, whereby traditional authorities (including local chiefs, village leaders and lineage heads) were incorporated into the colonial politico-administrative machinery as an effective means of controlling the indigenous population and the natural resources endowments (Njoh and Akiwumi, 2012; Mamdani, 1999). The policy, along with the upsurge in demand for land (occasioned by increases in population, internal migration and rapid boom in trade and commerce) significantly transformed the pre-existing tenurial relations and institutions (Njoh and Akiwumi, 2012; Djokoto and Opoku, 2010; Akuffo, 2009; Baryeh, 1997). This was highlighted by the introduction of several land policies and interventions by the colonial administration in a bid to restructure the supposedly inefficient and insecure

customary tenure arrangements (Berry, 1993; Kasanga, 1996; Baryeh, 1997; Agbosu et al. 2007; Djokoto and Opoku, 2010). As Agbosu (1982) explained, the predisposition of the colonial authorities to restructure customary tenure arrangements was predicated on the notion that they were backward, lacked security of title and incapable of supporting economic development at the time.

Against this background, two unsuccessful attempts were made by the colonial administration between 1891 and 1897 to regulate the customary land tenure system through vesting all unoccupied lands in the crown. In 1894, the colonial administration through the landmark Crown Lands Bill proposed the vesting of all wastelands, forest and mineral lands in the then Gold Coast in the English crown. The legal effect was that any future grants of such lands and minerals were to be made by the Governor at his discretion and would confer absolute title on the grantee (Aryeetey et al. 2007). The bill however stipulated clearly that it would not affect indigenous people's right to land acquired under customary law. The second statutory intervention was the Public Lands Bill of 1897 meant to declare all unoccupied communal lands as public property thereby vesting the power of administration of such lands in the colonial state (Abdulai and Ndekugri, 2007). These ordinances were restricted by organised oppositions notably the Aborigines Rights Protection Society (which represented the interests of chiefs and the educated elites) on the basis that it was an attempt to dispossess the natives of their land (Obeng-Odoom, 2014; Ninsin, 2015).

In light of the failed Crown Lands Bill, the Concessions Ordinance was promulgated in 1900 to ensure security of title for investors in the mining and timber industries. This latter ordinance was met with opposition by chiefs especially in the most affected areas even though no attempt was made to interfere with indigenous land rights. Nonetheless, the Concessions Ordinance was successfully passed (Aryeetey et al. 2007). This was

followed by several legislative efforts to regulate customary landholdings in the country as a whole or some parts of the country between 1900 and 1950 (Arko-Adjei, 2011). Notably, the colonial administration successfully passed the Administration (Northern Territories) Ordinance of 1902 (Cap. 111) and the Land and Native Rights (Northern Territories) Ordinance of 1931 (Cap. 143) respectively for the Northern Territories. The former conferred on the Chief Commissioner power to acquire lands in the Northern Territories for public use without any compensation (Aryeetey et al. 2007). These formalised land policy interventions introduced by the colonial administration effectively created a sharp contrast in the land administration system between southern and northern Ghana (Aryeetey et al. 2007; Djokoto and Opoku, 2010). Whereas the *laissez faire* approach was maintained in the south, in the northern territories, legislations were passed which vested native lands and all rights in the Governor (Kasanga, 2002; Agbosu et al. 2007; Djokoto and Opoku, 2010). The practical operation of the law was limited as Kasanga (2002) explained that except for the few acquisitions for public buildings and infrastructure, no major acquisitions were made nor were any local communities displaced (Djokoto and Opoku, 2010). Aside these laws, the colonial administration also enacted other legislations to facilitate and regulate land uses – the Town and Country Planning Ordinance, 1945 (CAP 84) (as amended), the Forest Ordinance No. 13 of 1927 (Cap. 157), Concessions Ordinance of 1939 and the country’s first Forest Policy in 1948. To the extent that the colonial government sought to formalise the customary tenure system, they effectively interpreted “customary” law in a manner that gave greater autonomy over land to the chiefs – who granted agricultural rights to farmers and timber rights to logging firms (Boni, 2006). Consequently, the chiefs sold the cultivable rights in land to immigrant farmers while the right to fell timber was granted to timber firms (ibid; Amanor, 2001).

In view of the foregoing, the colonial administration's agenda to restructure the customary tenure institutions and arrangements was not without consequences. First, the application of the indirect rule of administration led to the creation and superimposition of new traditional structures that hitherto did not exist (Firmin-Sellers, 1995; Okoth-Ogendo, 2002; Berry, 2002; Akuffo, 2009, Amanor, 2012). It also resulted in the emergence of previously 'unknown' chiefly privileges evidenced by the enrichment and empowerment of individual controlling customary tenure institutions (Pottier, 2005; Joireman, 2006; Amanor, 2012). A case in point was the recognition of chiefs as the radical allodial title holders and the relegation of community members to the status of usufructs holders in customary land (see sub-Section 2.3.2.1). Conversely, the establishment of new traditional structures in some instances, led to the ultimate weakening of the authority of some chiefs (Berry, 2002; Cotula, 2007; Akuffo, 2009). Berry (2002: 643) for instance, reported that colonial administrators routinely deported traditional leaders who they perceived as potential threats to the authority or security of the colonial state, exiling them to remote locations far away from their erstwhile lands and subjects. A classic example in the then Gold Coast colony was the exile of the Asantehene, Otumfuo Nana Prempeh I, King of the Asante Kingdom to Seychelles Island following the annexation of Ashanti in 1901.

Second, the wholesale introduction of a new legal system based on western legal principles and concepts resulted in the adulteration of the pre-existing customary rules and practices of the indigenous population. Contrasting with the pre-existing indigenous tenurial practices, the 'received' western conception of property was founded on the notion of exclusionary individualised ownership as opposed to collective or group ownership of land. Thus, the colonial authorities' failure to find conceptions of landholding similar to the freehold or exclusionary land ownership led to the assumption

that the indigenous population were mere occupants of their land instead of actual owners (Garber, 2012; Joireman, 2011). The resultant effect was the oversimplification of complex tenorial relations and the resultant pluralistic legal regime that has existed to date (Kasanga, 2001; Agbosu et al. 2007). The dualism in the judicial structures (i.e. the traditional and colonial courts) meant that ‘native’ customary law was interpreted through the lens of western legal principles and concepts. This ultimately resulted in the denial of customary ownership rights in land as the indigenous population did not own their lands in a manner that was admissible under western conceptions of title and property (cf. Amanor, 2012; Arko-Adjei, 2011; Akuffo, 2009). Moreover, the assumed hegemony by traditional authorities created room for the emergence of structures that undermined the land rights of their subjects or excluded them altogether (Amanor, 2012; Peters, 2004; Pottier, 2005; Akuffo, 2009). Following the rising land values and monetisation, traditional authorities responsible for land allocation practised ‘politics of exclusion’ denying resources to the poor and vulnerable segment of the community as part of a grand scheme to advance their individual interests and that of colonial administrators (Firmin-Sellers, 1995; Pottier, 2005; Joireman, 2006). Consequently, the inequalities in access to land occasioned by the individualisation and alienation of communal lands triggered social tensions between natives and their ‘imposed’ chiefs resulting in conflicts which have even persisted to date, especially in the formerly non-centralised states (Amanor, 2009). These modifications to the customary land tenure system have substantially influenced land relations even to date (Agbosu et al. 2007). In fact, some authorities in land tenure (e.g. Berry, 1993; Peters, 2004; Amanor, 2010; Ninsin, 2015) have argued the present land inequities, conflicts and tenure insecurity that pervade the tenorial regime in Ghana and other SSA countries are rooted in the legacies of colonialization (see sub-Section 2.3.2.1).

3.4.3 Post-Independence Legislative Interventions: Continuity or Change?

As established in Chapter 2, the post-independence era was characterised by the adoption of various land policies which primarily served to replicate the colonial framework of land tenure in several SSA countries. In Ghana, the enactment of various land policies operated to further adulterate the existing customary land tenure system (Kasanga, 1996; Baryeh, 1997; Djokoto and Opoku, 2010). A flurry of legislations that vested large parcels of land hitherto under the jurisdiction of customary authorities was passed under the Nkrumah regime with the underlying political objective of neutralising the potential threat posed by chieftaincy (Aryeetey et al. 2007; Djokoto and Opoku, 2010; Arko-Adjei, 2011). Notable amongst the laws promulgated to facilitate this new philosophy of land tenure and management were the Local Government Ordinance of 1951, State Council (Ashanti) Ordinance No. 4 of 1952, State Council (Northern Territories) Ordinance No. 5 of 1952. Other laws that clearly manifested this political motive were the Akim Abuakwa (Stool Revenue) Act 1958 (Act 8), the Ashanti Stool Act 1958 (Act 28) and the Stool Lands Control Act of 1960 (Act 79). These laws effectively vested in the state the authority to compulsorily acquire and use stool lands for either private or public purposes and to regulate the collection of stool land revenues (Aryeetey et al. 2007).

In light of this, additional legislations were passed in the 1960s which further entrenched the state's control over customary land. Prominently, the Administration of Lands Act, 1962 (Act 123) and the State Lands Act, 1962 (Act 125) were enacted to facilitate land acquisition by the state. To Abdulai and Ochieng (2012), these laws (Acts 123 and 125) were purposively enacted to disguise the initial political motive of the then Nkrumah led CPP administration. Whereas the Administration of Lands Act, 1962 repealed most of the colonial enactments, it however maintained the vesting customary land in the state. The preamble of the State Lands Act, 1962 stipulates that whenever it appears to the president

it is in public interest so to do, he may by an executive instrument compulsorily acquire any parcel of land. Such an acquisition automatically extinguishes all other rights in the [acquired] land and completely vests all interests in the president to be held in trust for the entire people of Ghana. A prerequisite to exercising this power of eminent domain is that, the acquisition should be in public interest. Conversely, the Administration of Lands Act, 1962 also operated to vest the legal interest in the [acquired] land in the state whereas the original landholding community retained the equitable or beneficiary right. Essentially, Act 123 gives the state the power to take over the management and control of any stool or family land. Political reasons (e.g. Kumasi Town Lands – Part 1), chieftaincy and land disputes (e.g. Sunyani in the Brong Ahafo region and Nkawkaw in the Eastern region), proper town and country planning (e.g. New Juabeng lands in the Brong Ahafo) and protracted litigation (e.g. between the Effutus and Gomoa) have been cited as common precursors to the invocation of this enactment (Baryeh, 1997; Agbosu et al. 2007; Djokoto and Opoku 2010). The implementation of these laws created a dual, unequal and hierarchical system of land tenure in which freehold and leasehold interests in land are conceived as superior to customary interests (Kasanga and Kotey, 2001).

Nonetheless, the 1979 Constitution re-vested the administration of stool lands in customary authorities (Djokoto and Opoku, 2010). The disposition of such vested lands however is subject to statutory consent and concurrence as provided under Section 8 of Act 123 and Article 267 of the 1992 Constitution of Ghana. In addition, Article 190 (4) of the 1979 Constitution imposed a general restriction on the grant of freehold interest in all stool/ skin lands in the country. This provision was imported wholesale under Article 267(5) of the 1992 Constitution which effectively barred the creation of private freehold interest in any stool/ skin land except for such interests created before the promulgation of the 1992 Constitution. Furthermore, in 1979, vested lands in Northern Ghana were

returned to the customary authorities following the concerted lobbying by the northern elites and chiefs (Amanor, 2009: 100; Ninsin, 2015). By implication therefore, customary authorities in the affected customary areas retained full ownership (both legal and equitable interest) of their land save for those lands acquired under the State Lands Act, 1962 in which the state retains full ownership (Arko-Adjei, 2011).

The post-independence era also witnessed the introduction of various land registration policies in Ghana as a means of providing evidence of ownership. The deeds system of land registration was first introduced under the Registration Ordinance of 1883 and Land Registry Ordinance of 1895. However, the Land Registry Act, 1962 (Act 122) was subsequently promulgated to consolidate the law relating to the registration of instruments affecting land. Other pieces of legislation that were enacted to support the deeds registration system included the Survey Act, 1962 (Act 127), Conveyancing Decree, 1972 (NRCD 175) and the Statutory Declaration Act, 1971 (Act 371). The deeds system primarily functions to provide evidence that a transaction took place but it is not *prima facie* proof of title. A myriad of weaknesses have been identified with the deeds system of land registration. Several studies (e.g. National Land Policy, 1999; Kasanga, 2003; Sittie, 2006) identified that the deeds registration is plagued with inaccurate and unscientific description of land parcels, multiple land sales and lack of certainty of ownership culminating in tenure insecurity. In this vein, attempts were made to address the inherent weakness of the deeds system. This led to the introduction of title registration under the Land Title Registration Law, 1986 (PNDCL 152). This law was chiefly promulgated to give certainty and facilitate proof of title and to render dealings in land safe, simple and cheap and prevent fraud relating to purchases and mortgages. It was enacted to provide the framework for the compulsory registration, and to provide for the registration of all interests in land, including customary and common law. Despite the

good reasoning backing its introduction, the Land Title Registration Law has not achieved its stated objectives. A recent study by the World Bank (2011) estimates that approximately 30, 000 land parcels are registered under the title registration system with that of the deeds system unknown. Some writers (Kasanga, 2003; Sittie, 2006; Djokoto and Opoku, 2010) have underscored that the sporadic manner of implementation caused by the lack of technical expertise, logistical constraints, poor public education among others are probable reasons for the low impact of the title registration system. Kasanga (2002) concluded *inter alia* that, recourse was not made to the existing deeds registry system which indeed should have been the nucleus of the title system. This by implication has created room for appropriation of land by speculators, the well informed and educated folk, land administrators, their cronies and members of government (ibid). For example, a recent survey by the Ghana Judicial Service revealed that nearly 50% of all new civil cases lodged are land-related (Ghana Judicial Service, 2010). Besides, the cumbersome, bureaucratic, time-consuming and expensive registration process has meant that the PNDCL 152 operated to the detriment of the poor majority whom it was intended to protect (Dowuona-Hammond, 2003; Arko-Adjei, 2011). This is further exacerbated by the fact that the implementation of the law has been predominantly limited to the urban areas of Accra and Kumasi with little or no efforts made to broaden its coverage to afford the registration of land rights in the rural areas.

It is evident from the foregoing discussion that the several decades of statutory interventions in customary land management based on a 'replacement ideology' has translated into little in terms of engendering adequate tenure security and efficient land delivery system in Ghana. Instead, problems of land ownership, access, loss of land rights and tenure insecurity especially by the poor and vulnerable groups have persisted at best or worsened at worst. The remainder of the discussion therefore turns attention to the new

generation land (tenure) reforms of post-independence era marked by the transition from a replacement paradigm towards an adaptation paradigm in order to promote tenure security and effective land management in Ghana. The review of the existing land policies, particularly the ongoing Land Administration Reforms (LAR) lays a useful foundation for a deeper and nuanced understanding of the subsequent empirical analysis.

3.5 The ‘New Generation’ of Post-Independence Land Reforms: Towards an Adaptation Paradigm?

3.5.1 The National Land Policy (NLP) of Ghana

As indicated previously, a more nuanced and better understanding of tenurial and resource-use dynamics is necessary to devise appropriate policy responses. It therefore follows that an analysis of the complexities of tenurial and resource-use dynamics under customary tenure arrangements will be incomplete without considering the role of state land policies on customary land management. To that end, the failure of earlier land policy reforms to improve land tenure security vis-à-vis the changing socio-economic and environmental conditions in country highlighted the urgent need for a comprehensive national land policy that would provide the framework for addressing the various challenges bedevilling the customary land administration in Ghana. Thus, in a marked departure from the rather piecemeal approach to land tenure reform pursued in the preceding decades, a comprehensive National Land Policy (NLP) document was launched in June 1999 following earlier recommendations by the Law Reform Commission in 1994. Being the very first of its kind, the NLP sought to address some of the fundamental problems of land management in the country. These included general indiscipline in the land market, evidenced by land encroachments, multiple land sales, haphazard development, indeterminate boundaries of customary-owned lands, resulting from lack of reliable maps and plans, compulsory acquisition by government of large

tracts of land, which have not been utilised; a weak land administration system and conflicting land uses, inadequate security of land tenure and protracted land litigations that have clogged the court system (GoG, 1999). The new NLP was envisioned to ensure ‘the judicious use of the nation’s land and all its natural resources by all sections of the Ghanaian society in support of various socio-economic activities undertaken in accordance with sustainable resource management principles and maintaining viable ecosystems’ (ibid: 6).

Importantly, the NLP document in recognising the principle of highest and best use of land based on a market-driven approach to land management also underlines the need to facilitate equitable access to land and security of tenure rights of landowners and their descendants so as to protect them from becoming landlessness or tenants on their own lands. In addition, the NLP also highlights effective collaboration between local communities, traditional authorities and government agencies in the land development process (GoG, 1999). Whereas the objectives enshrined in the NLP document constitute a major step towards addressing the afore-mentioned issues of land ownership, tenure insecurity and environmental conservation saddling land administration in the country, the policy is not without shortcomings. Recognisably, the policy fails to outline clear-cut implementation guidelines, timescales and framework for evaluating the attainment of its objectives. Aside from indicating the involvement of traditional authorities and statutory agencies in the land development process, it does not specify their specific roles which remains critical in avoiding potential contradictions and conflicts. Besides, some scholars (e.g. Kasanga, 2000; Wily and Hammond, 2001; Abdulai, 2002) have even questioned efficacy of the NLP in delivering its touted pro-poor vision of engendering equitable land access and security of land rights. Wily and Hammond (2001: 12), for instance, argue that though the NLP is benign in many of its stated principles, it fails to directly tackle the

actual difficulties faced by the economically and institutionally poor in securing their land rights. This observation also finds expression in the National Land Policy being silent on gender inequality as a problem (Tsikata, 2001). To that end, the NLP as it stands, falls short of a clear pro-poor vision of securing land rights and cannot therefore be characterised as laying a solid foundation for growth with equity (Wily and Hammond, 2001). The limited involvement of the majority of community-based land users in the development of the NLP and ultimately their marginalisation in its implementation is also telling of the NLP's inherent defect in pursuing its pro-poor vision (Abdulai, 2002; Bugri, 2004). Moreover, the overall strategic direction of the NLP seems to assume that registration of individualised land rights guarantees tenure security and facilitates investment for the benefit of the poor majority. Yet empirical evidence on the experiences of land registration in Kenya and other African countries generally attests to the fact that this may not always be case (Bugri, 2004; Domeher and Abdulai, 2012; Section, 2.6.1). This is also evidenced by the fact that customary land rights in Ghana and SSA generally are the outcomes of negotiations, struggles, disputes and implicit agreements that are embedded in social relations of family, kinship and community (Berry, 1993; Ubink and Quan, 2008). These social relations are also underpinned by unequal power relations between ordinary land users and customary authorities, whose powers and opportunities to redefine and interpret local rules to their advantage might increase as a result of formalisation of customary tenure systems through land registration. To that extent, the registration of individualised land rights could operate to the detriment of the less powerful, poor and vulnerable in the society (Berry, 1993; Peters, 2004; Ubink and Quan, 2008; Amanor, 2010).

3.5.2 The Land Administration Project (LAP) of Ghana: A Critique

To give effect to the recommendations outlined in the NLP document of 1999, the Land Administration Project (LAP) was formulated during 1999-2001. The LAP is a multinational donor support project with a long-term (15-25 years) perspective designed to address the major deficiencies and challenges plaguing land administration as captured in the National Land Policy (GoG, 2003). However, it was not until October 2003, during the era of the Kufuor-led New Patriotic Party (NPP) administration that the Land Administration Project was officially launched. Essentially, the focus of LAP is to reform land institutions and develop land policy so as to provide clarity and certainty of property rights of local land users and enable greater discipline and efficiency in the land market (Quan et al. 2008; LAP, 2008). A major feature in the LAP design seems to be its focus on building on the strengths of the local customary land administration and management as a plausible basis towards effective harmonisation of customary and statutory tenure structures (LAP, 2008). In conjunction with the NLP, the LAP constitutes a paradigm shift in approach to land reform in Ghana and has been touted as the panacea to the existing challenges of land administration in the country (GoG, 2003; 2008; Djokoto and Opoku, 2010). To this end, the objectives of the first phase of the project (LAP-1), which spanned from 2003 to 2011, sought to implement land policy and institutional changes in order to lay the appropriate foundation for a sustainable and well-functioning land administration system that is fair, efficient, cost-effective, decentralised and enhances land tenure security (GoG, 2003: 12). Direct outcomes of LAP-1 included: (i) review of existing statutes on land which led to the passage of the Lands Commission Act, 2008 (Act 767) and merger of four land sector agencies, (ii) decentralisation of the deeds registry to the other nine regional capitals, (iii) establishment of 37 customary lands secretariats (CLS) to facilitate management of customary lands and associated records

keeping on land transactions by traditional authorities, (iv) establishment of land courts which did lead to a reduction in the backlog of land-related court cases, (v) systematic land title registration and customary boundary demarcation and (vi) the ascertainment and codification of customary land rights in 20 traditional areas (World Bank, 2011: 4).

The objective of the current and second phase of the LAP (LAP-2), which started in September 2011, is to consolidate and strengthen land administration and management systems for an efficient and transparent land service delivery. To achieve this end, the project “concentrates on removing business process bottlenecks, promoting transparency and addressing the various challenges within the lands sector so as to improve efficiency in the delivery of land services and increase land tenure security” (GoG, 2015: 2). Other pertinent issues outstanding from LAP-1 including difficulty in accessing land, weak land administration system, lack of consultation with land owners and chiefs amongst others have also been flagged for consideration (World Bank, 2011). So far, the implementation of LAP-2 has culminated in two major enactments – an omnibus Lands Bill and Land Use Bill pending cabinet approval before passage into law.

Notwithstanding the achievements of the LAP so far, its implementation has been riddled with some notable flaws which has received several criticisms. First, the overly ‘technical approach’ adopted in the implementation of the LAP has meant that it circumvents several political issues (Aryeetey et al. 2007). This is evidenced by the seeming importance assigned to the views and interests of local and political elites; chiefs, land administrators, technocrats, landowners, land lawyers among others to the relative neglect of other groups (such as women, migrant farmers, youth and the poor) in the design and implementation of the LAP. This raises questions as to the extent to which the LAP is inclusive in terms of adequately representing the interest of the different social groups especially the less powerful, poor and vulnerable in the society (Aryeetey et al. 2007; Majeed, 2010;

Ampadu-Ameyaw and Aidoo, 2015). To this end, there are concerns that the LAP has so far not given sufficient attention to the interest of the poor and vulnerable in Ghana and there is the propensity that its implementation would exclude and further marginalise the afore-mentioned in favour of the rich and powerful local actors. Some scholars (e.g. Amanor, 2008; 2010; Ampadu-Ameyaw and Aidoo, 2015) have argued that the current proposition of returning land to stools and skins as part of the broader reform process towards improved customary land management risks entrenching the powers and positions of traditional authorities as landlords instead of custodians of communal lands. The foregoing observation derives from recent evidence suggesting that traditional authorities in the face of growing competition and commodification of land are now redefining and interpreting custom to advance their individual parochial interest to the detriment of their subjects and future generations (Ubink, 2008; Amanor, 2009; 2010).

On the foregoing, the market-driven approach to reform under the LAP as an avenue to engender efficiency and equity in land access, poverty reduction and development has also been called to question. The rationale for the market-driven land tenure reform under the LAP seems to be underpinned by de Soto's 'dead capital thesis' that tenurial problems and the inability to collateralise land lead to market distortions with negative effects on economic growth and productivity (de Soto, 2000). Yet the experiences of other sub-Saharan African countries (implementing land reform programmes) (see Sections 2.3.1 and 2.4.1) suggest that market-driven land tenure reforms particularly privatisation and titling of land may also operate to produce outcomes contrary to expectations. In fact, there is evidence that land titling may lead to insecurity and reinforce inequalities within poor and vulnerable groups thereby exacerbating poverty and social exclusion (Berry, 1993; Peters, 2004; Ubink and Quan, 2008; Amanor, 2010; Ampadu-Ameyaw and Aidoo, 2015). Within this purview, the LAP's romanticising of land titling and registration as the

panacea to tenure insecurity among the poor majority in Ghana raises some questions from a social equity perspective. Importantly, there are major concerns that the rather default recourse to land registration (as the solution to land tenure problems in Africa and specifically Ghana) without thorough appraisal of its distributive effects could result in elite capture of its benefits and encourage land speculation in favour of the rich and more powerful actors. This is evidenced by the low rate of registration especially amongst the rural poor instigated by a myriad of factors including the cost involved and limited awareness of the relevance and benefits of registration in Ghana (Alhassan and Manuh, 2005; Kanji et al. 2005; Ampadu-Ameyaw and Aidoo, 2015). Besides, the extensive focus of the LAP on urban and pre-urban areas relative to the rural areas leaves much to be desired in its implementation because the majority of rural folk might be excluded from the programme altogether.

Moreover, the LAP's skewed focus on individual registration vis-à-vis the existing legal contradiction over the registration of customary freehold interests in Ghana invariably implies that most rural people especially natives stand the risk of losing their land rights (cf. Aryeetey et al. 2007; Majeed, 2010). To that extent, custodians of communal or family lands like chiefs, clan or lineage heads are likely to assume individual ownership of such lands to the disadvantage of other members of the landholding community particularly in the rural areas. Though considerable efforts have been channelled into strengthening local-level land management in order to alleviate these challenges, such decentralised administrative units are increasingly overwhelmed by the complexities in the planning and management of rural landscapes (Yelibora et al. 2014). A case in point is the recent Land Tenure Facilitation Activity⁷ under the auspices of the Millennium

⁷ The MIDA Land Tenure Facilitation Activity formed part of a broader initiative on agricultural productivity and rural development in some identified intervention areas (including the Awutu-Senya and Savelugu-Nanton districts) implemented between 2006 and 2012. The overarching purpose was to improve land

Development Authority which (sought to provide an efficient methodology for registration of rural land rights as a means to improve tenure security of small rural landholders) which run into various implementation challenges significantly limiting its impact (USAID, undated). For instance, the general unwillingness and/ or lack of interest of landowners, chiefs and communities to engage in the land tenure facilitation process as well as inter-community disputes over allodial land boundaries constrained the success of pilot projects in the Awutu-Senya and Savelugu-Nanton Districts respectively (ibid :10).

In view of the above, a rather general critique of the current land tenure reforms across several African countries and specifically Ghana's LAP relates to the extent to which the project is decoupled from the vested interests and positions of the multilateral agencies (notably the World Bank) involved its design and implementation (Aryeetey et al. 2007; Majeed, 2010). Given the neoliberal or market-oriented development focus of the World Bank, there is a concern that the implementation of the LAP could champion the institutional interests of the former to the detriment of the wider segment of the Ghanaian society. This concern is reflected in the somewhat 'heavy influence' of the World Bank on the implementation of the LAP such that it closely follows the de Soto's logic of unlocking dead capital on land through capitalism and glosses over social equity issues in the process as previously mentioned (cf. de Soto, 2000; MLF, 2003; World Bank, 2011; Ninsin, 2015). Yet, the LAP is envisioned to promote the harmonisation of customary and statutory tenure systems in order to enhance efficiency while ensuring equitable land access, tenure security and ultimately poverty reduction. This therefore calls to question the extent to which the LAP's market-oriented focus reforms geared towards economic

tenure security for existing landowners and to facilitate access to land. Overall, over 3,800 rural land parcels in the Awutu-Senya district were legally registered (USAID, undated).

efficiency also guarantees social equity. In this view, Majeed (2010: 36) argues that ‘whereas LAP advocates for efficiency and pro-poor approach in its rhetoric, the outcome might not be pro-poor as the interest of other social groups are likely to be undermined and subordinated to the market based on efficiency which may come at the expense of equity’. Thus given the complexities of land access in Ghana underpinned by unequal power relations (transcending the efficiency question), subordinating issues of social equity to the market might not necessarily translate into pro-poor outcomes. Instead, this could potentially result in situations of winners and losers and concentration of wealth and power to a few powerful actors whilst the poor and vulnerable social groups risk being relegated into a state of landless or near-landlessness further entrapping them in chronic poverty (ibid, Amanor, 2010; Ninsin, 2015). It is against this backdrop that the present research examined whether customary tenure arrangements are viable in safeguarding tenure security in the changing tenurial context (see Chapters 5 and 6).

3.5.2.1 The Customary Land Secretariat (CLS)

The current Ghana Land Administration Programme (LAP) in its bid to harmonise customary and statutory tenure systems for effective land governance as aforementioned, has increasingly underscored the need for decentralised structures at the local level. In this vein, the implementation of the LAP has resulted in the establishment of customary land secretariats (CLSs) as decentralised administrative units that assist customary authorities to improve and develop customary land administration in Ghana (Arko-Adjei, 2011; Bugri, 2012). Essentially, the CLSs operate as the interface between customary and public land sector agencies and are governed by the chiefs and heads of clans and families through their respective land management committees (Bugri, 2012: 8). While the CLS

concept is not entirely new⁸, the LAP-supported CLS is envisioned to streamline local land administration processes while addressing existing problems of protracted disputes, uncertainty and insecurity over land rights through the demarcation of customary land boundaries and registration of rights and interests in land. In achieving this goal, CLSs as stipulated in Section 16 (1) of the draft Lands Act 2016 are to perform some key functions including the recordation of rights and interests in land, settlement of land disputes through alternative dispute resolution, facilitate the preparation of participatory local planning schemes and undertake community education, sensitization and awareness creation on land in their respective customary areas. Since 2004, the LAP in an incremental manner has established pilot customary land secretariats either at the stool level under the paramount chief and/ or under landholding families in selected communities across the country. Incidentally, the Assinman and Western Nzema CLSs have recently been established in the district and traditional capitals, Assin Fosu (Kakum) and Beyin (Ankasa) in the two study sites respectively. Notable of the achievements of the LAP-CLS so far include the recording of land transactions, enumeration of properties and recovery of land records in the existing CLS areas. This remains an integral aspect of the on-going process of building land databases for respective customary authorities (Kakraba-Ampeh, undated). Besides, the LAP-CLS through the promotion of alternative dispute resolution mechanisms (ADR) is facilitating the peaceful settlement of land disputes in existing CLS areas. A case in point is the successful settlement of a 14-year old dispute by the Land management committee of the Dorma-Ahenkro CLS in the Brong Ahafo region upon its withdrawal from the formal court (ibid). It is thus on record that

⁸ The concept of customary land secretariat was already operational by some traditional authorities in Ghana before the advent of the Ghana Land Administration Project (LAP) in 2003. Notable of these pre-existing customary land secretariats are the Asantehene's Land Secretariat in Kumasi (Ashanti Region), the Akyem Abuakwa Land Secretariat in Kyebi (Eastern Region) and the Gbawe Kwatei Family Land Secretariat in Gbawe- Accra (Greater Accra Region) (see Kasanga and Kotey, 2001; Bugri, 2012).

within the short period of the CLS inception, it has facilitated the settlement of 771 disputes through ADR across the country (GNA, 2009).

Notwithstanding these early achievements, critical assessments of pilot CLSs established under the LAP framework underline a number of challenges that could blunt its overall impact. The initial top-down approach or the so-called “supply-led approach” (where the initiative to establish CLS originated from the government without sufficient consultation with the landholding communities) adopted by the LAP between 2003 and 2008 led to problems of ownership as some traditional authorities perceived the CLS as an appendage of the public land sector agencies and a ploy to usurp their authority and/ or dispossess them of their land (see Quan et al. 2008; Aryeetey et al. 2007). Subsequently, the LAP has revised its implementation strategy in favour of a “demand driven approach” where CLSs are established at the request of customary authorities having satisfied a predefined economic viability and readiness criteria (for a discussion, see Biitir and Nara, 2016).

There is also a concern that CLSs could develop land markets and create landlessness among the less powerful and vulnerable groups like women, tenant farmers, youth and the poor, especially in rural communities (Antwi, 2006; Yankson et al. 2009). This derives from the understanding that the supervision and management of the CLSs remain vested in the traditional authorities and heads of clans and families. This conceptual configuration of the CLS synonymous to Fitzpatrick’s (2005) “agency method” description of land governance (where the state identify agents to undertake land management functions on behalf of their customary landholding groups) raises some suspicions of the re-invention of the indirect rule system which effectively operates to free land for foreign and/ or large-scale investments benefitting the elite minority but constraining the livelihood opportunities of the poor majority especially in the rural areas (Ubink and Quan, 2008; Amanor, 2010). This suspicion is chiefly fuelled by the

government's neoliberal orientation of simplifying land access and developing land markets to attract the needed investments for progressive socio-economic development (GoG, 2003). Yet, the current position of some traditional authorities as landlords instead of custodians of communal land (evidenced by the wanton sale of land to different foreign investors to the detriment of their subjects) as observed earlier remains a real problem (in terms of transparency and accountability) in the operations of CLSs (Aryeetey et al. 2007; Ubink, 2008a; Amanor, 2001; 2010). As Ubink and Amanor (2008: 16) observe, vesting of the CLS under the authority of the chiefs implied that LAP ignores the fact that chiefs often exercise customary privileges and use their powers to redefine land relations in their interest to the detriment of the powerless subjects. Antwi (2006) seems to downplay this concern by arguing that with the CLS' preoccupation of promoting transparency and accountability in customary land administration, the incidence of such practices will be minimised or curtailed in the long-run. As a result, smallholders stand a chance of benefitting from the evolution of operational and pervasive land markets under the CLS regime considering the LAP's adoption of a learning-by-doing strategy (ibid). However, Bugri (2012) emphasises that "it will be naïve to assume that the establishment of CLSs will not lead to tenurial re-engineering in customary areas". He advocates that the land rights of vulnerable groups and possible elite capture of the land governance process should be anticipated and progressively addressed.

On the foregoing, there are also major outstanding issues relating to the long-term sustainability of CLSs especially in rural communities where land markets are still less developed. Some recent studies (Yankson et al. 2009; Bugri, 2012; Biitir and Nara, 2016) have highlighted some key institutional challenges including inadequate skilled personnel, poor staff remuneration, revenue constraints etc. as constraining the effective and efficient operations of CLSs in Ghana. These institutional weaknesses are further

complicated by the fact that the regulatory framework that sets out the legal basis of CLS and its operations has yet to be passed into law. Therefore, to the extent that established CLSs especially in rural areas have limited financing opportunities invariably imply that they are incapable of engaging qualified personnel for the effective execution of their functions without the requisite support from government. In light of these institutional weaknesses, it is questionable whether the CLS concept is sustainable (particularly in the rural communities) considering the LAP's strategy of providing high-level information technology (IT) infrastructures, equipment and logistics for CLSs without sufficient and continuous support (cf. Bugri, 2012; Yankson et al. 2009). In any case, it is also worth highlighting that the public land sector agencies are equally if not severely fraught with capacity weaknesses to the extent that Kasanga (2000) observes it would be suicidal to leave all land management functions to them. Thus, for the LAP (through the implementation of the CLS concept) to achieve its stated objectives, much will depend on the extent to which above challenges are effectively addressed. In Quan et al.'s (2008) view, "without the harmonization of stakeholder perspectives and the disparate interests, the well-intentioned CLS may become a novelty rooted in the hitherto problematic old traditional land management framework".

3.6 Summary

The chapter has outlined the legal framework for land management in Ghana which situates the subsequent empirical analysis, findings and recommendations presented in chapters 5 through to 8. The discussion demonstrates that the quest of successive governments to restructure the customary tenure system (based on a replacement ideology) in order to improve tenure security and efficiency in land delivery has rather resulted in a pluralistic institutional arrangement. The combination of these statutory and customary laws underpinning Ghana's land tenure system are ill-coordinated and appear

to be a collision course with negative implications for security of access and tenure for different social groups especially the vulnerable and poor in society (Kasanga and Kotey, 2001; Aryeetey et al. 2007).

Importantly, the chapter highlights that current land policy interventions in a bid to addressing the myriad of challenges bedevilling land management in the country still follow the colonial and post-colonial models of replacement instead of adaptation to existing customary systems (Arko-Adjei, 2011). This orientation of land policy interventions is largely premised on de Soto's notion of land tenure formalisation through land title registration as the primary means of securing land rights. Yet the foregoing analysis highlight that land tenure formalisation via land titling or registration may not always improve tenure security but could rather operate to the detriment of the vulnerable social groups like women, youth and the poor (see Section 3.5.1).

Thus, the focus of current debates on land tenure in the country is geared towards how to successfully harmonise the statutory and customary tenure structures to improve tenure security, efficient and equitable land delivery. Whilst the promulgation of the NLP and its operationalising framework (i.e. the LAP) reflects this thinking, it appears that the implementation prioritises economic efficiency over social equity considerations which may blunt its overall impact especially in the rural areas. It therefore follows that for the ongoing land administration reform in Ghana to effectively promote efficiency and equity in land access as well as enhance tenure security, sufficient attention to the social equity argument (beyond the efficiency question) at the local level remain necessary. The current approach of subordinating issues of social equity to the market under the LAP may be inadequate in achieving the intended objectives. The next chapter (Chapter 4) outlines in detail the methodology used in this thesis after which the three results chapters (Chapters 5 through to 7) are presented.

CHAPTER FOUR

GENERAL METHODOLOGICAL FRAMEWORK FOR THE STUDY

4.1 Chapter Overview

This chapter outlines the specific research design and methodology for this study. The study adopts a mixed methods approach (Creswell and Clark, 2011; Creswell, 2014) to explore the changing dynamics of customary tenure institutions, the social and power relations that undergird them and their implications for local landholders' tenure security and land investment decision-making in rural Ghana. As highlighted in Chapter 2, contemporary resource management is underpinned by the active involvement of local communities and groups who are central in achieving sustainable resource management. It was argued that achieving such an end hinges on a better understanding of land tenure and resource-use dynamics which is necessary to develop appropriate land use policy interventions. This in turn also requires a holistic understanding of the nature of customary tenurial arrangements and their inherent socio-political dynamics (that determine conditions of local people use and control of land and its influence on their land management decision-making) in the absence of which some authors (e.g. Obiri et al. 2012; Insaيدoo et al. 2014) have expressed could impede the success of current land use interventions aimed at sustainable land management.

A number of previous investigations have employed a mixed methods approach in their examination of issues around tenurial and resource-use dynamics (see, e.g. Bugri, 2008 and Antwi-Adjei et al. 2015 in Ghana; Jansujwicz et al. 2013 in Maine) because adopting a mixed methods approach offers a pragmatic approach to holistically answering important empirical questions posed (Creswell and Clark, 2011). The remainder of the chapter is structured as follows: the first section outlines the underlying philosophical

foundations of the study based on which the merits of adopting a mixed methods approach to underpin the research design is elucidated. In addition, the adoption of an exploratory case-based approach is also justified. The succeeding sections go on to discuss the research design in conjunction with the selection of the study sites for the investigation and the general data collection approach. Afterwards, a detailed description of the process of stakeholder identification, specific sampling strategy, data gathering, analysis and reporting of both the qualitative and quantitative aspects are outlined. The concluding paragraphs of the chapter then discusses some methodological limitations and ethical considerations of the thesis.

4.2 General Philosophical Approach

Research design as a concept has been defined variously in the literature (e.g. Kumar, 2005; Punch, 2014; Creswell and Clark, 2011). However, for the purposes of this research, Creswell and Clark (2011) definition of a research design as the various procedures for collecting, analysing, interpreting and reporting data in research works is adopted following after a mixed methods approach. Within this context, Creswell (2014) defines “mixed methods as an approach to research in which the investigator gathers both quantitative (close-ended) and qualitative (open-ended) data, interprets the two and then draws interpretations based on the combined strengths of both sets of data to understand research problems”. This is in the light of the recognition that the actual research process does not conform to the qualitative-quantitative dichotomy and there is the increasing need for more evidence in applied settings (Miles and Huberman, 1994; Tashakkori and Teddlie, 2003a; Creswell and Clark, 2011: 50). Thus, notwithstanding the various controversies within contemporary social science research circles about the appropriateness of mixed methods (for a related discussion, see Tashakkori and Teddlie,

2010: 12-34); several scholars (e.g. Creswell, 2003; Tashakkori and Teddlie, 2003) advocate strongly for its usage in understanding complex societal phenomena.

The epistemology (theories of knowledge and how it can be known) that underpins the qualitative approach is that knowledge is based on the subjective meanings of individual and shared experiences of which meanings are directed toward certain objects or things (Creswell, 2003). The ontology (theories of what exists) of the qualitative approach is that the reality is multiple which does not exist independently of human conceptions and interpretations, but is a social process shaped by differing human actions and attitudes (Creswell, 2003; Creswell and Clark, 2011). As such, the methodology (approaches to forming knowledge) is based on an objective investigation of the multiple perspectives from participants on a particular situation (Creswell and Clark, 2011: 41). The researcher therefore operates from a “bottom-up” using the participants’ views to build broader themes and generate a theory (ibid: 41). A core feature of the qualitative approach is the quality and depth of the information gathered.

Conversely, the epistemological basis of the quantitative approach is premised on the understanding that knowledge is gained from experience which is verifiable through empirical measurement (Creswell, 2003; Creswell and Clark, 2011). The ontological basis is premised on the assumption that the reality is singular and that which can be directly measured is acceptable as evidence (Creswell, 2003; Creswell and Clark, 2011: 41). Regarding the methodology aspect of the quantitative approach, it is based on a “top-down” deductive process of adding or contradicting a theory on a particular research problem (ibid). In using the quantitative approach, the researcher obtains wider latitude (breadth) of information that can be easily generalised. Johnson and Onwuegbuzie (2004) assert that both research paradigms (i.e. the qualitative and quantitative approaches) are

anchored at either ends of a continuum necessitating a “third paradigm” that mutually exploits the merits of these disparate worldviews.

Against this background, the use of the mixed methods approach is justifiable on the basis that investigating complex research problems like the evolving tenurial dynamics and its implications for sustainable land use transcends the disciplinary norms of one philosophical paradigm. Adopting a mixed method approach therefore affords the plausibility of achieving breadth and depth of information in the present study. In doing so, a critical realist approach is adopted as it in a way “bridges” the ontological and epistemological differences of the two approaches (i.e. the qualitative and quantitative) in the sense that it enhances complementarity and gives room for a deeper understanding of the research problem whilst allowing for the generalizability of the study findings across a significant stratum (Creswell, 2013; Johnson and Onwuegbuzie, 2004; Sayer, 2000; Creswell and Clark, 2011). Critical realists argue that “our knowledge of reality is as a result of social conditioning and, thus, cannot be understood independently of the social actors involved in the knowledge derivation process” (Mark et al. 2009: 115). It therefore follows that tenurial practices, farmers’ perspectives about their property rights, tenure security and land investment decision-making does not exist independently from the context within which they occur. Whereas some aspects of this phenomena under study can be empirically observed, others may only be discernible through the lived experience of the social actors (farmers) within the specific settings. Needless to say, while there is the lack of a common philosophical basis between the qualitative and quantitative disciplines, the adoption of critical realism as a philosophical stance (which is ontologically objective but epistemologically subjective) affords the use of multiple methods of different worldviews and different assumptions that “work in practice” as well

as different forms of data collection and analysis to completely address the stated research problem (Sayer, 2000; Creswell, 2003; Johnson and Onwuegbuzie, 2004).

4.3 The Research Design for the Study

Given the complex, multifaceted and ill-understood nature of land tenure security-land use dynamics which overtime has been theorised as non-linear and context-specific, an exploratory case-study approach was best suited for examining the associated issues around property rights and resource-use dynamics and how they ultimately influence local landholders' investment decision-making. The merits of adopting the case study approach have been highlighted by several social research methodologists. For example, Yin (2003) articulated that the use of case studies offers a rich, empirical descriptions of particular instances of a phenomenon that are typically based on a variety of data sources. In other words, the case-study approach provides the opportunity for an intensive analysis of specific details often overlooked by other methods based on which generalisations can be made that are applicable to other cases (Kumar, 2005: 113). Following the above logic, this research employed a case-study approach in order to undertake an in-depth analysis of the views of various social actors (landowners and land-users alike) about local tenurial dynamics (i.e. ownership, access to and control of land) and land use in relation to their perceived tenure security and uptake of sustainable land management practices. Accordingly, Ghana's high forest zone was chosen for this research in view of the changing tenurial, socioeconomic and environmental conditions (resulting in increasing land use pressures and conflicts) and the concomitant efforts to promote sustainable land management (see Sections 1.2,1.3 and 3.5).

In terms of the study design specifics, initial research questions were formulated based on the researcher's original knowledge of the tenurial, socio-economic and environmental context of the HFZ of Ghana and review of relevant literature. The formulated questions

were refined in an iterative manner based on emerging themes from the data collection process as outlined in section 5.5 below. Drawing on Greene et al. (1989) and Bryman (2006) typologies of reasons for mixing methods, the rationale for adopting a mixed methods design is premised on the following considerations:

- The multifaceted nature of the research problem requires that it is contextualised, in which sense triangulation becomes necessary to holistically define and address the associated research questions (Greene et al. 1989; Patton, 1999; Creswell and Clark, 2011). Using a mixed methods approach affords the verification of findings derived from one method (say qualitative investigation) with findings from the other (say quantitative investigation) thereby enhancing the convergence and validity of results as well as minimising any inherent biases (Greene et al. 2001; Creswell and Clark, 2011:61-63; Carter et al. 2014). In so doing, the current research triangulated study data using (i) the methods triangulation (multiple data gathering techniques such as interviews, field notes, observation etc.); (ii) data source triangulation (includes individuals, groups, time and places), and theory triangulation (using alternative or competing theories in the same study) as identified by Denzin (1978) and Patton (1999).
- Employing a pluralist research approach (i.e. combining qualitative research and quantitative research) facilitates the development of the study as well as helps achieve complementarity. With the qualitative aspect of the study preceding the quantitative aspect, it enabled the collation of relevant background information on the content, context and subjects of the study, clarification of the research questions and subsequent results as well as the development of suitable scale(s) and for on-ward sampling and measurement (Creswell, 2003; Creswell and Clark, 2011: 62). Further, this approach also enabled the researcher to capture and

adequately elaborate on the diversity of respondents' views (particularly their perceptions of customary tenure institutions, tenure security and how it influences their land management decision-making) which is at the crux of the present investigation.

- Adopting the mixed methods approach helps alleviate the problem of generalizability and internal validation of research findings (associated with wholly qualitative research) as the quantitative evidence (garnered through the household survey) helped augment the qualitative findings (in terms of representativeness) by extending the breadth and range of the research (Creswell, 2003; Tashakkori and Teddlie, 2003; Johnson and Onwuegbuzie, 2004, Punch, 2014).
- To achieve 'completeness' in coverage and analysis of the nuances around tenurial and resource-use dynamics of relevant stakeholders in the study (e.g. the underlying power and control dynamics governing land use decision-making of the often marginalised groups in tenurial relations, i.e. women and migrants), the mixed methods approach is deemed as suitable in convening their concerns (Creswell, 2003).

Based on the above-explained considerations, this study employs the use of qualitative and quantitative methods in investigating the formulated research problem. The succeeding sub-section describes the process of site selection and the methodology for addressing the formulated research objectives in Chapter 1.

4.3.1 Selection of the Case Study Areas

As underscored earlier, the multifaceted nature of the research problem implies that analysis of farmers' tenure status, their perceptivity of property rights and tenure security and how it influences their land management decision-making is grounded with site-

specific empirical evidence. In this view, the researcher in order to adequately answer the key research questions was guided by the underlying presumption that tenurial and land use arrangements may differ from place to place often influenced by demographic, social, economic and ecological factors prevailing in a particular landscape (cf. Place and Otsuka, 2000; Sections 2.2 and 3.3). As such, the selection of the Kakum and Ankasa contexts for in-depth investigation of the land tenure and resource-use dynamics was done using specific criteria based on the convergence of a number of theoretical and empirical considerations. Firstly, the researcher's familiarity with the Kakum and Ankasa contexts in terms of their representativeness in characterising the prevailing tenurial situation in Ghana's High Forest Zone. Secondly, the consideration of Oxford University's Environmental Change Institute pre-existing research connections (i.e. through the ECOLIMITS and GEM-TRAIT projects) in Kakum and Ankasa respectively, which the present research leveraged on. Thirdly, the similarities of the social dynamics underpinning tenurial arrangements and the prevailing environmental conditions in the study areas so as to afford site comparability. Other dynamics considered included the existence of diverse tenure forms and social groupings as well as ongoing sustainable land use (notably on-farm reforestation) projects in the study areas. This was to facilitate the coverage of different tenurial regimes and land management interactions as well as other site diversity and heterogeneity that suitably characterises the prevailing situation in Ghana's High Forest Zone. Accordingly, a reconnaissance survey of the Kakum Conservation Area was conducted by the researcher from 1st December 2013 to 7th December 2013 based on which Kakum (situated in the Central region) was selected and pertinent stakeholders such as farmers, local traditional authorities, resource managers etc. identified (see Section 4.4). Also, in order to extend the coverage of the study and to

afford site comparability as explained earlier, the Ankasa Conservation Area located in the Western region was also considered.

Although tenurial issues and land use dynamics have been given considerable attention in various rural communities across the high forest zone and other parts of Ghana generally (see, e.g. Amanor, 2001, 2010; Boni, 2005; Boone and Duku, 2012; Bugri, 2008), the situation in Kakum and Ankasa areas have received less attention notwithstanding their agro-ecological importance and status as designated protected areas. With the notable exception of Damnyag et al.'s (2012) study on the role of land tenure insecurity in deforestation in Ankasa, tenurial issues in the study areas have largely been ignored in more recent times. Yet, recent evidence appears to suggest that intensifying land pressures particularly for farming resulting in growing inequalities over land access, tenure insecurity, conflicts over land and extensive deforestation in the peripheral areas of the Ankasa and Kakum areas with negative implications for livelihoods and environmental sustainability (Damnyag et al. 2012, 2013; IUCN, 2010; Briamah et al. 2009). Thus, the selection of the study areas was in view of the foregoing issues, their representativeness of Ghana's High Forest Zone (HFZ) (in terms of the range and diversity of tenurial and land use interactions and environmental conditions), on-going reforestation (tree planting) and conservation-related projects (e.g. Sustainable Tree Crop Programme, Cocoa Carbon Initiative Pilots, Climate-Smart Agriculture Projects) and presence of Customary Land Secretariat (CLS).

4.3.1.1 The Kakum and Ankasa Conservation Areas

The Kakum and Ankasa Conservation Areas fall within the remnant fragments of the Upper Guinea forest ecosystem extending from Guinea to Togo, which is designated as a Global 200 eco-regions and one of Africa's eight biodiversity "hotspots" by the WWF and Conservation International respectively (Critical Ecosystem Partnership Fund, 2000).

In recognition of their socio-ecological importance, both study regions were designated as protected areas forming part of Ghana's high forest zone 216 protected area network for the purposes of conservation and long-term ecosystem sustainability.

In terms of geographical location and extent, both Kakum and Ankasa form part of the 8.2 million ha stretch of the high forest zone spanning the entire southern third of Ghana⁹(see Figure 4.1). Specifically, the Kakum is situated within the Central Region of Ghana covering a total area of 360km² (Figure 4.1). It is approximately 33km north of the regional capital, Cape Coast comprising of about 80 fringe communities. The conservation area falls within the administrative jurisdiction of the Assin North, Assin South and Twifo Hemang Lower Denkyira District and lies between latitudes 5° 20' and 5° 40' north and longitudes 1° 30' and 1° 51' west. A greater proportion of the reserve area however fall within the Assin South District which was carved out of Assin North Municipal in August 2009.

The Ankasa Conservation Area (Figure 4.1) is located within the Western Region of Ghana comprising a total land area of 509km². The conservation area is about 120km from Takoradi, the regional capital and falls between longitude 2°39'28' and latitudes 5°20'20'. It is also in close proximity to the Ivory Coast and consists of about 55 fringe communities. Whilst the whole of the reserve area lies within the administrative jurisdiction of Jomorro District, the off-reserve area (encapsulating communities situated 5-7km from the reserve boundaries) fall within the jurisdiction of the Ellembelle and Wassa Amenfi West District. It is instructive to note that this study was conducted in the off-reserve communities within the Kakum and Ankasa conservation Areas. Figure 4.1 gives a pictorial impression of the location of Kakum and Ankasa in a national context.

⁹ The remaining 15.7 million ha out of the total land area of 23.9 million ha is situated within the savannah zone in northern Ghana (Oduro et al. 2014).

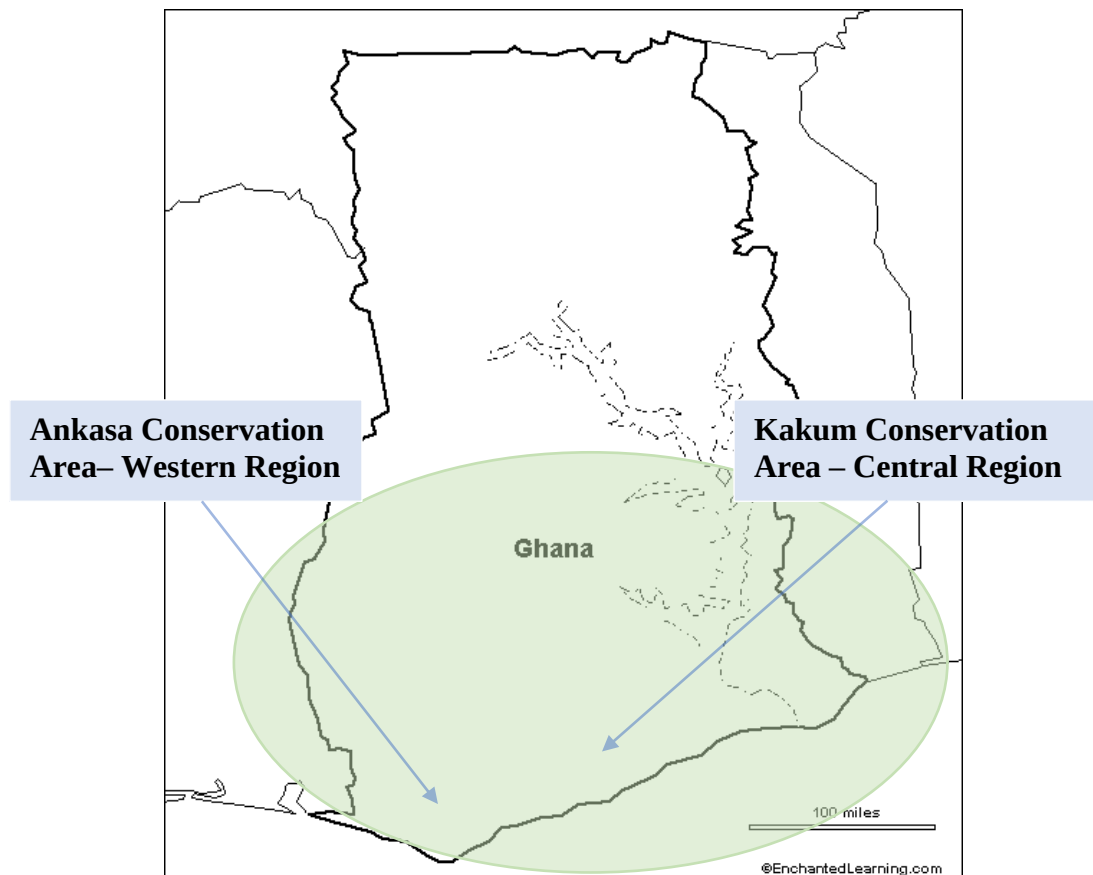


Figure 4.1: Overview of the two case study areas in Ghana. Green Area illustrates the High Forest Zone (HFZ).

Source: Author’s illustration using an outline map retrieved from Enhantedlearning.com.

4.3.2 Sampling of Study Communities

Given the rural context of this study, an obvious challenge envisaged was the difficulty in accessing relevant existing data particularly on the demographic features of the respective communities to inform the final sampling decisions. Unsurprisingly therefore, all the relevant institutions (i.e. the District Assemblies and Statistical Offices) did not have an up-to-date record on the exact number of communities fringing the Kakum and Ankasa Conservation Areas. This necessitated the need to generate a list of all the forest-fringe communities to constitute the total sample frame based on the available records, expert knowledge and subsequent ground verification. The rationale for the selection of forest fringe communities is based on the underlying assumption that residents within such communities constitute the greatest land use threat and are central in the long-term

sustainability of the forest ecosystem. Marfo et al.'s (2012) definition of forest-fringe communities as rural settlements situated in close proximity to forested areas and whose source of livelihood is primarily derived from access to forest and or forest resources is adopted for this study. Accordingly, a list of all forest-fringe communities was generated based on the expert knowledge of three (3) rangers (Messrs Kumi and Adams of Kakum Park and Mr. Ezekiel of Ankasa Park) of the Game and Wildlife Division of the Ghana Forestry Commission (GWD) who also happen to be camp supervisors¹⁰ and a community relations officer respectively. The community sampling was therefore conducted spatially and randomly based on the GWD camps in Kakum (Aboabo; Ahomaho; Antwikwaa; Abrafo; Briscoe I&II; Adiembra; Afeaso; and Kruwa) and CREMA areas (Ohiamadwen/Fiasoro, Amokwaosuazo, Navrongo/Tweakor, Ghana-Nungua/Cocoa-Town, Aiyinase/Ayawura, Fia, Asomaasi, Naptoma and New Adiembra) in Ankasa. Of the total list of 80 communities generated in Kakum, 16 communities were spatially and randomly selected through the lottery method to constitute the total sample frame. Similarly, in Ankasa, out of the 55 communities listed, 11 communities were sampled to constitute the actual sample size for the field investigation. The accuracy and reliability of this list was subsequently verified in separate meetings with officials of the respective District Assemblies, Kakum and Ankasa National Park Authorities as constituting a fair representation of all the communities fringing the two conservation areas¹¹. Table 4.1 summarises the sampled communities for the investigation by study area.

¹⁰ The camp leaders are responsible for supervising a cohort of rangers who undertake surveillance along specified transects across the Kakum National Park to ward off potential poachers and encroachers on the reserved areas.

¹¹ Owing to some practical challenges (chiefly inaccessibility of some communities, logistics and time) encountered during the fieldwork, the research team had to make some alterations in the final sample which saw the exclusion of 5 sampled communities in Kakum and 3 in Ankasa. In effect, the research team

Table 4.1: List of Studied Communities by Study Area

Kakum Region	Ankasa Region
Appiahkrom	Amokwaosuazo
Bunsu	Fawoman/Nsuano
Fante	Ghana Cocoa Town
Jerusalem	Kanokware
Kwame-Annan	Kusasi
Kwaku Mmore	Navrongo
Mankata	Nyamebekyere
Nkwantannan	Old Ankasa
Nkwanta	
Seidukrom	
Totoda	

Source: Field Survey, 2015

4.4 General Data Collection Approach

Adopting a mixed methods approach requires that the collation of relevant data is conducted along two strands i.e. qualitative and quantitative which are not mutually exclusive (Creswell and Clark, 2011: 171; Denscombe, 2010). A cross-sectional approach was devised progressing from a broad-based focus to a narrower and intensive focus on sampled households in the study communities. The first stage which doubled as a scoping exercise essentially was a rapid rural appraisal consisting of individual interviews (with key persons armed with privileged information about the study communities) and group interviews about the patterns of land use, tenurial arrangements, area demography, general land management practices etc. with local people, traditional authorities and other village level officials within the study communities. Sampling techniques adopted at this stage were mainly purposive and continuous snowballing approaches. The overall import of this “first-stage” exercise was to elicit baseline data in relation to the specific research

visited 11 out of 16 sampled communities in KCA. However, in the case of Ankasa, the team managed to realise the 9 communities target as the 3 inaccessible communities in the northern part were substituted with 3 communities in the Southern part after deliberations with the park authorities about their suitability.

questions and identify focus communities based on which relevant questions were designed to direct the line of subsequent investigation.

The second stage consisted of in-depth individual farmer surveys at the household level focusing on key household characteristics, resource use patterns, farmland management and economics, views about tenure arrangements, trees and forest amongst others. Some of the critical questions that emerged from these interviews were further pursued in subsequent focus group discussions with key informants and some village leaders in the study communities.

The third and final stage of the data gathering involved the research team undertaking transect walks and farm visits to farm-plots of selected respondents in a bid to capture and verify specific on-farm features such as the number and types of retained trees, crops cultivated and other attendant land management practices. In addition, institutional level interviews were conducted with other relevant stakeholders such as the local district assemblies, traditional authorities, Stool Lands, CLS, Forestry Commission, agricultural extension office etc. These institutional level interviews focused specifically on the existing tenurial arrangements, communal land use practices and norms and general land use interactions in the study areas. As envisioned, the disaggregated fieldwork approach facilitated a sampled coverage of all key actors relevant to this study as well as enabled the gathering of useful data on household and communal activities of production that may influence or reflect decision-making process, the values and factors that underlie it.

It is instructive to note that owing to the scope of the research coupled with the researcher's consideration of executing the fieldwork in a timely manner, the hiring of research assistants became necessary. Consequently, a total four research assistants with a good working knowledge of the studied communities were engaged to assist in the data collection exercise. In the selection of the research assistants, four main factors were

considered: (1) their knowledge of the studied communities, (2) educational and language background, (3) mobility¹², and (4) previous experience of data collection either in the study areas or elsewhere. This was against the backdrop of the recognition that the chosen field personnel ought to have very good understanding of the context and capable of fluently translating English to *Twi*, the predominantly spoken language in the studied communities. In the end, the field assistants engaged for this study were proficient in both English and *Twi* and had had previous experience of data collection in the study areas. Moreover, the field assistants' excellent working relationship with the respective communities in their capacities as community relations officers proved useful in negotiating access during the community entry phase of the fieldwork.

Against this background, the recruited field assistants underwent a three-day training workshop led by the researcher. The purpose of the training was two-fold: (1) to thoroughly explain the focus and objectives of the research to the field assistants, and (2) to assess their overall suitability for the job. In this light, the researcher fully convinced that the field assistants understood the objectives of the survey and were equal to the task at hand, the team proceeded with a pilot survey in Kakum and Ankasa respectively¹³. The pilot survey was crucial to this investigation in that it afforded the opportunity to test the survey questionnaire (in terms of the appropriateness of the specific questions and quality of responses) and see how field assistants fared first-hand. Based on lessons learnt from the piloting, some slight modifications were made to the questionnaire and field assistants

¹² Mobility was an important consideration in the choice of research assistants as motor cycle is the most appropriate means of commuting to and fro the studied communities. Vehicular transportation is only available on market days to the few market centres. As such, the chosen research assistants needed to be good riders to facilitate the ease of movement during the fieldwork.

¹³ In the Kakum pilot conducted in mid-June 2015, the Kasum and Aworoso villages were selected with a total 10 household-heads receiving attention. It is noteworthy that though the pilot communities reflected similar characteristics to sampled communities in the study areas, they were excluded from the final analysis.

were also guided on how to put questions to elicit appropriate responses from participants in the main survey. The ensuing paragraphs shed more light on the data sampling and specific data collection techniques or instruments employed to gather relevant primary and secondary data for answering the research questions posed.

4.5 The Qualitative Data Acquisition and Analysis

4.5.1 Qualitative Sample and Sampling Procedure

Prominent amongst the characteristic features of the qualitative research include that the inherent difficulty in predefining the research design prior to commencing the research and the relatively small sample size (Miles and Huberman, 1994: 27; Denscombe, 2010). The associated sampling approach i.e. the selection of targeted respondents is normally via the non-probabilistic sampling techniques (Miles and Huberman, 1994; Miles et al. 2013; Punch, 2014: 161). This follows from the rationale that the qualitative research process is one of discovery (i.e. inductive) instead of hypothesis testing (i.e. deductive) which is synonymous with quantitative approaches (cf. Glaser and Strauss, 1967; Miles and Huberman, 1994). The preoccupation of the researcher was therefore geared towards the targeting of a sample that would proffer detailed information germane to understanding the research problem under investigation (Denscombe, 2010; O’Leary, 2013; Creswell, 2013: 48). Thus, in the context of this study, the gathering of qualitative data from all relevant stakeholder groups in customary land management in the study areas such as farmers, traditional authorities, official of the OASL and District Assemblies, opinion leaders etc. was necessary in order to fully address the research questions directing the investigation. Consequently, purposive and snowball non-probabilistic sampling techniques were adopted in identifying and determining the qualitative sample size. The purposive sampling technique is often touted as an effective way of obtaining relevant information by selecting items or persons most likely to have

the experience or expertise to provide privileged information and valuable insights on the research problem (Black, 1999; Denscombe, 2010). Conversely, the snowball sampling (used to generate the qualitative sample size) involves the process of the researcher identifying a suitable respondent who in turn is asked to recommend some other suitable persons for the purposes of the research (Denscombe, 2010: 37). Although this technique is often observed to generate a sample that is less representative of the target population (O’Leary, 2013), it is nevertheless advantageous in building sample frames quickly especially in contexts where none exist (Black, 1999; Denscombe, 2010).

Against this backdrop, the selection of targeted respondents during the qualitative data sampling phase employed a broad-to-specific approach involving a series of iterative steps. Essentially, the approach involved the identification of all relevant stakeholders at the district-level (including representatives of the District Assemblies, OASL, Traditional Authorities, Assinman CLS, CREMAs etc.) who provided an institutional perspective on the existing tenurial and resource management in the study areas. This was followed by the selection of village-level respondents (notably, the Odikros, Abusuapanyin, elders and other opinion leaders) who are well-informed on the village history and local tenurial dynamics using mainly purposive and continuous snowballing. The succeeding paragraphs present a detailed discussion on the specific qualitative data techniques employed.

4.5.2 Methods of Data Collection Employed

In executing qualitative data collection for a piece of (social) research, several research instruments exist for achieving this end (see, Denscombe, 2010; Creswell and Clark, 2011; Punch, 2014; Miles et al. 2013). The dictates of the research questions invariably implied the use of some appropriate tools to better elicit relevant data to fulfil the qualitative aspect. As such, the qualitative data collection methods adopted for the field

investigation were: individual and group interviews, focus group discussions, participant observation and documentary analysis. These specific qualitative research instruments are discussed in turns below:

(i) Individual and Focus Group Interviews

Interview is perhaps the most commonly used data collection instrument in qualitative research (Punch, 2014; O’Leary, 2013; Denscombe, 2010). Punch (2014: 144) further posits that “interview is a very good way of accessing people’s perceptions, meanings, definitions of situation and construction of reality”. Following after Fontana and Frey (1994) three-way classification of interviews (i.e. structured, semi-structured and unstructured), this study employed a semi-structured approach to collate relevant data on the prevailing land and resource tenure situation in the study areas, perceptions about land tenure security and household resource-use dynamics from institutional, individual and household respondents respectively. The choice of a semi-structured approach was based on the fact that the research questions were pre-formulated subject to modification from the emerging field data collated. Besides, using a semi-structured interview format afforded the researcher the opportunity to cross-compare interviews and at the same time providing flexibility in responses by interviewees (Berg, 2009; O’Leary, 2013: 164).

However, major limitations of interviews as observed by several research methodologists are that they are often time consuming, difficult to code for analysis and highly prone to ‘interviewer effect’ (Denscombe, 2010: 193; O’Leary, 2013: 162-169; Punch, 2014: 151-152). Nevertheless, interviews have been advanced as particularly useful in obtaining in-depth information on a subject matter and exploring “grey areas of research” (ibid). Thus, information gathered through the individual and group interviews conducted played a complementary role in enriching the depth of data from the quantitative survey.

On the foregoing, identifying and gaining access to respondents has been theorised as crucial to conducting successful interviews (Punch, 2014; O’Leary, 2013; Hammersley and Atkinson, 2007). For instance, some research methodologists have argued that the way and manner by which researchers make contact with respondents, and organise access can affect all stages in the data gathering process and by extension data quality, reliability and validity (see Punch, 2014: 150; Hammersley and Atkinson, 2007: 41-51; O’Leary, 2013: 150). Put differently, the question of access in (social) research invariably implies being culturally-sensitive and respectful to the social setting throughout the data collection process (cf. O’Leary, 2013: 46-52). This is particularly so in the case researches in rural areas, including rural Ghana, where access to relevant data could be challenging contingent on the extent of the researcher’s skill and experience in the specific socio-cultural setting. In this study, aside from the institutional respondents who were directly contacted in their respective offices¹⁴, access to community-level stakeholders (i.e. farmers, village elders and opinion leaders) was negotiated through the respective traditional authorities (or “gatekeepers” as Hammersley and Atkinson 2007 prefer to put it) such as the chiefs, Odikros, elders and Abusuapanyins who were themselves interviewed.

Moreover, the reconnaissance survey undertaken in December 2013 (which also doubled as a form of a rapid rural appraisal) served as a good opportunity for facilitating access to the respective stakeholders identified in this study (see also Section 4.3.1). This initial visit to the sampled communities in the study areas proved useful in two main ways:

¹⁴ In line with institutional protocol and procedure, introduction letters requesting permission to conduct interviews were submitted by the researcher to the respective institutional heads (mostly at the regional level) prior to the actual interviews with the district level representatives. In some instances, verbal/telephone explanation of the purpose of the research was sufficient in gaining access to institutional respondents. This was made possible because of the researcher’s previous research engagements and established networks in the study areas.

Firstly, the exercise enabled the researcher identify and develop acquaintances with key informants, chiefs, local opinion leaders, GWD/FSD officials, government officials, NGO representatives and other researchers operating in the study areas. Secondly, the researcher was not only able to obtain first-hand information on the tenorial and land use aspects and confidence of stakeholders but also access to key documentary data which otherwise would have been difficult to obtain.

In this view, the researcher's in-depth knowledge of the local language (i.e. *Akan Twi*¹⁵), customs and traditions prevailing in the study areas was a significant asset in brokering access to relevant stakeholders throughout the entire data collection phase. Indeed, this also proved useful in satisfying the criteria of "theoretical sensitivity" in grounded research (see Glaser, 1978; Section 4.7.2). For instance, it is the native custom (*amamre*) amongst the Akan tribes of southern Ghana that "*obi nfa nsa pan nkɔ ahenfie*" (literally meaning one does not seek audience with a chief empty-handed). Thus, the researcher being well-aware of this traditional protocol in the study regions, presented customary gifts (in some cases the monetary equivalent) to the traditional authorities (i.e. the chiefs and elders) of the respective villages as part of the formal process of negotiating access prior to the commencement of the actual data collection. The significance of this 'ritual' is two-fold: (1) it signified a formal acceptance into the communities and ratification by the customary authorities to proceed with the study, and (2) served as a forum to officially inform the community members of the purpose of the research and solicit their full support and cooperation throughout the entirety of the data collection. Figure 4.2 below shows evidence of the researcher together *Odikro* of Kwame-Anang and Elders of

¹⁵ Twi is the most widely spoken language amongst the Akan tribal groupings of southern Ghana.

Aiyinase villages during of the customary presentations in Kakum and Ankasa respectively.



Figure 4.2: Some Snapshots during the Customary Presentations in Kakum and Ankasa. A shows the Researcher together with the Odikro of Kwame-Annan and his family (Kakum). B shows the Researcher in the company of some Elders of Aiyinase Stool (Ankasa).

The interviewees and key informants who received attention represented the different stakeholder groups (i.e. land management institutions, traditional authorities, agro-environmental NGOs etc.) in the study regions and sampled communities as mentioned above. These categories of respondents possessed relevant local knowledge on the existing tenorial and land use dynamics in the study areas deemed critical to the fulfilment of the study objectives (see Section 1.4) and were therefore purposively selected. On the question of the actual interviewing style, the face-to-face approach was employed in this study with *Twi* being the primary medium of communication (see Punch, 2014; Denscombe, 2010). The resulting interview data were mostly audio-taped save for some few instances where video-recording was done all subject to prior-informed consent of the interviewees. On average, the interviews lasted for about an hour and forty-five minutes and all the respondents gave their full consent for the interviews to be audio-

taped. Additionally, field notes were also taken by the researcher as a supplementary approach.

Focus group discussions (FGDs) were conducted in the sampled communities to obtain complementary information as well as serving as an avenue to triangulate collated data on some key research questions (see Punch, 2014: 147). Denscombe (2010: 177) defines FGDs as consisting of small groups of people who are brought together by the researcher (who acts the moderator) to explore attitudes and perceptions, feelings and ideas about a specific subject matter. A primary reason for using FGDs in this study was in line with the objective of exploring the variations in the land rights of women and strangers and the effect on their perceived land tenure security. Besides, FGDs proved a useful approach to verify and probe further on thornier questions (e.g. differing views of respondents on respective tenure forms and level of security) that emerged from the household interviews. In addition, the FGDs was also used as an avenue in filling the gaps and collate other data not previously gathered.

Whilst the composition of FGDs remains variable depending on the research context, a maximum of six to nine people is generally recommended (see Denscombe, 2010; Punch, 2014). Thus, armed with the above fundamentals of conducting FGDs, a checklist was developed and participants of each FGDs recruited using mainly the snowball sampling technique¹⁶. The FGD participants were well-informed individuals on the local tenurial and resource-use dynamics and village histories. As a rule of thumb in conducting the community FGDs, a predetermined number of 7 participants per group was adopted. The rationale for limiting the size of each group to 7 was chiefly based on Denscombe's

¹⁶ To ensure anonymity of interviewees in this study, the use of pseudonyms instead of real names and designations have been employed.

admonition that “the core idea of FGDs is to constitute a number which is large enough to allow a range of views and opinions, but not too large to be unmanageable for a meaningful discussion” (Denscombe, 2010: 177)¹⁷. Moreover, to ensure a representative balance in the composition of homogenous FGDs, factors such as age, gender and ethnicity were accorded serious attention particularly in the wake of underlying power asymmetries that pervade the tenurial and resource management regimes in the study areas (see Chapter 5). Consequently, 3 separate FGDs comprising of a female only, migrants’ only and a combined session with indigenes were undertaken in 8 communities (4 each in KCA and ACA respectively). The women’s only group consisted of female participants of different ages within the broader migrant and indigene categories. Similarly, the migrants’ only group comprised of both male and female migrants of different age categories. The composition of FGD participants based on age, gender and residency status allowed for the differences in their diverse perceptions and experiences about tenurial conditions, security of tenure and land management investment dynamics to be captured. On average, each FGD lasted for an hour and forty-five minutes and all participants of the respective groups gave their full consent for proceedings to be audio-taped supplementing the exercise of continuous note-taking and still photography by the researcher. Figure 4.3 show examples of the separate FGDs conducted in two of the study villages in Kakum and Ankasa respectively.

¹⁷ In some few instances, however, the number of FGD participants (as pre-determined) could not be restricted as passers-by joined the discussion as active participants making very useful contributions. This, in a way, showcases the seriousness stakeholders in the sampled communities accorded the issues under discussion. Besides, the smallness of the communities and the closely-knitted social networks synonymous with communities in rural Ghana implied that the issues discussed were more of communal than private concerns.



Figure 4.3: Group photograph of general focus groups in Kakum and Ankasa. A shows a general FGD session at Appiahkrom village (Kakum). B shows a general FGD session at Nsuano village (Ankasa).

Apart from the formal interviews and FGDs, ‘focused interviews’ (cf. Yin, 2003: 90, 91) with some key informants were also employed as a ‘side-technique’ to help triangulate the validity of information collated during the interview and FGD sessions. In this study, the key informants included officials of OASL, CLS, Forestry Commission, District Assemblies, CREMA executives, NGO/cooperative representatives and village elders. Table 4.2 summarises the qualitative data collection phase of the research.

Table 4.2: Summary Qualitative Data Collection

Date	Location	Data Collected
Jan-Feb 2015	Accra	Interviews: National Land and Forestry Sector Agencies (LAP Secretariat, OASL, Land Title Registry)
	Kakum	Interviews: District Assemblies; MOFA, OASL, FSD, CLS, Traditional Authorities, Environment-oriented NGOs and Farmers
June 2015	Ankasa	Interviews: Ankasa Park Authorities, OASL, FSD, CREMA, MOFA and Farmers
August 2015	Ankasa	Interviews: Traditional Authorities, CREMA, Farmers
September 2015	Kakum	Interviews: Traditional Authorities, Farmers
	Accra	Interviews: National LAP, Land Registry, Land Policy Experts
Final Data	Interviews	85 (Total)

Source: Field Notes, 2015.

(ii) Participant Observation

Despite participant observation as data gathering strategy receiving various criticisms – chiefly its susceptibility to the subjective biases of researchers (Punch, 2014: 156), nevertheless, its usage in (social) research is still favoured and recommended by several research methodologists (ibid, O’Leary, 2013: 170-177). In this study, the observational strategy was largely unstructured without any predetermined criteria (see Punch, 2014: 155-157; O’Leary, 2013: 174). By implication therefore, the researcher after gaining access to the study communities continuously ‘looked and listened’ to various interactions of interest (as a way of understanding the cultural practices, livelihood and social organisation and tenorial practices) and took down field notes which were subsequently examined, analysed and reported to supplement the section on the changing land ownership and power dynamics in the study areas (see Section 5.2). In addition, transect walks across some of the studied villages and farm visits (in the company of selected respondents and research assistants) were made to ascertain the different land use forms and farm management dynamics respectively. These exercises were useful as the researcher obtained grounded information on the land acquisition process, cropping patterns and the extent of on-farm SLM investments (in terms of long-term agroforestry tree planting and retention) in different areas.

(iii) Documentary Data

The above-explained data gathering techniques (i.e. interviews, FGDs and participant observation) chiefly relate to the collation of primary data for analysis. Conversely, documents both historical and contemporary have also been observed as a rich source of secondary data and a means of data triangulation in social research (Punch, 2014: 158). Documents thus constituted a major source of data gathering in this investigation as recourse was made to various government policy documents on land tenure, forestry,

agriculture etc. in Ghana pertinent to the study context. Other relevant publications of some environment-oriented NGOs operating in the study areas were also consulted. In this view, the collated documentary data enabled the situation of the study (i.e. in terms of sharpening its focus) and triangulation of findings from the primary data. In the process of collating relevant documentary data for this study, the researcher constantly kept in mind the possibility of such information being skewed and not representative of the actual reality on the ground (see O’Leary, 2013: 178). Therefore, to safeguard against such occurrence, collated documents were sorted out according to their sources and cautiously examined against available empirical evidence on the study areas. Overall, this study collated documentary data from a variety of sources including library material from the Radcliffe Science and Social Science libraries of the University of Oxford, District Assemblies and Traditional Councils in the study areas, Statistical Service (Accra), Kakum and Ankasa Park Management Office, OASL, relevant NGOs in the study areas, internet searches and media publications.

4.5.3 Qualitative Data Analysis

The qualitative data analysis followed Miles and Huberman’s (1994) three-tier approach of data reduction, data display and conclusion drawing and verification. The analysis commenced with the selection, abstraction and transformation of the raw data to ensure the ease of data reduction, display and interpretation (Miles and Huberman, 1994; Miles et al. 2013). In this light, the audio-recorded information from the key informant interviews and community FGDs were transcribed after which content and thematic analysis of the ensuing textual data (including field notes and other documentary evidences) and was undertaken. Whereas the content analysis involved the identification of recurring words and phrases in the textual data, the thematic analysis focused on examining and recording patterns (in terms of similarities and differences in responses to

the same question) in the data. For example, the converging perspectives of different respondents on their understanding of tenure security.

Following the above, the key themes and issues that emerged were coded and subsequently organised under similar categories using the theoretical framework, research aim and objectives and research questions as a guide. Aside from summarising the data, the rationale for coding the emergent themes and patterns was to facilitate to the consolidation of similar themes so as to make propositions to theorising and explaining the data (Miles and Huberman, 1994; Creswell, 2013). It is noteworthy that the identification of pattern and coding, the researcher repeatedly read the interview transcripts (including field notes) and in some instances, listened to playbacks of the actual audio-recorded interviews. This iterative process afforded the opportunity to identify new patterns that were not initially recorded, review and refine initial codes and categories and to establish any contradictions within and across interviews and the other related documentary evidence. Importantly, contradictory information to the converged themes were also captured on the basis that conflicting perspectives are not uncommon especially in relation to tenurial issues in contexts involving different social actors.

Regarding data display, this study principally used some respondents' quotations (that were representative of the participants' responses to the research questions) in varying length from long to short embedded in passages (Creswell, 2013: 254). Initial findings from the qualitative data analysis were noted and tentative conclusions drawn subject to verification by triangulation with the quantitative data and other relevant secondary information collated (Creswell, 2013; Creswell and Clark, 2011).

4.6 The Quantitative Data Acquisition and Analysis

4.6.1 Methods of Data Collection Employed

Drawing on the underlying research questions and insights obtained from the review of the relevant literature as well as collated qualitative data, a survey questionnaire was designed to gather quantitative data for the study. The use of questionnaires has been criticised particularly in research purporting to measure experiences, knowledge and perceptions as they largely employ closed-ended questions which have the propensity to mask relevant information (Kitchin and Tate, 2000; Denscombe, 2010). As such, the questionnaire for this study though mostly closed-ended also included some open-ended questions. The closed-ended questions afforded the measurement respondents' experiences, perceptions, and opinions pertinent to the research questions using the Likert scale as the main measuring instrument. On the contrary, the open-ended questions gave room for detailed perspective of respondents to a question (see Denscombe, 2010: 165). The designed questionnaire was pre-tested in two villages (i.e. Kasum and Aworoso) prior to the actual survey as a way of judging its suitability in eliciting relevant responses to the questions posed. It is instructive to note that, the villages selected for pre-testing the questionnaires reflect similar tenurial and land use characteristics as the sampled villages but were not included in the actual survey. During the pre-testing of the questionnaires, slight modifications were made to the questionnaire chiefly the wording of some terminologies (e.g. names of crops and tree species) in the local language, *Twi* to enable respondents relate directly with same.

In this view, the questionnaire was structured into eleven sub-sections essentially facilitating the collation of specific and quantitative information on household demography, assets, plot specific information, land use investments decision-making, perceptions about land rights and tenure security, documentation etc. The surveys were

administered by the research team (comprising the researcher and four research assistants) mostly in the homesteads of respondents save for a few instances where respondents were contacted on their farms, according to their preference (see Figure 4.4). Figure 4.4 capture some scenes during the questionnaire administration in Ankasa and Kakum respectively.



Figure 4.4: Some Scenes during the Household Surveys in Ankasa and Kakum. A shows a Research Assistant interviewing a Respondent on his farm in Kusasi village (Ankasa). B shows an interview session by the Researcher in a Respondent Homestead at Nkwanta (Kakum).

4.6.2 Quantitative Sample and Sampling Procedure

The quantitative analysis was based on data collated at the household level. For the purposes of this study, the number of related or unrelated persons who live together in the same housing unit, who acknowledge one male or female as the head of the household, who share the same cooking arrangements, and are considered as one unit is the preferred definition for a household. In view of this, the random sampling technique was applied in the selection of the households which was undertaken by the researcher and four research assistants who constituted the questionnaire administration team. As data on the number of households and farmer populations (to constitute the sample frames) in the respective

communities was almost non-existent¹⁸, a modified stratified random sampling technique was applied in sampling the households (see Black, 1999; O’Leary, 2013: 107). In alluding to this sampling challenge during separate interviews, officials of the Assin North and South District Assemblies commiserated that despite the recent census (i.e. 2010 National Population and Housing Census) conducted, population data on the targeted villages was not readily available to the Assemblies (*pers comm.*: DA1&2, 12-13/02/2015). Considering the above, the process of household selection was undertaken as follows:

Firstly, a headcount of all the houses in the respective villages was conducted with the assistance of the village headman or his representatives¹⁹. This was followed by a generated list of all the household heads which was stratified by gender into male and female headed households and matched unto respective houses in the sampled villages. The disaggregated households constituted the sample frame and was assigned as one of the main unit of analysis as variations in tenurial and land management decision-making could easily be captured and differentiated at that level²⁰. This is against the backdrop of majority of studies on land tenure focusing on a single household head (usually male) for information and women’s views only captured to the extent that they are recognised as household heads (Place et al. 1994; Yngstrom, 2002). On the contrary, there is evidence

¹⁸ There was limited and in most cases, no demographic data on some of the study communities in the repositories of the District Assemblies visited during the fieldwork. Where available, the information was mostly outdated.

¹⁹ It is noteworthy that for some of the sampled villages surveyed, the settlement pattern was more dispersed than nucleated. Hence a modified technique of visually dividing the villages into four quadrats was undertaken to ease household identification. Also, the few non-farming households encountered in this exercise were completely discarded from the final sample frame.

²⁰ In instances where some household members managed their landholdings independently, they were also interviewed in order to capture specific variations in tenure form, status and land investment decision-making. This approach did not only enhance the reliability of the collated data, but also afforded the unique opportunity to capture the views of such household members (particularly female plot managers within male-headed households) who otherwise would have been excluded.

suggesting that there are variations in perceptions, experiences and impacts intra and inter households which could best be captured by soliciting information across different groups, i.e. both male and female (see, e.g. Quisumbing et al. 2001; Bugri, 2008; Goldstein and Udry, 2008; Ali et al. 2014). On this premise, this study in the spirit of gender equity assigned equal importance to the views of both men and women and therefore treated gender as an analytical category. In addition, the composition of the focus groups also targeted women as central in local tenurial and land use decision-making dynamics (see also Section 4.5.2).

In view of the above, the disaggregated households in each stratum (i.e. male and female headed households) were assigned house numbers and written on pieces of paper. Using the “whisk social gathering technique” (or lottery method popularly so-called) the pieces of paper were mixed up in a bowl after which an independent observer hand-picked one without looking into the bowl. Through this process, the final sample of households was generated. The remaining households (from the sample frame) were listed and second random sample was generated through the above-explained process as a ‘Plan-B’ in the event that any of the originally selected households are unavailable or unwilling to participate. For example, in instances where a particular (sampled) household was visited without any suitable person to undertake the interview, another household from the second list (Plan-B) was selected and visited as a replacement of the former. It is worth pointing out that due to the haphazard nature of the settlements without proper and consistent house numbering and layout, the systematic random sampling was not feasible under the circumstance. More so, the selection of an equal number of households across the sampled villages though ideal was not possible either as the sampled villages differed markedly both in size and composition. Within the confines of (social) research, however, a minimum of 30 respondents per target population has been recommended in order to

achieve statistical relevance or significance (Black, 1999; Denscombe, 2010; O’Leary, 2013). Nevertheless, in some exceptional instances in (social) research where the minimum statistical requirement (i.e. 30 respondents) is not empirically feasible, a smaller than 30 or larger than 500 is acceptable (see Balnaves and Caputi, 2001: 94; O’Leary, 2013: 105). Hence, as a general rule of thumb for the quantitative survey, a random sampling intensity of 50% was applied in the determination of household sample sizes in the case of villages with over 20 households. Alternatively, a complete census was taken for those communities containing 20 or less households while those with far lesser sizes (i.e. less than 5 households) were completely discarded. The decision was purely based on cost and logistical consideration. This in effect resulted in a total of 380 farming households randomly selected from the two strata. The number of sampled households from each village was proportional to the total number of households in the village. Altogether, the quantitative sampling process was guided by a number of considerations including: (1) statistical relevance or significance (i.e. in terms of generalisability of the study results), (2) time and resources at the disposal of the researcher, (3) interrelationship between the multiple variables under investigation, and (4) cross-comparison between sub-data collated (Black, 1999; Denscombe, 2010; O’Leary, 2013). A breakdown of the quantitative sample for the study is captured in Table 4.3 (page 141).

Table 4.3: Summary Characteristics of Respondents by Study Area

Categorisation		Kakum (N= 232)	Ankasa (N=148)
Native Group	Native Male	14 (82%)	27 (68%)
	Native Female	3 (18%)	13 (32%)
	Total	17 (7%)	40 (27%)
Migrant Group	Migrant Male	183 (85%)	96 (89%)
	Migrant Female	32 (15%)	12 (11%)
	Total	215 (93%)	108 (73%)
Age Distribution	20-35 years	49 (21%)	45 (30%)
	35-60 years	147 (63%)	84 (57%)
	60+ years	36 (16%)	19 (13%)

Source: Fieldwork, 2015.

4.6.3 Quantitative Data Analysis

The survey data from the quantitative data collection were coded, entered, cross-checked for accuracy and analysed using the Statistical Package for Social Sciences (SPSS version 20)²¹. Cross-tabulation analysis of the study variables and groups were undertaken so as to generate data summarises and descriptive statistics (i.e. mean, modes, percentages, ranges and standard deviations) on household characteristics, methods of farmland acquisition, tenure modes, sizes of landholdings, perceptions tenure security etc. Owing to the categorical nature of the data, the Pearson's Chi-square test of Independence (χ^2) was considered more appropriate in the determination of whether there were significant differences and/ or associations (in the response frequencies) between variables and social groups of sampled households in the study areas. For instance, chi-square tests were undertaken to determine whether there were significant differences in respondents' perceptions of what constitutes land tenure security on the basis of community

²¹ The open-ended questions included in the household questionnaire were examined to identify patterns and themes for coding guided by Miles and Huberman's (1994) general strategy for qualitative analysis as outlined in Section 4.5.3.

membership and gender in Chapter 6. Whilst statistical significance (of the differences between variables and/ or groups) is not binary, a cut off or a 90% probability ($p \leq 0.1$) was used. Importantly, patterns exposed do not necessarily imply cause and effect relations, but instead highlight variables which vary in a coordinated manner. Moreover, the use of the Likert scale of measurement also afforded the opportunity to assess respondents' perception about their tenure status (land tenure security), strength of individualised property rights and incidence of land conflicts in the studied communities. Using a three-point Likert scale, for instance, the opinions of respondents to a statement or question was measured by assigning a weight of 3 if "they were sure they had the specific right", 2 if "they were uncertain and 1 if "they felt they did not have the specific right". Therefore, a high score above the median score meant a positive perception to a given statement (i.e. certain about specific right) and vice-versa. It was assumed that respondents who were uncertain as to whether they had a specific right would have a median score, which in this case is 2. The final (mean) score represents the cumulative perception of respondents on individual statements.

In addition to the descriptive analysis, logistic regression model was employed to investigate the role of land tenure security in shaping households' land management decision-making and investment strategies at the farm plot level. In total, three set of logit models were used to analyse the determinants of adoption of three different SLM practices namely soil improvements, on-farm tree planting and preservation of naturally-occurring trees in order to address the key research questions. The rationale for using a logit regression model is based on three main reasons: Firstly, the fact that the relationship between land tenure security and households' investment in sustainable land management (SLM) practices is influenced by several contextual factors meant that the use of linear regression was inappropriate in this study. Secondly, logit regression models (and probit

regression models) are commonly regarded as most appropriate in the estimation of binary dummy dependent variables and mathematically simple to execute. The use of logistic regression in this study guaranteed that the estimated probabilities lie between the limits of 0 and 1. A value close to 0 implied that Y was very unlikely to have occurred, and a value close to 1 meant that Y was very likely to have occurred (Field, 2009: 267). Moreover, logit models are flexible and highly suitable in instances where the explanatory variables are a mixture of continuous and categorical variables and if they are not normally distributed. In this vein, the predictor variables used to examine the determinants of SLM adoption comprised of both categorical and continuous predictors which made logistic regression the most appropriate in this study (see Table 7.1, page 259).

On the foregoing, an underlying assumption in the application of logistic regression is a relationship between the independent and dependent variables evidenced by computing the logit coefficients that compare the probability of a specific SLM practice occurring with the probability of not occurring. The probability of adoption of an SLM practice in a farm plot (Y) for one independent variable is given by equation 5.1.

$$P(Y) = 1/1+e^{-(\beta_0 + \beta_1 X_1 + \varepsilon_1)} \quad (4.1)$$

Where P(Y) represents the probability of a particular SLM practice occurring in a farm plot. The survey solicited household responses on investments made on soil improvements, tree planting and preservation of naturally-occurring forest trees specified as binary variables (i.e. 1 if household has implemented a specific practice and 0 otherwise). β_0 is the Y intercept or constant term, β_1 is a vector of the regression coefficient, X_1 is the value of the predictor variable and e is the base of natural logarithm. However, where there are several predictors as was the case in this study, the probability

of adoption of a specific SLM practice is a function of the linear combination of coefficients (-y) as specified in equations 4.2 and 4.3:

$$P(Y) = 1/1+e^{-y} \quad (4.2)$$

Where

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 Z_i + \varepsilon_i \quad (4.3)$$

Where X_1 is a vector of land tenure characteristics on the plot (form of tenure, mode of acquisition, duration of plot use, use rights, transfer rights etc.); X_2 is a vector of households' human capital and wealth (household size, residency status, education, age and gender of household head); X_3 is a vector of household's endowment of physical capital and wealth (relative farm sizes, livestock holdings, labour and other resource endowments); X_4 is a vector of plot-level characteristics (soil type, crop types, distance from homestead, and yield expressed in Ghana cedis); X_5 is a vector of household social capital characteristics (position of household head or member in village and membership of farmer group or cooperative); X_6 is a vector of market characteristics (household access to credit and agricultural extension services); Z_i is a vector of study area fixed effects; and ε_i is a random error term.

There is one model for each of the three SLM practices and each of them estimated separately. The estimated probability allows for the prediction of the likelihood of a household's engagement in a particular SLM practice as a function of its land tenure status, household, plot-level and other market characteristics. The implicit assumption here is that the model holds for each of the dependent variables in that factors influencing the decision to invest in soil improvements, tree planting and preservation of naturally-occurring (regeneration) trees are the same. Given that both study locations fall within the same geographical region, Ghana's high forest zone with similar tenorial arrangements in place (see Section 4.3.1) vis-à-vis the fact that the same survey instrument was administered through the field survey afforded the opportunity of pooling

the data and testing for the two study areas effects. Dummy variables are therefore employed in controlling and testing for the specific location effects of Kakum and Ankasa respectively. More importantly, the adoption of SLM practices is empirically specified and modelled at the plot-level instead of the household level. This is premised on the assumption that farmers' land management strategies may be different for different plots operated by the same household depending on tenurial and other plot-level factors. In effect, the approach affords the unique opportunity to capture specific plot-level variations in management decision-making in relation to the afore-mentioned land management strategies. The definition and observation level of the explanatory variables in the logistic regression models are outlined in Table 7.1 in Chapter 7.

In order to test for model specifications and determine final models, series of preliminary diagnostic steps were conducted. The pseudo R^2 , Hosmer-Lemeshow test, maximum likelihood ratio test and -2log likelihood were used in the regression analysis as statistical measures to assess the goodness of fit and eligibility of the predictor variables. The pre-selection of variables for the models was also based on a Pearson chi-square test and literature with statistical significance pegged at 10%, 5% and 1% levels for the subsequent logit regression analysis. The Statistical Package for Social Sciences Software (SPSS version 20) was used to perform the statistical and regression analysis of the data in this study (see Chapter 7).

In line with the ethos of mixed methods research, both the qualitative and quantitative data were combined leading to an integrated analysis contributing to the overall research findings (Punch, 2014; Creswell and Plano Clark, 2011). Table 4.4 and Figure 4.5 respectively give a summary of the methodological approach and research design adopted in this investigation.

Table 4.4: A tabular representation of the methodology, objectives and questions

Research Objectives	Research Questions	Methodology	Case study – Kakum & Ankasa Conservation Areas, Ghana
RO1. Examine the patterns of land ownership, distribution, mechanisms and processes of access to and control of land by the various social groups within the evolving local tenurial context in the study areas.	RQ1.1 What patterns of land ownership, distribution, and access mechanisms currently exist in the study areas, and how are these being shaped by the shifts in the local land tenurial arrangements?	• Literature-based analysis • Elite, semi-structured interviews with key informants: farmers, traditional authorities, district assemblies, CREMA etc. • Focus group interviews with selected participants. • Field observations, reflections and document analysis.	
	RQ1.2 How and to what extent are the shifting customary land tenure arrangements influencing variations in land rights among different social actors (farmers) in the study areas?	• Literature-based analysis • Elite, semi-structured interviews with key stakeholders: farmers, traditional authorities and local district assembly. • Focus group interviews with selected participants. • Field observations, reflections and document analysis.	
RO2. Determine the perceptions of different key social groups about land tenure security, the factors informing such perceptions and assess how these influence their investments	RQ2.1 How do various categories of farmers perceive and define their land tenure security?	• To be addressed using the same methods as outlined for RO.1	

in sustainable land management practices.	RQ2.2 What are the variations and sources of tenure (in)security and how do these differentially influence farmers' investments in sustainable land use and management?	• Survey questionnaires • Key informant and focus group interviews. • Multivariate analysis and Cross-tabulations of pre-coded data using SPSS. • Thematic and content analysis of qualitative data.	
RO3. Evaluate the challenges and prospects of the changing dynamics of customary tenure arrangements in relation to enhancing security of tenure and the implications for livelihoods and sustainable land management.	RQ3.1 How and to what extent are local customary tenure institutions responding to problems of tenure security and associated conflicts in the study areas, and what are the implications for promoting security of access and tenure for sustainable land management?	• To be addressed using the same methods outlined for RO.2	
RO4. Make appropriate suggestions towards promoting security of access and tenure and sustainable land management for sustainable development.	Considering the above research questions, what are the implications of study findings for safeguarding security of rural land rights, livelihoods and sustainable land management in Ghana?	• Analysis based on RO.1, 2 and 3.	

Source: Author's construct.

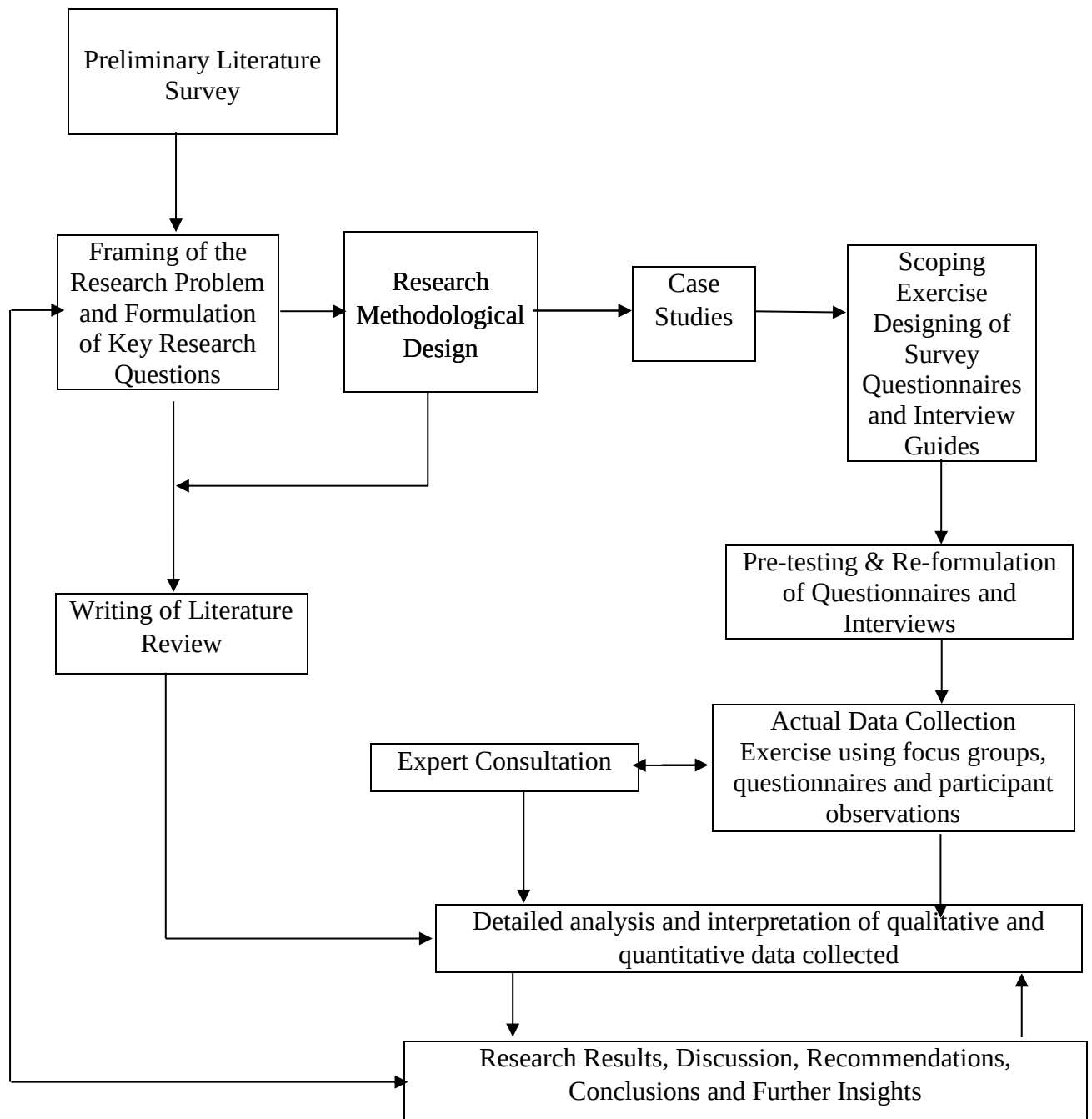


Figure 4.5: A Schematic Representation of the Research Design

Source: Author's Construct.

4.7 Methodological Limitations and Ethical Considerations

Recognisably, the pursuit of any social research enterprise like the present investigation is not without limitations. This is especially so in the case of a mixed methods research (as in this research) utilising a variety of data gathering methods which, in turn, invites several criticisms concerning validity and rigour deriving from the underlying ontological and epistemological differences of the qualitative/ quantitative dualism (see Section 4.2). As such, the penultimate section of this chapter reviews the major methodological limitations of the study. Additionally, a discussion on the key fieldwork challenges encountered as well as other pertinent considerations about positionality and ethics and how the researcher waded through them is also presented.

4.7.1 Limitations

Notwithstanding the justification of the appropriateness of a mixed methods approach in the collation of relevant data towards comprehensively address the research problem, some limitations still remain. First, the fact that the qualitative research primarily focused on the views and perceptions of selected stakeholders identified through a purposive and snowball sampling process meant that their views were based on personal experiences which may not be representative of the views of all the pertinent stakeholders involved in customary land management in the studied communities. This derives from the diversity of social actors and interests in local tenurial arrangements vis-à-vis the fact that stakeholders' views of land ownership, access, control and tenure security are dynamic and subject to unpredictable changes over time. A related issue widely recognised is the seemingly gender disproportionate sample (occasioned by the patriarchal organisation of the studied communities) which risked the representativeness of women's views in the results. In order to minimising this risk, efforts were made to ensure a careful composition of focus groups so as to capture the views of women and other groups like the poor and

landless. Also, by treating gender as an analytical category, the research also captured key differences between men and women and other salient unexpected relationships that would have otherwise been concealed (see sub-Section 4.6.1).

Another limitation of the research concerns the use of a cross-sectional dataset to investigate the tenure security-investment relationship in the quantitative analysis primarily due to financial and time constraints. It is recognised that the use of plot-level and household panel data affords the opportunity to sufficiently control for endogeneity of tenure security and household-level heterogeneity influencing stakeholders' perceptions as well as capture any effects on investment strategies from changes over time rather than the cross-sectional variation only (cf. Ali et al. 2007; Abdulai and Goetz, 2014). Nevertheless, the combination of qualitative and quantitative data (especially information obtained through interviews, FGDs and observations) afforded the unique opportunity to sufficiently explain and capture some local-level nuances in households' land management decision-making and factors influencing same which otherwise would have remained unobserved or hidden in a wholly quantitative study.

4.7.2 Some Ethical Issues and Fieldwork Challenges

The issue of ethics has also been variously identified as crucial to the empirical foundations (otherwise the underpinnings) of properly executed (social) research (see, e.g. Punch, 2014, O'Leary, 2013; Creswell, 2013; Denscombe, 2010). Punch (2014: 41) asserts that ethics defines the standards for executing research in accordance with the dictates of a particular profession, in this sense social sciences. To this end, the researcher guided by these methodological prerequisites and stipulated research and safety guidelines of the Social Science Division of Oxford University duly completed all relevant pre and post fieldwork ethics and safety documentation. These were fully approved by both the Head of the School of Geography and the Environment and the

Central University Research and Ethics Committee (CUREC) of the University of Oxford prior to the commencement of the fieldwork phase of this study. More importantly, the field research team adhered strictly to the said guidelines during and after the field interviews and questionnaire administration employing strategies such as anonymisation, pre-interview explanation of the research overview and gaining participant consent, repeated assurance of participant confidentiality during and after interviews as well as reflexivity in analysis and writing to alleviating any ethical issues chiefly confidentiality and protection of rights of participants (Punch, 2014: 48).

On the foregoing, researcher positionality is yet another important consideration in the context of social research as it underlies not only the research process but the eventual outcome. In this view, positionality encompasses the key attributes of the researcher such as age, gender, colour, ethnicity, and educational status etc. which have the propensity to either positively or negatively influence the credibility and/or rigour of an empirical enquiry (Punch, 2014: 53-54; O’Leary, 2013: 43). Positionality is inextricably linked to the reflexivity of the researcher (i.e. the researcher’s background and prior knowledge) as well as the target population’s perception of him. These underlying and yet interrelated issues can also influence the process of data collection and subsequent study results.

The researcher’s position (Punch, 2014: 53-54) as both an Oxford student and ‘insider’ (i.e. Ghanaian) presented some implications for the investigation which is also worth highlighting. Firstly, being a native might have influenced the researcher’s comprehension of the research problem and by extension the selection and approach of the study contexts (see sub-Section 4.3.1). Without overly professing the ‘culturally sensitive’ nature of the study contexts, it would suffice to say that respect and reciprocity are very much ingrained in the socio-cultural fabric which, in turn, implied critical attention to the selection of appropriate data collection techniques. In this light, the focus

communities reposed a lot of confidence in the researcher by virtue of his native association as they perceived that he could easily relate with and better capture their stories. Needless to say, the researcher's ability to fluently communicate and relate with the local traditions also played a pivotal role in facilitating access to the studied communities (see sub-Section 4.5.2). A typical introductory expression captured during the field interviews reads: "*...you are most welcome and we assure you of our maximum co-operation. And since you are also native, we believe that you not only understand our situations but can better explain them to the people at the top...*" Whilst this may appear to be overtly advantageous in terms of the ease of access to the respondents at face-value, it could also potentially present some negative ramifications if such trust is breached (see Punch, 2014: 48; O'Leary, 2013: 43). Thus, the researcher being well-aware of these issues employed a number of precautionary strategies such as repeated assurance of respondents of study objectives, use of pseudonyms etc. to avert any negative reflexivity issues. Nonetheless, it is admitted that the researcher's identity and personal orientation could have also 'coloured' or 'blurred' his attention to some otherwise promising lines of enquiry (i.e. discovery of new concepts) as he might already be familiar with some of the observations by respondents (ibid). Moreover, the relationship might be misconstrued as respondents could have some anticipation of future support (although it was made clear at the onset of interviews that no direct benefits would accrue) considering the research team's intimate engagement with them and the depth of discussions. These observations are premised on the rather implicit assumption that the research process cannot be completely decoupled or divorced from the researcher's own socio-cultural orientation and experiences.

Moreover, a major challenge encountered during the fieldwork phase of the research was related to the initial unwillingness of some farmers to be interviewed on land issues for

fear of ‘information mining’. Synonymous with most rural communities in Ghana, the farmers were initially sceptical of the ‘real identity’ of the research team and objective of the research fearing that divulging sensitive information about their lands and issues of conflict could have some negative repercussions. In some instances, it was speculated that the research team was representing the traditional authorities and government in obtaining information about their current landholdings for taxation and other purposes. Some migrant farmers in the studied communities also feared possible backlash from their landlords and/ or traditional authorities on providing information about their landholdings. Similarly, interviewing women alone in the absence of men was challenging. Given the patriarchal organisation of the studied communities, women were generally regarded as ‘less knowledgeable’ when it comes to land matters and were therefore not expected to divulge any information relating to land. Nevertheless, the choice of interviewing farmers at their respective homesteads and/ or locations convenient to them as well as in-depth explanation of the purpose of the research helped alleviate these initial challenges. Besides, the fact that the recruited research assistants were locally based in the study areas was far-reaching in eliciting the full participation of farmers. Overall, the multiple sources of data and application of data triangulation techniques helped in the verification of the information thereby ensuring data validity and reliability.

4.8 Summary

This chapter has discussed the specific methods employed to address the research objectives of this study. Adopting of a mixed methods approach underpinned by a critical realist philosophy, facilitated the collation of data using a combination of qualitative and quantitative methods. Whilst not without limitations, the chapter demonstrates that the use of mixed methods approach afforded the unique opportunity to bridge the qualitative

and quantitative dualism as a pathway to holistically addressing the complexities of tenurial and resource-use dynamics in rural Ghana. In this light, both the qualitative and quantitative data were combined leading to an integrated analysis contributing to the overall research findings based on which conclusions were made. The subsequent chapters 5 through to 7 discuss the empirical results and findings of this study.

CHAPTER FIVE

CHANGING CUSTOMARY LAND MANAGEMENT, INSTITUTIONS AND ACCESS ARRANGEMENTS IN KAKUM AND ANKASA REGIONS

5.1 Chapter Overview

Against the backdrop of contemporary discourses on land tenure in sub-Saharan Africa (SSA) torn between the pursuit of ‘full-scale’ tenure reform (formalisation) and preservation of customary tenure structures as a panacea to guaranteeing equitable land access and allocation, tenure security and sustainable land management (Chimhowu and Woodhouse, 2006; Kasanga and Kotey, 2001; Toulmin et al. 2002; Toulmin, 2009; Knight, 2010), this chapter principally addresses the first research objective of the thesis (see Table 1.1, Chapter 1). Drawing on survey and qualitative data complemented by secondary information, the chapter provides an empirical analysis on the changing mechanisms of land access, control and ownership arrangements that define the scope and conditions of land rights of different social groups (i.e. indigenes, migrants and women) in the context of contemporary tenurial relations in the study areas. The chapter demonstrates the changing dimensions of land ownership, power relations, tenure modes and conditions impinging land access in the context of the study areas. It also highlights how inequalities in land access, distribution and control operate to cause difficulties for some social groups (native youth, women and the poor) with negative implications for sustainable land management and livelihoods. In addition, the chapter also demonstrates the extent of dynamism of customary tenure institutions in responding adequately to these emergent issues of social inequities in access to and control of land in the study areas.

The chapter argues that rapid transformation of local tenurial arrangements more in favour of individualisation based on market ideologies, has triggered the redefinition of local norms and rules (on access and control mechanisms) thereby resulting in access difficulties for some social groups with far-reaching implications for equitable land allocation, control and security of tenure. The findings of the chapter suggest that contrary to the mainstream egalitarian view of customary land tenure system in rural regions as guaranteeing equitable and secured land access to all members of the landholding community (Hill, 1963; Berry, 1993; Kasanga et al. 1996; Kasanga and Kotey, 2001), the emerging patterns of access and control (instigated by the increasing land scarcity) have resulted in differentiation and inequalities in land access and distribution especially amongst the vulnerable and disadvantaged members of landholding groups in the study areas. Such inequalities in land access and distribution contributes to social differentiation and class formation resulting in the disruption of the hitherto homogeneousness of rural farming communities under customary tenure systems at least in the context of the study areas (cf. Amanor, 2010; Peters, 2004). The findings also highlight the view that the emergent changes in customary tenure arrangements towards individualisation are far more complex (and socially embedded) than the often assumed linear conceptualisation suggested under the evolutionary theory of land rights (see Boserup, 1965; Platteau, 1996, 2000).

The remainder of the chapter is structured as follows: the first section examines the changing patterns of land ownership and power relations, tenure forms and landholdings. The successive sections discuss the pattern of land acquisition and access, dynamics of the local land market as well as the extent of land scarcity based on disaggregated analysis of community membership (i.e. indigenes and migrants) and gender associations within

the study areas. The concluding aspects of the chapter summarises the discussion on the key issues raised and shares some final thoughts.

5.2 Changing Land Ownership and Power Dynamics in the Study Areas

As underscored in Chapter 3, the customary land tenure system is the predominant tenurial system in Ghana. Within this context, the status of land ownership is characterised by different layers of ownership and institutions that are responsible for land allocation and management at the local levels. Under customary land tenure, access to and ownership of land is primarily based on membership of a particular landholding community. This implies that native community members have guaranteed social right to land. However, non-community members obtain access through a process of negotiation which differ from context to context (see Sections 2.7.3 and 3.4.1). Following this premise, the underlying logic of tenurial practices in customary societies favoured communal interests rather than individual to the extent that there was no landlessness (cf. Arko-Adjei, 2011; Abdulai and Ndekugri, 2007; Kasanga and Kotey, 2001). Yet, in the face of rapid socio-economic transformation, there are divergent views as to whether customary tenure systems can adequately respond to these changes in terms of safeguarding equitable land access and security of tenure (see Sections 1.3, 2.5, 2.5.1 and 2.7). It was therefore germane in the context of this study to examine the mechanisms of access and control and the extent to which they remain equitable in guaranteeing equal access to and ownership of land by all members of landholding groups within the study areas. This is important in the wake of increasing land scarcity and changing tenurial relations in rural Ghana and sub-Saharan Africa. The ensuing paragraphs therefore discuss the architecture of land ownership focussing on the different actors involved in customary governance of land. This is followed by an analysis of the dynamics of land ownership at the household level in Section 5.3.

The qualitative research revealed a close semblance in the land ownership types and structures within Kakum and Ankasa traditional areas. Broadly, three main categories of land viz. stool land, family land (*abusua-asaase*) and privately-owned land (*ɔtɔ-asaase*) are identifiable in both study areas (Field notes, 2015). By description, stool lands refer to all land held in trust by the chief on behalf and for the shared benefit of all members of the community who trace their roots to the same ancestry. Consequently, a member of the landholding community could gain access to a vacant stool land as of social right as aforementioned acknowledging the sovereignty of the stool.

Family lands on the other hand encapsulate all parcels of land recognised as belonging to a particular lineage or extended family through inheritance from their forebears by reason of early settlement or cultivation. This category of lands are held in trust by a member (usually on the basis of seniority) for the common benefit of other members of the said extended family. In the traditional context, access to such family lands by a member is through inheritance and/or usufructuary rights sanctioned by the head of family (*Abusuapanyin*) with the consent of other members of the said family. Importantly, individual family members can only own the property on such lands but not the actual land. A key distinction between *agyapade3* (property) and *asaase* (land) under customary law is therefore instructive here. Whereas the property (connoting the investment or cultivated crop) is both inheritable and alienable, the land per se is not. Typical explanations in point are the respective observations by Nana Kwao, an elder of the Nuba Stool and a migrant farmer in Ankasa:

“...over here and in fact across the Akan communities, it is the property [crop] on the land that belongs to the land user and not the actual land per se. The ownership of the land unquestionably resides with the traditional authority or the landholding group...” (pers comm. Nana Kwao, Elder of Nuba Stool –Ankasa, August 2015).

“...There is a difference between the use and the ownership of land. We the migrant farmers have use rights over the land (i.e. the farm property) but that does not constitute

ownership of the land per se... ” (Ampofo Nkansah, FGD – Old Ankasa, Ankasa, August 2015).

It is therefore evident from the foregoing that the above customary principle is of general application to all land users (irrespective of one’s community membership) and has been a source of contention between the traditional authorities and different social groups in the study areas (see also Section 5.5). Lastly, individual land refers to land owned by an individual in a private ownership sense usually through outright purchase, inheritance and/ or gift (*akyedee*) from an original owner in favour of an assignee.

On the foregoing, different forms of land ownership and control structures are also discernible in the study areas. At the apex of the power structure is the Paramountcy which is a conglomeration of all landholding communities within a defined traditional area. The Paramountcy is represented by the Paramount Chief (*Omanhene*) who is the overall head of the political setup and the custodian of all land and natural resources (i.e. allodial titleholder) within the traditional area. The Divisional Chief (*Ohene*) is next in line (only subservient to the authority of the *Omanhene*) vested with the sub-allodial title to land in trust for his subjects, *kromma* (i.e. natives) who constitute the landholding group. Aside from their core jural functions, the chief exercises supervisory and administrative functions in respect of communal lands. Pertaining to land administration, however, the Divisional Chief may delegate responsibility to his *Abusahene* (i.e. a sub-chief responsible for natural resources) who oversees the day-to-day transactions on the former’s behalf. In this vein, whilst members of the landholding community own customary freehold in land (individually or collectively) as family or clan members although they are customarily barred from alienating land to *ahoho* (strangers) without the consent and concurrence of the Chief or *Abusuapanyin*. Although the Divisional Chiefs and *Omanhene* (Paramount Chief) are at the apex of the power structure, the

Omanhene plays a very minimal role in land management by sanctioning documentation on land within his jurisdiction. Therefore, his consent and concurrence to a land transaction is not obligatory but as a customary protocol, he is informed of any development relating to land as a sign of respect. The *Abusuapanyin* (Clan/ Family Head) is yet another important authority within the spheres of customary land management in the study regions. Recognisably, the *Abusuapanyin* is regarded as the senior member of a particular clan or family within the landholding group and could either be a male or female as per Akan custom. His or her role in land management chiefly relates to administering ‘clan or family lands’ (*abusua-asaase*) and is sometimes regarded as the ultimate land owner in some communities within the study regions. For instance, some portions of land within the Amokwaosuazo CREMA area in Ankasa is regarded as ‘family land’ administered by an *Abusuapanyin*. Similarly, portions of land in Bunsu, Appiahkrom, Nkwanta and Kwaku-Mmore communities in Kakum are classified in this category managed by the *Abusuapanyins* respectively. Such ‘family lands’ as indicated by key informants were often products of grants made to early settlers by the Stools and/ or outright sale of land to individuals and groups by the former. Moreover, within the spheres of tenurial relations in both study regions, the *Odikro* and *sub-Odikro* do not possess any inherent right in land ownership beyond acting as intermediaries between the stools (chiefs) and prospective land users. Therefore, a migrant settler of reputable character and who has lived a community for a considerable duration could easily occupy the office of an *Odikro* as this does not in any way impart proprietary rights over land within the said community. Extracts of interviews with the *Odikros* of Kwame-Anang and Kanokware in Kakum and Ankasa respectively are illustrative of the above point:

“...The function of an Odikro or sub-Odikro is to oversee customary matters in the community but may from time to time act as an intermediary (or link) between prospective land users and the chiefs in negotiating for land even though he may not necessarily be

part of the landholding group... ” (pers comm. Odikro of Kwame-Anang – Kakum, June 2015).

“...Although I’m not originally from this place [Ankasa], I’m now the Odikro in this community by virtue of my fathers’ been the foremost migrant settlers here. What is important in installing one as an Odikro is the character and sound leadership qualities even though the duration of stay and cordial relationship with the customary authorities is also taken into account... ” (pers comm. Odikro of Kanokware – Ankasa, August 2015).

The above quotes clearly exemplify the functions of the office of the *Odikro* within the customary land management framework in the context of the study areas and are also representative of other Akan communities in southern Ghana. It is important to underscore that the position of a *sub-Odikro* arises in the instance where a substantive *Odikro* appoints a representative within distant communities under his jurisdiction. For instance, the *Odikro* of Amokwaosuazo in Ankasa has a number of *sub-Odikros* in communities like Faya, Paradise, and Old Ankasa within his jurisdiction. It was revealed through further enquiries that these different stakeholders on the customary power scale including *Odikros* and lessees, sometimes entered into transactions with tenant farmers disguising as actual landowners with the capacity to alienate land. These multiple spheres of land ownership and/ or control pose a great concern to land users who are a lower tier of the power structure (particularly the migrants, women and poor) in terms of tenure security and legitimacy of acquired property rights. In some of the communities surveyed both in Kakum and Ankasa, this complexity in land ownership has instigated conflicts between stools, families and land users resulting in loss of property rights of land users in some instances. Classical examples are the on-going contestation between *Mpataba Stool v. Nuba Stool* and *Fanti-Nyankumase v. Akosontiri-Aboabo Stools* in Ankasa and Kakum respectively. Another case in point is the story of one migrant farmer in Ankasa, Mr. Abdulai (originally from Kandiga in the Upper East region) who lost his land rights as a result of illegitimate sharecropping grant made by a *sub-Odikro* upon his arrival in the study area in the year 2000:

“...upon my arrival here in 2000, I approached one sub-Odikro in a neighbouring village who granted me a piece of land on sharecropping basis. Upon fulfilling all the customary protocols, I later found that the Odikro did not have the power to give out the said land and I lost it completely because I couldn’t afford the re-negotiation demands of the actual owner at the time...” (pers comm. Mr. Abdulai, Old-Ankasa, Ankasa, June 2015).

The above quotation highlights the underlying complexity within the land ownership structure evidenced by its susceptibility to illegitimate land grants which has implications for security of tenure of land users and overall land management. It also exemplifies an instance where some powerful local actors exploit the rather complex landownership setup by manipulating rules and norms governing land allocation for their own parochial gain. Further, respondents who participated in the quantitative survey were also asked to identify the landowners and the most influential person (in terms of land use and management decisions) in their respective communities. This was insightful in further unveiling the dynamics of power and control that underlie and define stakeholders land use and management decision-making as typified in Figure 5.1.

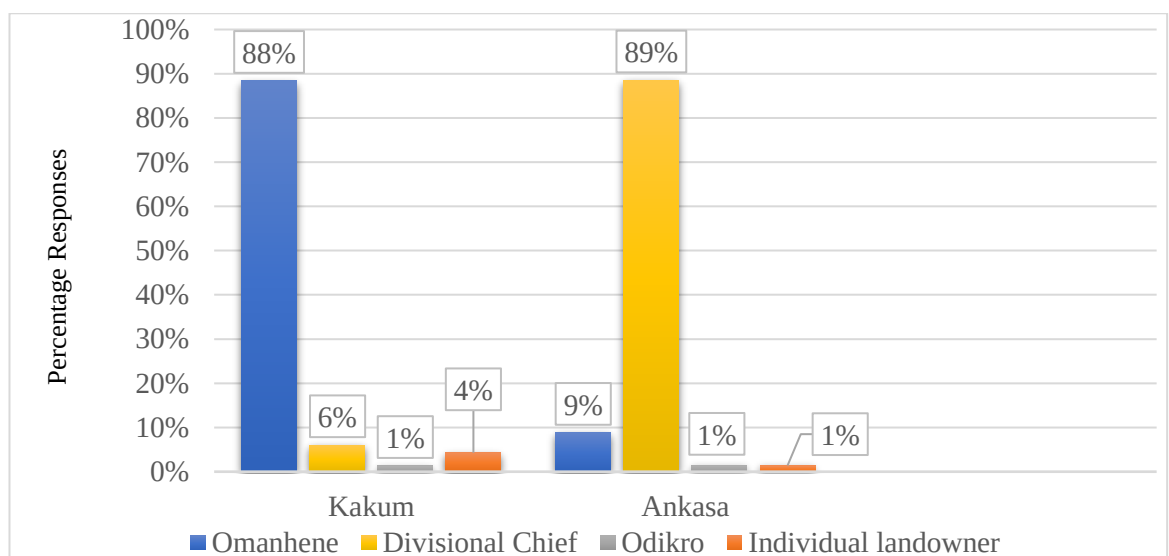


Figure 5.1: Respondents perception of who are the contemporary landowners in Kakum and Ankasa

In line with the qualitative evidence, it is discernible from Figure 5.1 that majority of respondents perceived the allodial or ultimate title in land to be vested in the *Omanhene* (88%) and Divisional Chiefs (89%) in Kakum and Ankasa respectively. This

contradiction could be explained by the fact that the sub-allodial title in land in southern Ghana is often vested in Divisional Chiefs (*Ahenfo*) and/ or family heads (*Abusuapanyins*) of whom the paramountcy is a collective representation. Interestingly, *ankoroankore* (individuals) and *Odikros* were also accredited with the same status (allodial title holders) in land in their communities (Figure 5.1). This result is interesting in view of the customary law position that forbids the vesting of absolute (allodial) title in land in persons other than the occupants of stools and clan/ family lineage heads in southern Ghana. A plausible reason for this contradiction could be that these authorities or actors have assumed important roles as sources of land allocation in the wake of the near-absence of vacant communal lands in most of the studied communities. This perhaps also finds expression in the observation that the hitherto abundance of vacant communal lands controlled by chiefs and *Abusuapanyins* rendered them very influential in the land allocation process. Yet such lands are now rare and hence the erosion of some control over land management by the chiefs and *Abusuapanyins*. This implies some important evolutionary changes in power and control dynamics of land in the study areas which in turn could have some ramifications for land use and management dynamics. The foregoing results corroborates Abdulai and Ndekugri's (2007) finding that the operation of customary tenure institutions permits individual land ownership and more broadly observations of evolutionary changes in land ownership and control structures in southern Ghana (Otsuka et al. 2003; Kasanga and Kotey, 2001). It therefore begs a fundamental question as to who wields the most influence (control) on land use and management in face of changing patterns in land ownership in the studied communities. Figure 5.2 typifies the pattern of power over land use and management in the study areas.

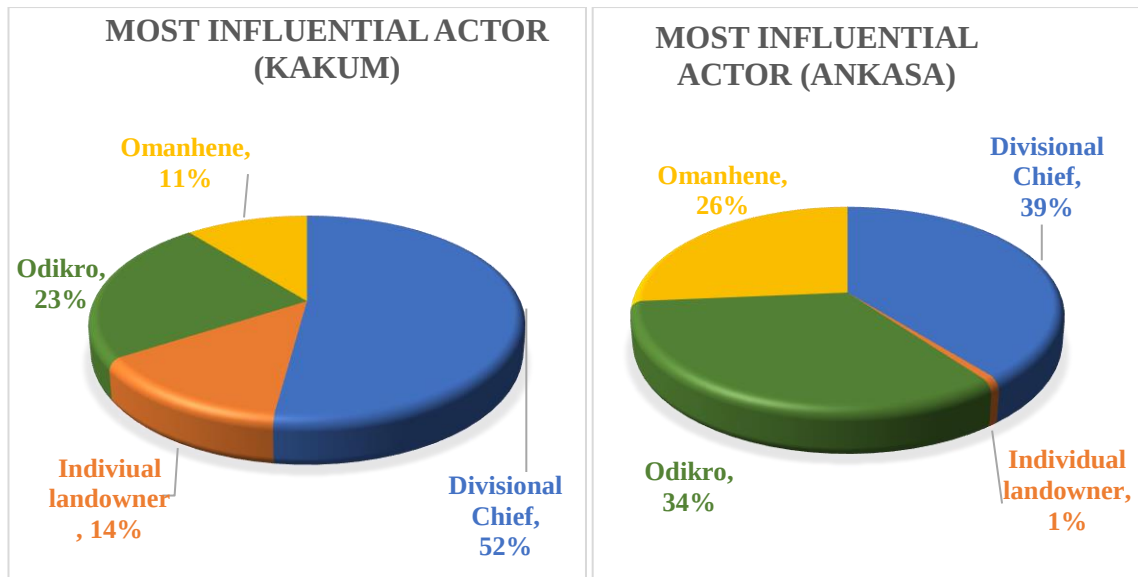


Figure 5.2: Respondents' Perceptions of Most Influential Actor in Land Management

It is discernible from Figure 5.2 that apart from the Divisional Chief whom majority of respondents in both regions regarded as the most influential on land use and management, other actors like the *Odikro* and the *ankoroankore* (Individuals) were also seen to have the same control in their respective communities. Comparing Figures 5.1 and 5.2, the results show that of the proportion of respondents who regarded the *Omanhene* as the ultimate landowners in Kakum (n= 205), only 11% maintained that the *Omanhene* was the most influential authority on land use and management. On the contrary, of the proportion of respondents who indicated the Divisional Chief as the ultimate landowner in Ankasa (n=131), only 39% accredited the same actor with the greatest control over land use and management in their respective communities.

Despite a far lesser proportion of respondents (1% and 4%) who identified the *Odikro* and individuals as the ultimate landowners respectively (Figure 5.1), a relatively higher proportion 23% and 14% regarded same as the most influential actors in land use and management concerns in their communities within Kakum. Statistical tests show significant differences (99% confidence) between respondents' recognition of *Odikro* and individuals as allodial title holders and the most influential on land management with chi-

square values of 7.58 and 52.8 respectively. In juxtaposition, although only 1% of the total 148 respondents in Ankasa regarded the *Odikro* as the ultimate landowner, a comparatively higher proportion (34%) of the total sample recognised the *Odikro* as the most influential in land use and management in their respective communities (Figure 5.2). This result was however not statistically significant. Taken together, the foregoing results suggest differing perceptions of respondents pertaining to land ownership and influence on land use and management in the studied communities within Kakum and Ankasa. This underscores the complexity in land ownership and control structures as well as indicates changing power relations within Kakum and Ankasa which seem contradictory to the conventional wisdom that *Omanhene*, Divisional Chiefs and *Abusuapanyins* are the most influential in land use and management dynamics. Other less recognised actors like *Odikros* and individuals are credited as exercising the most influence or control over land management although the supremacy of Chiefs within the general land administration architecture is duly acknowledged. A typical remark by one community leader in Totoda village within the Kakum region is illustrative of the above observation:

“...Realistically, individuals and Odikros exercise the most influence control over land use and management at the community level although the ultimate allodial power is vested in the Chiefs...” (pers comm. Godwin Akpakpli, Totoda – Kakum May 2015).

The foregoing discussion appear to indicate some evolutionary changes in customary tenure highlighted by shifts in the dimensions of land ownership and control structures in the context of the study regions. These shifts in the dynamics of land ownership have also being accompanied by changes in the tenure of household landholding to which attention is now drawn.

5.3 Multiplicity of Tenure Forms in Changing Contexts

As noted in Section 5.2, transformations in customary land tenure has resulted in the emergence of individual ownership in land contrary to the hitherto underlying

communitarian objectives. Invariably, this phenomenon has fuelled the creation of multiple tenure forms with differing implications for land use and management and tenure security. In this section, the analysis focuses on the different tenure forms at play and the variation across the different social groups in the context of the study areas. Following this, respondents were asked about the type of tenure based on which their respective household landholdings were managed the results of which are presented in Figure 5.3.

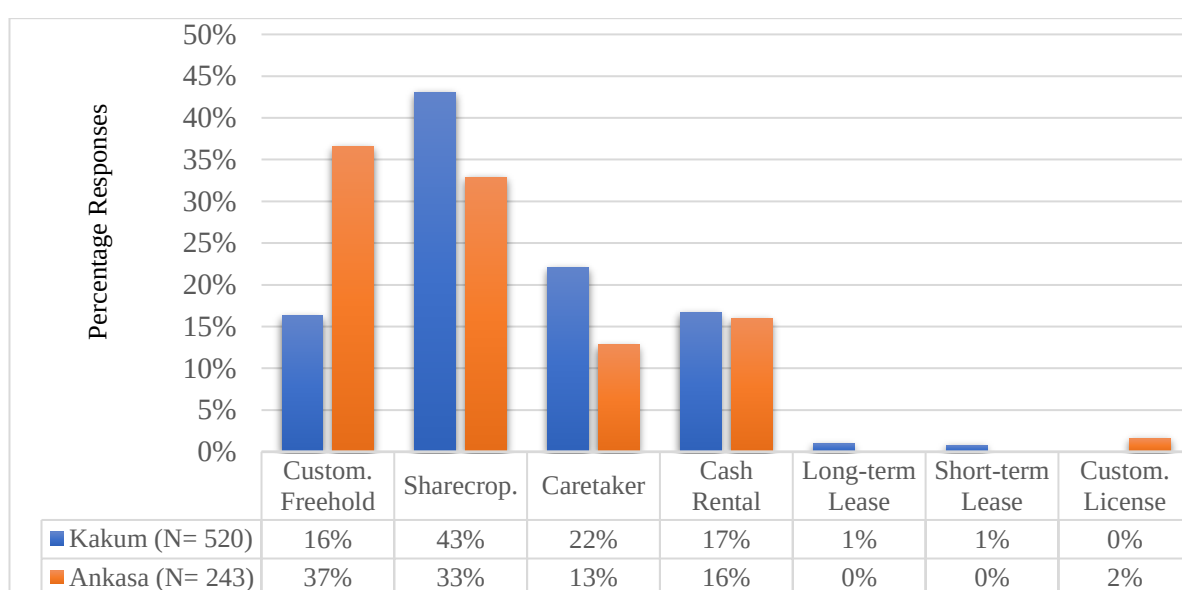


Figure 5.3: Tenure Modes of Landholdings by Study Area

Figure 5.3 highlights the prevalence of secondary tenure forms in contemporary contexts, particularly in Kakum. On the land rights (power) spectrum, customary freehold which is analogous to primary land rights is often witnessed as superior (in terms of use and transfer) and secure only subservient to the allodial title as compared to secondary or derived land rights (encapsulating sharecropping, leasehold and other rental arrangements) (see Table 5.1, page 162). Whereas the traditional authorities observed that customary freehold interests in land under customary norms are non-alienable at least to third parties outside the landholding group, emerging trends appear to suggest the opposite as community members perceived such usufruct rights in land are alienable. A

typical view affirming this observation is proffered by an elderly community leader in Kakum:

“...I hold a customary freehold interest in my land parcel and as such the land is inheritable and I have the exclusive right to alienate the land to anybody (native or non-native) I want to without any restrictions. It is also within my right to alter the use of the land should I elect to do so...” (pers comm. Elder Ayamga, Aboabo-Kakum, January 2015).

From the foregoing premise, the quantitative results show that more than one-third of household landholdings (37%) in Ankasa were held on customary freehold basis as against a relatively lesser proportion (16%) in Kakum (Figure 5.3). Additional information garnered through the qualitative interviews appear to suggest that land access on customary freehold basis is increasingly becoming rare (especially in Kakum) in recent times as most landowners prefer to grant out land on sharecropping and/ or rental basis whilst retaining some measure of control over land use and management decision-making. A case in point is the typical view expressed by the Odikro of Krobokese, Nana Adjona in response to a question about the general tenurial situation in Kakum:

“...The land is almost finished! There is no vacant land except the forest reserve [Kakum and Attandansu] which we are not allow to even enter let alone establish a farm. It is now very difficult to get everlasting (customary freehold) even if you are an Assin [indigene]. In my case, I hold my land[s] under customary freehold because of my late father being an early settler here. Late arrivals have no option but to settle for sharecropping (abunu/abusa) or land rentals which is now very common here. Also, if you have money you can buy [lease] land from those who have more parcels of land and are willing to sell...” (pers comm. Nana Adjona, Krobokese – Kakum, January 2015).

The above observation expressed in this interview illustrates the current tenurial situation in Kakum’s context and was re-echoed in several other interviews and focus group discussions. Similar observations were also made by respondents in the studied communities within Ankasa. The foregoing observation highlights the view that tenure forms are changing from primary and more secure customary freehold interests in favour of secondary or derived land rights in the study areas. This conveys the understanding

that as the rural land attains a scarcity value under increasing pressures, the complexion of local tenure forms and scope of rights are also changing with differing implications for land tenure security (Anaafo, 2015; Amanor, 2010; Kasanga and Kotey, 2001). Table 5.1 below summarises the variegated tenure forms in the study regions and the latitude of control in terms of land rights. The succeeding sub-sections further analyses the forms of tenure based on land use (crop type), community membership and gender to identify variations, if any and possible implications for land management dynamics in the study areas.

Table 5.1: Variegated Tenure Forms and Scope of Land Rights in Study Areas

Tenure Form	Salient Features and Remarks
Customary Freehold	• Subservient only to the allodial title. • Independent control over land use and management decision-making. • Effectively permanent and inheritable subject to full observance of the conditions of grant. • Differences between individual land users and traditional authorities about alienability.
Abunu (Division Two)²²	• Subservient to the customary freehold interest and allodial title. • Independent control over land management decision-making. • Inheritable property (i.e. crop on the land). • Somewhat permanent subject to the maintenance of the 'property' thereon. • Alienable property but not land per se.
Apaso Abunu	• Subservient to the customary freehold and allodial title. • Somewhat independent control over land management decision-making (subject to approval of landowner). • Inheritable property (i.e. crop on the land). • Indeterminate subject to full observance of conditions of grant. • Non-alienable to a third party.
Abusa	• Subservient to the superior interest from which it was carved. • Partial/ limited control over land management decision-making (subject to approval of landowner). • Inheritable property. • Indeterminate subject to full observance of conditions of grant. • Non-alienable to a third party.
Rental	• Fixed duration subject to observance of full conditions of grant. • Partial control over land management decision-making. • Non-inheritable property. • Non-alienable to a third party.
Caretaker	• No legal interest in the said property and/ or land. • No control over land management decision-making. • Non-inheritable property. • Non-alienable and indeterminate duration.
Customary Licenses (Permissions)	• No legal interest in the said property and/ or land. • No control over land management decision-making. • Non-inheritable property. • Non-alienable and indeterminate duration

Source: Field Notes, 2015.

²² The abunu and abusa are variants of sharecropping agreements. Under the abunu system, two forms were identifiable - *dua mmienkye* or division two (where the tree crops say, cocoa are divided into two including land and the tenant's portion remains with him/ her permanently) and *apaso abunu* (where the farm proceeds are equally shared between landlord and tenant). In the case of the *abusa* system, the proceeds from the sale of farm produce is shared in the ratio 1:2 between landowner and tenant-farmer respectively.

5.3.1 Tenure Forms and Land Use (Crop Type)

The form of tenure under which landholdings are operated is to a large extent recognised as critical in determining the specific type of land use investment (especially long-term perennial crops like cocoa, rubber etc.) undertaken on land. It was therefore instructive to investigate in the context of this study whether there were differences, if any, between tenure modes of household landholdings and cultivated crops. Respondents were therefore asked about the specific land use and tenure under which their respective household plots were managed. As can be seen from Table 5.2, although no consistent trend is discernible from the overall results, it appears that significant majority of landholdings managed on customary freehold, sharecropping, caretaker and rental basis had perennial crops (mostly cocoa and rubber) as the main land use in Kakum and Ankasa respectively. Nonetheless, a significant association between customary license and cultivation of food crops on household plots is deducible in Ankasa ($p \leq 0.001$; χ^2 value 25.00). This finding is unsurprising to the extent that customary licenses are mere permissions to use land invariably suggesting that cultivating long-term perennials (such as cocoa, rubber etc.) could constitute an adverse claim to landowner's title. Overall, the results seem to suggest that the tenure mode was not a strong predictor of the type of crop investment undertaken on household landholdings in both study areas. Plausibly, other factors could better explain the decision of land users to cultivate specific crop on their respective landholdings. In fact, it was gathered from the qualitative interviews that the type of crops cultivated on a particular land was part of the pre-acquisition negotiations between the prospective land user and landowner. It therefore stands to reason that land users were required to cultivate mutually-agreed crops (say cocoa or oil palm) on land as per the initial terms and conditions of grant. Failure in this regard could result in the loss of land rights (see Section 6.3.3).

Table 5.2: Tenure Forms and Land Use by Study Area (%)

Tenure Form²³	Type of Land Use (Kakum)			Type of Land Use (Ankasa)		
	Perennials	Food crops	Other	Perennials	Food crops	Other
Custom. Freehold	79%	20%	1%	82%	18%	0%
Sharecropping	92%	7%	1%	93%	6%	1%
Caretaker	91%	9%	0%	90%	7%	3%
Rental	90%	10%	0%	92%	8%	0%
Long-term Lease	100%	0%	0%	0%	0%	0%
Short-term Lease	100%	0%	0%	0%	0%	0%
Custom. License.	0%	0%	0%	0%	100%	0%

Source: Field Survey, 2015.

5.3.2 Community Membership and Tenure Modes

Contrary to the conventional understanding that indigenes enjoy customary freehold rights in communal land by virtue of their membership of the landholding group (see Section 5.2), the disaggregated results in Table 5.3 seem to indicate some changes in such customary freehold status in land in the study areas. Of the total proportion of landholdings managed by indigenous households in Kakum (n=29), only 28% were held as customary freehold as against 52% on sharecropping basis. Juxtaposing to that of Ankasa, however, the results indicate a significant proportion of all indigenous landholdings (79%) were operated as customary freehold basis as opposed to just 12% on sharecropping basis. Further statistical test shows a significant association between indigenous landholdings and customary freehold status ($p \leq 0.001$; χ^2 value 62.73). This perhaps suggests that indigenous groups to some extent still had better opportunities to gain access to relatively secure land (on customary freehold basis) under existing tenurial arrangements in Ankasa.

²³ The significant differences are not marked because it would make the tables somewhat illegible and therefore are referred to in the text.

Table 5.3: Tenure Modes of Landholdings by Community Membership (%)

Tenure Form	Kakum			Ankasa		
	Household Plots		Total (N=520)	Household Plots		Total (N=243)
	Indigene (n= 29)	Migrant (n= 491)		Indigene (n=73)	Migrant (n=170)	
Custom. Freehold	28%	16%	16%	79%	21%	37%
Sharecropping	52%	43%	43%	12%	42%	33%
Caretaker	17%	22%	22%	10%	14%	13%
Cash Rental	3%	18%	17%	0%	23%	16%
Long-term Lease	0%	1%	1%	0%	0%	0%
Short-term Lease	0%	1%	1%	0%	0%	0%
Custom. License	0%	0%	0%	4%	1%	2%

Source: Field Survey, 2015.

As suggested previously (Sections 2.3.2 and 2.7), tenurial dynamics are undergoing transformation in the face of growing land scarcity and commodification in SSA, including Ghana. Altogether, the results in Table 5.3 lends empirical credence to this observation as evidenced by the shifting pattern of customary freehold status of indigenous groups which was more pronounced in Kakum. Plausibly, the severity of the land scarcity problem in Kakum has meant that indigenous farmers had to settle for secondary or derived land rights other than customary freehold to support their livelihood (see Section 5.6). To the extent that native farmers are unable to acquire customary freehold interest in land implies that they may be hesitant in undertaking long-term SLM investments as they do not exercise complete rights in their land and therefore maybe susceptible to future expropriation. Besides, this could also have negative implications for *dejure* tenure security as landholders may not be able to register their secondary land rights and thus constraining access to formal credit opportunities (see Sections 2.5.2 and 6.6.3).

As regards the tenure status of migrant households, the disaggregated results indicate that though most of their landholdings were operated on sharecropping basis, a considerable proportion (16% and 21% respectively) in Kakum and Ankasa were also managed as

customary freehold (Table 5.3, page 172). These results are interesting to the extent that the customary freehold interest is traditionally recognised as the preserve of community members (i.e. indigenes) as opposed to secondary (derived) interests common with migrant groups. It therefore gives the indication that the current transitions in tenurial arrangements are highly differentiated with respect to who is able to strengthen their claims over land. Nevertheless, the qualitative evidence from the community FGDs pointed to the fact that most migrant beneficiaries of customary freehold were long-term settlers in their respective communities who had acquired such interests through customary gifts as rewards for their labour in establishing cocoa plantations in the study areas. An elderly migrant farmer in Kakum had this to say:

“...Originally from Bawku in the Upper East region of Ghana, I was brought here [Kakum] by my master as a farm labourer from Techiman-Mangoase where my master used to farm. When we first arrived here in the 80s, this whole place was a thick virgin forest. Upon arrival, my master and I reached an agreement that I will work under him for three (3) years in return for 17 acres of farmland. Through sustained effort and hard work, I cultivated the land jointly with my master and he [master] in turn transferred 17 acres of land as customary freehold to me in fulfilment of our initial agreement...” (pers comm. Mr. Musah, Aboabo Camp, Kakum, January 2015).

5.3.3 Gender and Tenure Modes

Examining tenure differences across genders shows that more female-managed landholdings than male-managed landholdings were cultivated on customary freehold basis in both regions (see Table 5.4, page 174). Whereas the observed differences in Kakum were small and statistically insignificant, that of Ankasa indicate a statistically significant difference between gender and customary freehold landholdings ($p \leq 0.001$; χ^2 value 14.98). Over two-thirds (70%) of the total female household landholdings as against only 32% of that of their male counterparts were held as customary freehold (Table 5.4).

Table 5.4: Tenure Modes of Landholdings by Gender

Tenure Form	Kakum			Ankasa		
	Household Plots		Total (N=520)	Household Plots		Total (N=243)
	Men (n= 452)	Women (n= 68)		Men (n=206)	Women (n=37)	
Custom. Freehold	15%	24%	16%	31%	70%	37%
Sharecropping	44%	35%	43%	37%	11%	33%
Caretaker	24%	13%	22%	14%	8%	13%
Cash Rental	15%	27%	17%	17%	11%	16%
Long-term Lease	1%	2%	1%	0%	0%	0%
Short-term Lease	1%	0%	1%	0%	0%	0%
Custom. License	0%	0%	0%	1%	6%	2%

Source: Field Survey, 2015.

Overall, these results are surprising to the extent that women are generally observed as having weaker land rights and limited control over land as compared to men under the customary land tenure system (cf. Duncan and Brants, 2004; Sewornu, 2010). One reason that could explain the foregoing result is that majority of the female landholdings in Ankasa (62%) were owned by indigenous women who had acquired customary freehold interest because of their nativity. This observation is supported by the fact that 78% out of the total 24 female-operated landholdings managed as customary freehold belonged to indigenous women. It therefore presupposes that such female customary freeholders independently control their landholdings with fewer restrictions which could have positive implications for land management dynamics and tenure security. Yet, the foregoing analysis also highlights that such relatively more secure customary freehold rights (mostly enjoyed by indigenous groups) are being replaced by short-term agricultural leases in the wake of the current tenorial transformations. An alternative explanation could be that certain groups of women (such as married women and matriarchs) navigated different strategies to gain access to more secure land and assert

their interest through, for example, leveraging the idea of ‘sweat equity’²⁴ (see Quisumbing et al. 2001; Tsikata, 2009; Flintan, 2010; Section 5.5.2).

5.4 Landholding, Size and Distribution Patterns

In order to gain a comprehensive understanding of how the shifts in customary tenure arrangements have shaped patterns of land access and control on the ground, this section provides an analysis of the distribution and sizes of household landholdings²⁵ and the extent to which local tenorial arrangements still maintained their inherent egalitarian features (particularly regarding land access by the vulnerable groups) in the wake of growing land scarcity and individualisation in the study areas. Against this backdrop, whereas the opportunity to access land in the studied communities is available to all (particularly members of the landholding groups), the overall results in Figure 5.4 appear to suggest the incidence of fragmentation in landholdings which was more pronounced in Kakum. For instance, almost two-thirds (65%) of households in Kakum cultivated more than 1 plot as compared to 41% of their counterparts in Ankasa within the same category (Figure 5.4).

²⁴ The idea of sweat equity follows that women should be granted the same rights (or equal opportunities) to lands as enjoyed by their husbands as compensation for their efforts and time spent working in the fields and household (Garber, 2012; Meinzen-Dick et al. 1997).

²⁵ Landholding or plot used in this context generally refers to a piece of land owned or used by an individual or household.

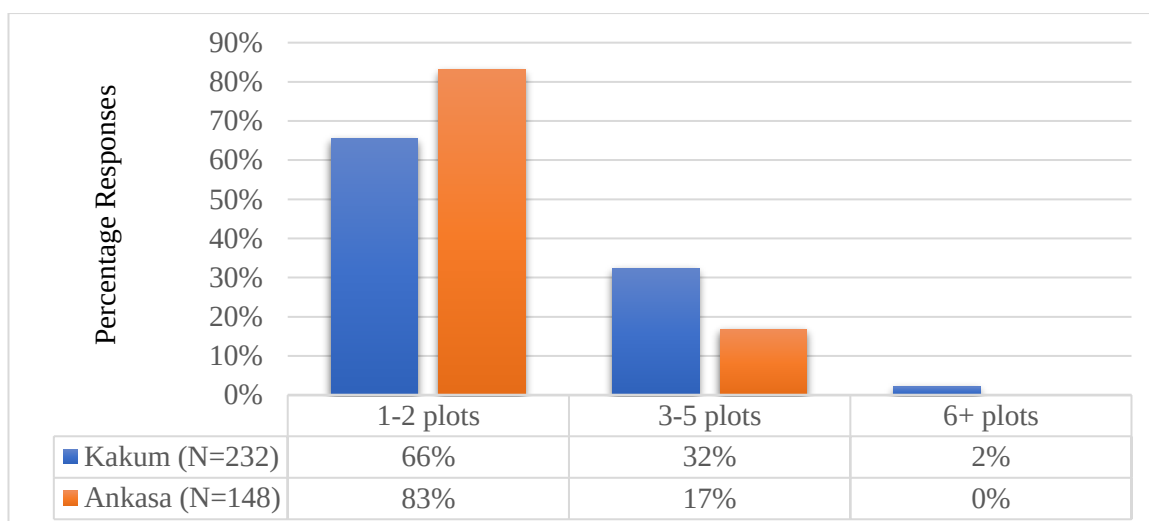


Figure 5.4: Number of Household Landholdings by Study Area

The qualitative evidence revealed that the cultivation of multiple plots by households within the study regions may be attributable to a number of factors including the inheritance regime²⁶ (land fragmentation) and problem of land scarcity. Attesting to the above observation are excerpts of the interviews with the *Odikro* of Krobokese village and a community elder in Kakum respectively:

“...Previously, it was easier to get a single composite but large tract of land but nowadays you will be lucky to even get 4 or 5 poles of a single stretch of land...” (pers comm. Nana Adjona, sub-*Odikro* of Krobokese – Kakum, January 2015).

“...Our major challenge is the pervasive land scarcity as it is very difficult to get adequate farmland in a single location. It is very common here to see people with multiple farm plots even outside their community of residence...” (pers comm. Elder Ayamga, Aboabo–Kakum, January 2015).

Further information garnered through key informant interviews and community FGDs confirmed that the problem of land fragmentation and scarcity was quite severe in Kakum compared to Ankasa. The distance between farm-plots and homestead tends to have far-reaching implications for households’ land use and management dynamics, particularly regarding investments in productivity-based SLM practices (see Section 7.5.3).

²⁶ The inheritance practice (both patrilineal and matrilineal) of sharing of the estate (including land) of deceased person amongst his/ her children has the propensity to fuel rapid land fragmentation, particularly when several children have equal entitlement to inherit their parent’s estate.

The foregoing analysis is even more insightful when the sizes of household landholdings within the respective communities are considered.²⁷ In this light, the general consensus is that agriculture in Ghana is predominantly on smallholder basis with 90% of farmholdings less than 2ha in size (MOFA, 2011). Nevertheless, a thorough analysis of the distribution and sizes of landholdings reveal inequalities amongst farmer groups in different regions. From Table 5.5, it is deducible from the data that there exist marked variations in landholding sizes within and across the study areas which lends credence to the growing land pressure particularly in Kakum.

Table 5.5: Sizes of Landholdings in Kakum and Ankasa (Acres)

Kakum			Ankasa		
Farm Sizes (Acres)	Responses (N=232)	%HH	Farm Sizes (Acres)	Responses (N=148)	%HH
≤ 3	55	24%	≤ 3	28	19%
4 – 6	76	33%	4 – 6	44	30%
7 – 9	35	15%	7 – 9	21	13%
10 –12	23	10%	10–12	12	8%
13–15	13	6%	13–15	6	4%
16 +	30	13%	16 +	37	25%
Mean (Total) Farm Size = 8.66			Mean (Total) Farm Size = 11.99		
Median Farm Size = 6.23			Median Farm Size = 7.03		

Source: Field Survey, 2015.

During the qualitative interviews, respondents highlighted the growing land pressure resulting in more but smaller cultivated plots and the curtailment of the traditional practices of land fallowing and crop rotation as a means of rejuvenating soil fertility in almost all the studied communities. This observation is also corroborated by the results in Table 5.5 and Figure 5.4. A direct implication of the foregoing is the intensification of cultivation (in the case of food crops) which invariably exposes the land to the vagaries of land degradation, ultimately contributing to the general decline in productivity as observed in the study areas (Field notes, 2015).

²⁷ The sizes of landholdings are reported in acres, and in poles, the commonly used unit is 0.83 acres.

5.4.1 Pattern of Land Distribution Across Social Groups

To further ascertain variations, if any, in the distribution and sizes of landholding across the social groups, the overall results were further disaggregated based on community membership and gender. Regarding community membership, though the disaggregated results indicate some small differences in landholdings of indigenous and migrant households, these were altogether statistically insignificant (see Appendix 2). This gives the indication that other factors (such as land fragmentation, land scarcity and gender) apart from community membership explain the unequal distribution of landholdings in the study areas (see sub-Sections 5.5.1 and 5.4.1.1).

5.4.1.1 Gender and Land Distribution Patterns

Examining gendered differences in landholdings, the *a priori* expectation was that men would generally have better access to land (reflected in multiple and large sizes of landholdings) than women. This derives from the underlying argument that the critical question of access is not whether all people (in this context women) have the right of access to land but rather the effective ability to do so (Ribot and Peluso, 2003; Duncan and Brants, 2004). Against this backdrop, the disaggregated results show significant gender disparities in landholding as women generally controlled fewer and smaller farm-plots relative to men in the study regions (Table 5.6).

Table 5.6: Sizes of Household Landholding by Gender (%)

Size of Farm (Acreage)	Kakum Region			Ankasa Region		
	Men (n=197)	Women (n=35)	Total (N=232)	Men (n=123)	Women (n=25)	Total (N=148)
≤ 3	20%	43%	24%	14%	44%	19%
4 – 6	32%	37%	33%	29%	32%	30%
7 – 9	16%	11%	15%	14%	16%	14%
10 – 12	12%	0.0%	10%	9%	4%	8%
13 – 15	7%	0.0%	6%	5%	0.0%	4%
16+	14%	9%	13%	29%	4%	25%

Source: Field Survey, 2015.

From Table 5.6, more women (43%) than men (20%) had farm sizes between 0.81 and 3 acres in Kakum. Only 9% of women had farm-plots above 10 acres as against 32% of men with similar farm sizes. These results highlight significant gender differences in sizes of landholding in Kakum ($p \leq 0.05$; χ^2 value 13.99). Likewise, in Ankasa, there were significant gender differences in the sizes of landholdings. More women (44%) as opposed to men (14%) had farm sizes between 0.41 and 3 acres ($p \leq 0.05$; χ^2 value 12.32). Just 8% of women had farm-plots above 10 acres as against 43% of men in the same category ($p < 0.001$, χ^2 value 21.34). Altogether, it could be suggested from the foregoing results that the growing pressure on land has further entrenched gendered inequalities in land distribution in the studied communities with far-reaching implications for livelihood and household welfare dynamics. Paradoxically, however, anecdotal evidence (see Foster, 2016: 80-86; van den Berg, 1997; de Bruijn et al., 1997) point to women as better environmental managers than men as well as the main agricultural producers in sub-Saharan Africa, including Ghana (FAO, 2011; Garber, 2012; Lambrecht, 2016). Yet women control limited amount of land as evidenced by the above results. As Peters (2004) argues “issues of exclusion and unequal access to land are signs of class formation [social differentiation] in local micro-politics”. The above findings therefore challenge the commonly held view that women in matrilineal communities enjoy equitable access (in a distributive sense) and tenure security than their counterparts in patrilineal communities since the control of land is traced through a maternal lineage. Besides, whilst Kasanga et al. (1996) argument that customary land tenure is equitable (in terms of guaranteeing access to land by all) without significant impedance to land access is true to some extent, it may be over-generalised as evidenced by the foregoing results. This observation is even more compelling considering the increasingly monetised access arrangements and the deep-seated patriarchal-oriented norms (regarding land ownership) in the studied

communities which operate to ensure that men are better-placed to accumulate more land than women (see Sections 5.5 and 5.7.2). The ensuing section examines these issues as well as more general patterns of land acquisition and access mechanisms.

5.5 Pattern of Land Acquisition and Access Routes

The foregoing analysis also raises questions as to the degree of dynamism and flexibility of local tenurial arrangements in terms of proffering access opportunities in the wake of increasing land scarcity and inequality in land distribution in the study areas as evidenced in Section 5.4. It was therefore relevant to investigate the different modes of land access in the studied communities as function of the local tenurial system's dynamism and/or flexibility. Figure 5.5 typifies the main modes by which household landholdings were accessed in Kakum and Ankasa.

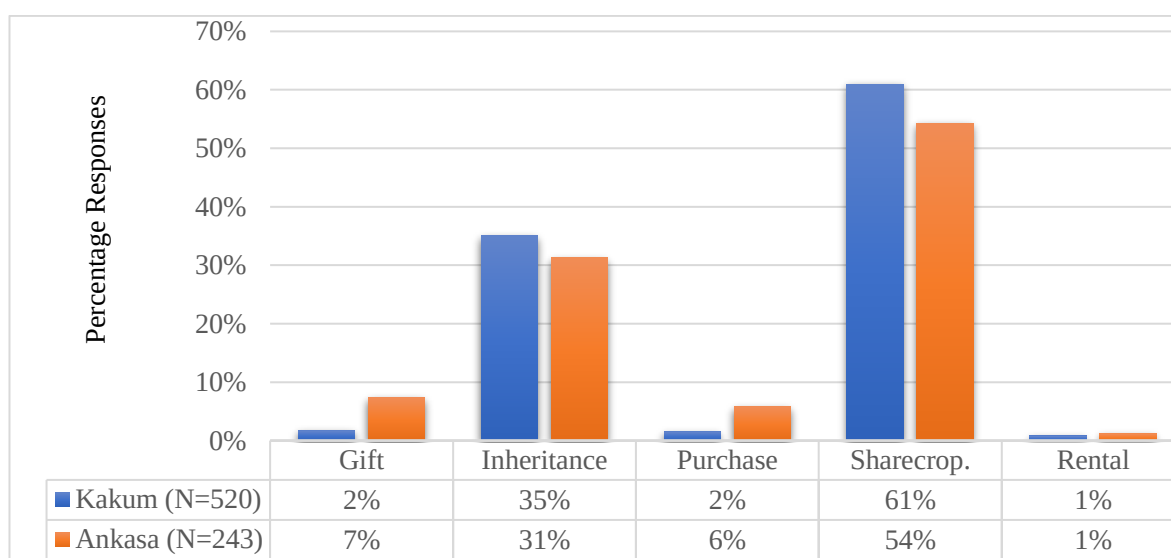


Figure 5.5: Common Access Routes to Landholdings by Study Area

The overall results show significant differences (99% confidence) in the modes of land acquisition for farming, including market (purchase, sharecropping, rental) and non-market mechanisms (inheritance and gift) employed by respondents in Kakum and Ankasa (χ^2 values 128.50 and 94.34 respectively). Nevertheless, it is deducible also from Figure 5.5 that aside from landholdings acquired via inheritance and gift (non-market

channels), a significant proportion of landholdings in Kakum (63%) and Ankasa (61%) respectively were acquired through market channels (sharecropping, purchase and rental). These results highlight the extent of commercialisation of land occurring in both study areas. With the notable exception of inheritance, other traditional modes of accessing land (such as borrowing, gifts and customary permissions) that were previously considered to be important (Benneh et al. 1996; Kasanga and Kotey, 2001; Quisumbing et al. 2001; Amanor, 2010; Yaro, 2010), no longer appear to be important. The implication of the foregoing is that more communal lands are effectively being transferred to private ownership as a corollary of the increasing marketization and individualisation of land. The following narrative gathered through an interview with an official of the Assinman CLS is illustrative in this respect:

“...Nowadays, it is quite common for people to out-rightly acquire land in this area (provided the person has the money) which was not the case about fifteen years ago...This phenomenon is contributing to the rise in land-related disputes as some clan/family members unilaterally sell off land even without the consent of Nananom and/ or other lineage heads given the growing land demand...” (pers comm. CLS-1, January 2015).

The foregoing thus questions previous assertions that customary tenure arrangements in SSA are incompatible with land markets (de Soto, 2000; World Bank, 2006). In the particular case of sharecropping which constituted the commonest access route in both Kakum (61%) and Ankasa (54%) respectively, the shifts in access conditions has also affected the nature of such arrangements in terms of the usual share of farm produce as in the past. From the community FGDs and key-informant interviews, majority of respondents argued that landowners have varied the terms and conditions of sharecropping arrangements in favour of ‘flat rate’ cash payments in return for the use of land. A typical view by one landowner in Ankasa sums up the foregoing observation:

“...The sharecropping arrangement in itself is associated with cheating. Most sharecrop farmers even pastors are stealing some bags of the produce [cocoa] without the knowledge of we the landowners. Nowadays, we [landowners] have also devised a

strategy of only accepting cash payments. We charge based on the acreage you [farmer]cultivated...” (Akosua Ampomaa, FGD-Nungua, Ankasa, August 2015).

The above statement further highlights the changes in access conditions reflected in the transition towards monetised arrangements induced by market forces as aforementioned.

It is thus inferable that with the increasing spate of land scarcity vis-à-vis population pressure in the study areas, certain groups of people are bound to encounter difficulties in gaining access to land notwithstanding the flexibility in access options available to them (see Sections 5.5.1 and 5.5.2).

In view of the foregoing, it was pertinent to further investigate the extent to which the operation of local land markets in the study areas is shaped by existing patterns of tenurial arrangements and associated social dynamics. This was determined when respondents were asked to indicate whether or not there was any prequalification factors that facilitated their success in gaining access to their respective landholdings. In this light, two characteristic features of the formal ‘open market’ include the access to information by all and transactions being ‘arm-length’ in nature. In this context, an arm-length land transaction implies that both the land seeker and land giver or landowner act independently and have no relationship (by blood, marriage or other business engagements etc.) to each other so as to influence the negotiation process and the ultimate outcome. Against this backdrop, despite the ongoing tenurial transformation in the study areas, the emerging land markets are still localised, informal and heavily embedded within the internal socio-political relations. By implication therefore, the features of the local land markets operating in the studied communities fell short of the ‘open market’ conditions which could have potential implications for the conditions of land access and control. With the notable exception of adjudication of land-related disputes, statutory laws or rules played very limited or no role at all in the land allocation process in both

Kakum and Ankasa. Figure 5.6 illustrates the criteria by which respondents accessed their landholdings in the study areas.

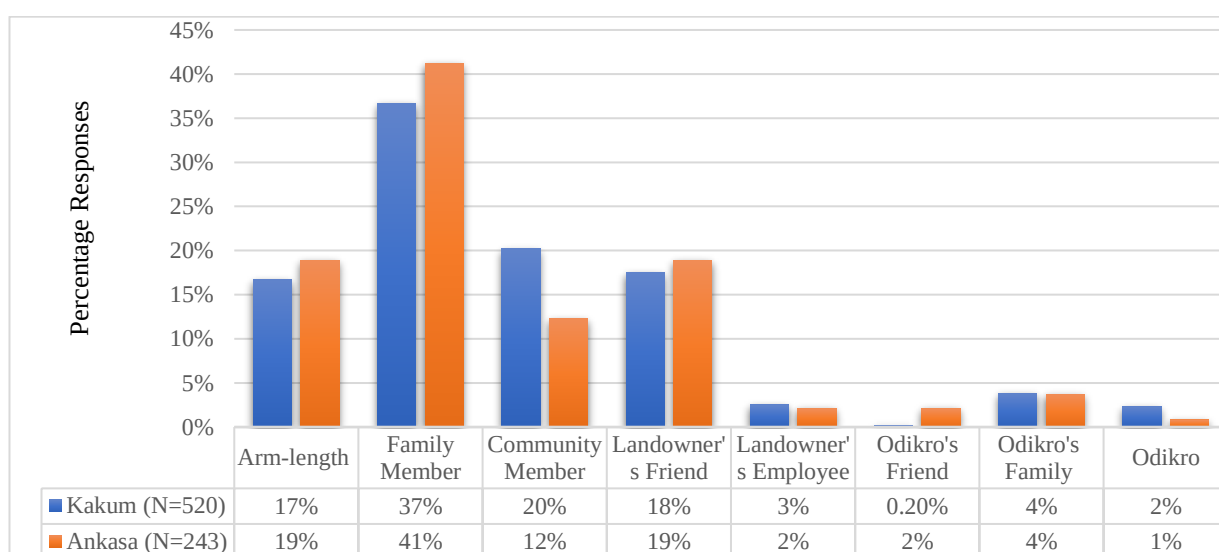


Figure 5.6: Qualification for Access to Household Landholdings

As discernible from Figure 5.6, the overall results seem to indicate similarities in the dynamics of the local land markets in Kakum and Ankasa as the membership of landholding family or community and friendship with landowners were the three principal factors that influenced respondents' initial success in acquiring their respective household landholdings. Of all the household landholdings surveyed, an overwhelming proportion of landholdings in both Kakum (83%) and Ankasa (81%) respectively were accessed through familial and other social connections (Figure 5.6). It can therefore be inferred from the foregoing results that while there is a trend towards individualisation and monetisation of land transactions and general tenurial arrangements, they are still deeply embedded in social relationships. This highlights the view that local tenurial arrangements to some extent still maintain important features to ensure that members of the landholding community could access land for farming in the face of increasing land scarcity in the study areas. For instance, some of the community FGD participants explained that land-constrained natives desirous of farming were often able to gain access to land through their land-rich extended family relations in their respective communities.

They further highlighted that such inter-familial land allocation somewhat served as an effective means to averting landlessness amongst native groups even though it could potentially cause inter-familial land conflicts and future intergenerational equity problems on the part of the land-rich familial groups (see Section 5.7.1). It therefore stands to reason that good interpersonal and familial relationships as well as strong community networking were vital attributes or elements in bargaining for land in the studied communities. Besides, the possession of such attributes could also have positive implications for overall social legitimation of land rights and ultimate security of tenure (see Section 6.6). This gives further empirical credence to Berry's (1993) assertion that investment in social relations is far-reaching in terms of gaining access to land which could also potentially operate to exclude others (especially the less powerful and vulnerable groups) from land and the benefits thereof. The ensuing paragraphs discuss the land access patterns of the different social groups in the studied communities.

5.5.1 Patterns of Land Access and Community Membership

Despite the different access options available to farmers in both study areas, the disaggregated results in Table 5.7 appear to show some variations in access to respective landholdings on the basis of community membership particularly in Ankasa. Whereas about three-quarters (71%) of migrant landholdings in Ankasa were accessed via sharecropping (market channel), only 15% of indigenous landholdings fell within this category. A statistical test showed significant difference between community membership and sharecropping as an access route ($p < 0.01$; χ^2 value 64.80). Likewise, 69% of all indigenous landholdings as against only 15% of those of their migrant counterparts were accessed through inheritance, a non-market pathway ($p < 0.01$; χ^2 value 22.09).

Table 5.7: Mode of Acquisition of Landholdings by Community Membership (%)

Mode of Acquisition	Kakum			Ankasa		
	Household Plots		Total (N=520)	Household Plots		Total (N=243)
	Indigene (n= 29)	Migrant (n= 491)		Indigene (n=73)	Migrant (n=170)	
Gift	7%	1%	2%	10%	7%	7%
Inheritance	8%	35%	35%	69%	15%	31%
Purchase	3%	1%	2%	7%	5%	6%
Sharecropping	52%	62%	61%	15%	71%	54%
Rental	0%	1%	1%	0%	2%	1%

Source: Field Survey, 2015.

Inferably, it could be suggested from the foregoing that to an extent, customary tenure institutions in Ankasa still operated to afford native groups better opportunities to gain access to relatively more secure land (through mostly inheritance) amid ongoing tenurial transformations. On the contrary, a different pattern is discernible in Kakum as majority of indigenous (52%) and migrant household landholdings (62%) alike were accessed through sharecropping (i.e. market pathway). Interestingly, whilst 38% of indigenous household landholdings were accessed through inheritance, a relatively high proportion of migrant household landholdings (35%) were also accessed via the same route. This presupposes that indigenous and migrant groups were equally restricted to gaining access to land in Kakum mainly through market channels. Taken together, the foregoing results seem to highlight regional differences with respect to community membership and patterns of access to land. A possible explanation for this difference could perhaps be attributable to the extent of land scarcity in Kakum relative to Ankasa (see Section 5.6) which has meant that natives and migrants alike were restricted to market options to access land in the study area. Besides, it is also discernible from the foregoing that the inherent ‘social right’ to land enjoyed by native groups under customary land tenure may be eroding particularly in Kakum. The fairly straightforward process by which indigenes gained access to vacant communal land in the past is no longer practicable in the wake of current transformations in the local tenurial arrangements (see Section 5.3). Evidently,

the land acquisition procedure for indigenes (natives) is not entirely different from what is applied in the case of strangers. Typical views by an indigenous farmer and an elder of the Azuletti Stool in Ankasa are illustrative of the above observation:

“...Although you are indigene if your family were not the first clearers of a particular land, then the procedure is the same as that of a migrant. However, in the case of a land previously cultivated by another family member, it can be used without seeking the approval of the chief as you are recognised as part of the landholding group...” (pers comm. Nana Adusei, Azuletti Stool, Ankasa, August 2015).

“...Accessing land is now money matters. It does not follow whether you are from here [native] or not. A migrant who has the purchasing power can acquire land at the expense of you the native...” (Kofi Atta, Nkwantannan-FGD, Kakum, September 2015).

The foregoing statements highlight changes in the mechanisms of land access by indigenous farmers in the study areas which puts to question Aryeetey et al.’s (2007) claim that ethnicity fosters a sense of bonding ensuring that indigenous people are able to reject the right of migrants to land even when migrants are fellow citizens. It therefore does appear that in the spate of current transformations, one’s economic status other than nativity is perhaps the overriding factor in gaining access to land. In this light, whereas the marketization process seems to create opportunities for certain people who hitherto could not gain access to land to do so (cf. Yaro, 2010; Quisumbing et al. 2001), it also could potentially contribute to both distributive and procedural inequities in land access from the perspective of native groups, particularly the poorer and less powerful natives. It was gathered from the qualitative interviews that on average, it cost indigenes between 100-350 Ghana cedis to acquire an acre of farmland whilst migrants could pay up to the tune of 500 Ghana cedis to acquire the same size of farmland in Kakum. Clearly, access conditions have changed from the mere presentation of customary drinks (*aseda*) to the landowner to include cash payments even in the case of natives. From the perspective of community members (natives), the payment of drink money in order to access land underlines some unfairness (procedural inequity) regardless of the fact that they often

paid lesser amounts than their migrant colleagues. It therefore follows that those land-constrained natives who could not afford such payments are effectively excluded from gaining access to land even when they are desirous to do so. This is particularly pronounced in the case of women and the youth who appear to bear the brunt of the increasingly monetised access arrangements which could also have far-reaching negative implications for their livelihoods given the high dependence on land in the study areas (see Section 5.7).

5.5.2 Patterns of Land Access and Gender

Table 5.8 portray the access routes to household landholdings according to gender. Overall, the results seem to suggest that women generally had the right to gain access to land (rights) as evidenced by the multiple modes of access.

Table 5.8: Mode of Acquisition of Landholdings by Gender (%)

Mode of Acquisition	Kakum			Ankasa		
	Household Plots		Total (N=520)	Household Plots		Total (N=243)
	Men (n=452)	Women (n= 68)		Men (n=206)	Women (n=37)	
Gift	1%	4%	2%	8%	3%	7%
Inheritance	35%	37%	35%	27%	57%	31%
Purchase	1%	3%	2%	4%	14%	6%
Sharecropping	62%	56%	61%	59%	27%	54%
Rental	1%	0.0%	1%	2%	0.0%	1%

Source: Field Survey, (May–September) 2015.

Interestingly, the data from Ankasa show that a higher proportion of female-managed landholdings (57%) than male-managed ones (27%) were acquired via inheritance ($p < 0.001$, χ^2 value 16.24). This distribution is not very surprising to the extent that access to land through the inheritance mode was and is still the primary means of gaining access to land in the studied communities especially amongst indigenous members of the landholding families. The qualitative data also corroborated the foregoing results on

women's access to land as excerpts from interviews with one community elder and an official of the Assinman CLS in Kakum established:

"...there is no differentiation in the process of land acquisition between men and women. Women have equal right to access land just as men do if they go through the appropriate customary authorities and procedures..." (pers. comm., Elder Musah, Aboabo–Kakum January 2015).

"...Women have the right to land and can own and transfer land on their own. There is no distinction between the right of women and men in land. However, depending on the terms of grant, arrangements in terms of succession remains variable..." (pers. comm., Assinman CLS-1 February 2015).

The above quotes exemplify the views of almost all community FGD participants to the effect that women generally had the same right as men to gain access to land perhaps signalling less marginalisation under the local tenurial system. Nevertheless, further analysis shows some variations in access to land by certain social groups, particularly migrant women. The data from Ankasa indicate that 57% of landholdings managed by migrant women (n=14) were acquired through market channels as against 30% of those (n=23) managed by their native women. Correspondingly, whereas 60% of all landholdings operated by migrant women in Kakum (n=63) were accessed via market pathways, 40% of those their native women (n=5) fell within the same category. Altogether, these results seem to give the indication that indigenous women as opposed to their migrant counterparts were still better placed to access more secure land (rights) by virtue of their nativity notwithstanding the on-going tenurial transformations in the study areas. This somewhat underlines the resilience of the local tenurial system in preserving aspects of its social good character to ensure that natives still enjoyed relatively better opportunities to access land. If this inference is correct, then it also raises a critical question as to the extent to which the inherent social right of indigenes to land would persist in the long-term considering the current spate of transformation and

commodification of land in the studied communities and rural Ghana at large (see Section 2.7).

More so, migrant women's seeming restriction to mostly market channels (sharecropping and purchase) as the primary access routes to land could also have far-reaching negative implications for their livelihoods in the studied communities. To the extent that women constitute the largest segment of the Ghanaian poor population, then it could imply that majority of migrant women in the study areas could be precluded from gaining access to more secure land via market channels. From field observations, it was apparent that the majority of women, especially within migrants' households had no proprietary control over household landholdings as they mostly functioned as farmhands assisting their spouses or male relatives. The complexities of women's access to land is considered in detail in Section 5.8.

5.6 Assessment of the Extent of Land Scarcity

To ascertain the extent of land scarcity and whether opportunities exist to gain access to more farmland in the study areas, the views of respondents were solicited in this regard. Based on a five point Likert scale measurement, respondents were asked whether they could easily gain access to more farmland the results of which are typified in Figure 5.7.

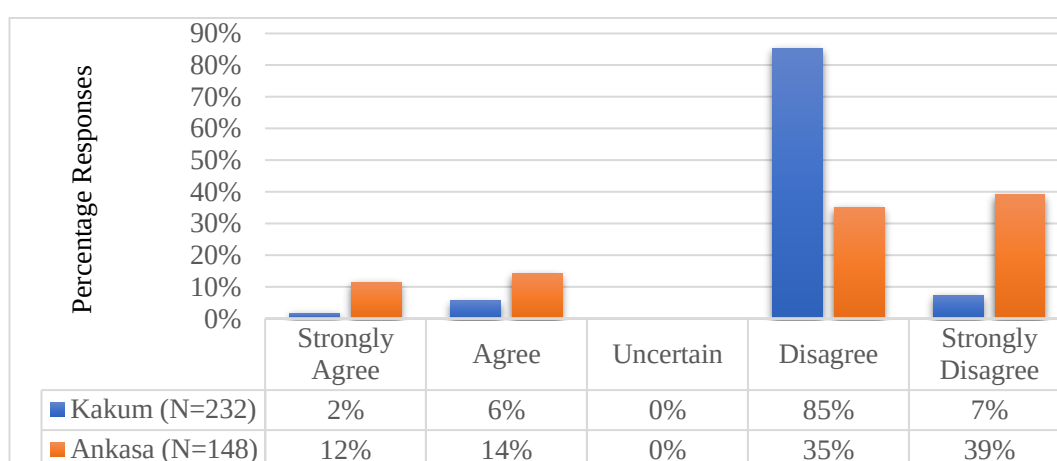


Figure 5.7: Respondents perceptions of how easy it is to access extra farmland by study area

As can be seen in Figure 5.7, the overall results show evidence of growing land scarcity which appeared to be more severe in Kakum relative to Ankasa. An overwhelming majority (93%) of respondents in Kakum disagreed/ strongly disagreed with the view that they could easily gain access to more farmland in their respective communities. Juxtaposing to Ankasa's context, almost three-quarters (74%) of respondents expressed disagreement/ strong disagreement with the above view. This latter results for Ankasa perhaps gives the indication that it was still possible to gain access to extra farmland in the face of growing land scarcity in the region. Although the landholding groups were specifically investigated in this study, information from the FGDs and personal observations attested to evidence of landlessness amongst some social groups (including native women, youth and the poor) particularly in Kakum. For instance, scores of individuals, notably women and the youth residing in the studied communities did not have farm-holdings of their own and had to depend on other land-rich relatives or settle for rental, caretaker-farming and customary licenses to meet their land needs (Field notes, 2015). This observation is supported by the fact that 22% and 13% of respondents in Kakum and Ankasa respectively were caretaker-farmers of farm-holdings belonging to third parties (see Section 5.4). Apart from the demarcation of the reserve area, another factor which appeared to have contributed to the afore-mentioned problem was the near non-availability of vacant forestland in the study regions. To the extent that land is increasingly becoming scarce in the surveyed communities vis-à-vis commodification, some respondents now view the reserved forest areas as potential land banks for future farming enterprise. Moreover, this phenomenon is compounded by the limited off-farm employment options available to respondents especially the women and native youth instigating conflicts and situations of insecurity on the part of existing land users and

traditional authorities. A typical expression by an indigenous farmer in Kakum is illustrate to this observation:

“...Given the pervasive land scarcity in this area, our young men who are interested in farming are now faced with the challenge of having to settle for caretaker farming or renting if they have the money. Some have even moved to the big towns to find job opportunities. We have also tried negotiating with the forestry people to release some of the forest lands for farming to support our livelihoods but they have turned our request.... (pers comm. Atta Twumasi, Jerusalem –Kakum, June 2015).

The foregoing statement was re-echoed in several other interviews and FGDs particularly in Kakum. In explaining the tenurial situation in Ankasa, an official of the Ankasa Park Management recounted instances of illegal encroachment of some reserve areas (particularly the northern part of Ankasa) by some indigenous farmers resulting in clashes between the forestry guards and members of the affected communities (Field notes, 2015). The net effect of the near-absence of farmland is the difficulty and/ or exclusion of some vulnerable social groups in accessing land with negative implications for livelihoods in the studied communities. For instance, it was gathered that traditional authorities and individual landowners alike now give priority to people who possess the requisite financial resources to pay for the land irrespective of ethnic affiliation. Besides, some key informants disclosed that proceeds from community land transfers to non-natives are hardly distributed for the benefit of all members of the landholding groups given the absence of any public accountability measures in place (see Section 5.7.1). Some traditional authorities argued to the effect that the drink money is purposefully meant for the maintenance of the stools [occupied by chiefs] and other community developmental projects. It was therefore not a deviation from custom not to disclose revenues arising out of such land transfers to the wider community however big or small (Field notes, 2015). This is somewhat indicative of the re-interpretation of custom by some traditional authorities (by reason of their fiduciary role as land managers) to advance their own parochial interests rather than communal interests which undermines the

fundamental principle of stewardship that underpins customary landholding (Kasanga and Kotey, 2001; Ubink, 2008). This affirms Ubink's (2008: 59) observation that in the wake of increasing commodification of land, local chiefs are shirking their fiduciary roles to discriminate against fellow indigenes. The foregoing analysis therefore raises some concerns as to the government's plan of ceding greater control over land management to traditional authorities (through the operationalisation of the Customary Land Secretariats) as there is the propensity that it would rather operate to entrench the position of traditional authorities as landlords to the detriment of the vulnerable groups such as native women, youth and the poor.

5.7 Equitable Land Access under Changing Land Tenure Arrangements: Gender and Youth

The foregoing discussion has so far highlighted patterns of inequality in land access, ownership and distribution particularly amongst certain social groups in light of increasing land scarcity and individualisation of land rights in both study areas. Within this purview, however, women, youth and the poor are often touted as the most vulnerable social groups who tend to experience access difficulties in face of growing land scarcity and commodification (Duncan and Brants, 2004; Mensah-Bonsu and Sarpong, 2008; Sewornu, 2010; Lambrecht, 2016). Yet, there are also counter-observations that the individualisation of land rights promotes equitable land access and distribution by creating opportunities for people who hitherto were excluded from land access to effectively participate in local land markets (Yaro, 2010; Chimhowu and Woodhouse, 2006; Aryeetey et al. 2007; Quisumbing et al. 2001). Following this premise, this section examines the complexities of land access as a corollary of current transformations in local tenurial relations within and across the different vulnerable social groups in the studied communities.

5.7.1 Complexities in Land Access and the Youth: An Intergenerational Equity Problem?

Whereas the current tenorial transformations seem to engender opportunities for some social groups previously excluded to easily gain access to land on the one hand, it also invariably implies some challenges especially for vulnerable groups like the youth and the poor. Within this purview, a central feature of the customary land tenure system is its underlying inter-generational equity principle that ensures that communal lands are managed by the present generation in a manner that safeguards the interests of future generations (cf. Ollenu, 1962; Arko-Adjei, 2011). Yet, the shifting dimensions of land ownership, access and control occasioned by increasing commoditisation of land raises some concerns as to the extent to which adequate mechanisms are in place to safeguard the social rights of future generations to land in the study areas. It was therefore germane to investigate the challenges of land access by the youth and the mechanisms put in place to alleviate these challenges considering the current tenorial transformations in the study areas.

Against this backdrop, it came to light during the field interviews that aside from native adult men and women, the youth equally bore the brunt of the changing tenorial arrangements more in favour of monetised arrangements as they encountered difficulties in gaining access to land. In almost all the studied communities (particularly in Kakum), respondents stressed that it remains difficult for young natives to obtain land for farming due to the growing land scarcity and marketization of land. It therefore follows that most native youth who did not have adequate financial resources to purchase or rent land had to settle for customary licenses and/ or caretaker arrangements in the case of already established cocoa farms (see Section 5.6). As disclosed by one key informant in Fante village (Kakum), most land-rich natives now preferred to grant out their lands to migrants

(instead of fellow natives) who were prepared to pay higher sums as drink money. He further asserted that the difficulty in obtaining access to farmland in the studied communities has contributed to the general disillusionment of the youth in farming altogether. Yet the limited off-farm economic opportunities invariably imply that farming still remained a second-best option for most youth to sustain their livelihoods. A corollary of the difficulty in access to land has fuelled the monetization of labour as some youth shirked the ‘cultural norm’ of providing labour for their families in preference for waged labour on the basis of who can pay more. For instance, *ndoboa* (communal labour) which used to be quite common is now rare in most of the studied communities, particularly in Kakum. Instead, ‘farming gangs’ providing waged labour is now the order of the day for the youth in almost all the studied communities. This demonstrates the ongoing reconfiguration of labour relations in cocoa communities which began during the (1920s to the 1970s) cocoa boom in south-eastern Ghana (Amanor, 2010). To the extent that migrant farmers were willing to pay more money in exchange for labour, the youth offered their services to them. In some instances, this has resulted in strained family bonds/ relationships as parents felt betrayed by their children and tensions between native and migrant groups who are believed to have benefitted more under the prevailing circumstances. This situation was quite visible in a number of the studied communities in Ankasa as one native farmer at Old Ankasa typically retorted: “...*the migrants are now richer than us and are taking over everything even our women...*”. It could thus be inferred from the foregoing analysis that the on-going tenurial transformations have also engendered problems of social exclusion and economic insecurity on the part of the vulnerable native groups with negative implications for intergenerational equity particularly in the Kakum region.

In this view, it was also instructive to further ascertain the social security measures, if any, put in place by customary tenure institutions to safeguard the right of future generations to land in the studied communities. An exploration of this issue revealed that customary authorities in view of the on-going tenurial transformations have also instituted on some precautionary measures to safeguard against potential landlessness by the native members of future generations. Notable of these precautionary measures is the transition from customary freehold grants to agricultural leases (of limited duration) particularly to new settler farmers in the studied communities. In fact, as at the time of fieldwork in Nsuano and Ghana-Nungua (both in Ankasa), customary authorities were at an advanced stage of introducing 10 year agricultural leases (subject to renewal) as replacement for all customary freeholds currently enjoyed by non-native farmers as a way of ensuring that the interest of the indigenous members of future generations is not compromised. Explaining the rationale for the somewhat ‘radical approach’, an educated community elder at Nsuano village (Ankasa) had this to say:

“.... even the laws of the land [i.e. the 1992 Constitution of Ghana] forbids the grant of freehold interest in any stool/ skin land. Therefore, our intention to replace customary freeholds enjoyed by the non-native farmers [including new settlers] with 10-year renewal leases is in accordance with the law. It’s simply meant to safeguard our interest and that of our future generations yet unborn...” (pers comm. Opanin Amponsah, August, 2015).

The above observation exemplifies an instance where customary authorities are drawing on statutory legislation in redefining local rules and norms on land access with the underlying logic of safeguarding intergeneration equity. For instance, Article 267 (5) of the 1992 Constitution stipulates that “subject to the provisions of this Constitution, no interest in, or right over, any stool land in Ghana shall be created which vests in any person or body of persons a freehold interest howsoever described”. Arko-Adjei’s (2011) study of three peri-urban locations (Gbawe, Japekrom and Tamale) in Ghana found similar evidence where leaseholds have been adopted based on social security

considerations. Thus, the foregoing highlights the view that customary tenure institutions amid on-going transformations can evolve and adapt to meet the needs of community members without direct state intervention. The ensuing sub-section delves into the specific challenges encountered by women in relation to land access and control.

5.7.2 Complexities in Land Access and the Gender Factor

In line with the overall objective of this study, the gender question remains fundamental as the conditions of access and control of land in sub-Saharan Africa, including Ghana is often identified as patriarchal-oriented to the detriment of women (Duncan, 2010; Duncan and Brant, 2004, Whitehead and Tsikata, 2003; Dowuona-Hammond, 2003; Section 2.7.1). This is against the backdrop of several statutory provisions (e.g. Article 27(3), Chapters 5 & 6 of the 1992 Constitution of Ghana, Intestate Succession Law, 1985 (PNDCL 111)) which in theory guarantees gender equality in terms of access to land and tenure security. The widespread gender inequities and discrimination in land access and control have been observed to have negative implications for women's empowerment, tenure security and their livelihoods to which the current tenurial reforms (spearheaded by the LAP) are expected to rectify (Toulmin and Quan, 2000; Dowuona-Hammond, 2003; Mensah-Bonsu and Sarpong, 2008; Sewornu, 2010). Yet, there are also observations that the conditions of women access to and control of land are improving in the face of emerging 'gender neutral' rules and conditions of access as a corollary of increasing individualisation of land rights and marketization (see Owusu, 2008; Bugri, 2008; Quisumbing et al. 2001). The lack of consensus regarding questions of gender and land issues means it requires further empirical investigation. The question therefore is, to what extent is women's access to and control of land restricted in the face of the changing tenurial conditions in the studied communities?

As evidenced in Sections 5.4 and 5.5, manifestations of gender inequities exist within the context of Kakum and Ankasa. The increasing scarcity of land and commodification has triggered the redefinition of local norms and rules in favour of monetised arrangements which in the process engender access difficulties for most women in the studied communities. In this light, two main unrelated and yet intertwined factors (i.e. socio-cultural and economic/ financial barriers) operated in tandem to constrain women's ability to gain access to land and accordingly assert their land rights. These factors are discussed in turns below:

5.7.2.1 Socio-Cultural Norms and Political Barriers

It was evident from the qualitative interviews that within the studied communities that women (even natives) may require intermediaries in negotiating for land just like newcomer-strangers do. Notwithstanding the pervasive practise of matrilineal inheritance, women still have to pass through their husbands or a male relation to access land. As argued by the traditional authorities, this was in tandem with the proverbial Akan saying that *se Ōbaa tɔ tuo a ɛtwere Ōbarima dan mu* which literally reads when a woman buys a gun, it is kept in a man's room. This saying in effect demonstrates that in the strictest sense, the acquisition and exercise of a woman's property rights is not completely devoid of a male [spouse] influence and/ or contribution. Thus, in the particular case of married women, seeking her husband's consent is recognised as essential prerequisite for granting land as it is deemed that past and future observance of the conditions of grant is made possible with the involvement of the spouse as two female FGD participants demonstrated:

“... Women access to land is achievable in two ways: Firstly, if you happen to be married, you discuss your intention with your husband and upon agreement, he would lead you to the said landowner to negotiate for the land. Alternatively, if you are unmarried, you can fall on a male relation to lead the way in approaching the landowner for further

negotiation about the identified land parcel...” (Abena Kumi, Women only FGD, Navrongo – Ankasa, August 2015).

“...Generally the procedure for acquiring land by men and women is the same except for the fact that in the case of women, her husband or a male relative is required to lead the way. This consideration is necessary in order to give the landowner the assurance that the prospective land user (in this case a woman) is capable of maintaining the land...” (Gladys Ababio, Women only FGD, Appiahkrom – Kakum, September 2015).

Besides, unilaterally negotiating land access without the husband risk been misconstrued as having an illicit affair with the landowner as a female FGD participant clearly explains another rationale behind such arrangement:

“...Aside from the fact that intermediaries serve as witnesses to the transaction, we married women ought to get our spouse or male relatives involved in negotiating for land in order to avoid any backlash of engaging in extra-marital affairs in the particular case of male landowner...” (Serwah Kpotsi, Women only FGD, Totoda – Kakum, August 2015).

The foregoing statements give the indication that although within the local tenurial setup women could access and control land, the negotiation process to a significant degree revolved around men. In the community FGDs, women discussants agreed that the rationale for male intermediaries as part of the negotiation process was for security reasons – which is to avoid being cheated by landowners. In addition, they argued that in the event of any dispute the men could ably act and defend their (women) land rights. Observations by traditional authorities in both study areas attested to the fact that men mostly dominated the decision-making process especially in respect of land allocation with women confined to the fringes of decision-making. This affirms observations by Sewornu (2010) and Duncan and Brants (2004) that the process of negotiation and decision-making under local tenurial arrangements is dominated by men with women playing a passive role to the extent that they were recognised as knowledgeable on the historical antecedents of a land in question.

Moreover, it was observed that the traditional gender patterns in terms of division of labour also tend to give men the relative advantage in gaining access to more secure land

(rights) as compared to women. For instance, the clearing of virgin forest patch by either a man or woman confers usufructuary rights in a communal land but owing to gender division of labour and social norms women are often precluded. This is on account of the rather stereotypical view that women are “naturally weak” to undertake certain farming activities considered as the preserve of men (cf. Duncan and Brants, 2004; Duncan, 2010). A typical view by a male FGD participant in Totoda village (Kakum) is illustrative of this point: “*Obaa ammu kwaε*” – *a woman cannot clear a forestland to establish a farm* (Bismark Acheampong, FGD-Totoda, Kakum, August 2015). During the women only FGDs, women also recounted that they were customarily required to assist their husbands on their farms as part of their marital obligations leaving them with limited time to develop their own farms. A case in point is the situation of most women within migrant households in both study areas (especially the wholly migrant communities) who worked as farm hands with no proprietary control over the farmlands operated by their respective households. The foregoing situation is further compounded by the increasing scarcity and competition for land resources which to some degree might not favour the enterprise of women as they tend to naturally lose out on such struggles to access land. Whereas there are observations that it was common for women to gain access to land (rights) through *inter-vivos* gifts as rewards for their labour contribution in establishing cocoa farms in southwestern Ghana (Quisumbing et al. 2001; Duncan, 2010), it worth underscoring that gifts are seldom a viable means of accessing land in light of the current tenurial transformations that favour of market channels of access. To the extent that this proposition is correct imply that women had to resort the market-channels in order to gain access to land in the studied communities especially in Kakum. This observation is supported by the fact that 59% and 41% of women in Kakum and Ankasa respectively accessed their landholdings through market channels (see sub-Section 5.5.2). It could thus

be inferred from the foregoing that gender differences in land access to a large extent is still influenced by socio-cultural norms and perceptions notwithstanding the current tenurial transformations in the studied communities.

5.7.2.2 Economic (Financial) Barriers

Aside from the socio-cultural and political factors, another delimiting factor that impinged women's access to land in both study areas was the lack of requisite financial resources. In the qualitative interviews, most women argued financial constraints as opposed to land constraint prevented them from independently gaining access to land as with the requisite financial resources they could easily negotiate for land. A typical view in this regard is captured as follows:

“...As a woman, I can access land for whatever purpose provided I have the money to pay for it. The men can sometimes be selfish and would not consider paying for the land on behalf of their spouses. As such, you the woman can unilaterally proceed to acquire it for yourself and children once you have the means which is not easy at all...” (Victoria Asare, Ghana-Nungua-FGD, Ankasa).

The above statement was re-echoed in several other interviews and focus group discussions and is indicative of the general situation of women (often touted as constituting the largest segment of Ghanaian society entrapped in poverty) in not only the study areas but Ghana in general. With the increasing monetisation of the land acquisition process in the study regions (see Sections 5.5 and 5.6), it therefore stands to reason that financial constraint is perhaps the single most significant impediment to women's land access (aside from socio-cultural and political barriers) as with the requisite financial capital access to land is almost guaranteed irrespective of one's gender. Indeed, the above assertion was also underscored by some traditional authorities as noted previously in Section 5.5. Yet, majority of the women in the studied communities were poor and dependent on men, it invariably implied that they were effectively constrained from gaining access to more secure land. This in a way affirm observations by Kasanga et al.

(1996) and Kasanga and Kotey (2001) to the effect that the existence of other constraining factors contributes to widening the gender gap in terms of equitable land access. Therefore, tenurial factors *per se* cannot be blamed for the problems of inequities in land access; non-tenurial factors, chiefly the access to financial resources, also play a significant role highlighting the need for equal attention in a bid to promoting gender-equity in access and control of land.

5.8 Migrants' Land Access and Changing Landlord-Tenant Relations

As established in sub-Sections 5.3.2 and 5.5.1, the community membership of an individual (i.e. nativity) to some extent is no longer a major constraint to land access and/or ownership in view of the current transformations in local tenurial arrangements in the study areas. Nevertheless, this observation does not necessarily imply the absence of any difficulties in respect of migrant farmers' access to and control of land. Indeed, the real challenge of most migrants in the studied communities in light of the current tenurial transformations perhaps boils down to two main issues: (1) payment of huge consideration as '*nsa sika*' (drink money) to traditional authorities and/or landowners as a precondition for gaining access to land, and (2) variations of the initial terms and conditions of grant at will by landowners occasioned by the seemingly ambiguous emergent rules and conditions governing land access and control. From the qualitative interviews, whereas traditional authorities in Kakum and Ankasa insisted that land is customarily not for sale, most migrant farmers held a contrary view alluding to the colossal considerations payable for accessing land as tantamount to outright alienation. Extracts from three interviews with an elder of the Aiyinase Stool and representatives of the migrant farmers in Ankasa and Kakum respectively sums up the contrasting positions above:

“...The lands are not sold to anybody but granted out to prospective users usually on sharecrop (i.e. Abunu or Abusa) or land rental basis. They make small payment in the form of drink money to the chief and the terms and conditions of use are spelt out before cultivation of the land...” (pers comm. Elder of Aiyinase Stool–Ankasa, August 2015).

“...We paid gargantuan amounts to the customary authorities prior to acquiring our sharecropped lands. For some of us the long-term migrants, we paid GHC 200.00 as of 1995/96 before they [chiefs] granted us access to the land. We currently pay GHC 250.00 per acre annually to the chiefs to ensure continual use of the land...” (pers comm. Ohiamadwen-Fiasoro Rep. 1, Ankasa, January 2015).

“...How can you kill an animal and remove its heart twice? We paid colossal amounts to gain access to the land and every now and then, we are still required to make some payments to the chiefs (often disguised as developmental levies) or risk losing our farmlands...” (pers comm. Mr. Quaye, Totoda-Ankasa, June, 2015).

The above statements highlight the tensions between traditional authorities and migrant farmers regarding the conditions of access to land especially in the Ankasa area. Kasanga and Kotey (2001) assert that the drink money payable to landowners is often equivalent to the market value of the land which makes it difficult to distinguish between outright sale and other forms of land transactions. Elsewhere in southwestern Ghana, similar accounts on landlord-tenant relations have been reported by Boone and Duku (2012), Boni (2005) and Alhassan and Manuh (2005). Moreover, the foregoing developments have also created ‘spaces’ or opportunities for other actors apart from traditional authorities (i.e. chiefs and *Abusuapanyins*) to participate in customary land allocation in view of the prospects of profiting from the upsurge in land values compounded by the growing land scarcity and ambiguity of emergent rules and conditions of land access and control in the study areas. This was determined when the respondents were asked about which customary institutions or authorities are currently responsible for allocating land to strangers (migrants) in the studied communities. Figure 5.8 typifies a variety of customary institutions responsible for allocating land to strangers in Kakum and Ankasa.

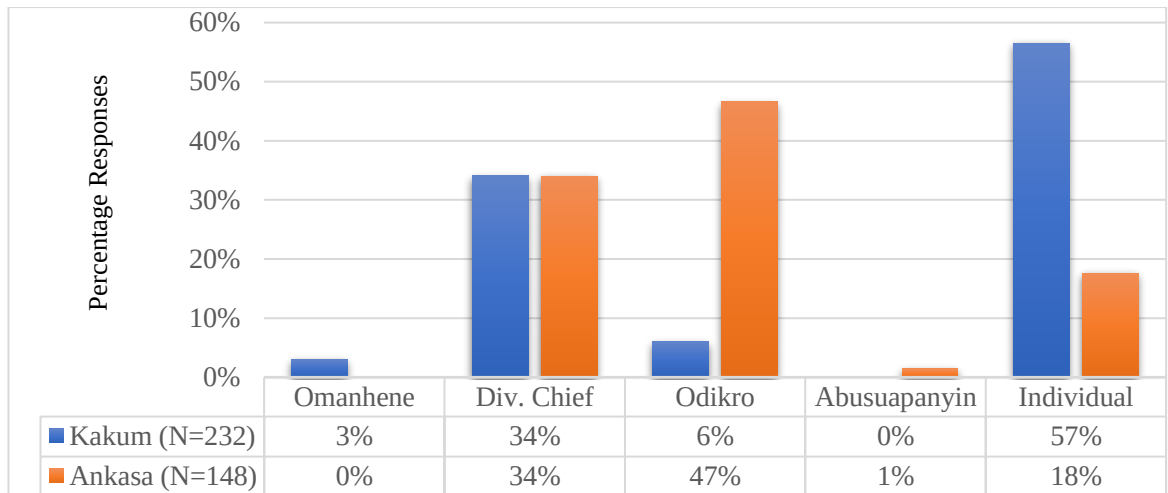


Figure 5.8: Customary Institutions Responsible for Strangers' Land Allocation

It is evident from Figure 5.8 that majority of respondents interviewed recognised individuals (*ankoroankore*) and *Odikros* as the main sources of strangers' land allocation in Kakum and Ankasa respectively. Overall, the foregoing results in Figure 5.8 further supports the earlier observation of emergent changes in the dynamics of power over customary land management in favour of individuals and *Odikros* (see Section 5.2). It was gathered from the qualitative interviews and personal observations that unilateral alienation of land (notably migrant to migrant transfers) was common in both study areas even though the traditional authorities frowned upon such arrangements as tantamount to adverse claims to their title in land (see Section 6.3.3). The foregoing observation is compelling to the extent that majority of migrant respondents identified market channels as the main access routes to land (see Table 5.7) and the fact that transferability of 'property' was permissible especially in the case of plantation crops like cocoa. Perhaps, the increasing demand for farmland coupled with the lucrative nature of the land rental enterprise (especially to usufructuary right holders who could easily carve out other secondary or derivative land rights to third parties) could have instigated the foregoing development. During the community focus groups, almost all discussants alluded to the above practice pointing out that early settlers with large tracts of land on customary

freehold basis are accustomed to granting out portions of their lands to third parties (especially new arrivals and other landless households) usually on sharecropping terms in their respective communities. Two typical expressions corroborating the above assertion are the views of two male farmers in Kakum and Ankasa respectively:

“...Once you acquire say 10 acres, you can rent out portions of it but of course, without the knowledge of the chiefs as that would constitute an adverse claim to the landowner’s title leading to the forfeiture of your land rights...” (Kojo Abeberese, FGD–Totoda, Kakum, July 2015).

“If you are an indigene or migrant with usufructuary rights over a particular farmland, you have the right to grant out portion of your land to another person mostly on sharecropping basis [i.e. abunu or abusa] without recourse to the Stool...” (Bismark Nkansah, FGD–Old Ankasa, Ankasa, August 2015).

Considering the foregoing statements, it is also noteworthy that such farmer to farmer alienation without the appropriate legitimization by the original landowners (i.e. traditional authorities) are potential conflict traps and sources of insecurity as two elders of the Akosontiri Aboabo and Azuletti Stools in Kakum and Ankasa respectively demonstrated:

“...Although it is customarily illegal especially for users of stool [abusa] lands to alienate such lands to third parties without recourse to the customary authorities, we are very much aware it is happening. Such transfers however are not legitimate and for that matter the supposed beneficiaries risk losing devolved land rights as we [customary authorities] do not know them...” (pers comm. Yaw Gyan, Akosontiri Aboabo Stool, Kakum, February 2015).

“...Owing to the high incidence of sub-letting of farmlands, the inherent risk of insecurity is increased as we the landlords have no knowledge of such third-party transfers and therefore cannot guarantee the legitimacy of such purported land rights of users. We have compiled a list of all tenant-farmers to whom we have granted out lands and anyone whose name is not on our list is an illegal land user and is therefore prone to future expropriation...” (pers comm. Nana Adusei, Azuletti Stool, Ankasa, August 2015).

The foregoing statements highlight the contrasting position of migrant farmers and customary authorities on third-party alienation of acquired property rights with far-reaching implications for security of tenure from tenant farmers point of view as aforementioned.

5.9 Summary and Conclusion

The foregoing discussion in this chapter has underlined on-going transformation in the local tenurial arrangements in the study areas following growing land scarcity and commodification resulting in the redefinition of local norms and rules of land access and ownership. Yet the transformation is non-linear, traversing the domains of land ownership, access and control engendering difficulties and inequalities in access to land in the process. Ultimately, it is evident from the foregoing analysis that the ‘self-transformation’ or dynamism of the customary land tenure system is inadequate in addressing the issues of inequalities and difficulty in access to and control of land particularly by the vulnerable social groups (i.e. the native youth, women and the poor) in the study areas. The current tenurial dynamics, which are increasingly characterised by individualisation and monetisation, generate socially differentiated impacts with respect to considerations of equity. Generally, they have favoured wealthier individuals and households regardless of ethnicity or migratory status, and have undermined the security of natives/ autochthonous and poorer households. This is evidenced by the seeming spaces or opportunities created in the emergent tenurial relations for powerful actors to advance their individual interests at the expense of the vulnerable groups thereby resulting in a situation of winners and losers (see sections 5.5.1, 5.5.2, 5.6 and 5.7.1). It can therefore be concluded that the emergent changes in conditions of access and control of land by the different social groups is not intrinsic in the customary tenure system *per se* but largely products of manipulations by interested parties (mostly chiefs and local elites) who exploit these seeming opportunities created for their own pecuniary benefit as opposed to the collective interest of the landholding community (cf. Boni, 2005; Yaro and Zackaria, 2008).

Whilst recognising the limitation of two case studies in generalising for the whole of Ghana and by extension sub-Saharan Africa, the chapter thus underscore the need for a theoretical shift of the focus of land tenure reforms away from static approaches geared towards promoting efficiency or merely lauding customary tenure arrangements in favour of more flexible approaches that accommodate the complexity of change and its social embeddedness across contexts in order to effectively mitigate the social inequities and, as discussed in Chapter 7, the impediments to sustainable land management. Within this purview, however, the current focus of Ghana's on-going land administration reforms (i.e. the LAP) does appear to be skewed in more favour of the economic efficiency argument to the relative neglect of social equity considerations inherent in the process of tenurial transformation which may be problematic, particularly in rural contexts (cf. Ninsin, 2015). This is in view of the high dependence on land for sustaining livelihoods (as in Kakum and Ankasa's case which is symptomatic of other rural areas in Ghana and SSA generally) vis-à-vis the changing environmental conditions and marketization of land which underscores the relevance of the social equity argument in achieving this critical balance for guaranteed equitable land management. The next chapter examines the dynamics of tenure security of the different social groups in view of current tenurial transformations in the study areas.

CHAPTER SIX

DYNAMICS OF LAND TENURE (IN) SECURITY IN KAKUM AND ANKASA REGIONS: AN EMPIRICAL ANALYSIS

6.1 Chapter Overview

This chapter presents an analysis on the state of land tenure (in) security within the context of changing tenurial relations in the study areas. Using household and plot-level data complemented by qualitative information, the chapter delves into a focused analysis of the dynamics of land tenure security and conflicts with the aim of providing a more detailed understanding of what constitutes land tenure security, factors that promote or undermine land tenure security, and the mechanisms for protecting and securing land rights of rural land users. The analysis provides answers to the questions: How do various categories of farmers perceive and define their land tenure security (Research Question 2.1), what are the variations and sources of tenure (in)security and how do these differentially influence farmers' investments in sustainable land use and management (Research Question 2.2). It also provides some answers on how and to what extent local customary tenure institutions are responding to problems of tenure insecurity and associated conflicts in the study areas, and what are the implications for promoting security of access and tenure for sustainable land management (Research Question 3.1).

The underlying tenet of this chapter is that insufficient understanding of the local dynamics of land tenure security and its operationalisation within the dualised institutional environment (i.e. customary and statutory tenure regimes) would render policy mechanisms counterproductive causing further uncertainties and tenure insecurity with negative implications for livelihoods and sustainable land management. The

remainder of the chapter is therefore structured as follows: the first section examines respondents' views and perceptions of what constitutes land tenure security and tenurial restrictions on land use dynamics in the study areas. The successive sections discuss the perceived land tenure security of respondents, land conflicts and institutional mechanisms for adjudication and safeguarding rural land rights. The concluding aspect of the chapter then looks at the mechanisms (formal and informal) for promoting the security of property rights as well as factors inhibiting registration efforts at the local level.

6.2 What constitutes Security of Land Tenure?

An important aspect of this research is to assess farmers' views of what constitute land tenure security and factors informing their perceptions in the study areas. This is against the backdrop of a raging debate in the literature about what the concept constitutes and appropriate means to achieve it (see Section 2.5). To this end, respondents were asked about their understanding of what constitutes tenure security based on their experiences and perceptions. From the qualitative interviews, a variety of expressions and opinions about what constituted tenure security were given by respondents. Of the varied opinions expressed, three (3) important dimensions of secure tenure are inferable:

- Certainty or assurance of continuous use and enjoyment of land without any worry of loss of land rights,
- Institution of sufficient mechanisms for safeguarding or protecting land rights,
- Assurance of continuous benefits from investments undertaken on land.

In order to ascertain whether or not respondents preferred the customary tenure system to statutory land tenure from a security point of view, a question was asked about which of the two tenurial systems guarantee sufficient security of land tenure. This feeds into debates about the extent to which legal legitimacy of rural land rights (via formal

documentation) is important in guaranteeing greater tenure security for landholders, especially in the face of changing tenurial relations at the local level (cf. Van Gelder, 2010). In this vein, the overall results indicate that an overwhelming majority of respondents in both Kakum (98%) and Ankasa (95%) cited preference for statutory land tenure. This is contradictory to the findings of Bugri (2008) in northeast Ghana where majority of respondent groups (55-65%) indicated that customary land tenure offered better security to land users than statutory land tenure. Plausibly, the contradiction could be as a result of the fact that unlike northern Ghana where land is in relative abundance and contestations over customary land minimal, the case of southern Ghana is different characterised by increasing land scarcity and stiff competition for access to land. Besides, these results perhaps give indication of an ‘induced demand’ for institutional innovation to better safeguard rural land rights in the face of growing scarcity and commodification of land. This is somewhat evidenced by some level of uncertainty on the part of respondents as to the extent to which the existing customary mechanisms guaranteed sufficient (*dejure*) security of their property rights given the on-going tenurial transformations in the study areas (see Sections 5.7 and 5.8). It could thus be inferred from the foregoing that the overwhelming preference for statutory tenure was largely premised on respondents’ desire for *dejure* recognition of their land rights as a way of further bolstering the pre-existing (*defacto*) security they currently enjoyed. As would be discussed later, this quest for *dejure* security has instigated differing strategies not necessarily based on statutory legislation (see Section 6.6).

6.3 General Assessment of Perceptions on Land Tenure Security

The importance of tenure security to respondents is the recognition of some level of guarantee of the ‘bundle of rights’ conferred against any adverse claim by a third party. Within this context, however, the measurement of land tenure security is still a major

challenge in the literature owing to the difficulty in identifying the most convenient approach that best captures the reality on the ground (see Section 2.5.2). As explained in Section 2.5.2, the perception of respondents was deemed a satisfactory proxy for assessing the extent and robustness of tenure security and its possible consequences for sustainable land use. By serving as a unifying indicator (Simbizi et al. 2014; Broegaard, 2013; Van Gelder, 2010; Van Gelder and Luciano, 2015), it afforded the unique opportunity to capture the realities (both the actual situation and legal dimension of tenure security) and past experiences of respondents that are likely to shape their present perceptions. Against this backdrop, the ensuing sub-sections focus on an in-depth assessment of the perceived bundle of land (property) rights and tenure security of respondents in both study areas.

6.3.1 Analysis on Strength of Individualised Land (Property) Rights

In determining the strength of the ‘bundle of rights’ enjoyed by respondents as a function of their perceived tenure security and decision-making dynamics, a property rights summation index was developed based on a three-point Likert scale of measurement. Respondents were therefore asked about their opinions on a number of statements directly relating to their perceptions on whether they had specific rights over respective household plots. By assigning weights of 3 if “they were sure they had the specific right”, 2 if “they were uncertain” and 1 if “they felt they did not have the specific right”, the opinions of respondents to the statements were measured (for a detailed description, see Section 4.6.3). The summary statistics of each disaggregated rights and the right summation index are captured in Appendix 3. Inferably, the regional differences in respondents’ perception about the robustness their property rights are small at an aggregate level demonstrating the importance of disaggregating (see Appendix 3). Respondents (perceived) property

rights was thus further disaggregated based on customary freehold and non-freehold plots across the two case study regions as shown in Table 6.1.

Table 6.1: Disaggregated Property Rights by Study Area, Freehold/ Non-Freehold

<i>Do you have the following rights over the plot of land you own or cultivate?</i>	Kakum Region		Ankasa Region	
	Freehold (N=85)	Non-Freehold (N=435)	Freehold (N=89)	Non-Freehold (N=154)
	Mean score	Mean score	Mean score	Mean score
Indicator: Cultivation/ Use Rights				
1. Plant, maintain and harvest the crops you choose	2.9	2.4	3.1	2.5
2. Plant any tree species you choose	2.9	2.5	3.0	2.7
3. Use NFPs occurring on the plot	3.0	3.0	3.0	3.0
4. Collect water from the land	3.0	3.0	3.0	3.0
5. Cut trees to make charcoal/ other personal uses	2.5	2.4	2.9	2.8
6. Cut timber trees on plot for sale	1.1	1.2	1.8	1.3
7. Make changes to land (plant trees, build etc.)	2.6	1.7	3.0	2.4
Mean sub-total of Use Rights	2.6	2.3	2.8	2.5
Indicator: Exclusion Rights				
8. Decide who is allowed to access and use this land	2.9	2.3	2.9	2.3
9. Exclude/ prevent anyone from accessing this land	2.9	2.6	3.0	2.8
10. Prevent anyone from harvesting timber trees on plot	2.6	2.6	2.9	2.7
11. Exclude others from harvesting NTFPs on this plot	3.0	2.9	3.0	2.9
Mean sub-total of Exclusion Rights	2.9	2.6	3.0	2.7
Indicator: Alienation Rights				
12. Transfer land to children without any difficulties	2.9	2.5	2.9	2.5
13. Transfer land to spouse without any difficulties	2.7	2.3	2.9	2.4
14. Sell, lease or rent part/ all of this land to others	2.2	1.1	2.3	1.5
15. Use land as collateral security to secure a loan	2.6	1.3	2.8	2.2
Mean sub-total of Alienation Rights	2.6	1.8	2.7	2.2
Overall Property Rights Summation Index	2.7	2.2	2.8	2.5

Source: Field Survey, 2015.

As evidenced in Table 6.1, the disaggregated results indicate that majority of customary freeholders in both study regions strongly perceived they had the right to change the existing use of their plots although the associated mean scores is comparatively higher in Ankasa (3.0) than Kakum (2.6). This result seems to suggest that plots operated on customary freehold basis were subject to fewer restrictions, hence the respondents' strong perception of the right to make changes to land. The foregoing results have important implications for farmers' land-use investment decisions regarding long-term SLM practices (see Section 7.5.2).

Again, the results in Table 6.1 on alienation or transfer rights appear to show some variations across freehold and non-freehold plots in both study areas. Although customary freeholders in both Kakum (2.3) and Ankasa (2.3) generally claimed to have the right to sell, rent or bequeath their plots, this perception was the weakest relative to the other alienation rights. In case of the non-freeholders, the proportion was comparatively lower (1.1 compared with 1.5) suggesting that almost none of the respondents had that right across the two study areas. Moreover, majority of customary freeholders strongly perceived they had the right to use their land as collateral security in Kakum (2.6) and Ankasa (2.8) respectively. Interestingly, however, whilst non-freeholders in Kakum indicated they did not have the right to use land as collateral security, a comparatively high proportion (2.2) in Ankasa asserted to have this right. Altogether, the foregoing results are somewhat surprising to the extent that a far lesser proportion of respondents in Kakum (1%) and Ankasa (19%) respectively claimed they had access to credit (see Section 7.4). Probably, the traditional practice of the *awowa* arrangement (a form of social credit) where farm (property) is used as collateral for soft loans to farmers in the study areas could have accounted for this perception. During the qualitative study, some interviewees disclosed that it was quite common for households that were financially-constrained to enter into an agreement with a creditor (in the presence of witnesses) where a cultivated plot(s) (say oil palm or cocoa) is released to the latter for a defined number of farming seasons (or years) with the exclusive right to harvest and sell all or part of the farm produce (depending on the conditions of the agreement) as repayment for a loan advanced to the former. Some discussants in the community FGDs attested to been involved in this practice on a number of occasions especially in Kakum. They asserted that it was a very convenient and flexible way of obtaining financial assistance within their communities without having to go through the hassles associated with accessing

formal credit from rural banks and micro-finance cooperatives. Besides, the foregoing appears to give the indication that social credit is possible under the customary tenure system contrary to widespread belief that it discourages access to credit altogether (see Sections 2.4.1 and 2.6.2). However, the arrangements under *awowa* are largely unregulated and can be punitive from the perspective to the debtor.

In a unifying sense, the results in Table 6.1 and Appendix 3 seem to suggest an overall positive perception about the strength of respondents' land rights in Kakum and Ankasa with the overall property rights summation index scores of 2.3 and 2.6 respectively (Appendix 3). This lends empirical credence to Lawry et al.'s (2014: 10) conclusion that customary tenurial arrangements in SSA may already provide a level of pre-existing (*defacto*) tenure security to local land users without formalisation. Therefore, the expected gains from current formalisation efforts in Ghana and elsewhere in SSA may be more limited (particularly in the case of customary freeholders who already enjoy a reasonably high level of *defacto* security) because tenure insecurity which such reform programmes seek to remedy does not exist to the degree envisioned by programme designers. This observation is further supported by the fact that customary freeholders in both Kakum and Ankasa generally perceived their property rights as very strong evidenced by the overall summation index scores of 2.7 and 2.8 respectively (Table 6.1). At the same time, it could also be inferred from the foregoing that the exercise of respondents' property rights was not absolute implying the involvement of third parties in the decision-making regarding use and investment in land management. By implication therefore, in-as-much-as farmers remain integral in any policy intervention on sustainable land management and conservation, others involved in the land use decision-making process need to be seriously considered if critical success is to be achieved.

6.3.2 Respondents Perception of Expropriation Risk

In view of the foregoing, respondents' views were also solicited on a number of inter-related statements in a bid to ascertain their perception on expropriation risk as a determinant of their tenure security. Synonymous to the approach in Section 6.3.1, a three-point Likert scale was devised to measure the perception of respondents to a given statement or question. By assigning weights of 3 to "yes", 2 to "somewhat" and 1 to "not at all", the overall perception of respondents to the statements were collated (see Section 4.6.3). Following the results in sub-Section 6.3.1, a positive perception of tenure security was expected in that only a small proportion of respondents would express the worry of losing the plots they use. Table 6.2 summarises respondents perceived tenure security by study area.

Table 6.2: Perceived Expropriation Risk by Study Area (Plot Level)

<i>Statements on perceived expropriation risk</i>	Kakum (N=520)	Ankasa (N=243)
	Mean score	Mean score
1. Worried of losing part or all of your land rights over your plot	1.6	1.5
2. Worried that government might take over your land one day	1.4	1.8
3. Worried of losing all or part of your land to extended family	1.2	1.1
4. Worried of losing all or part of your land to another household	1.0	1.1
5. Worried of losing all or part of your land to chief/elders/elites	1.4	1.3
6. Worried that your land will be reallocated if left fallow	2.2	1.6
Overall (Perceived) Expropriation Risk Summation Index	1.5	1.4

Source: Field Survey, 2015.

It is discernible from Table 6.2 that respondents generally felt secure in the ownership/use of land they cultivated in Kakum and Ankasa with overall (perceived) expropriation index scores of 1.5 and 1.4 respectively. Nevertheless, a closer look at the results seems to exhibit variations in responses to some individual statements. For instance, regarding whether respondents were worried that their plots would be reallocated to someone else if left fallow for several months, the results indicate a somewhat positive perception (agreement) to the statement in Kakum. In contrast, respondents in Ankasa generally

expressed disagreement in response to the foregoing statement. The mean scores for these views were 2.2 and 1.6 respectively in Kakum and Ankasa (Table 6.2). By implication therefore, whereas respondents in Kakum generally believed they could lose their land upon fallow, their counterparts in Ankasa disagreed overall. Plausibly, two factors could explain this contradiction: the pervasive land scarcity in Kakum as compared to Ankasa which invariably implies a high competition for land access. Alternatively, the high incidence of secondary land rights (subject to land use restrictions) in Kakum as opposed to customary freehold in Ankasa perhaps indicates that farmers in the latter could easily make changes to existing land use (including land fallowing). This observation is further supported by the fact that respondents managing non-freehold plots in Kakum (84%) generally indicated they did not have the right to make changes to such plots (including fallowing) compared to their colleagues in Ankasa who responded in the affirmative. The associated mean scores for these views were 1.7 and 2.4 in Kakum and Ankasa respectively (Table 6.1).

On the question of whether respondents were worried that government might take their land one day, the overall results depict a general disagreement to the statement in Kakum (1.4) and Ankasa (1.8) respectively (Table 6.2). Probably, the mineral prospecting activities in the Ankasa region could have occasioned respondents contemplation of possible expropriation by government hence the above result (see also Sections 6.3.3).

As regards respondents been worried about losing all or part of their land rights, the overall results generally indicate negative views by respondents in Kakum (1.6) and Ankasa (1.5) respectively. Juxtaposing the foregoing results to those of Section 6.3.1, it can be concluded that irrespective of the on-going transformations in local tenurial arrangements, there still exist, to some extent, an element of social security (through existing social connections and networking) that perhaps guaranteed a certain degree of

defacto security to landholders in the study regions. If this inference is correct, then Kasanga and Kotey's (2001) assertion that the social security attribute of customary land tenure safeguarded (*defacto*) tenure security of rural land users may not be entirely out of place at least in the Kakum and Ankasa contexts. Elsewhere in south-eastern Ghana, Goldstein and Udry (2008) also observed that existing social networks at the community are far-reaching in terms of positively influencing perceived or actual security of local landholders. To the extent that these contextual configurations positively affected *defacto* security perhaps informed Ayamga et al.'s (2015) observation that farmland under continuous cultivation are seldom appropriated under the customary tenure regimes in SSA, including Ghana. This underlines the view that respondents' desire to move to a higher level of tenure security (via legal recognition of their land rights) may not necessarily imply they are insecure. It therefore stands to reason that alternative measures and indicators of tenure security (beyond individualisation and classical land titling) remain necessary in capturing different situations of security especially in rural contexts characterised by multiple landholding and use arrangements (cf. *ibid*; Obeng-Odoom and Stilwell, 2013).

While the discussion so far seems to highlight a general positive perception of respondents' regarding their tenure status in both study areas, it does not necessarily imply that threats (perceived and actual) that could undermine tenure security are totally non-existent, or that aggregated data present an accurate picture of the socially differentiated nature of tenure security. It was therefore relevant to further ascertain the extent of respondents overall (perceived) tenure security particularly if there were any variations across the different social groups. In this vein, respondents were asked as to how they would describe the status of their rights over respective household plots the results of which are shown in Table 6.3.

Table 6.3: Overall Perceived Tenure Security by Study Area (Plot Level-%)

Statement Study Area			Description of Overall Perceived Tenure Security				
			Totally Secure	Secure	Uncertain	Insecure	Extremely Insecure
Kakum	Indigene	Male (n=24)	25%	50%	0%	25%	0%
		Female (n=5)	0%	60%	0%	40%	0%
		Total (n=29)	21%	52%	0%	27%	0%
	Migrant	Male (n=428)	13%	60%	0%	23%	4%
		Female (n=63)	21%	52%	0%	24%	3%
		Total (n=491)	14%	59%	0%	23%	4%
	Overall Total (N=520)		14%	59%	0%	24%	3%
Ankasa	Indigene	Male (n=50)	50%	42%	0%	4%	4%
		Female (n=23)	83%	4%	0%	4%	9%
		Total (n=73)	60%	30%	0%	4%	6%
	Migrant	Male (n=156)	31%	37%	0%	26%	7%
		Female (n=14)	38%	43%	0%	21%	0%
		Total (n=170)	31%	37%	0%	25%	7%
	Overall Total (N=243)		40%	35%	0%	19%	6%

Source: Field Survey, 2015.

From Table 6.3, the overall results seem to indicate an unexpectedly high level of (perceived) tenure security in Kakum (73%) and Ankasa (75%) respectively as compared to the literature on the state of land tenure security in the rural high forest zone of Ghana (GoG, 2011; Damnyag et al. 2012). When disaggregated by community membership, 25% of all migrant landholdings (170) were described as insecure, with only 4% (3 plots) of native-managed plots within the same category ($p \leq 0.05$; χ^2 value 8.47). These differences were driven by the findings in Ankasa where the difference between proportion of indigenous-managed plots (60% or 44 plots) as against migrant-managed ones (31% or 53 plots) described as totally secure is statistically significant (χ^2 value 7.56), whereas in Kakum, differences between migrants and indigenous groups were small and statistically insignificant. It can therefore be inferred from the foregoing results that whereas respondents perceived tenure security over household plots in Kakum is irrespective of residency status, the reverse case is true for Ankasa further buttressing the earlier observation that local tenure arrangements still maintained aspects of their social security attribute to safeguard the land rights of natives in the face of ongoing tenurial transformations (see Section 5.5.2). A plausible explanation for the regional difference

could be due to the fact a small proportion of indigenous respondents compared to migrants in Ankasa (26% versus 79%) had secondary or derived land rights which were more susceptible to conditions of insecurity. If this explanation is correct, then it perhaps implies that some migrant groups faced probable threats to their tenure security in Ankasa by virtue of their residency status which could be a disincentive in undertaking long-term SLM investments (see Chapter 7). From a security point of view, it therefore follows that current policy focus on rural land titling in Ghana might more likely benefit migrant groups than their indigenous counterparts if the foregoing results is anything to go by.

In terms of gender, the differences in perceived tenure security between male and female-managed plots in Kakum were also small and statistically insignificant overall (Table 6.3). This implies the lack of association between gender and perceived tenure status. By contrast, almost two-thirds (65% or 24 plots) of female-managed plots were regarded as totally secure as compared to only 35% (72 plots) of male-managed landholdings within the same category in Ankasa ($p \leq 0.05$; χ^2 value 5.67). Of the proportion of female-managed plots regarded as totally secure in Ankasa (24), 79% were cultivated by indigenous women with the remaining (21%) by their migrant counterparts. The gender difference in perception of tenure security is surprising considering observations about the often marginalised and vulnerable nature of women's land rights relative to men under customary land tenure in the literature (Duncan and Brants, 2004; Sewornu, 2010). One possible reason for this contradiction could be that majority of the female-managed plots (70%) in Ankasa were accessed on customary freehold basis subject to fewer or no tenurial restrictions. This explanation is supported by the fact that 62% of the total customary freehold plots (37) were managed by indigenous women as against 38% by their migrant colleagues. Furthermore, the survey respondents were predominantly household-heads which may bias the sample towards more secure women. The foregoing

results seem to give indication of strong (*de facto*) tenure security enjoyed by respondents (particularly customary freeholders) which could have positive implications for land use investment dynamics in the study areas (see sub-Section 7.5.2.2). Besides, the results also highlight the view that the current policy focus on improving tenure security via rural titling may not necessarily benefit customary freeholders beyond adding legal recognition of their land rights as they already enjoy a reasonably high level of *de facto* security. The above findings have important policy implications for improving the security of rural land rights, as examined in much detail in Section 8.5.1.

6.3.3 Conditions for the Loss of Land (Property) Rights

Following the generally high perception of respondents about their tenure status, it was also relevant to further investigate the possibility of future loss of their land rights, and if so, circumstances that could instigate loss of land rights, particularly in the case of the often marginalised and vulnerable groups, women, migrants and the poor. Thus, when asked if they could lose their land rights, all migrant respondents interviewed in Kakum as compared to 86% of their counterparts in Ankasa answered in the affirmative; hinting some sense of (perceived) insecurity. On the question of how they could lose their land rights, a significant majority of respondents in Kakum (67%) and Ankasa (67%) respectively cited that farmland abandonment constituted the commonest grounds they could lose their rights over land (Figure 6.1, page 220).

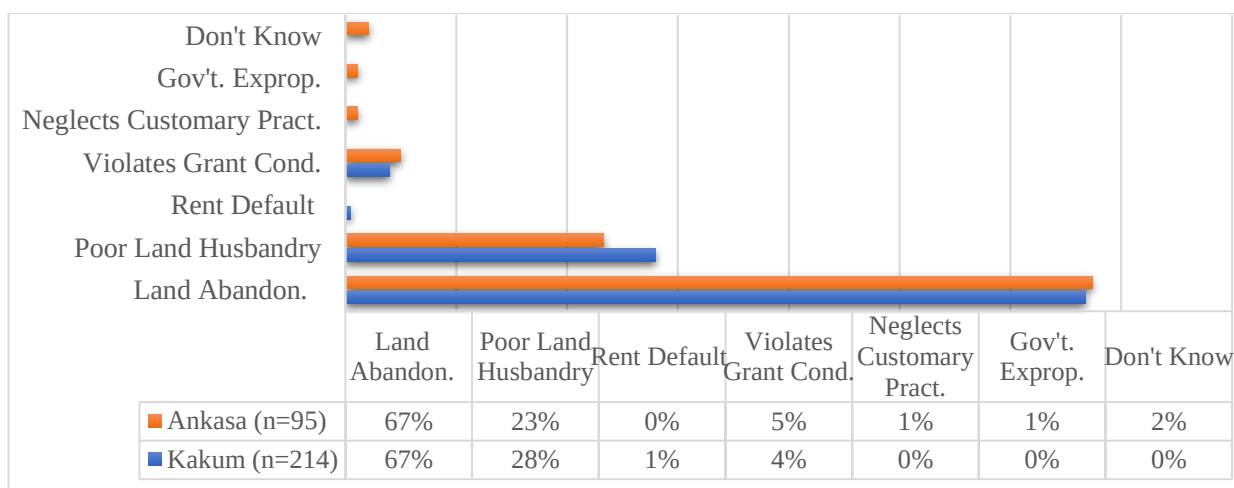


Figure 6.1: Conditions for Strangers Loss of Land Rights

It was also gathered during the qualitative interviews that security of property rights of landholders was mostly predicated on their continuous use of the land, the failure of which amounted to forfeiture of land rights (see Section 6.2). In almost all the studied communities in Kakum and Ankasa, migrants were required to fully cultivate land (with a mutually agreed cultivar) within 2 to 5 years of acquisition and failure to do so constituted a valid ground for truncating land rights irrespective of any previous consideration agreed upon. Typical remarks by Nana Adusei of Azuletti Stool and an elder of Abaase Stool in Ankasa and Kakum are illustrative of the above point:

“...The security of tenure of the landholder is predicated on the continual use of land. As long as he or she continuously use the land, then the risk of expropriation or loss of his farmland rights is very minimal...” (pers comm. Nana Adusei, Azuletti Stool, Ankasa, August 2015).

“...You came to acquire the land for farming reasons as such it is expected of you to cultivate the land continuously. In the event of any difficulty in doing so, you will need the approval of the landlord without which the landlord may re-allocate the land to another...” (pers comm. Opanin Gyimah, Abaase Stool, Kakum February 2015).

The above quotations exemplify the position of traditional authorities pertaining to land abandonment which was further corroborated by respondents during the community FGDs in the two study areas. This perhaps explains the inertia of farmers in undertaking land fallowing as a management technique as there was the underlying tendency to

misconstrue fallowing as abandonment of land. Poor land husbandry (stewardship) was yet another common grounds for loss of land rights by migrants (Figure 6.1). For instance, a landholder who fails to properly tend his/her land by allowing it to develop into ‘*mfofoo*’ (secondary forest), risks losing all or part of the said land to the original grantor (landowner) or an immediate neighbour. In all the community FGDs held in Kakum and Ankasa, a common assertion was that the condition of poor land husbandry or stewardship is more associated with sharecropping contracts and customary licenses which were easily revocable.

Surprisingly, a far lesser proportion of migrant respondents in both Kakum (1%) and Ankasa (5%) cited non-payment of rent (*nto*) and violations of conditions of grant respectively as potential basis for the loss of land rights. Contrasting with the qualitative data, almost all migrant interviewees referred to the afore-mentioned conditions as common grounds for the loss of strangers’ land rights especially those occupying stool lands in both study areas. A typical view in this regard is an explanation by an Assinman CLS official:

“...Non-payment of farm rents (nto) constitutes forfeiture of one’s right over the land as that is the only basis of recognition of one’s right to the land by the stools...” (pers comm. CLS-2, Kakum January 2015).

Whereas no respondent in Kakum indicated government expropriation as a basis for loss of land rights, only 1 (1%) respondent referred to this confirming the general observation that compulsory acquisition by the state was seldom a means of land expropriation in rural Ghana. On the contrary, the land rights of strangers could be potentially secure into the long term upon good conduct, fulfilment of other customary obligations and good relationship with landowners as emphasised by respondents during the community FGD sessions. It can therefore be suggested that the security of migrants’ land rights is embedded in a social milieu based on other factors not directly connected to land but

incidental to the continuous use and enjoyment of land. For instance, it was a common practice in the study regions for migrant farmers to make contributions in cash and kind towards the celebration of traditional festivals, funerals or communal projects spearheaded by traditional authorities. Nevertheless, it is worth underscoring that in the villages of Ohiamadwen, Navrongo, Kusasi and Tweakor within the Ankasa area, there is presently heightened fears of farmland expropriation amongst migrant farmers occasioned by the incidence of mineral prospecting activities in the region. This is a major cause for concern to most migrant groups in the afore-mentioned communities as demonstrated by two key informants who happened to be community leaders:

“We are seeing that the way things are going we [migrant farmers] can lose our land rights. Just recently the chiefs performed some rituals at Ayibesoli close to Tweakor to allow for commencement of mining operations. They [customary authorities] even killed 3 cows and there is now fear amongst us that we might lose our farmlands...” (pers comm. Ohiamadwen CREMA Executive, Ankasa June 2015).

“We have heard there are negotiations on-going to commence mining operations which fall within the CREMA area and our villages will be affected. Presently, we are unsure what will happen but there is general fear of losing our farmlands especially amongst us the migrant farmers...” (pers comm. Odikro, Navrongo–Ankasa June 2015).

The foregoing statements depict a situation of uncertainty and insecurity among households in the affected communities as there are growing fears that their land rights would be usurped through compulsory acquisition of farmlands upon commencement of mining operations. This is against the backdrop of statutory legislation in Ghana vesting legal rights over mineral resources in the State with the community (represented by the chiefs) benefitting from the residual equitable interest in land (see Article 257 (6) of the 1992 Constitution of Ghana). Indeed, this condition of insecurity is further exacerbated by the lack of proper statutory documentation supporting the land rights or interest of migrant groups. This is one evidence of the instances where the current policy initiatives on rural land documentation could prove very beneficial in bolstering (*dejure*) security of

land rights of the affected migrant groups so as to safeguard against arbitrary expropriation without any compensation.

6.3.3.1 Conditions for Women Loss of Land Rights

Respondents were also asked about the possibility of women losing their land rights and the circumstances under which this could occur in both study areas. Within this context, a key distinction was made between women's land use rights and title to land in recognition of the underlying argument that land access by women is often on use basis instead of absolute title to land (see Duncan and Brants, 2004; Sewornu, 2010). Therefore, a two-fold question about whether a woman can lose her use-rights and title over land was posed to respondents the results of which are shown in Table 6.4.

Table 6.4: Women's Loss of Land Rights by Gender (%)

Area	Women's Loss of Land Rights		Gender of HH Head		Total
			Male	Female	
Kakum	1. Can a woman lose her use-rights over land?	Yes	97%	100%	98%
		No	3%	0%	2%
		Total	(n=197)	(n=35)	(N=232)
	2. Can a woman lose her title (interest) of land?	Yes	34%	54%	41%
		No	61%	46%	59%
		Total	(n=197)	(n=35)	(N=232)
Ankasa	1. Can a woman lose her use-rights over land?	Yes	76%	64%	74%
		No	21%	36%	24%
		Don't know	2%	0%	2%
		Total	(n=123)	(n=25)	(n=148)
	2. Can a woman lose her title (interest) of land?	Yes	11%	16%	12%
		No	84%	84%	84%
		Don't Know	5%	0%	4%
		Total	(n=123)	(n=25)	(N=148)

Source: Field Survey, 2015.

From Table 6.4, the overall results seem to indicate a generally high perception by both men and women of the possibility of loss of use-rights by women in both study areas. On the question of loss of title, however, the results indicate mixed views between male and female respondents in Kakum. Whereas majority of female respondents (54%) were of the view that women could lose their title to land, their male counterparts (61%) generally

indicated otherwise (Table 6.4). Overall, these results give the indication that respondents perceived there was a high possibility of future loss of women's land rights in Kakum and Ankasa although there appears to be mixed views when it comes to their title to land. From the FGDs and key informant interviews it was also gathered that the use-rights could generally be lost as such rights were more associated with temporary rather than permanent usage of land. Conversely, women's title (interest) to land at best signified some form of land ownership or primary rights (i.e. customary freehold) which are often characterised by strong tenure security. The foregoing analysis also begs a typical question as to the circumstances under which women could lose their land rights. The disaggregated results in Table 6.5 show that non-payment of rent (*nto*), abandonment of land and poor land husbandry are the three main reasons for the loss of women's rights to farmland in both study areas.

Table 6.5: Circumstances for Loss of Land Rights by Women (%)

Conditions for the loss of land rights by women	Kakum Region			Ankasa Region		
	Gender of HH Head		Total (N=232)	Gender of HH Head		Total (N=148)
	Male (n=197)	Female (n=35)		Male (n=123)	Female (n=25)	
Divorce	11%	9%	11%	10%	16%	11%
On widowhood	1%	3%	1%	6%	0%	5%
Non-payment of rent	42%	57%	44%	6%	8%	6%
Farmland abandonment	24%	9%	22%	36%	24%	34%
Poor land husbandry	19%	22%	20%	18%	16%	18%
Government Expropriation	0%	0%	0%	1%	0%	1%
Don't know	3%	0%	2%	23%	36%	25%

Source: Field Survey, 2015.

Contrasting these results to Section 6.3.3, a conspicuous difference between the circumstances for loss of women's land rights and that of strangers is on divorce and widowhood. During the qualitative interviews, it emerged that aside from the common reasons (i.e. farmland abandonment, rent default and poor land husbandry) for loss of land rights across the different groups, divorce and widowhood were emphasised as

peculiar conditions for loss of women's land rights. This observation is relevant to the extent that majority of women (especially within male-headed households) in the studied communities were secondary land right holders working on farmlands initially acquired by their spouses or other relations. An illustrative case is the story of a 25-year-old widow with 5 children in Bunsu village (Kakum) who lost part of her land to her brothers-in-law upon the demise of her husband:

"...I came here [Bunsu] with my late husband from Wassa Damang in the Western region. Just 8 months ago after my husband death, his brothers have seized 4 out of the original 6 poles I used to work on with my husband. They claim that the land will be rented out to defray the GHC 5000.00 debt incurred during my husband's funeral. I'm now uncertain if they will allow me to continue working on the remaining 2 poles..." (pers comm. Regina Ababio, Bunsu – Kakum).

In essence, the stability of marriages and maintenance of good relations are far-reaching in terms of women's access to land and security of tenure as observed in elsewhere in Ghana (Duncan and Brants, 2004; Duncan 2010; Sewornu, 2010).

6.4 Respondents Perceptions of Land Conflicts

As highlighted previously, the insufficient understanding of the contextual configurations of tenure security in Ghana's dualised institutional environment risks the implementation of counterproductive policies causing further uncertainties and tenure insecurity. Land disputes remain one of such common avenues that could lead to serious conditions of insecurity and ultimately the loss of land rights. This is against the backdrop of the several complexities and contestations over land access and ownership by different social groups in Ghana (GoG, 1999; Seini and Tsikata, 2004; Tettey et al. 2008; Ayee et al. 2011). The nature, frequency and extent of such disputes over land as well as the associated consequences for property rights of different groups remain variable.

Owing to the paucity of information on documented land conflicts or disputes in the study areas, it became necessary to rely on respondents' understanding of land disputes over

specific household parcels and the studied communities in general. This was critical to further understanding the forms and dimensions of tenure insecurity, mechanisms for addressing them and the possible ramifications for land use investment dynamics in the study regions. In this light, the views of respondents were solicited on a number of land conflict issues (both surveys and FGDs) with the objective of examining the nature, frequency and severity of land conflicts and its effects on security of property rights of land users at both the village and household plot levels²⁸.

Therefore, on the question about whether the studied communities had experienced any disputes within the last five (5) years, it appears from the quantitative data that land-related disputes are more pronounced in Kakum (60%) as compared to Ankasa (28%). To further ascertain the extent to which land conflicts were problematic in the studied communities, respondents' views were solicited based on 5-point Likert scale measurement (ranging from 1 – not a problem to, 5 – a serious problem) as adopted in Section 6.3.1. Table 6.6 summarises the results on the severity of land conflicts by the respective communities.

²⁸ Recognising the sensitivity of land issues and the tendency by respondents to either exaggerate or withhold information on the subject, care was taken when soliciting respondents' views on the incidence of land-related disputes in their respective communities. The question was approached from different angles to ascertain the factual situation on the ground.

Table 6.6: Severity of Land Conflicts/ Disputes in the Studied Communities

Statement Kakum	Severity of Land Conflicts		Statement Ankasa	Severity of Land Conflicts	
	Responses	Mean Score		Responses	Mean Score ²⁹
Totoda	30	4.33	Kusasi	10	2.10
Fante	20	3.95	Navrongo	18	3.06
Jerusalem	12	4.83	Nyamebekyere	23	2.74
Nkwantannan	24	3.88	Kanokware	20	3.30
Kwame-Anang	11	4.00	Fawoman	22	3.45
Appiahkrom	26	3.54	Amokwaosuazo	20	3.45
Nkwanta	11	3.00	Ghana-Nungua	20	3.45
Mankata	21	3.81	Old Ankasa	15	3.27
Bunsu	42	3.79	Total (N)	148	3.16
Seidukrom	25	2.96			
Kwaku-Mmore	10	3.10			
Total (N)	232	3.72			

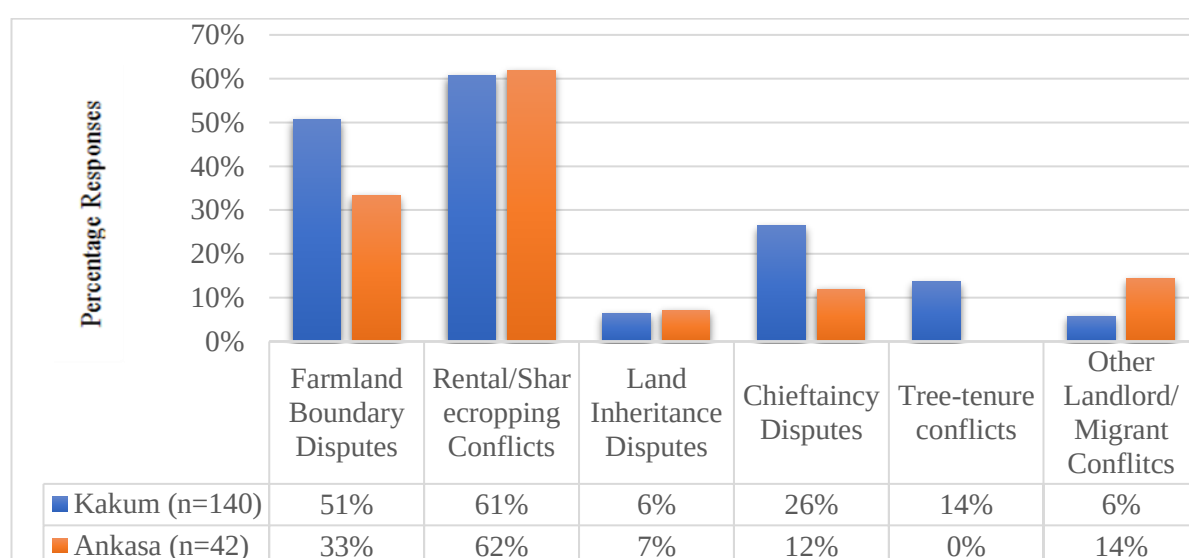
Source: Field Survey, 2015.

It is quite clear from Table 6.6 that land conflicts were prevalent in almost all the studied communities in Kakum except for Seidukrom, Nkwanta and Kwaku-Mmore which appeared to be the least problematic relative to the other communities. Juxtaposing to Ankasa's context, a similar pattern is discernible across all the studied communities except for Kusasi and Nyamebekyere which portrayed a negative perception to the afore-statement with a mean community scores of 2.10 and 2.74 respectively (< the median value of 3).

Inferring from the foregoing results, it can be suggested that the incidence of land conflicts appeared to be very problematic in the communities with high land scarcity, particularly in the Kakum area (e.g. Totoda, Kwame-Anang). This in a way highlights the growing tensions and/ or conflicts with regards to land access with potentially negative implications for security of land rights of some local landholders. Paradoxically, research and policy emphasis seem to be devoted to violent and large scale conflicts to the relative neglect of small-scale looming conflicts which have the propensity to degenerate into

²⁹ The mean scores of communities were computed by aggregating individual responses to the statement divided by the total number of respondents surveyed in the respective communities.

‘full-blown’ large-scale conflicts (Tettey et al. 2008). From the perspective of investment in land management, the pervasive nature of land disputes in the respective communities perhaps imply that without due attention it could stifle investment in sustainable land management and agricultural productivity (GoG, 1999; Seini and Tsikata, 2004; Tettey et al. 2008). From the FGDs, participants expressed the view that conflicts associated with land use created situations of uncertainty and insecurity about land rights which have far-reaching negative consequences for tenure security and land management systems. The foregoing analysis begs a typical question as to the nature of such intra-community conflicts experienced in the study areas. Figure 6.2 therefore typifies the nature of disputes as evidenced in the studied communities.



Note: Figure based on multiple responses on the nature of land disputes

Figure 6.2: Type of Land Disputes in the Study Areas

As can be seen from Figure 6.2, sharecropping conflicts constituted the commonest form of land-related disputes across the two case study regions. It was gathered from the qualitative research that the incidence of land rental/ sharecropping conflicts was attributable to the oral, open-ended and variable nature of terms and conditions of grant which renders them highly susceptible to conflicts. Generally, while most respondents in the qualitative research downplayed the seriousness of land conflicts at the community

level, focused and key-informant interviews showed that the impact of land-related disputes at the community level is very far-reaching with negative consequences for tenure security and land management dynamics. It was therefore worthwhile to further examine individual household experiences about land disputes. Besides, this was also necessary in order to shed more light on the extent to which land disputes influenced respondents' perception about the security of their land rights.

6.4.1 Farmers Individual Experiences of Land Disputes: Plot-Level Analysis

On the foregoing, a question was asked as to whether or not respondents had experienced disputes pertaining to landholdings managed by their respective households. From Table 6.7 (page 230), the overall results appear to indicate that land-related disputes may not necessarily be a dominant problem for the different social groups in both study areas. Contrasting with Section 6.3, to the extent that the low incidence of plot-level disputes is analogous to respondents (*defacto*) tenure security, it could perhaps be concluded from these results (Table 6.7) that most respondents in both study regions enjoyed strong (*defacto*) tenure security under the customary tenure system. If this inference is correct, then it means that local tenurial arrangements *per se* may not necessarily be an impediment to farmers' investment in SLM practices (particularly productivity-enhancing investments) as far as security is concerned (see Sections 7.5.2 and 7.5.3).

Table 6.7: Experience of Previous Disputes over Household Plots (%)

<i>Have you had a dispute with anyone over this plot?</i>	Kakum Region		Ankasa Region	
	Household Plots		Household Plots	
	Indigene	Migrant	Indigene	Migrant
Yes	14%	14%	10%	12%
No	86%	86%	90%	88%
Total	(n=29)	(n=491)	(n=73)	(n=170)
<i>Specific Nature of Dispute</i>				
Farmland Boundary Disputes	50%	17%	43%	60%
Multiple Claims to Land	0%	19%	43%	20%
Breach of Terms (Sharecropping)	50%	60%	14%	20%
Tree-tenure Conflicts	0%	0%	0%	0%
Other Landlord-Migrant Conflicts	0%	4%	0%	0%
Total	(n=4)	(n=69)	(n=7)	(n=20)

Source: Field Survey, 2015.

It is also deducible from Table 6.7 that whereas breach of sharecropping terms was the common form of land-related dispute in Kakum, farmland boundary disputes were more prevalent in Ankasa. In general, the oral nature of most sharecropping contracts and indeterminate land boundaries have been noted as the common causes of land-related disputes in amongst land users in rural Ghana (GoG, 1999; Bugri, 2008; Ayee et al. 2011). Yet the inherent flexibility in the execution of oral grants in addition to being convenient ‘channels’ for maintaining social cohesion are some positive attributes which perhaps explains their pervasive practice across rural communities in Ghana. To the extent that this latter observation is correct also raises questions as to whether such oral grants can thrive given the rapidly evolving nature of local tenurial arrangements (see Chapter 5).

The incidence of land-related disputes perhaps gives more impetus for respondents’ quest to protect and secure their property rights. Yet, information from key informants and FGDs indicate that there was the underlying tendency of bias in favour of indigenes especially in instances of disputes involving migrants and their indigenous landlords. Moreover, groups of people with strong socio-political connections within the community stood a better chance of securing favourable judgement in the event of disputes over land. This invariably creates room for some level of uncertainty as to the adequate protection

and legitimacy of land rights of different social groups. The succeeding section therefore examines in more detail the local mechanisms for land dispute resolution in the study areas. Preceding this is a discussion on the common boundary indicators used in household plot identification in light of the prevalence of farmland boundary disputes as afore-mentioned.

6.4.1.1 Nature of Farmland Boundary Indicators of Household Plots

In view of the relatively high incidence of farmland boundary disputes (especially in Ankasa), respondents were asked about the specific boundary indicators of their respective household landholdings as a way of identifying plausible factors occasioning such disputes (and insecurity) over land as shown in Figure 6.3.

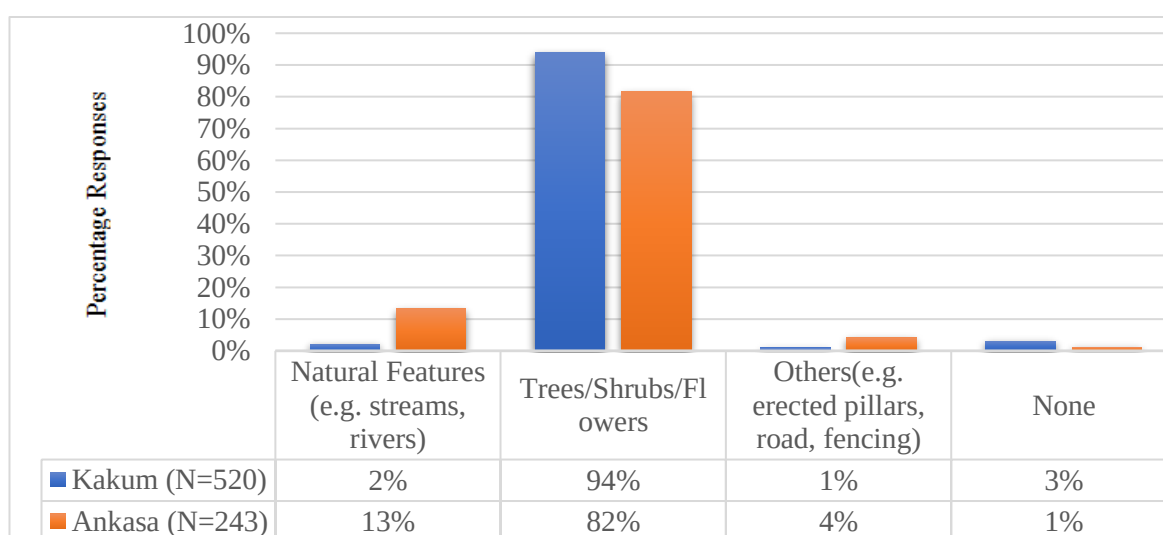


Figure 6.3: Type of Farmland Boundary Indicators

It is evident from Figure 6.3 that non-permanent indicators were commonly used in farmland boundary demarcations as opposed to permanent boundary indicators such as cadastral plans/ maps. This finding is unsurprising to the extent that the lack of permanent and accurate boundary indicators has been identified as constituting a major source of land-related disputes associated with insecurity and uncertainty of rural landholders' property rights (GoG, 1999; Bugri, 2008; Ayee et al. 2011). During the field interviews,

the National LAP Coordinator emphasised the importance of permanent boundary demarcations pointing to on-going exercises (i.e. Customary Land Demarcation and Rural Parcels Rights Demarcation Projects) aimed at mapping extent of land rights and boundaries at the community and household levels to improve certainty and security of tenure³⁰. While this remains necessary, it is also instructive to note that such exercises could lead to a situation of possible winners and losers especially in rural communities where land disputes are common. For instance, the permanent boundary demarcation process could be manipulated in favour of powerful and ‘socially-connected’ local actors in terms of further consolidating their land claims (in the case of contested lands) to the detriment of vulnerable actors like women and the poor. It may also result in some natives losing their entitlements (social right) to land whereas strangers may have the opportunity to bolster the security of their (*defacto*) land rights which otherwise would have been difficult to accomplish (Lund, 2011). In any case, the authority of chiefs (as custodians and administrators of customary lands) also comes to play here. Social groups lacking recognition from chiefs could lose their *defacto* land rights (particularly third party migrant transfers without appropriate legitimation by traditional authorities) whereas those of persons recognised by the chiefs might more likely be protected in the event of any conflicting land claims occasioned by such permanent farmland demarcation exercises (Boamah, 2014; Section 5.7.1). To the extent that the foregoing holds true could perhaps result in heightened tensions and social insecurity in the said communities (see Section 6.3.2). This inference derives support from Kasanga and Kotey (2001) and Ayee et al. (2011) observation that the inefficiency and complicity that plague state land agencies renders them susceptible to manipulations by a few powerful actors (including

³⁰ As at the time of the fieldwork, the Rural Parcels Rights Demarcation (RPRD) Project had taken off on pilot basis in the Western, Ashanti and Brong Ahafo regions focusing on demarcating 5,118 farmlands in the afore-mentioned regions.

chiefs and local elites) to the detriment of the less powerful and poor majority. The foregoing also finds expression in Lund's (2011: 72) statement that "the process of securing land rights can often become complex when several competing normative orders may be brought to bear to legitimise specific claims". In this view, 'looser' demarcations might actually reduce conflicts relative to permanent precise measurements when interested parties might start to contest boundaries if they perceive they might permanently lose out particularly in conflict-prone communities. This further underlines the relevance of sufficient understanding of the local socio-political realities as a precursor and basis for intervention programmes geared towards enhancing the certainty of rural land rights.

6.5 Institutional Mechanisms for Land Dispute Resolution and Respondents Preference

In view of the foregoing, a corollary of land-related disputes is the loss of legitimacy of land rights and ultimately, erosion of tenure security of local landholders. This derives from the understanding that the extent to which local landholders could easily defend and legitimise their land rights is far-reaching in determining the robustness of their land rights. To this end, there are opposing views as to whether customary or statutory adjudicatory mechanisms provide the most effective means to safeguard local land rights, particularly those of the poor and women and migrant groups (see Section 2.7). Analysing the different adjudicatory mechanisms for protection of land rights in the study areas, this section seeks to assess the extent to which they guaranteed the legitimacy of respondents' land rights.

Against this backdrop, the qualitative research showed that the mechanisms for dispute resolution in both study areas were largely localised with the customary authorities (traditional courts), Abusuapanyins and local Stool Land Offices and Courts as the main

adjudicatory institutions. On face-value, this gives the indication that several fora were opened to landholders in terms of the enforcement and legitimation of their land rights. In the quantitative survey, respondents were therefore asked as to whether or not they had ever sort help from the traditional authorities and/ or state courts in the resolution of land disputes as shown in Table 6.8.

Table 6.8: Mechanisms for Land Disputes Adjudication (%)

<i>Sought help with dispute resolution</i>	Kakum Region			Ankasa Region		
	Community Membership		Total (N=232)	Community Membership		Total (N=148)
	Indigene (n = 17)	Migrant (n = 215)		Indigene (n = 40)	Migrant (n = 108)	
Yes	12%	11%	11%	10%	9%	10%
No	88%	89%	89%	90%	91%	91%
<i>Institutional Preference</i>						
Traditional Court	100%	98%	98%	95%	88%	90%
State Court	0%	1%	1%	2%	2%	2%
Stool Land Office	0%	0.4%	0.4%	0%	0%	0%
Abusuapanyin	0%	0%	0%	3%	0%	1%
Don't Know	0%	0.4%	0.4%	0%	10%	7%

Source: Field Survey, 2015.

From Table 6.8, the results seem to indicate a far lesser proportion of respondents in Kakum (11%) and Ankasa (10%) respectively had made recourse to the traditional authorities and/ or state courts regarding the resolution of land-related disputes. Nonetheless, the qualitative data revealed that most respondents in the event of land disputation preferred private resolution through negotiation (involving *Abusuapanyins*, *Odikros* and Elders) at first instance. In the failure of such private resolution, recourse was made to any of the above-identified institutions.

As regards the specific institutions respondents preferred as forums for dispute resolution in the study areas (i.e. how land disputes were being settled), the overall results suggest an overwhelming preference for traditional courts (98% and 90%) by respondents as opposed to state courts (1% and 2%) in Kakum and Ankasa respectively (Table 6.8). In

order to ascertain the reasons for the high preference of traditional as opposed to the state mechanisms for dispute resolution, key informants and FGD participants were probed in this regard. Information gathered attested to the fact that most respondents were under the impression that the inaccessibility, delays in adjudication, associated costs, public image and fear of being labelled a ‘vexatious litigant’ that characterised the formal state courts were cited as reasons for the preference of the customary mechanisms for dispute resolution. Furthermore, these customary mechanisms played a pivotal role in maintaining social cohesion in their communities particularly when disputing parties belonged to the same family or village. Traditional authorities (who interpret and administer custom) were well-versed with the local customs, norms and rules governing communal landholdings, thus more capable of dealing with contestations over land use and ownership. Two typical remarks by key informants are illustrative of the above observation:

“...most people prefer an amicable settlement of their land-related disputes by making recourse to the Odikro and his elders as opposed to the court. This is due to several reasons including the fact that the courts were expensive, delays in going to and fro and the fear of being labelled a litigant which could affect or strain social relationships between families and friends in the community...” (pers comm. Opanin Ofori Amponsah, Kakum September 2015).

“...In this community we see ourselves as one and as such, we try to resolve any disputes especially in relation to land amongst ourselves sometimes even without seeking help from Odikro and his elders. Neglect of the customary structures could attract some scorn and/ or sanctions from other members of the community...” (pers comm. Opanin Quarm, Ankasa, August 2015).

The foregoing statements were illustrative of the several views of interviewees that bolstered their confidence in the customary mechanisms for dispute resolution. Contrasting with the results in Section 6.2, the analysis reveals a seeming contradiction in respondents’ view of statutory tenure as more secure with an overwhelming stated preference for traditional courts to resolve disputes. Thus, to the extent that the aforementioned merits of the customary adjudicatory mechanisms relative to the state

courts holds true perhaps explains this contradiction. This explanation also finds expression in the observation that the existing institutional constraints and allegations of corruption impede the effective functioning of the state courts as secure avenues for the protection of land rights irrespective of social status (Platteau, 1996: 42-43; Kasanga and Kotey, 2001; Ubink and Amanor, 2008). Indeed, informal conversations with some officials of the Stool Land Office and CLS revealed that the local populace were quite sceptical that the formal state mechanisms would best serve their interest and/ or protect their land rights as powerful entities could influence decisions in the latter's favour. This is indicative of Platteau's (1996: 43) remark that "in social contexts dominated by differential access to state administration [as in Ghana's case], there is always the fear that the adjudication/ registration process will be manipulated by the elite to its advantage". At the same time, the foregoing also brings to the fore an important question as to the effectiveness of these customary mechanisms in the protection of land rights of different social groups. This is discussed under the purview of respondents' satisfaction with the customary adjudicatory mechanisms in the ensuing sub-section.

6.5.1 Satisfaction with Local Dispute Resolution Mechanisms

Given that respondents in both study areas expressed high preference for traditional over statutory mechanisms of land dispute resolution (Section 6.5), it is relevant to further ascertain the extent to which respondents perceived customary mechanisms to be effective in land dispute resolution. This is against the backdrop of Alternative Dispute Resolution (ADR) mechanisms gaining currency as a plausible avenue for the effective resolution of land-related disputes in Ghana (Crook, 2012; Kuusaana et al. 2013; Ghana Judicial Service, 2014; Nolan-Haley and Annor-Ohene, 2014). Respondents were therefore asked about whether or not they were satisfied with the local dispute mechanisms in their respective communities, the results of which are shown in Table 6.9.

Table 6.9: Satisfaction with Local Dispute Resolution Mechanisms (%)

<i>Satisfied with the local dispute resolution mechanisms generally</i>	Kakum Region			Ankasa Region		
	Community Membership		Total (N=232)	Community Membership		Total (N=148)
	Indigene (n = 17)	Migrant (n = 215)		Indigene (n = 40)	Migrant (n = 108)	
Yes	65%	74%	73%	83%	57%	64%
No	35%	25%	26%	17%	14%	15%
Don't Know	0%	1%	1%	0%	29%	21%

Source: Field Survey, 2015.

From Table 6.9, it is quite clear that respondents were generally satisfied with the customary dispute resolution mechanisms which perhaps explains the low incidence of land disputes (at the plot level) in the study areas. Interestingly, however, the disaggregated Ankasa data indicate that more indigenous (83%) than migrant respondents (57%) expressed satisfaction with the customary adjudicatory mechanisms ($p < 0.05$, χ^2 value 8.01). Plausibly, the growing incidence of landlord/ migrant conflicts in Ankasa perhaps contributed to the waning confidence of migrant farmers in the traditional authorities as impartial arbiters in land dispute resolution (see Section 6.5). Corroborating this assertion is a typical remark by one migrant informant in Ankasa:

“...If you a settler farmer here and you have an issue over land with an Nzema [indigene], it is likely that the decision by the traditional authorities would favour your opponent by virtue of his nativity. In the eyes of the authorities, you the strangers cannot profess stronger ties to the land than the indigene as you only came to make a living...” (pers comm. Akругu, Old Ankasa, Ankasa, June 2015).

Previous studies by Boone and Duku (2012) and Boni (2005) reporting on the incidence of landlord/ migrant conflicts in the context of south-western Ghana have also made observations of local mechanisms operating to favour indigenous landlords in contestations over land use arrangements to the detriment of migrant-tenant farmers.

Notwithstanding the foregoing results suggesting a generally high respondents' confidence in the customary adjudicatory mechanisms, it does not necessarily imply that there is complete trust (in terms of fairness and transparency of the procedures employed)

in them. As evidenced by the results in Table 6.9, 26% and 15% of the respondents in Kakum and Ankasa respectively were dissatisfied with the customary adjudicatory mechanisms. Expressions from the qualitative interviews pointed to instances of discrimination where traditional authorities used their power to subvert justice especially in favour of powerful actors within the local political hierarchy and indigenes in the event of contestations with migrant farmers. Besides, given that 29% of migrant respondents in Ankasa were indifferent or uncertain is perhaps a cause for concern as to the legitimization of their land rights (Table 6.9).

The gender question (in terms of the peculiar vulnerability of women) also comes to play here. From the women's only focus group and personal observations, discussants argued to the effect that customary mechanisms were somewhat discriminatory (gender biased) to the extent that women even had to rely on spouses and male-relatives to enforce their land rights in the event of any contestations (see sub-section 5.7.2.1). This observation is also supported non-significantly by the survey data (Table 6.10). For instance, it was socially unacceptable (taboo) for women to discuss land matters with strangers without prior approval of their male relatives or husbands in most of the communities surveyed. Interestingly, they were equally unenthused about the state court as a forum for enforcement of their property rights citing a myriad of reasons including fear of possible backlash by community for not according respect to traditional authorities, marital tensions leading to instability of marriages and poverty. It can therefore be inferred from the above enumerated reasons that fear of community sanctions and poverty perhaps constitute the underlying reasons for respondents' preference for the customary mechanisms and not necessarily because of equity in the adjudicatory processes. The low levels of education could also be potential barrier to the enforcement of land rights via the formal adjudicatory mechanisms, especially in the case of women (in rural areas) who

might be intimidated by the formal procedures that characterise the state courts (see GSS, 2014). This observation is supported by the fact that a far lesser proportion of respondents in Kakum (28%) and Ankasa (7%) who had sought help from either the customary and/or statutory dispute resolution mechanisms were women. As highlighted in the preceding chapter (Chapter 5), the peculiar vulnerability of women is witnessed in the fact they generally constitute the largest segment of the poor with limited access to the requisite financial resources and education particularly in the rural areas. Yet, the statutory mechanisms as observed earlier are touted as expensive and bureaucratic which invariably imply that seeking enforcement or protection of land rights within such mechanisms could well be outside the reach of the poor and vulnerable. To extent that this inference is correct, then it is not totally surprising that majority of respondents prefer traditional courts as a forum to assert their land rights notwithstanding issues of discrimination and procedural inequities (both perceived and real) that may characterise customary mechanisms.

Table 6.10: Satisfaction with Local Dispute Resolution Mechanisms (Gender)

<i>Satisfied with the dispute resolution Mechanism</i>	Kakum Region			Ankasa Region		
	Gender of HH Head		Total (N=232)	Gender of HH Head		Total (N=148)
	Male (n=197)	Female (n=35)		Male (n=123)	Female (n=25)	
Yes	75%	66%	73%	63%	68%	64%
No	24%	34%	26%	15%	16%	15%
Don't Know	1%	0%	1%	22%	16%	21%

Source: Field Survey, 2015.

In spite of low preference for the formal mechanisms of disputes resolution, interviews with officials of the Assin Fosu Municipal Court revealed that land-related cases constituted the highest number of cases registered although official/ exact figures were not readily available. Further enquiries at the Assin Fosu and Elubo Stool Land Offices showed that these offices were playing an unconventional role acting as forums for the resolution of land disputes (through mediation) involving farmers and landowners

especially in communities within their jurisdictional scope. From the foregoing, it can therefore be concluded that whereas several options were available to landholders as forums for enforcement and protection of their land rights, in practice, they have ‘restricted options’ as evidenced by the above-enumerated challenges plaguing the existing mechanisms for dispute resolution. As pointed out by Rao (2007: 313), “legal pluralism does not imply a normative preference of one legal order or the other, as the choice of the arena for contestation is ultimately a political choice, determining as it does the access to resources.” Thus, the different identities, subject positions (within the local socio-political hierarchy), authority and fairness of procedures used could be instrumental in determining final outcomes (ibid; Crook, 2008). This could also explain the contradiction in respondents’ opinion of statutory tenure as secure and the overwhelming preference for traditional courts to resolve disputes (see Sections 6.2 and 6.5). Besides, the foregoing does highlight a concrete opportunity for integrating customary and statutory adjudicatory mechanisms (given the high social legitimacy of the former) for effective protection of rural land rights (see Section 8.2.4).

In this view, the promulgation of the Alternative Dispute Resolution (ADR) Act 2010 (Act 798) is touted as a progressive way of mediating land-related disputes (by combining the merits of customary and statutory mechanisms) for the protection of local land rights especially that of the poor and vulnerable (Crook, 2012; Kuusaana et al. 2013; Ghana Judicial Service, 2014: 46; Biitir et al. 2015). Consequently, the Ghana-LAP supported CLS has facilitated the creation of internal forums for land dispute resolution through ADR. This is envisioned as a plausible way of providing an efficient, equitable and inexpensive medium for the adjudication of land-related disputes at the local level³¹ (*pers*

³¹ As at the time of fieldwork in 2015, the Assinman and Western Nzema CLS had just been established (and yet to commence full-scale operations) at Assin Fosu and Beyin which Kakum and Ankasa respectively fall within their jurisdiction. It was therefore not possible for the fieldwork team to collate data on

comm. CLS-1, January 2015). Whereas actual implementation of the CLS-driven ADR mechanism remains to be seen in the study areas, it will suffice to say here that respondents (particularly at the institutional level) were generally optimistic that this could serve as an effective and inexpensive pathway for the enforcement and protection of local land rights. This notwithstanding, it is also worth underscoring that there is still some level of scepticism as to achieving this end in practice. As Crook (2008) aptly observes, “despite their much-touted merits ADR styled mechanisms are not fool-proof in that they are susceptible to issues of summary procedure, unequal power relations or ‘crony justice’ dominated by local power holders’ which could operate to the disadvantage of the vulnerable and the poor”. This might be true in the particular case of land-related disputes which are often problematic, as their embeddedness in intricate social relations implies that a case seldom involves the simple resolution of a dispute between two parties (cf. Crook, 2012). Indeed, informal conversations and personal observations during the fieldwork did reveal that despite the optimism of the prospects of CLS-driven ADR in facilitating effective adjudication of disputes, respondents equally flagged a number of worrisome issues which warrant discussion. Firstly, there was a serious concern regarding the capacity of the CLS-ADR setup to effectively deal with and enforce decisions on adjudicated disputes free from manipulations by interested parties and other powerful agents. Within this purview, the authority of the chiefs and the interplay between the CLS office and the traditional authorities’/ state institutions come to play here. Given that the CLS is supposed to serve as an interface between traditional authorities and state land agencies, some respondents expressed the apprehension that in the event of land disputes involving traditional authorities (i.e. chiefs and/ or elders) and

respondents’ assessment of the CLS effectiveness in terms of promoting certainty and security of land rights. Nevertheless, it was necessary to investigate the potential of the CLS in the study areas, the degree of its acceptability by different social groups as well as the barriers, if any, to its success.

their subjects, there is an underlying risk that judgement could be secured in favour of the former. This is in light of the often strong ‘political factor’ at play at the local level where traditional authorities enjoy a privileged position in the socio-political dynamics of most rural communities in Ghana (Ubink, 2008). As Berry (2001) observes “chiefs who have custodial authority over land could easily influence judgement in land struggles where they are involved alongside their subjects, resulting in a situation where chiefs become winners and their subjects’ losers”. This therefore raises questions as to the extent to which the CLS setup is decoupled from the influences of traditional authorities and the balance of authority between the chief’s subjective position as an individual and a representation of the larger landholding community. This follows Article 36 (8) of the 1992 Constitution of Ghana clearly stating the fiduciary role [and accountability] of customary land managers with respect to the management of stool, skin and family land for the benefit of the larger community they represent. Likewise, depending on the capacity and impartiality of the personnel tasked with dispute settlement, the settlement process could be ineffective and even counterproductive especially where disputants possess greatly different levels of power or authority. This derives from Crook’s (2008: 151) assertion that “the effectiveness of community-based dispute resolution mechanisms being promoted as ADR-type solution to land dispute settlement depends on the kind of power held by the chosen arbitrators, their role in the community and the kinds of procedures adopted”. From a gender perspective, there is the possibility that in land disputes (where the stakes are often high for one or both disputants) the settlement process could operate to the disadvantage of women as they might easily give up on their rights (actual and perceived) or be cajoled into settling for judgment that might not necessarily favour them (Crook, 2012; Atua, 2013). This might be particularly true in most rural settings where deep-seated socio-cultural norms and rules pertaining to land matters tend

to be somewhat skewed in favour of men as against women (see Chapter 5). To the extent that this inference holds, then it could imply that the less powerful actors will be less likely to utilise the CLS-ADR forums in the event their land rights are being denied them or subjected to counter-claims.

On the foregoing, some respondents (those who were aware of the establishment of the CLS offices) further highlighted some proximity concerns. In the particular case of Ankasa, a number of respondents complained about the situation of the CLS office at Beyin, which incidentally happens to be the seat of the Western Nzema Paramountcy. By implication therefore, the office was not easily accessible by the respective communities who had no other option but resort to available local mechanisms in resolving any land disputes. This assertion was also corroborated by the officials of the local Stool Lands Office and Ankasa Park Management in separate interviews. More so, the CLS setup as it stands lacks a legal basis of existence³² which invariably implies that its community-based dispute resolution mechanisms cannot be subjected to the formal rules and could therefore suffer from the same drawbacks of the customary mechanisms (Bugri, 2012; Crook, 2012). In the particular case of rural communities, like the study areas, where land markets are not very vibrant, a critical question in this regard concerns the long-term sustainability of CLSs given the presumption that they are designed to be self-sustaining institutions (Bugri, 2012). It therefore stands to reason that capacity building of the CLS and clear delineation of its powers (so as to avert undue interference by chiefs and other powerful agents) remain crucial if they are to serve as effective avenues for the protection of rural land rights via efficient and equitable registration and adjudication mechanisms.

³² As at the time of writing this study, a new draft Lands Bill (which makes provision for the mandate of the CLS and its functions) had gone through stakeholder consultation and was being formulated for Cabinet approval (Ghana News Agency, 25th September, 2016 <https://www.ghanabusinessnews.com/2016/09/20/ghana-hosts-international-land-forum/>).

6.6 Mechanisms for Enhancing the Certainty and Security of Property Rights: Informal Formalisation?

In the context of increasing individualisation, contestation and insecurity, land documentation is widely recognised as a plausible avenue to safeguard the (*dejure*) interest of local landholders especially, the poor and vulnerable social groups (Ali et al. 2011; World Bank, 2003, 2006; de Soto, 2000). A corollary of this argument is the rather implicit observation by some theorists (e.g. de Soto, 2000; Byamugisha, 2013) that there is the need for institutional innovation spearheaded by the state (government) as local communities are incapable of innovating or crafting solutions to problems of insecurity and land-related conflicts (Delville, 2002; Benjaminsen et al. 2009; Lund, 2011). This has therefore spurred on ongoing land (tenure) reforms across SSA including Ghana with emphasis on land registration as a panacea to tenure insecurity and by extension promotion of SLM (see Sections 2.4 and 3.5). Against this backdrop, it was therefore germane to assess in the context of this study, the diffusion and extent to which recent efforts of land registration (particularly with the Ghana-LAP and MIDA inspired systematic rural land registration) enhanced (legal) security of rural land rights. In addition, informal documentation practices adopted by farmers to ensure certainty and/or legitimacy of their land rights were investigated.

Despite on-going national land registration efforts (i.e. systematic rural land registration and parcel demarcation exercises), there was very little or no evidence of formal registration in the studied communities. In fact, the specific form of institutional innovation in Kakum and Ankasa (as at the time of fieldwork) was spearheaded by local communities evidenced by informal mechanisms such as the use of receipts, site plans and written agreements. From the qualitative research, it was gathered that the quest for avenues that further legitimises and/ or enhances the security of land rights constituted

the main motivation for the engagement in such informal documentation mechanisms.

Two typical expressions by two FGD participants highlighted the benefits of documentation as follows:

“...Paper no lie. Once I have documentation attesting to my occupation of this land, no one can threaten me be it over boundaries or anything. Everything is clear on the document...” (William Tettey, FGD-Totoda, Kakum, September 2015).

“...Before you can say you have security of tenure, it means you have a valid document which has been signed by the chief and government. Once you have the document, it gives you the vim [confidence] and assurance that anything you do on the land would be to your benefit ... (Joseph Tanoë, Fawoman-FGD, Ankasa, August 2015).

The foregoing statements in a way give an indication of the interaction between customary and statutory tenure practices as evidenced by the informal documentation practices by local landholders. Following this, the extent of informal documentation practices in the studied communities was examined as respondents were asked about whether or not parcels currently managed by their respective households had been registered. Table 6.11 therefore shows the results of informal documentation practices at the plot-level.

Table 6.11: Plot-Level Documentation (as at 2015) by Study Area

Plot Sizes (acres)	Kakum		Ankasa		
	Documentation Status		Documentation Status		
	Yes (n=206)	No (n=314)	Yes (n=64)	No (n=173)	DK (n=6)
≤ 3	36%	64%	20%	77%	3%
4-6	42%	58%	20%	79%	1%
7-9	53%	47%	33%	63%	3%
10-12	62%	38%	24%	76%	0%
13-15	40%	60%	57%	43%	0%
16+	62%	38%	52%	44%	4%
Overall %	40%	60%	26%	71%	3%

Source: Field Survey, 2015.

As typified in Table 6.11, the overall results seem to give the indication of a generally low trend in the pursuit of informal land documentation in Kakum (40% or 206 plots) and Ankasa (26% or 64 plots) respectively despite the large majority of respondents stating

that statutory tenure is ultimately preferable from a security point of view (see Section 6.2). Again, it can be inferred from the foregoing results that the practice of informal documentation was generally positively related to the size of household landholdings. The majority (52% and 62%) of the large landholdings in Kakum and Ankasa respectively were subject to some evidence of documentation (Table 6.11). This corroborates the observation by Osman and Takyiwaa (2005) that the wealthy and powerful were more likely to undertake documentation practices as means of promoting the (legal) security of their land rights. Furthermore, to ascertain whether the length of time on plot influenced documentation status, a cross-tabulation analysis was undertaken and the results are shown in Table 6.12.

Table 6.12: Duration of Plot Use and Documentation Status

Duration of plot use (years)	Kakum		Ankasa		
	Documentation Status		Documentation Status		
	Yes (n=206)	No (n=314)	Yes (n=64)	No (n=173)	DK (n=6)
≤ 5 years	24%	76%	20%	80%	0%
6-10 years	24%	76%	14%	86%	0%
11-15 years	40%	60%	32%	65%	3%
16-20 years	58%	42%	19%	81%	0%
21+ years	64%	36%	46%	45%	9%
Overall %	40%	60%	26%	71%	3%

Source: Field Survey, 2015.

From Table 6.12, the disaggregated results seem to indicate a significant association (95% confidence) between the length of time on plot and documentation status across the two study areas. A considerable proportion of plots operated for a longer time (21+ years) in both Kakum (64% or 91 plots) and Ankasa (46% or 26 plots) were evidenced by some documentation with associated chi-square values of 48.89 and 15.14 respectively. The foregoing results is interesting given that *de facto* security increases with the duration of plot use (Van Gelder and Luciano, 2015; Van Gelder, 2010; Place, 2009), in which case documentation may be recognised by rural landholders as less important to guarantee

legitimacy and security of their land rights (Bromley, 2009; Place, 2009). A possible explanation could be that a considerable proportion of the older plots (21+ years) in Kakum (31% or 26 plots) and Ankasa (32% or 28 plots) were predominantly managed on customary freehold basis suggesting that landholders independently controlled them and for that matter, regarded documentation as means to further consolidate their claims over such plots, particularly in the face of the changing tenurial dynamics (see Sections 5.3 and 6.2). To the extent that this inference holds, then it gives the indication that depending on the contextual situation, *defacto* security (through community recognition) alone may, in some instances, be insufficient to safeguard the land rights of local landholders. This lends empirical support to Van Gelder's (2010: 6) argument that "although reasonable amount of *defacto* security can exist without legal recognition, security always remain partial and therefore incomplete. Just as titles are not secure without *defacto* security..., so too do *defacto* and perceived security remain insufficient without their legal counterpart" (cf. *ibid*; Sections 2.5.1 and 2.5.2).

6.6.1 Types of Informal Documentation and Sources of Institutional Legitimacy

In light of the above, respondents (those who had procured some form of documentation) were asked the question what type of documentation do you possess on your household plot(s). Responses to this question sheds more light on the specific form of informal documentation practices engaged in by respondents as means to bolster the security of tenure over their plots as shown in Table 6.13 (page 248).

Table 6.13: Type of Informal Documentation

<i>Kind of Documentation</i>	Kakum (n=206)	Ankasa (n=64)	Main Features
Allocation Note from Stools	11%	11%	Name of stool, allottee, date, embossed seal, size of land, signatures, date etc.
Site/ Farm Plan	41%	23%	Location, size of land, name of land user/owner, surveyor etc.
Agreement Paper (Written/Typed)	48%	59%	Names of parties, type of tenure, size of land, date, signatures of parties etc.
Stool Lands Receipt	0%	6%	Rent payable, Stool name, land user of name, stamp of stool lands, date etc.

Source: Field Survey, 2015

Figure 6.4 Examples of Informal Documentation Evidencing Landholding/Ownership. A= Sample Allocation Note from; B= Sample Agreement Paper and C= Sample Farm Plan and D = Sample Stool Land Receipt in Chapter 6, page 248 has been omitted due to due to sensitive contents.

As can be seen from Table 6.13 and Figure 6.4 (page 248), agreement paper constitutes the commonest form of informal documentation used by landholders across the two study regions. Elsewhere in the context of south-western Ghana (Osman and Takyiwaa, 2005) and Ivory Coast (Colin, 2013; Delville, 2002) have also found some evidence of the use of informal documents as means of authenticating and enhancing the (*dejure*) security of land rights of rural landholders. During the qualitative research, it became apparent that both farmers and landowners alike had different interpretations as to what such informal documents connote in terms of validity and admissibility as registrable documents. For instance, in the case of documentation such as the agreement paper and allocation note, respondents commonly argued that they were highly recognised as key evidence of occupation of land to the extent that they had been duly approved by the said landowners and/ or chief (Figure 6.4). This brings to fore two critical questions as to the extent of validity of such informal documents and whether they conferred (legal) security on their possessors. To these ends, evidence from the qualitative research pointed to the fact that despite the different interpretations assigned to what such documentation meant in terms of tenure security, respondents generally perceived them as valid proofs of their interests at least within the confines of their local communities. A case in point is the story of one key-informant (an elder of Bunsu village) who asserted that his family successfully defended their land rights on the basis of a written agreement during a disputation with a local chief over their farmland (see Box 1).

Box 1: Written Agreement as Valid Proof Endorsed within the Local Allocation Process

Our forebears acquired a vast farmland holding via outright purchase from the Fanti Nyankumase Stool and an agreement was prepared and approved by the then Omanhene (Paramount Chief). Just recently, a few years ago, one sub-chief challenged us as to our right over the land threatening to re-enter it. We produced the said agreement in a meeting at the Traditional Council and judgement was entered in our favour. The case even went to court and we again had the ruling in our favour as we produced the original agreement and other witnesses who attested to the validity of our claim (pers comm. Opanin Amoah, Bunsu-Kakum, September 2015).

Importantly, the Conveyancing Decree 1973 (NRCD 175) states that any instrument affecting land in Ghana should be evidenced in writing stipulating the nature of transaction (e.g. sale, gift, lease etc.), names of grantor sanctioning the transaction, the transferee, consideration and duration of interest transferred to the grantee. In addition, Section 4 of the Land Registry Act, 1962 (Act 122) stipulates the prequalification for a registrable instrument as sufficient description of land (subject property) by reference to a plan clearly delineating the extent of land boundaries and locational description. Yet, during the field interviews it came to light that most of these informal documents (at least those shown to the researcher) failed to capture some key elements of registrable documents including the duration of the interest transferred, adequate description of the land (reference to a plan), terms and conditions of transfer and the names and signatures of grantors sanctioning them. Thus, to the extent that such informal documentation as evidenced in Table 6.13 fell-short of the afore-mentioned statutory requirements implied that they do not impute any enforceable legal right over land and therefore insufficient in guaranteeing adequate security of tenure. Despite the insufficiency or statutory limitations of such informal documents, however, they were widely seen by respondents as legitimate basis for tenure security by which their land rights could be enforced. A community elder at Ohiamadwen in Ankasa gave a typical statement that reflected the above observation as:

“...once you have a paper [document] showing that you are in occupation of a particular land, it means that your wife and children can rely on the validity of the paper especially if approved by the landlord/ chief to avert any loss of land rights in the event of any future dispute...” (pers comm. Ohiamadwen, Ankasa, June, 2015).

The above statement highlights the utility of such informal documentation and the extent of respondents’ confidence in terms of their relevance in asserting land rights within the local context. On the question of which institutions were responsible for sanctioning informal documents attesting to the land rights of respondents, the overall results (Figure

6.5) indicate that local customary mechanisms largely provided the institutional basis for authenticating such documentations. Figure 6.5 typifies the main sources of legitimacy of informal documentation issued to land users in both study areas.

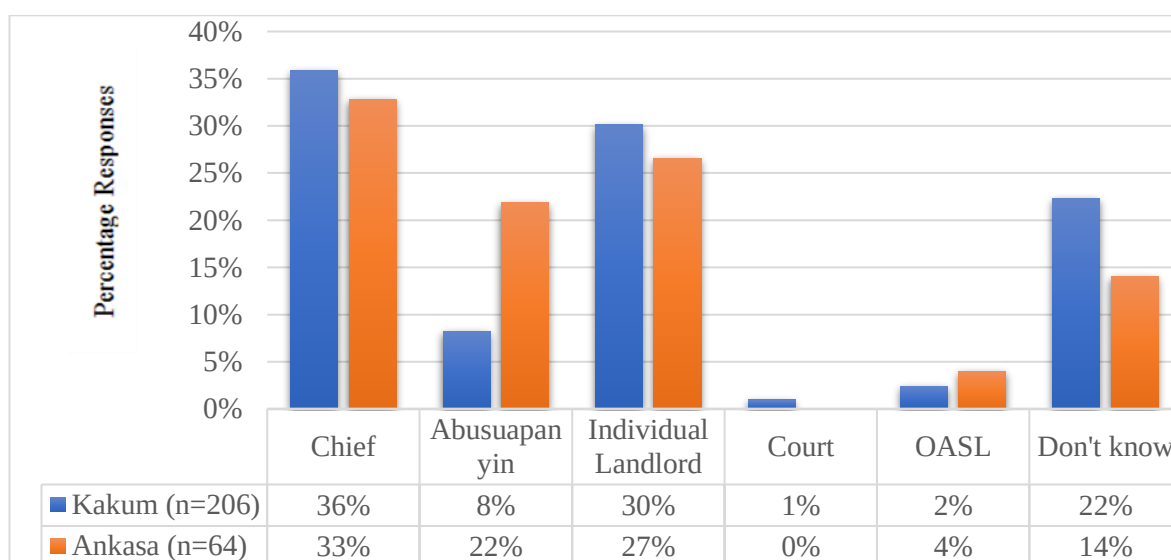


Figure 6.5: Sources of Informal Land Documentation

As can be seen from Figure 6.5, three main customary institutions namely chiefs, Abusuapanyin and individual landlords were responsible for validating informal documentation issued across the two study areas. This finding is unsurprising to the extent that the foregoing institutions were the principal authorities responsible for land allocation at the community level which therefore presupposes that they equally had the power to sanction any documentation evidencing any allocations made. Although the foregoing results seem to suggest that the OASL and local courts played a minimal role in the informal documentation process, it was gathered from informal conversations with officials of the OASL and CLS that the former often assisted landowners with the drafting and witnessing of informal tenure documents, particularly in Kakum. Plausibly, the role of the OASL in this regard highlights the interaction between the customary and statutory mechanisms in the process of recognition and enhancement of the security of local land rights. To give an indication of the institutional significance (i.e. confidence) respondents

attributed to the afore-mentioned institutions in the informal documentation process, evidence from the qualitative research highlighted four (4) main levels of institutional legitimisation of land rights as typified in Figure 6.6. Based on respondents' views, each institutional level was assigned a different level of authenticity it conferred on documentation issued, with the paramountcy, OASL and courts being the highest and individual landlords the lowest on the legitimisation spectrum respectively. It could therefore be inferred that informal documents such as allocation notes, agreement papers sanctioned by the chiefs, OASL and local courts welded a higher probative value (i.e. usefulness in proving land ownership/ use in the 'loose' legal sense) in terms of guaranteeing security of tenure than those by individual landlords within the informal documentation setup (Figures 6. and 6.5). Yet, such informal documentation practices to a considerable degree fell-short of the formal registration provisions under the NRCD 175 which perhaps imply somewhat minimal effect from a *dejure* tenure security perspective.

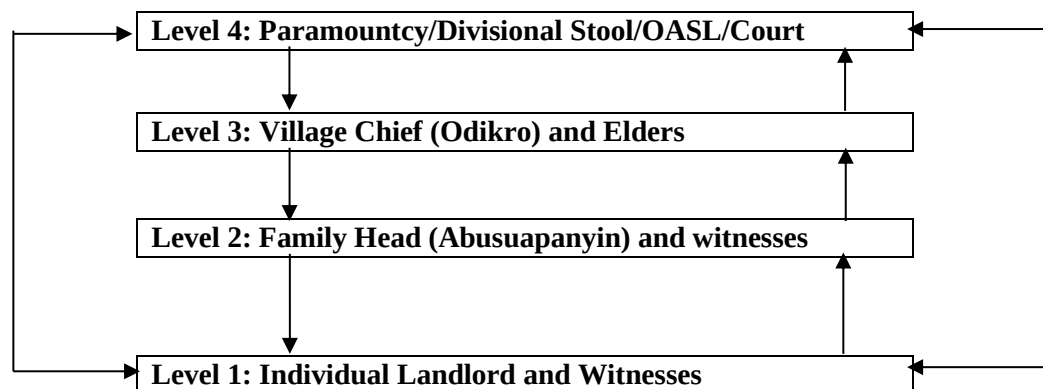


Figure 6.6: Levels of Institutional Legitimisation

Therefore, respondents (those who claimed to have documentation) were asked about their general satisfaction with the informal documentation process using a five point Likert scale of measurement (Figure 6.7). From Figure 6.7, the overall results indicate a general satisfaction with the informal documentation practices in Kakum (69%) and Ankasa (58%) respectively. This perhaps suggest that informal documentation may to

some extent positively influence respondents' (perceived) tenure security even if it does not result in a significant material change in their circumstance in a legal sense (cf. Broegaard, 2013).

Whilst the discussion so far appears to suggest that local landholders are proactive in internally devising strategies to address the problems of insecurity as well as promote certainty of their land rights, it also highlights the insufficiency of such in-formalised documentation practices (in imputing adequate legal security of tenure on land users) without statutory recognition. This therefore reinforces Ubink's (2007) conclusion that customary mechanisms alone were inadequate in guaranteeing sufficient tenure security and equitable land management. At the same time, the foregoing also brings to the fore potential trade-offs issues (in terms of winners and losers) that might be associated with formalised registration mechanisms aimed at securing local land rights. The ensuing sub-sections delve into these issues in light of the current documentation practices by various social groups in the studied communities as well as factors that either facilitate or preclude the pursuit and securitisation of their property rights.

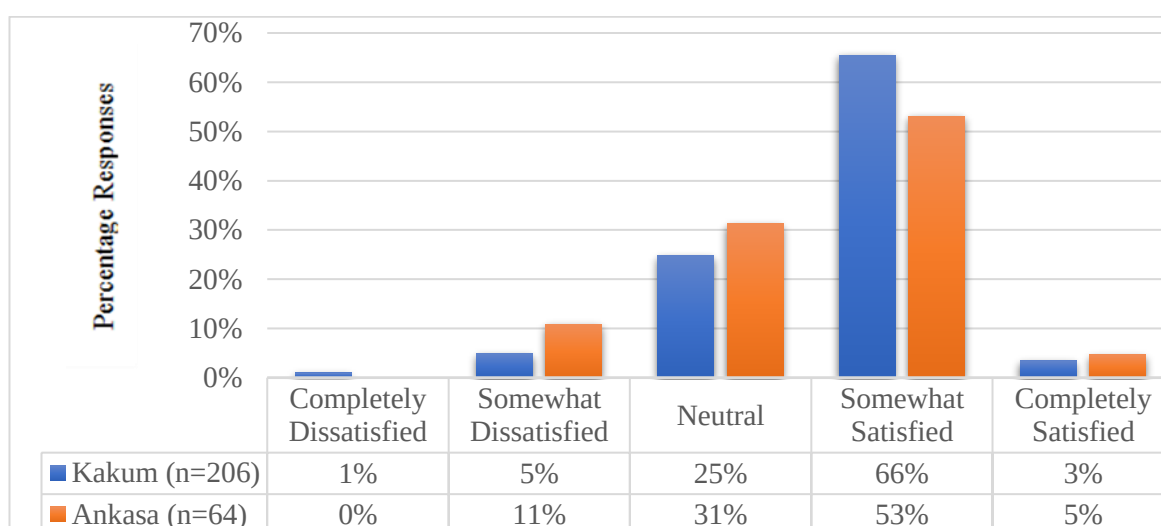


Figure 6.7: Extent of Satisfaction of Informal Documentation

6.6.2 Who is engaged in Informal Documentation Practices?

In view of the foregoing, it was also insightful to ascertain specific social groups (i.e. indigenes, migrants and women) engaged in the informal land documentation practices. Following this, the a priori assumption was that migrants as opposed to indigenous farmers would more likely be involved in the so-called informal documentation practices as way to enhance the certainty and (*dejure*) security of their land rights. Table 6.14 shows the results from the cross-tabulation analysis.

Table 6.14: Community Membership and Informal Documentation (%)

Do you possess a document for this plot?	Kakum Region			Ankasa Region		
	Household Plots		Total	Household Plots		Total
	Indigene	Migrant		Indigene	Migrant	
Yes	24%	41%	40%	19%	29%	26%
No	76%	60%	60%	75%	69%	71%
Don't Know	0%	0%	0%	6%	1%	3%
Total	29 (6%)	491(94%)	520(100%)	73 (30%)	170(70%)	243(100%)
Document Type						
Allocation Note	43%	10%	11%	0%	14%	10%
Site/Farm Plan	14%	42%	41%	28%	19%	21%
Agreement Paper	43%	48%	48%	50%	56%	54%
Stool Lands Receipt	0%	0%	0%	0%	8%	6%
Don't Know	0%	0%	0%	22%	4%	9%
Total	7 (3%)	199(97%)	206(100%)	18 (26%)	52 (74%)	70 (100%)

Source: Field Survey, 2015.

From Table 6.14, the disaggregated results indicate a somewhat significant association (90% confidence) between community membership and plot documentation in both study areas. In the case of Kakum, more migrant (41% or 199 plots) than indigenous-managed plots (24% or 7) were evidenced by some documentation with an associated chi-square value of 3.08. Similarly, 29% (50 plots) of the migrant-managed plots as against 19% (14 plots) of indigenous-managed landholdings were supported by some form of documentation in Ankasa ($p \leq 0.1$; χ^2 value 2.77). Taken together, these results seem to give the indication that the community membership of landholders might be instrumental in the pursuit and securitisation of their property rights in both study areas. The foregoing

result is not totally surprising as migrants' farmers (by virtue of their often 'vulnerable' position as non-members of the landholding community) would necessarily take steps to further bolster the security of their land rights so as to safeguard against future loss in the event of any skirmishes. It therefore stands to reason that migrant farmers (as opposed to their native counterparts) will more likely benefit from the formal recordation of their land rights as it would afford them legal legitimacy as well strengthen their tenure security. There was however no consistent pattern in terms of the type of documentation possessed by respondents and their community membership.

On the basis of gender, the disaggregated results indicate no significant differences between male and female-managed plots and their documentation status in Kakum (Table 6.15). In contrast, the Ankasa data showed a significant gender difference as more (30%) plots managed by men than those of women (8%) had some documentation ($p \leq 0.1$; χ^2 value 4.67). Altogether, these results give the indication that whereas the practice of informal documentation was irrespective of gender in Kakum, the reverse scenario is true for Ankasa. A plausible reason for this difference could be attributable to the relatively high land scarcity and disputes in Kakum relative to Ankasa which has perhaps instigated informal documentation practices as way of safeguarding their land rights. The succeeding sub-section turns attention to the reasons for the limited formal registration in the study areas.

Table 6.15: Gender and Informal Documentation (%)

<i>Do you possess a document for this plot?</i>	Kakum Region			Ankasa Region		
	Gender of Plot Manager		Total (N=520)	Gender of Plot Manager		Total (N =243)
	Male (n = 452)	Female (n = 68)		Male (n = 206)	Female (n = 37)	
Yes	40%	35%	40%	30%	8%	26%
No	60%	65%	60%	69%	81%	71%
Don't Know	0%	0%	0%	1%	11%	3%
Document Type						
Allocation Note	10%	17%	11%	11%	0%	10%
Site/Farm Plan	40%	50%	41%	21%	29%	21%
Agreement Paper	50%	33%	48%	59%	14%	54%
Stool Lands Rec.	0%	0%	0%	6%	0%	6%
Don't Know	0%	0%	0%	3%	57%	9%
Total (n)	182(100%)	24(100%)	206(100%)	63(100%)	7(100%)	70(100%)

Source: Field Survey, 2015.

6.6.3 Reasons for Non-Registration of Household Landholdings: Plot-Level Analysis

Despite the general recognition of the merits of documentation in enhancing (legal) tenure security as evidenced in the foregoing, there was very limited evidence of statutory registration of farmlands in both study areas. It was therefore pertinent to further examine the factors constraining formal registration in light of the popularisation of the CLS (as an interface between customary authorities and statutory agencies) as an avenue for the systematic recordation of land rights especially in rural regions like the study areas. In this vein, respondents (those who did not possess any form of documentation) were asked as to reasons for the non-registration of their farmlands as way of ensuring (legal) tenure security. Table 6.16 summarises the multiple reasons for non-registration at the household plot-level.

Table 6.16: Reasons for Non-Registration of Farmlands (%)

Reasons for Non-Registration	Kakum		Ankasa	
	Responses (n= 314)	Ranking Order	Responses (n= 173)	Ranking Order
No at all necessary	7%	6	20%	4
Unaware of land registration legislation	11%	4	5%	6
Cost of land documentation	38%	1	39%	1
Cumbersome Procedure	8%	5	24%	3
No extra benefits from land registration	19%	3	26%	2
Put off by sharecropping arrangement	26%	2	10%	5
Put off by non-approval of landowner	0.3%	8	5%	6
Don't know where to register	1%	7	0%	8

Source: Field Survey, 2015.

As evidenced in Table 6.16, a myriad of reasons account for respondents' non-registration of their landholdings in the both study regions. It is therefore evident from the results that the cost and cumbersomeness of land registration constituted the foremost reason for non-registration in both Kakum and Ankasa and this was corroborated during the community FGDs and informal interviews. As per the statutory requirements for registration under the Land Registry Act, 1962 and PNDCL 152, the landowner seeking to register land is required to submit a site plan (endorsed by a licensed surveyor), an indenture and the registration surcharge. Considering the overall cost involved in the registration process (i.e. procurement of the documentation and registration fees), it presupposes that most rural landholders could not embark on registration even if they desire to do so. Besides, the cost intensive and cumbersomeness of the registration process almost invariably imply that the wealthy farmers and landowners stand to benefit to the detriment of the poor. Illustrative of the foregoing is the story of a group of farmers in Amokwaosuazo (Ankasa) who sought to register their landholdings at the Takoradi Deeds Registry Office (see Box 2).

Box 2: Unsuccessful Attempt at Formal Registration by a Group in Amokwaosuazo

Just a year ago, a number of us in this community sought to register our lands upon learning that we could do so at the deeds office in Takoradi. As part of the requirements, we were supposed to produce a site plan. We therefore sought help from one draughtsman who managed to prepare plans of our respective landholdings. However, because the draughtsman wasn't qualified to validate the documents, we approached a licensed surveyor at Elubo to sign our prepared plans but he demanded GHC 4,500.00 in total to do so. We couldn't afford this and now the whole process has been stalled... (pers comm. Amokwaosuazo CREMA-1, Ankasa, June, 2015).

The foregoing statement therefore highlights the cost-intensive nature of the formal registration process which in turn raises some concerns as to the extent to which current national policy initiatives are pro-poor. As argued by Simbizi et al. (2014), formal mechanisms for addressing tenure insecurity of the rural poor in SSA ought to be inclusive and pro-poor in the sense that they are tailored to meet the specific needs of the rural poor. Indeed, it is in recognition of the peculiar constraints faced by rural communities in Ghana that the MIDA led systematic rural land titling focused on promoting tenure security of the rural poor through a low-cost titling approach. Notwithstanding the gains made so far, the above-mentioned initiative has been on a pilot basis to the exclusion of most rural communities. In addition, current legislation on land registration in Ghana does not permit for the registration of usufructuary rights in land (customary freehold) even though such rights are duly recognised as legitimate under the National Land Policy of 1999. Though the LAP (Phase 1) attempted to rectify this anomaly by developing an operational framework to afford the registration of customary freeholds, the National House of Chiefs (NHC) strongly opposed this effort³³. The NHC contended that registration of freehold interests was tantamount to challenging the allodial title vested in stools and skins (World Bank, 2013). Besides, the effect of the 1979

³³ The LAP-1 effort was based on an initial interpretation by the Attorney General's Office that customary freeholds are legitimate and backed by the rules of customary law and the Constitution.

constitutional provision that no grant of any freehold interest in any stool land in Ghana (as of 21st August 1979) has thus far been misconstrued resulting in the conversion of such land rights to leasehold before they can be formally registered³⁴.

In light of this uncertainty as to the status (legal effect) of customary freeholds, respondents were quite apprehensive contemplating that their hitherto relatively secure rights might be replaced with agricultural leases of limited duration; thus resulting in some level of insecurity. Indeed, it was gathered from a number of key informant interviews that there were widespread rumours that some customary landowners (particularly in Ankasa) were in the process of converting all customary freeholds grants to migrant farmers into customary tenancies of a specified duration. This assertion was also confirmed by a number of community leaders at Nsuano, Kusasi and Navrongo (all in Ankasa) who disclosed that deliberations were on-going amongst landowners to replace customary freeholds currently held by migrants to customary tenancies of ten (10) year duration subject to renewal to facilitate their registration (Field notes, 2015). The above development has triggered some level of uncertainty and by extension social insecurity especially amongst migrants as to the status of their land rights in some of the study communities in Ankasa. It therefore follows that the current focus on rural land registration might actually decrease tenure security of certain social groups (by eroding the quantum of *de facto* land rights currently enjoyed) especially in the case of migrant customary freeholders. Moreover, to the extent that the recording of land rights only captures the name of the household head, mostly male (as a representation of the landholding family), then it could have some negative implications for the future land rights of other individual members managing household plots. This is especially true in

³⁴ Article 190 (4) of the 1979 Constitution which restricted the grant a freehold interest in all stool lands in Ghana was imported wholesale under Article 267 (5) of the 1992 Constitution.

the case of most rural women (who gain access to land through male intermediaries) as there is an underlying risk that their land rights could be denied them upon the demise or divorce of the household head. Taking the case of polygamous marriages, for example, multiple spouses risk marginalisation (deliberately or non-deliberately) from the registration process as the existing framework lacks clarity on joint registration. At the time of writing this study, the new omnibus land bill envisioned to facilitate the joint registration of spousal rights in customary land was yet to have legal effect through formal legislative assent.

Furthermore, the nature of sharecropping agreements as cited by most farmers in Kakum impeded registration of their land rights. During the key-informant interviews and FGDs, farmers (particularly the sharecroppers) asserted that landowners were opposed to the idea of documentation especially in the case of the *apaaso abunu* and *abusa* arrangements (for cocoa) and recently acquired landholdings. Typical remarks by three sharecrop farmers is illustrative of this point:

“...Over here, once you acquire the land for planting cocoa, the agreement paper is normally prepared after about 5 years of establishment when it is deemed that the crop [property] would have attained maturity...” (pers comm. Kwame Appiah, Kwame-Anang, Kakum, July 2015).

“...In the case of the division two, until the land and the crops are divided, the land user [farmer] has no right to demand or commence any documentation process over the said parcel...” (pers comm. Opanin Quao, Azuletti, Ankasa, August 2015).

“...The land was not sold outright to us [tenant farmers] so we do not have the power to proceed unilaterally to prepare papers without the consent of the chief and/ or landowners...” (Opanin Acquah, Old-Ankasa-FGD, Ankasa, August 2015).

The above statements highlight the particular constraints faced by certain group of farmers in terms of registration of their land rights. In addition, respondents argued that sharecrop arrangements had an inherent risk and therefore withholding the preparation of any documentation could serve as a surety (security) for the landowner that the land user (farmer) would work to fulfil the terms of the grant. Yet, most respondents believed that

possession of some legal documentation contributed to the overall certainty and assurance that their land rights would be protected in the event of any skirmishes. Blocher (2006) stresses the need to take due-cognisance of pre-existing secondary land rights that are often dependent on the social relationships between contracting parties. Whereas the formal registration of land increases *dejure* security of registered landowners, it can also dampen tenure security to the other individuals (especially secondary users) that may have unregistered rights to the same piece of land and different dimensions of use of that land (cf. *ibid*; Hartwig and Hounghbedji, 2015).

Interestingly, another main reason for non-registration was the perception of some respondents that registration did not confer any additional benefits which contradicts the mainstream view on the motivations for land registration such as the facilitation of credit access, investment in land etc. (see Section 2.6). It raises a critical question as to the use-value of (legal) tenure security via rural land titling to these landholders. Pertaining to the plots respondents expressed no additional benefits upon registration in Kakum (n=60); all were managed by migrant households. By contrast, of the 45 plots within the same category in Ankasa, about half (51%) were managed by migrant households with the remaining by their indigenous counterparts. Though statistically insignificant, the fact that 19% and 26% of all household landholdings in Kakum and Ankasa respectively were deemed as not requiring any registration (due to the lack of any additional benefits to be enjoyed from registration) is perhaps indicative of respondents already enjoying sufficient (*defacto*) tenure security on such plots. Plausibly, the longer occupation of such plots by their users and social recognition (by neighbours and the landowning group) could have accounted for this observation. If this proposition is correct, then the narrow framings of security of tenure (occasioned by the conventional approach of equating possession of legal documentation as tenure security) are highly questionable (Van Gelder, 2010;

Obeng-Odoom and Stilwell, 2013; Simbizi et al. 2014). This reinforces Abdulai et al.'s (2007) conclusion that land registration (formalisation) *per se* is incapable of guaranteeing certain tenure security in the sub-Saharan context. In fact, during the qualitative research a number of respondents indicated that their landholdings were under the protection of their ancestors and the gods and in the event of any adverse claims to their land rights, the gods will fight their cause. A native farmer at Ghana-Nungua (Ankasa) had this to say:

“...before I started farming on this land, incantations and rituals [ntam] was performed to invite the spirit of our ancestors and the gods. As such anyone (even the chief) who dares to challenge my land rights would incur the wrath of the gods...” (Opanin Kwadwo, Ghana-Nungua FGD, Ankasa, August 2015).

Following the above, some interviewees were even sceptical as to the extent to which current policy on rural land registration (through the CLS) could ensure tenure security through the registration of their land rights. They expressed the fear that such titling initiatives particularly under the CLS arrangement could rather operate to their disadvantage in the sense that their land rights could easily be usurped once captured in the records of the chiefs and government. Others even asserted the possibility of government imposing higher taxes and farm rent charges particularly in the case of migrants occupying stool lands.

Inferring from the foregoing, two main conclusions can be drawn. On the one hand, it is obvious that there was limited public awareness on the objectives and benefits of the ongoing rural land documentation programmes. Alternatively, it would also suffice to say here that, to some extent, there was a lack of trust and/or disillusionment in government particularly regarding land matters in the studied communities. Plausibly, the local populace previous experiences with government sponsored programmes and/ or inability to deliver on commitments might have contributed to the general apathy or

disillusionment regarding the formal registration of their land rights. This might somewhat explain the contradiction between a large majority of farmers stating that state tenure is ultimately preferable from a security point of view, and so few pursuing formal land registration in the study areas (see Section 6.2). Yet, it is also instructive to highlight as established in the foregoing that majority of respondents expressed some optimism as to the documentation of their land rights ensuring to their benefit in terms of enhanced (*dejure*) tenure security. Therefore, the reasons for non-registration are far-reaching of which the lack of funds was just one of the several delimiting factors as per the results in Table 6.16. The foregoing further reinforces Sikor and Muller's (2009) observation that there is the need for a sufficient understanding of the local-level dynamics (realities and specific needs of different local actors such as the poor and marginalised groups) and their involvement in the design and implementation of [land] reforms to create a sense of ownership and involvement of local people. A detailed discussion of the policy implications of the above findings is presented in Section 8.5 (Chapter 8).

6.7 Summary and Conclusion

The chapter sets out by highlighting the need for sufficient understanding of the dynamics of land tenure security as well as mechanisms for safeguarding and promoting land rights of users within the context of a complex land tenure regime in the study areas. In effect, the foregoing analysis examined the state of land tenure security in the study areas including conditions that promote or undermine security of property rights of rural land users, conflicts and mechanisms for safeguarding and promoting land tenure security. The findings indicate that contrary to the mainstream view of the lack of tenure security under the customary land tenure system, the perceived (and *defacto*) tenure security of respondents was generally high in both study areas. This gives an indication of the existence of different sources of tenure security (legal and social legitimacy) shaped by

several interacting (intra and extra-household) factors in the study areas. These different contextual factors (including length of occupation of land, socio-political connections and social recognition) constitute the social legitimacy of respondents' land rights which ultimately contributes to their tenure security. For instance, the analysis shows that respondents' generally felt secure in the ownership/ use of their land in Kakum and Ankasa evidenced by the low expropriation index scores of 1.5 and 1.4 respectively (see Section 6.3.2). Thus, to the extent that the social legitimacy of land rights is important in achieving tenure security, then it highlights the need to revise theoretical models for evaluating tenure security (based on individualisation and titling) so as to capture different situations of (in) security as well as other relevant extra-household factors that might influence tenure security especially in rural contexts like the study areas.

Importantly, the chapter highlights that institutional arrangements for safeguarding and promoting security of land rights under customary land tenure in the study areas are dynamic. This flexibility of customary land tenure is evidenced by the introduction of informal mechanisms for safeguarding land rights (i.e. practice of written documentation) as a response to local problems of tenure insecurity and conflicts over land. Besides, the high stated preference (98% and 89%) of traditional mechanisms for land dispute resolution is telling of the strong social legitimacy enjoyed by customary tenure institutions (see Sections 6.5 and 6. 6). It therefore stands to reason that local communities amid on-going shifts in customary tenure arrangements are also able to innovate solutions to their problems without direct state intervention.

Nevertheless, it remains clear that the existing customary mechanisms alone are insufficient in safeguarding and promoting greater tenure security to rural land users (especially women, migrants and the poor) in the long-term there by underlining the potential importance of some state intervention through formalisation. As evidenced in

Section 6.2, an overwhelming majority of respondents (98% and 95%) in Kakum and Ankasa respectively cited preference for statutory land tenure from a (*dejure*) security point of view which is a testament of their desire to further strengthen the pre-existing (*defacto*) security they already enjoy. At the same time, there is a general uncertainty as to the legal status of customary freehold upon formal registration as most customary freeholders were particularly worried that their hitherto relatively secure rights might be replaced with short-term agricultural leases (see Section 6.6.3).

From the foregoing, the chapter also highlights the view that in the operationalisation of tenure security, elaborate land titling may not be necessary in all rural contexts in view of the differing contextual peculiarities. For instance, in the Kakum and Ankasa contexts, a simplified process of standardising the existing informal documentation practices to give them sufficient legal legitimacy might be a better approach if the foregoing results are anything to go by (see Sections 6.6.1 and 6.6.3). In doing so, however, the emergence of vulnerable land right holders and possible elite capture of the registration process remain likely and all these needs to be considered and proactively dealt so as to avoid situations of potential winners and losers (cf. Bugri, 2012: 24). Without sufficient attention to these context-specific configurations, the current policy focus on rural land registration as a pathway towards adequate protection and enhancement of rural land rights may not achieve the intended results. The succeeding chapter investigates the relationship between land tenure arrangements (tenure security) and households' land investment decision-making across the two case study areas.

CHAPTER SEVEN

WHAT IS THE USE-VALUE OF TENURE SECURITY? EMPIRICAL ANALYSIS OF PROPERTY RIGHTS AND FARM-LEVEL INVESTMENTS NEXUS

7.1 Chapter Overview

As outlined in Chapter 6, insufficient understanding of the local dynamics of land tenure security and its operationalisation in a changing tenorial context could render policy mechanisms counter-productive causing further uncertainties and tenure insecurity with negative implications for rural livelihoods and sustainable land management. This chapter therefore examines the linkages between land tenure arrangements (tenure security) and household land investment decision-making regarding adoption of sustainable land management (SLM) practices at the farm-plot level.

This is against the backdrop of tenure insecurity widely touted as one of the key factors which at best impinge successful adoption SLM practices (including agroforestry) and at worst contribute to increasing environmental degradation across SSA, including Ghana (Nkonya et al. 2016; Damnyag et al. 2012; Abdulai et al. 2011; Twerefou et al. 2011; Kabubo-Mariara, 2007; Boni, 2006; Owubah et al. 2001). Yet, there seems to be little consensus or clarity over the extent to which insecurity of customary land tenure acts as an impediment to SLM across different socio-economic, institutional and biophysical contexts (Persha et al. 2015; Damnyag et al. 2012; Fenske, 2011; Place, 2009). Although neoclassical economic theory posits a definitive link between well-defined and secure land (property) rights and land-related investments, the empirical evidence on SSA to date remains inconclusive with wide variations in results across different regions (see Section 2.6).

Consequently, the role of land tenure security in shaping farmers' decision making and pursuit of different land-related investment strategies remains unclear. Part of the controversy stems from the difficulty in the measurement of tenure security resulting in the adoption of different proxies. A corollary of the foregoing is the raging debate about what constitute tenure security which over time has been identified as non-linear and context specific (see Sections 2.5, 6.2 and 6.3). Besides, there is also limited understanding and a paucity of empirical evidence on key non-tenurial factors (including technology availability and knowledge, technical and economic feasibility of SLM technologies, households' socio-economic characteristics etc.) influencing adoption of SLM practices by rural landholders at the local-level which has constrained the effective implementation of alternative options and policies for sustainable land management (Kabubo-Mariara, 2006; Nyanga et al. 2016; Nkonya et al. 2016: 10-12; Otsuka and Runge, 2014; Otsuka and Place, 2014). As highlighted in Chapter 6, the differences in land rights (tenure security) and socio-economic conditions could have the propensity to differentially influence and/ or alter farmers' land management decision-making especially investment strategies with long payback periods like tree planting. This therefore begs fundamental questions as to what categories of land-related investments are adopted by farmers, their security-enhancing effects and the extent to which land tenure security incentivises farmers' uptake of SLM practices, particularly long-term agroforestry which remains a quandary which is yet to be resolved (see Table 1.1, Chapter 1). Thus, drawing on data across 380 households and 763 farm-plots in 19 communities complemented by qualitative and secondary information, this chapter addresses the question: what are the variations and sources of tenure (in)security and how do these differentially influence farmers' investments in sustainable land use and management (Research Question 2.2).

The underlying tenet of this chapter is that while tenure security is necessary, it may not be a sufficient condition for households' investment in SLM practices towards addressing environmental degradation in the study areas and Ghana generally. In other words, merely improving the (*dejure*) security of customary land rights may not be sufficient to engender the appropriate incentives needed to stimulate widespread investments in SLM practices. Through the tripartite conceptualisation of tenure security (see Section 2.5.2), the chapter affords a more nuanced understanding of how other important contextual factors (including age, duration of plot use, social capital, land use restrictions, access to extension support services, risk and profitability associated with SLM technologies etc.) interact to influence, on the one hand, the perceived (social) legitimacy and *defacto* condition of land rights and, on the other hand, the ultimate investment decision-making of households. It therefore stands to reason that theoretical models on land (tenure) reform based on static conceptualisation of tenure security and investment relationship need revision in favour of more nuanced and flexible approaches to accommodate the complexity and diversity of local tenurial arrangements to design more effective and appropriate policy interventions. In this view, the ongoing land policy interventions (Ghana-LAP) should adequately account for these contextual factors (that contribute to *defacto* and/ or perceived (in)security) so as to better understand and address the problems of tenure insecurity and sustainable land management at the local level.

The rest of this chapter is organised as follows: the first section analyses respondents' views on the specific role of tenure insecurity in contributing to environmental degradation in the studied communities. Afterwards, the succeeding sections delve into a detailed multivariate analysis of the determinants of households' adoption of different SLM across the two study regions. The final aspect summarises the key findings, conclusions and their policy implications.

7.2 The Role of Land Tenure (In) Security in Environmental Degradation

As previously discussed, the Kakum and Ankasa areas like other regions in Ghana are characterised by progressively changing land use pattern instigated by a myriad of factors (including agricultural activities, demographic conditions, institutional factors etc.) with varying implications for rural livelihoods and sustainable land management (see Sections 1.3 and 4.3.1). Within this context, there are conflicting observations about the role of tenure (in)security under the customary tenure system in the current spate of environmental degradation and poor agricultural development in Ghana and SSA generally (see Sections 2.3.1 and 2.4). To the extent that farmers are recognised as key stakeholders in sustainable land management, then it is important to understand their perceptions about the role of tenure (in)security in environmental degradation. Respondents were therefore asked about whether tenure insecurity is a major cause of environmental degradation in their respective communities.

The analysis shows a generally high perception amongst respondents that insecurity of customary land tenure constitutes a major cause of environmental degradation in the study areas. About 84% of the overall sample (N=380) agreed or strongly agreed with the foregoing statement as opposed to just 14% who responded in the negative (disagreed or strongly disagreed), with no statistically significant differences between locations or demographic groups. This finding seems to corroborate previous observations that insecurity of customary land rights contributes to environmental degradation as the rules governing landholding inhibited farmers' engagement in SLM practices (GoG,1999; Owubah et al. 2001; Damnyag et al. 2012). Additional information gathered through the qualitative interviews also revealed that the existing tenorial arrangements largely dictated the way and manner in which land is managed. Majority of FGD participants

asserted that holders of permanent land rights were better positioned to engage in SLM practices that minimised land degradation as opposed to those with ostensibly weaker land rights whose land management decision-making were subject to the approval of their landowners. Illustrative of the above observation are explanations by a migrant tenant-farmer and one landowner in Ankasa:

“...Those of us who acquired land on sharecropping or caretaker basis cannot unilaterally make certain decisions especially those likely to affect the existing land use like tree planting without the full consent and approval of our landlords even if we perceive that such investments would ultimately improve the land in the long-term...” (Opanin Adu, Old Ankasa-FGD, Ankasa, August 2015).

“...undertaking investments in land other than what was originally agreed is subject to fresh negotiation before the farmer can proceed. For a caretaker farmer, the landlord can take his land at any time so it would be unwise on the part of the farmer to engage in very intensive land improvements as his or her tenure could be short-lived...” (pers comm. Asafohene, Aiyinase, Ankasa, August 2015).

The foregoing discussion highlights the importance of improved tenure security as a plausible pathway for incentivising adoption of SLM measures to effect sustainable environmental management. The succeeding sections discuss the adoption of sustainable land management measures (SLM) as means of mitigating the environmental degradation challenge in the study areas.

7.3 Measurement Variables and Key Hypotheses

In section 4.6.3 (Chapter 4), the empirical estimation strategy employed in investigating the relationship between tenure security and land-related investment outcomes at the farm-plot level was presented. This was based on a conceptual model on the role of land tenure security in household investment decision-making developed previously in Chapter 2. This section therefore discusses the key variables used to specify tenure security and the categories of investments considered in the ensuing analysis. In addition,

the main hypotheses guiding the econometric analysis on the determinants of SLM adoption is also presented and summarised in Table 7.1.

Table 7.1: Definition and Observation Level of the Dependent and Explanatory Variables

Variable Name	Definition	Observation Level	Summary A Priori Expectation ³⁵
Dependent Variables:			
Soil Improvements	Invested in soil improvements (i.e. soil bunds, chemical fertiliser, manuring etc.): 1 if implemented; 0 if otherwise	Plot	--
Tree Planting (Agroforestry)	Investment in agroforestry tree planting on land: 1 if implemented; 0 if otherwise	Plot	--
Preservation of Naturally-Occurring Trees (Agroforestry)	Preservation or retention of naturally occurring forest trees on land: 1 if preserved; 0 if otherwise	Plot	--
Investment (All Practices)	0 if household has never implemented any of the three sustainable land use practices; 1 if household has implemented at least one of three practices	Plot	--
Independent Variables:			
Soil Type	A four-point variable based on the soil texture ranging from loamy to clayey.	Plot	(+/-) Indeterminate
Previous Land Dispute	1 if respondent has experienced a previous disputation over specific household plot; 0 if otherwise	Plot	(-) Presence of land disputes or conflicts over specific parcels may lead to insecurity and therefore, farmers less likely to undertake investments.
Duration of Plot Use	Number of years' household have used specific plot	Plot	(+) The longer the duration of use, the more secure land (<i>defacto</i> security) and therefore higher likelihood to undertake investments.
Main Land Use	A three-point variable based on the land use ranging from cash (perennial) crops to unused land.	Plot	(+/-) Indeterminate
Farm Income (Yield)	Total income from crop sales (in Ghana cedis) over the last 12 months	Plot	(+) The higher the income from crop sales increases the capacity to undertake investments.

³⁵ Whereas a plus sign signifies a positive relationship is expected, a minus sign implies a negative relationship based on a priori expectation. Where both plus and minus signs are specified, it implies that no specific a priori expectations are made and the relationship is therefore subject to empirical investigation.

Plot Distance (Kilometres)	Distance from homestead to specific plot	Plot	(-) The farther the plot is from farmer's homestead, the less likely to undertake investments.
Tenure of Landholding	A four-point variable based on the form of tenure ranging from Customary Freehold to Customary Licence.	Plot	(+) Farmers more likely to undertake investments on more secure and permanent landholding.
Complete Transfer Rights	1 if respondent has the right to sell or lease out land with or without approval; 0 if otherwise	Plot	(+) If farmers have complete transfer rights, the more likely to undertake investments.
Preferential Rights	1 if respondent has the right to bequeath land to children or next of kin; 0 if otherwise	Plot	(+) If farmers have preferential land rights, the more likely to undertake investments.
Plot Size (in acreage)	Size of household landholding	Plot	(+) The larger the plot size, the more the likelihood of investing in SLM practices.
Informal Documentation	1 if respondent has an informal documentation attesting to use/ownership of land; 0 if otherwise	Plot	(+) Informal documentation provides proof of <i>dejure</i> ownership and therefore a higher likelihood of investing in SLM.
Land Use Restrictions	1 if there are restrictions or conditions on the use of land; 0 if otherwise	Plot	(-) If there are restrictions on the use of land, the lesser the likelihood of undertaking investments.
Age of Head (years)	Age in years of the household head	Household	(+/-) Indeterminate
Gender of Head	A binary indicator of gender of household head: 1 if male-headed; 0 if female-headed	Household	(+) Women are relatively disadvantaged in terms of access to secure land of land and therefore less likely to invest in SLM.
Community Membership	A binary indicator of community membership of household head: 1 if migrant; 0 if indigene	Household	(+/-) Indeterminate
Duration of Stay in Village	Residence time in the community in years of the household head	Household	(+) Longer duration of stay in a community increases access to secure land and therefore increases the likelihood to undertake investments.
Educational Level	A four-point variable based on the educational level ranging no formal education to post-secondary education.	Household	(+) The higher the level of education, increases access to secure land therefore the more likely to undertake investments.
Non-Farm Income	Total income from non-farm economic activities (in Ghana cedis) in the last 12 months	Household	(+) Higher off-farm income increases the capacity to undertake investments.
Household Livestock Holding	Household total livestock holding in tropical livestock units (proxy for household wealth)	Household	(+/-) Indeterminate

Household Credit	1 if household has access to a credit facility; 0 if otherwise	Household	(+) Access to credit increases the capacity to undertake investments.
Total Household Size	Current number of people (members) in household	Household	(+) Larger household size increases the likelihood to undertake investments.
Socio-political Status	1 if household head or member occupies a position in the community; 0 if otherwise	Household	(+) Occupying a position in the village enhances defacto tenure security on land and therefore increases the likelihood of undertaking investments.
Cooperative Membership	Household head or member affiliated with a farmer cooperative offering conservation education: 1 if affiliated; 0 if otherwise	Household	(+) Cooperative membership increases farmers' knowledge of SLM and therefore the higher likelihood of undertaking investments.
Extension Service	Access to government agricultural extension services: 1 if household has access; 0 if otherwise	Household	(+) Access to extension services increases farmers' knowledge of SLM and therefore the higher likelihood of undertaking investments.
Willingness to Invest in agroforestry (if supported)	A five-point Likert scale variable based on the motivation to invest in tree planting ranging from strongly disagree to strongly agree.	Household	(+) The higher the motivation to invest, the more the likelihood to undertake agroforestry investments.
Study Region	Region of location of household: 1 if Kakum; 0 if Ankasa	Region	(+/-) Indeterminate

Source: Author's compilation.

7.3.1 Measurement Variables

The adoption of SLM practices refers to the implementation of one or more SLM practices in a given household plot. Specifically, the focus here is to examine the role of land tenure security and other factors in shaping household land investment decision-making on adoption of land conservation practices in the study areas. In this regard, a key distinction is made between short-term investments in soil improvements and long-term investments in agroforestry. This is premised on the understanding that different types of land investment strategies are differentially affected by various factors including tenure security and vice-versa (Persha et al. 2015; Place, 2009; Gebremedhin and Swinton, 2003). For instance, tree planting is commonly seen as a long-term security enhancing investment relative to short-term land investments like fertiliser application or manuring. In effect, three dependent variables each represent an independent or separate decision to adopt a particular land conservation activity – on-farm tree planting, preservation of naturally-occurring trees and soil improvements (inorganic fertiliser application, soil bunding and mulching). In the case of agroforestry investments, a key distinction is made between on-farm tree planting and preservation of naturally-occurring (regeneration) trees. This derives from policy reforms which effectively grants *dejure* right of ownership to individuals who undertake economic tree planting on farmlands even though the ownership of naturally-occurring economic trees is still retained by state³⁶. It therefore stands to reason that on-farm tree planting and preservation of naturally-occurring economic trees have different *dejure* connotations which could differentially affect their adoption potential by farmers. A similar distinction on agroforestry investments is also

³⁶ The 2002 amendment of the Timber Resources Act 547 to Act 617 makes provision for the ceding of legal right of ownership to individuals who plant timber trees on farmlands.

observed in Owubah et al.'s (2001) study of forest tenure systems and sustainable forest management in the high forest zone of Ghana.

Soil improvements, on-farm tree planting and investment in tree preservation are all defined as binary dependent variables. In addition, responses for these three SLM practices are aggregated into a composite variable that identifies whether or not households have implemented either of them on their individual farm plots (Table 7.1).

As elucidated in Section 2.5.2 (Chapter 2), land tenure security in this study is operationalised as legal, *defacto* and perceived. Therefore, measures of these three dimensions of land tenure security are obtained from respondents' answers to questions about their tenure status in relation to the farm-plots they cultivate. Firstly, legal tenure security is measured by the possession of informal documentation (such as farm plan, allocation note and indenture) evidencing 'legal' ownership or use of a given land. This derives from the fact that none of the respondents in this study possessed a deeds or title certificate on their plots which are the requisite formal documentation evidencing legal ownership or occupation of land as per the statutory land tenure provisions of Ghana³⁷ (see Section 6.6.1). Secondly, *defacto* tenure security is measured by five indicators including the plot tenure type, duration (years) of plot use, incidence of previous dispute, duration (years) of stay in village and household socio-political status. Finally, perceived tenure security is measured by three indicators viz. the fear of future expropriation, preferential rights in land (the right to bequeath land but not sell) and restrictions imposed on land use (Table 7.1).

³⁷As per the Land Title Registration Law (PNDCL 152) a title certificate is the most conclusive evidence of title which is also state guaranteed. Conversely, Act 122 stipulates a deeds certificate is admissible as evidence of a transaction on land (see Land Registry Act, 1962). However, both title and deeds registration have been sorely constrained and limited to a few urbanised areas in Ghana.

Other independent variables as evidenced in Table 7.1 can be specified as demographic, household wealth, plot-level and other socio-economic variables to control for the differences they are likely to exert on the land tenure security-investment nexus as well as to capture their own individual effect on the endogenous variables (Persha et al. 2015; Nyanga et al. 2016; Kassie et al. 2015; Kabubo-Mariara, 2006). Besides, the inclusion of a broader set of explanatory variables gives the unique opportunity for a wider appraisal of different factors influencing households land investment decision-making with respect to the adoption of SLM practices.

7.3.2 Main Hypotheses and a Priori Expectations

To guide the ensuing econometric analysis on the relationship between land tenure security and SLM adoption, a number of hypotheses are formulated based on a review of the relevant theoretical and empirical literature. This sub-section therefore discusses the main hypotheses about the key independent variables in addition to the measurement and direction of their hypothesised effects on SLM adoption as shown in Table 7.1.

7.3.2.1 Key Security-related Hypothesis

- I. It is hypothesised that investments in SLM practices will increase with the perceived degree of tenure security. Thus, long-term SLM practices (tree planting and conservation of naturally-occurring trees) are more likely to be implemented on relatively more secure tenure plots.
- II. Households exercising full ownership rights (right to sell, rent or lease out land) and preferential rights (right to bequeath land to next of kin) in land are more likely to invest in SLM practices on their own plots relative to temporarily acquired ones, owing to long-term tenure security effects.
- III. The possession of informal documentation (proxy for *dejure* security) would more likely increase farmers' willingness to invest in SLM practices (see section 6.6.1).

- IV. The longer the number of years a household has operated a specific plot is expected to increase its investment propensity on the plot as it is envisioned the household would over time develop a strong sense of (*defacto*) security over landholding thereby stimulating investment (Van Gelder, 2010; Van Gelder and Luciano, 2015).
- V. Households endowed with high social capital (represented by the number of household members occupying positions within the local socio-political hierarchy) are more likely to invest in SLM practices because they may have high (perceived and/or *defacto*) tenure security over cultivated plots (Goldstein and Udry, 2008; Kassie et al. 2015; Persha et al. 2015).

7.3.2.2 Key Non-Tenure related (Socioeconomic) Hypothesis

- I. It is hypothesised that male plot managers would invest more in SLM measures than their female counterparts, owing to the former having relatively more resource endowment and better access to more secure plots (Duncan and Brants, 2004; Whitehead and Tsikata, 2003; Sewornu, 2010; Jacobs and Kes, 2015).
- II. Indigenous farmers would more likely invest in SLM practices relative to their migrant colleagues as the former may have relatively better access to more secure plots due to their nativity, thereby increasing investment propensity (Cudjoe and Bilsborrow, 2012; Antwi-Adjei et al. 2015; Nyanga et al. 2015).
- III. Older farmers would more likely implement SLM practices on their plots due to their relatively long experience and more capital accumulation overtime relative to their younger colleagues (Persha et al. 2015; Dzanku, 2008; Zhang and Owiredo, 2007).
- IV. Plot managers with higher levels of education are more likely to implement SLM measures on their land as they may have relatively better access to off-farm

income opportunities, inputs and new information on SLM thereby increasing their investment propensity (Fentie et al. 2013; Abdulai et al. 2011; Kabubo-Mariara, 2006, 2007; Owubah et al. 2001).

- V. It is hypothesised that resource-endowed households would more likely invest in SLM practices relative to resource-poor households (Ayamga et al. 2015; Abdulai and Goetz, 2014).

7.4 The Data and Descriptive Statistics

The empirical analysis is based on a pooled sample of 380 households in 19 villages operating a total of 763 farm-plots (See Section 4.6.3). From the conceptual framework (Chapter 2), the key variables of interest considered in this study include SLM practices, land tenure security and household socio-economic characteristics. The survey data shows that 89% of household plots (N=763) had SLM investments implemented in them (see Section 7.4.1). Concerning key household demographic characteristics, about 84% of the survey respondents are male reflecting the patriarchal organisation across the two study regions. The average age of survey respondents is approximately forty-five years old. The data also suggest that educational attainment is generally low across the study areas synonymous with the situation in other rural regions of Ghana. Over one-third (~38%) of the survey respondents had no formal education and only 2% had post-secondary education (see Section 4.6.1).

As regards land tenure security, a detailed analysis of the strength of individualised land rights over respective household landholdings across the two study areas was presented in Section 6.4.1 in Chapter 6. Table 7.2 presents a summary of the socio-economic and demographic characteristics of sampled households as well as other variables used in the analysis.

Table 7.2: Summary Descriptive Statistics by Overall Sample and Study Area

Variables	Full Sample(N=763)		Kakum (N=520)		Ankasa (N=243)	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
SLM Practices						
Soil Improvements	0.750	0.433	0.820	0.385	0.600	0.490
On-farm Tree Planting	0.350	0.477	0.280	0.450	0.500	0.501
Preservation of Trees	0.770	0.422	0.810	0.391	0.680	0.468
General Investment	0.890	0.310	0.940	0.241	0.790	0.405
Tenure Security Factors						
Complete Transfer Rights	0.410	0.493	0.290	0.454	0.670	0.469
Preferential Rights	0.830	0.375	0.820	0.388	0.860	0.343
Limited Land Rights	0.200	0.398	0.220	0.415	0.140	0.352
Customary Freehold Land	0.230	0.420	0.160	0.370	0.370	0.483
Sharecropped Land	0.400	0.490	0.430	0.496	0.330	0.471
Leasehold/Rented Land	0.180	0.382	0.180	0.388	0.160	0.368
Informal Documentation	0.350	0.478	0.400	0.490	0.260	0.441
Duration of Plot Use	14.665	12.314	15.426	13.080	13.037	10.327
Land Use Restrictions	0.780	0.412	0.860	0.350	0.630	0.485
Previous Land Dispute	0.130	0.338	0.140	0.348	0.110	0.315
Household Characteristics						
Total Household Size	7.300	3.025	6.952	2.470	8.045	3.862
Age of Household Head	45.210	13.024	45.583	12.738	44.412	13.609
Gender of Household Head	0.860	0.345	0.870	0.337	0.850	0.360
No Formal Education	0.330	0.471	0.280	0.447	0.450	0.499
Basic Education	0.670	0.471	0.730	0.447	0.550	0.499
Secondary Education	0.100	0.300	0.100	0.300	0.100	0.299
Post-Secondary Education	0.010	0.114	0.000	0.062	0.030	0.179
Duration of Stay in Village	25.022	14.117	25.867	13.400	23.214	15.414
Marital Status of Head	0.870	0.332	0.890	0.310	0.840	0.372
Community Membership	0.870	0.341	0.940	0.230	0.700	0.459
Household Wealth						
Non-Farm Income	903.263	1502.654	883.077	1379.785	946.461	1738.993
Farm Income (Yield)	2172.806	3761.973	1682.617	1856.903	3221.770	5962.097
Household Physical Assets						
Plot Size	4.989	5.819	3.912	4.377	7.294	7.597
Livestock Holding	0.365	0.477	0.347	0.453	0.402	0.525
Number of Farm-Plots	2.741	1.412	2.996	1.445	2.193	1.164
Household Social Capital						
Socio-political Status	0.490	0.500	0.510	0.500	0.450	0.499
Market Characteristics						
Access to Credit	0.070	0.257	0.020	0.123	0.190	0.393
Access to Gov't Extension	0.480	0.500	0.410	0.493	0.630	0.484
Cooperative Membership	0.710	0.452	0.720	0.447	0.690	0.463
Willingness to Invest	0.810	0.393	0.780	0.415	0.880	0.330
Plot Characteristics						
Soil Type (Texture)	3.120	1.114	3.07	1.179	3.220	0.953
Cash crops Cultivated	0.890	0.316	0.900	0.305	0.870	0.339
Food Crops Cultivated	0.110	0.310	0.100	0.300	0.120	0.330
Distance to Plot	1.742	2.307	1.352	1.333	2.578	3.453
Location Variables						
Kakum	0.680	0.466	-	-	-	-
Ankasa	0.320	0.466	-	-	-	-

Source: Author's Calculations from Field Survey Data, 2015.

7.4.1 Adoption of Sustainable Land Management Practices

As regards plot-level implementation of SLM practices, Figure 7.1 presents the different SLM measures adopted in farm plots. From Figure 7.1, the overall results suggest that different land management strategies (soil improvements, on-farm tree planting and preservation of naturally-occurring trees) were implemented on majority of farm-plots although investment in on-farm tree planting is generally low. Inorganic fertiliser application appears to be the most common productivity-enhancing soil improvement investment (75% or 569 plots) implemented by households in both study regions. Interestingly, whereas the overall results indicate an overwhelmingly higher implementation of natural regeneration tree preservation (77% or 588 plots), relatively fewer plots (35% or 267 plots) had on-farm tree planting undertaken (Figure 7.1). This further highlights the distinct implementation of on-farm tree planting and preservation of natural regeneration trees on plots in the study areas which in a way justifies the decision to treat both land management strategies separately.

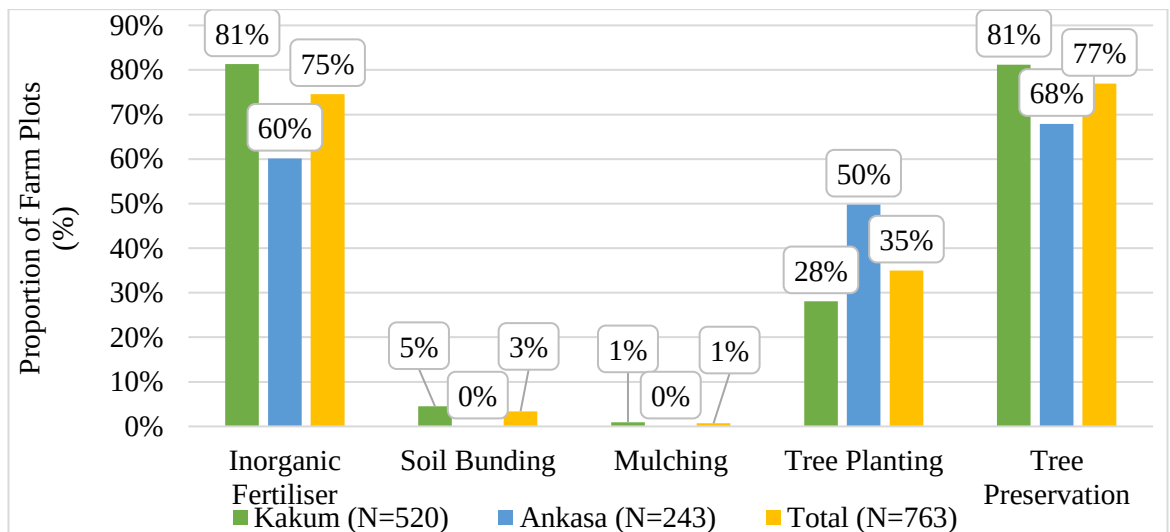


Figure 7.1: Distribution of Different SLM Practices Adopted in Farm Plots

Nonetheless, the empirical results at this stage of the analysis does not unveil the role of land tenure arrangements and other socio-economic and institutional level factors that

might be influential in adoption of SLM practices in the study areas. Further multivariate econometric analysis is undertaken in the ensuing section in order to sufficiently understand the influence of land tenure security and other socio-economic factors in households SLM investment decision-making across the two case study areas.

7.5 Determinants of Adoption of SLM Practices: Logistic Regression Analysis

The empirical results of the logistic regression models used to assess the role or influence of land tenure security and other socio-economic factors on adoption of SLM practices in the study areas are presented in Tables 7.3 through to 7.6. As discernible from Table 7.6, the results show that households' investment in SLM practices is influenced by a myriad of factors. It is inferable from the results (Table 7.6) that the determinants of adoption of SLM practices tend to differ from one practice to the another. Land tenure security (security-related), socio-demographic, institutional and market factors have different impact on the three different practices. For instance, factors that exert a significant positive influence on soil improvements have either insignificant or reverse impact on long-term tree planting. This gives the indication that depending on the type of investment, different factors influence households' decision to invest in them. The ensuing paragraphs therefore discusses the regression results focussing on the impact land tenure security, household socio-demographic, market and location factors on SLM investments that are particularly relevant in the context of this research. In so doing, the results of all three dependent variables in this study are first presented followed by a general discussion on the determinants of households' adoption of SLM practices.

7.5.1 Regression Results on Determinants of Households SLM Investment Decisions

I. Logistic Regression Results for Adoption of Soil Improvement Practices

The overall results of the logit regression model on the determinants of adoption of soil improvement practices (fertiliser application, soil bunding and mulching) in the study areas are presented in Table 7.3. The logit model fits the data well and is statistically significant at the 1% level with an overall model chi-square and -2Log Likelihood (-2LL) values of 155.379 and 701.093 respectively. The likelihood of households' engagement in soil improvement practices was also corroborated by the value overall percentage of correct prediction which increased from 75.1% to 79.6% (Table 7.3). In other words, the inclusion of the predictor variables improved how well the model predicted the observed data and likelihood of every respondent to be associated with the outcome category which majority of them fall (Field, 2000). For instance, in this context the model predicted correctly that 545 (95.1%) plots had soil improvement practices implemented in them and misclassified 28 others. It is noteworthy that when only fertiliser application (as soil improvement investment) is considered, the results in Table 7.3 remain almost unchanged.

Table 7.3: Logistic Regression Results for Soil Improvement Investments

Variable	Coefficients	Std. Error	Wald	Exp (β)	df	Sig.
Tenure Security Factors						
Complete Transfer Rights	0.027	0.245	0.012	1.027	1	0.912 ns
Preferential Rights	0.402	0.264	2.323	1.495	1	0.127 ns
Customary Freehold Land	-0.479	0.339	1.998	0.619	1	0.158 ns
Sharecropped Land	-0.201	0.270	0.553	0.818	1	0.457 ns
Rented Land	-0.221	0.347	0.406	0.802	1	0.524 ns
Duration of Plot Use***	0.045	0.012	14.371	1.046	1	0.000***
Informal Documentation***	-0.122	0.044	7.579	0.885	1	0.006***
Land Use Restrictions**	0.146	0.064	5.147	1.157	1	0.023**
Previous Land Dispute	0.106	0.298	0.125	1.111	1	0.723 ns
Household Characteristics						
Community Membership (1 = Migrant)	-0.240	0.321	0.561	0.787	1	0.454 ns
Gender of Household Head (1 = Male)	-0.034	0.321	0.011	0.967	1	0.916 ns
Age of Household Head***	-0.026	0.011	6.279	0.974	1	0.012***
Has at least Basic Educ. (relative to none)	-0.342	0.238	2.068	0.710	1	0.150 ns
Has Secondary School Education*	-0.652	0.351	3.437	0.521	1	0.064*
Has Post-Secondary Education	0.690	0.829	0.692	1.994	1	0.405 ns
Household Size	0.000	0.033	0.000	1.000	1	0.993 ns
Duration of Stay in Village	0.008	0.009	0.939	1.009	1	0.332 ns
Household Wealth						
Non-Farm Income*	0.000	0.000	3.469	1.000	1	0.063*
Farm Income (Yield)***	0.000	0.000	11.800	1.000	1	0.001***
Household Physical Assets						
Farm Plot Size*	0.055	0.033	2.814	1.057	1	0.093*
Livestock Holding (in TLU)	0.231	0.240	0.926	1.259	1	0.336 ns
Number of Farm Plots	0.013	0.086	0.022	1.013	1	0.881 ns
Household Social Capital						
Socio-political Status	0.124	0.219	0.321	1.132	1	0.571 ns
Market Characteristics						
Access to Credit	0.077	0.429	0.032	1.080	1	0.858 ns
Access to Gov't Extension Services	0.322	0.206	2.448	1.380	1	0.118 ns
Cooperative Membership	0.188	0.214	0.775	1.207	1	0.379 ns
Plot Characteristics						
Loamy Soil	-0.038	0.232	0.027	0.963	1	0.869 ns
Clayey Soil	0.386	0.336	1.323	1.471	1	0.250 ns
Distance to Plot from Homestead*	0.090	0.047	3.690	1.094	1	0.055*
Location Characteristics						
Study Region (1 = Kakum)***	1.632	0.275	35.159	5.112	1	0.000***
Constant	-0.550	0.620	0.786	0.577	1	0.375 ns
F -2LL = 701.093			Model Chi-Square = 155.379***			
Cox and Snell R Square = 0.184			Overall percentage 75.1% and 79.6% for I and F respectively			
Nagelkerke R Square = 0.273						

I for Initial, F for Final; * Significant at $p \leq 0.10$; ** Significant at $p \leq 0.05$; *** Significant at $p \leq 0.01$; ns Not significant

Source: Author's Computation from Field Survey (2015).

II. Logistic Regression Results for Adoption of On-farm Tree Planting Investments

The role of tenure security and other socioeconomic factors in the adoption of on-farm tree planting in the study areas was investigated and the results are shown in Table 7.4.

Table 7.4: Logistic Regression Results for On-Farm Tree Planting Investments

Variable	Coefficients	Std. Error	Wald	Exp (β)	df	Sig.
Tenure Security Factors						
Complete Ownership Rights	-0.180	0.225	0.637	0.836	1	0.425 ns
Preferential Rights***	1.092	0.291	14.080	2.981	1	0.000***
Customary Freehold Land**	-0.754	0.327	5.300	0.471	1	0.021**
Sharecropped Land ***	-1.023	0.251	16.686	0.359	1	0.000***
Rented Land	-0.290	0.301	0.931	0.748	1	0.335 ns
Duration of Plot Use**	0.021	0.009	5.319	1.021	1	0.021**
Informal Documentation*	0.024	0.013	3.172	1.024	1	0.075*
Land Use Restrictions	0.045	0.220	0.042	1.046	1	0.838 ns
Previous Land Dispute***	1.075	0.257	17.440	2.929	1	0.000***
Household Characteristics						
Community Membership (1 = Migrant)	0.414	0.301	1.891	1.513	1	0.169 ns
Gender of Household Head (1 = Male)	0.446	0.309	2.083	1.562	1	0.149 ns
Age of Household Head***	-0.034	0.010	12.301	0.967	1	0.000***
Has at least Basic Educ. (relative to none)	0.016	0.216	0.005	1.016	1	0.942 ns
Has Secondary School Education	-0.220	0.336	0.430	0.802	1	0.512 ns
Has Post-Secondary Education	0.768	0.807	0.906	2.156	1	0.341 ns
Household Size	0.033	0.031	1.138	1.034	1	0.286 ns
Duration of Stay in Village	-0.003	0.008	0.096	0.997		0.757 ns
Household Wealth						
Non-Farm Income**	0.000	0.000	8.969	1.000	1	0.003**
Farm Income (Yield)	0.000	0.000	0.001	1.000	1	0.975 ns
Household Physical Assets						
Farm Plot Size	0.027	0.020	1.952	1.028	1	0.162 ns
Livestock Holding (in TLU)	0.048	0.194	0.061	1.049		0.804 ns
Number of Farm Plots	-0.118	0.076	1.952	0.888	1	0.119 ns
Household Social Capital						
Socio-political Status**	0.419	0.194	4.644	1.520	1	0.031**
Market Characteristics						
Access to Credit*	-0.680	0.370	3.372	0.506	1	0.066*
Access to Gov't. Extension Services	-0.250	0.192	1.708	0.779	1	0.191 ns
Cooperative Membership*	0.374	0.212	3.112	1.454	1	0.078*
Willingness to Invest (if supported)***	1.054	0.267	15.647	2.870	1	0.000***
Plot Characteristics						
Loamy Soil	0.071	0.221	0.102	1.073	1	0.749 ns
Clayey Soil**	0.632	0.291	4.729	1.881	1	0.030**
Distance to Plot from Homestead	0.003	0.037	0.009	1.003	1	0.925 ns
Location Characteristics						
Study Region (1 = Kakum) ***	-1.104	0.249	19.717	0.332	1	0.000***
Constant	-1.370	0.669	4.194	0.254	1	0.041**
F -2LL = 813.750; Cox and Snell R Square = 0.204 and Nagelkerke R Square = 0.281						
Model Chi-Square = 174.192*** Overall percentage 65.0% and 71.8% for I and F respectively						

I for Initial, F for Final; * Significant at $p \leq 0.10$; ** Significant at $p \leq 0.05$; *** Significant at $p \leq 0.01$; ns Not significant

The overall results indicate that the model chi-squared (174.192) was statistically significant at the 1% level. This implies that the inclusion of the explanatory variables resulted in a change in the probability of households' investing in on-farm tree planting. In effect, the overall percentage of correct prediction increased from 65.0% with only constant to 71.8% with the predictors (Table 7.4). The model correctly predicted 122 out of the 267 plots in which on-farm tree planting had been undertaken, but misclassified 145 others (i.e. correctly predicted 46% of the plots with tree planting activity). In addition, the model correctly predicted 426 out of 496 plots in which tree planting had not been implemented and misclassified 70 others (i.e. correctly classified 86% of plots without on-farm tree planting activity). This latter result further buttresses the earlier observation of a low adoption of on-farm tree planting in the study areas (see sub-Section 7.4.1).

III. Logistic Regression Results for Conservation of Natural Regeneration Trees

Following the distinction between on-farm tree planting and preservation of natural regeneration trees in Section 7.3.1, an assessment of the role of land tenure security and socioeconomic factors in the adoption of the latter was also undertaken. Table 7.5 therefore shows the logit regression results for the preservation of natural regeneration trees in the study areas. The overall results show that the model fits the data well with a statistically significant ($p \leq 0.01$) model chi-square of 118.856 and -2Log Likelihood (-2LL) value of 705.310 respectively. The overall percentage of correct prediction increased from 76.9% with only constant to 78.9% with predictors. Of the total 587 farm-plots in which natural regeneration forest trees had been conserved, the model correctly predicted 563 of such plots (96%) but misclassified 24 others. This lends further credence to the fact that with the inclusion of predictors, the model better predicted the likelihood of households' preservation of naturally-occurring trees in their plots.

Table 7.5: Logistic Regression Results for Preservation of Natural Regeneration Trees

Variable	Coefficients	Std. Error	Wald	Exp (β)	df	Sig.
Tenure Security Factors						
Complete Transfer Rights	-0.025	0.248	0.010	0.975	1	0.919 ns
Preferential Rights	0.105	0.274	0.147	1.111	1	0.701 ns
Customary Freehold Land	0.554	0.386	2.061	1.741	1	0.151 ns
Sharecropped Land	-0.035	0.267	0.018	0.965	1	0.895 ns
Rented Land*	0.596	0.364	2.677	1.814	1	0.102*
Duration of Plot Use	-0.005	0.010	0.216	0.995	1	0.642 ns
Informal Documentation	-0.015	0.012	1.526	0.985	1	0.217 ns
Land Use Restrictions	0.093	0.299	0.097	1.097	1	0.756 ns
Previous Land Dispute***	0.942	0.347	7.366	2.565	1	0.007***
Household Characteristics						
Community Membership (1=Migrant)	0.678	0.292	5.413	1.971	1	0.020**
Gender of Household Head (1= Male)	-0.069	0.306	0.051	0.933	1	0.822 ns
Age of Household Head***	-0.027	0.010	6.583	0.974	1	0.010***
Has at least Basic Educ. (relative to none)	-0.010	0.233	0.002	0.990	1	0.966 ns
Has Secondary School Education**	-0.913	0.368	6.155	0.401	1	0.013**
Has Post-Secondary Education	0.330	0.835	0.156	1.391	1	0.692 ns
Household Size*	0.054	0.034	2.589	1.055	1	0.108*
Duration of Stay in Village**	-0.021	0.009	5.900	0.979	1	0.015**
Household Wealth						
Non-Farm Income***	.000	.000	10.610	1.000	1	0.001***
Farm Income (Yield)	.000	.000	2.241	1.000	1	0.134 ns
Household Physical Assets						
Plot Size***	0.077	0.029	7.305	1.080	1	0.007***
Livestock Holding (in TLU)	0.034	0.240	0.020	1.034	1	0.888 ns
Number of Farm Plots*	0.150	0.086	3.054	1.162	1	0.081*
Household Social Capital						
Socio-political Status**	0.467	0.219	4.530	1.595	1	0.033**
Market Characteristics						
Access to Credit***	-0.991	0.394	6.319	0.371	1	0.012***
Access to Gov't Extension Services	0.020	0.206	0.009	1.020	1	0.924 ns
Cooperative Membership	-0.167	0.229	0.530	0.846	1	0.466 ns
Plot Characteristics						
Loamy Soil	-0.044	0.245	0.032	0.957	1	0.858 ns
Clayey Soil	0.302	0.334	0.815	1.352	1	0.367 ns
Distance to Plot from Homestead	0.034	0.048	0.498	1.035	1	0.480 ns
Location Characteristics						
Study Region (1= Kakum) ***	0.843	0.271	9.677	2.324	1	0.002***
Constant	0.063	0.658	0.009	1.065	1	0.924 ns
F -2LL = 705.310		Model Chi-Square = 118.856***				
Cox and Snell R Square = 0.144		Overall percentage 76.9% and 78.9% for I and F respectively				
Nagelkerke R Square = 0.218						

I for Initial, F for Final; * Significant at $p \leq 0.10$; ** Significant at $p \leq 0.05$; *** Significant at $p \leq 0.01$; ns Not significant

Source: Author's Computation from Field Survey, 2015.

IV. Logistic Regression for General Investment in SLM Investments

Table 7.6 summarises the determinants of households' investment decisions across three SLM practices as presented above.

Table 7.6: Summary of Regression Results

Variable	Soil Improvements	Tree Planting	Tree Retention	General Investment ³⁸
Tenure Security Factors				
Complete Transfer Rights	-	-	-	-
Preferential Rights	-	(+Pos)***	-	-
Customary Freehold Land	-	(-Neg)**	-	-
Sharecropped Land	-	(-Neg)***	-	-
Rented Land	-	-	(+Pos)*	-
Duration of Plot Use	(+Pos)***	(+Pos)**	-	-
Informal Documentation	(-Neg)***	-	-	-
Land Use Restrictions	(+Pos)**	-	-	-
Previous Land Dispute	-	(+Pos)***	(+Pos)***	(+Pos)**
Household Characteristics				
Community Membership (1)	-	-	(+Pos)**	-
Gender of Household Head (1)	-	-	-	-
Age of Household Head	(-Neg)***	(-Neg)***	(-Neg)***	(-Neg)**
Has at least Basic Educ. (relative to none)	-	-	-	-
Has Secondary School Education	(-Neg)*	-	(-Neg)**	-
Has Post-Secondary Education	-	-	-	-
Household Size	-	-	(+Pos)*	-
Duration of Stay in Village	-	-	(-Neg)**	-
Household Wealth				
Non-Farm Income	(+Pos)*	(+Pos)**	(+Pos)***	(+Pos)**
Farm Income (Yield)	(+Pos)***	-	-	-
Household Physical Assets				
Plot Size	(+Pos)*	-	(+Pos)***	(+Pos)*
Livestock Holding (in TLU)	-	-	-	-
Number of Farm Plots	-	-	(+Pos)*	-
Household Social Capital				
Socio-political Status	-	(+Pos)**	(+Pos)**	(+Pos)**
Cooperative Membership	-	(+Pos)*	-	(+Pos)*
Market Characteristics				
Access to Credit	-	(-Neg)*	(-Neg)***	-
Access to Gov't Extension Services	-	-	-	-
Willingness to Invest (if supported)	-	(+Pos)***	-	-
Plot Characteristics				
Loamy Soil	-	-	-	-
Clayey Soil	-	(+Pos)**	-	-
Distance to Plot from Homestead	(+Pos)*	-	-	-
Location Characteristics				
Study Region (1= Kakum)	(+Pos)***	(-Neg)***	(+Pos)***	(+Pos)***

Statistical Significance at the 1% (***), 5% (**) and, 10% (*) levels.

³⁸ General investment corresponds to households' adoption of any of the three SLM practices.

7.5.2 Influence of Land Tenure Security on Adoption of SLM Investments

Using a variety of indicators for tripartite tenure security (legal, *de facto* and perceived), the overall results in Table 7.6 demonstrate that different dimensions of tenure have different effects on SLM investments. The ensuing discussion therefore focuses on the influence of the three dimensions of tenure security on households' SLM investment decisions. Although these three dimensions of tenure security are somewhat interrelated (but not the same), they are discussed separately for analytical clarity on their differential impact on SLM adoption.

7.5.2.1 Legal (*Dejure*) Security and SLM Adoption

Generally, the results seem to indicate that legal security (proxied by informal documentation) is important for households SLM investment decision-making. Informal documentation exerts a significant negative effect on SLM adoption in every model, except in the case of the on-farm tree planting model (Tables 7.4 and 7.6). It therefore presupposes that households that possess informal documentation (as proof of *dejure* ownership/ use) on their plots tended to invest more in long-term tree planting as they are more secure (from a legal security perspective) relative to households without documentation. Whereas the foregoing seems to indicate the utility of informal documentation in terms of stimulating farmers' investment propensity, juxtaposing with the results in the soil improvement model (Table 7.3) portrays a different picture.

From Table 7.3, the results show an inverse relationship between possession of informal documentation and investment in soil improvement practices which is inconsistent with both theory and *a priori* expectations (see Section 2.6.1). Inferably, to the extent that the possession of informal documentation increases perceived or *de facto* security over given farm-plots, landholders could either decide to invest less in soil improvements or defer investments in such plots altogether without any consequences (perceived and actual) to

their tenure status. This inference is supported by the qualitative analysis as one respondent explained in an interview as follows:

“...Having documentation attesting to the occupation/ use of land guarantees one’s stay on the said land and therefore the confidence [certainty] to continuously use land without any fear of losing it. For those of us who are sharecroppers (expected to invest in productivity-enhancing practices as condition for the continuous use of land), we may decide to defer the application of fertiliser especially in times when financial resources are limited to do so without worrying that the landlord may try to take back his land once we have some ‘legal’ [documentation] backing....” (Dada Boat, FGD-Bunsu, Kakum, August 2015).

From the above discussion, two main conclusions can be drawn. First, the overall results give the indication that legal tenure security can act as both an incentive and disincentive to invest in land. Second, the foregoing results also highlight the practical value of informal documentation as ‘significant’ proof of ownership/ use in the context of the study areas although they lack the force of the law to pass as official land documents. It therefore follows that elaborate land titling may not be necessary in all rural contexts as the standardisation of informal documentation practices can give farmers sufficient legal legitimacy to further bolster the certainty and assurance of protection of rural land rights in Ghana (see Sections 6.7.1 and 6.8). This latter observation is particularly interesting in light of Ghana’s LAP pursuit of rural land titling as the sole means of improving the security of rural land rights (see Section 8.5).

7.5.2.2 Defacto Security and SLM Adoption

The defacto security-related variables are observed to have different impact on adoption of SLM practices relative to non-adoption. Interestingly, the customary freehold variable was estimated as insignificant in every model except the on-farm tree planting model (Tables 7.4 and 7.6). Therefore, households appear to invest in soil improvements and the preservation of naturally-occurring trees regardless of whether or not their plots are managed on customary freehold basis, except in the case of on-farm tree planting. This

inference is supported by the qualitative analysis as some participants of the community focus groups (FGDs) asserted that the government initiative of free fertiliser distribution to cocoa farmers afforded them the opportunity to undertake such investments primarily to improve land productivity. Indeed, the majority of the farmers interviewed highlighted that to the extent that investment in short-term soil improvements are directly linked to productivity implied that irrespective of their status of land rights (tenure security), the general predisposition is to undertake such productivity-enhancing measures so as to realise the associated benefits for themselves and their landlords. A typical explanation in this regard is given by a migrant sharecropper in Kakum as follows:

“...As a farmer, the fertility of the land is very important as that would influence the productivity of my cultivated crops which is our main source of livelihood. I therefore try to apply chemical fertiliser, manuring and other soil improvement measures if it within my means so as to ensure that the land remains productive even though the conditions of tenure is not favourable to me...” (Alhassan, FGD-Otabil Nkwanta, Kakum, June 2015).

In some few instances in Kakum, a number of farmers had access to subsidized fertilisers for example, under specific village-level projects and by virtue of membership of farmer cooperatives such as Assin Young Cocoa Farmers Association (ANCOFA), in which case beneficiary households did not have to bear the total cost of undertaking such soil improvement investments.

Regarding the preservation of naturally-occurring trees, however, the results suggest that households that hold land under customary freehold are less likely to engage in on-farm tree planting (Table 7.5). This finding is contradictory to both theory and a priori expectation that households' with relatively more secure land rights are more likely to undertake tree planting investments (Besley, 1995; Zhang and Owiredun, 2007; Abdulai et al. 2011). A number of factors could perhaps explain this puzzling outcome. It could be that those households who hold land under customary freehold already enjoyed a reasonably high level of *de facto* security (under customary land tenure) to the extent that

the security-enhancing effect occasioned by tree planting investments was deemed less important (see Sections 6.3.1 and 6.3.2). Besides, it may also be that such households are more inclined towards undertaking productivity-based investments with shorter pay-back periods in which case, returns from such long-term cum cost-intensive tree planting investments were quite uncertain given the changing the tenurial contexts in the study areas (see Sections 5.2 and 5.3). During the qualitative interviews, a number of participants asserted that on-farm tree planting was risky given the uncertainty and complexity surrounding the existing benefit-sharing arrangements, attendant destruction to cultivated crops without the payment of any compensation by timber contractors as well as specific land use restrictions imposed by the original landowners. For example, one migrant customary-freeholder in Kakum and an elder of Aiyinase Stool in Ankasa gave their respective opinions of on-farm tree planting as:

“...To me, on-farm tree planting is not very beneficial as such investments have the tendency to negatively affect the productivity of our crops. Besides, it is a risk as it gives the opportunity to the forestry people and timber contractors to come and fell the trees destroying our cultivated crops in the process...” (Kwame Mensah, FGD-Appiahkrom, September 2015).

“...On-farm tree planting constitutes an additional investment on the land aside from whatever use was initially agreed (say cocoa or oil palm). As such, any tree planted is subject to re-negotiation and the benefits thereof should be shared 50-50 between the farmer and the original landowners. Without this arrangement, the farmer has no right whatsoever to plant such trees irrespective of whether he or she holds the land under customary freehold...” (pers comm. Elder Boakye, Aiyinase-Ankasa, August 2015).

The above statements highlight the underlying complexity of on-farm tree planting investments which operate as disincentive for majority of sampled households particularly in the Kakum region. These observations were reiterated in other interviews and is consistent with previous observations in the literature that the existing tree tenure complexities act as a disincentive to farmers in undertaking tree planting investments (Owubah et al. 2001; Boni, 2005; Hansen et al. 2009; Damnyag et al. 2012). It can

therefore be concluded from the foregoing that other contextual factors operate to influence farmers' *de facto* conditions of tenure and ultimately their SLM investment decisions.

The duration (years) of plot use variable exerts a significant positive influence across all SLM investments, except in the case of the tree preservation model (Table 7.6). As was expected *a priori*, households are more likely to undertake soil improvement and long-term tree planting investments in plots they managed for a considerable period of time as they are deemed to be relatively more secure. This result appears to give the indication that high *de facto* tenure security under local tenurial arrangements, in some instances, is sufficient to incentivise farmers' adoption of both short and long-term SLM practices even without formal (legal) individualised titles.

Household socio-political status variable also exerts positive effect on all SLM practices suggesting that households with members occupying high positions within the local socio-political hierarchy ('elite' households) tended to invest more in long-term tree planting and retention practices compared to their 'non-elite' counterparts with no such positions (Table 7.6). It could be that 'elite' households with high socio-political status within the local political hierarchy perhaps had relatively better access to multiple and more secure plots with favourable tenure arrangements affording them flexibility in their undertaking land management decision-making compared to households with no such affiliations. This inference derives from the earlier observation that the existing socio-political relations and networking largely define land access arrangements in the two study areas (see Section 5.5). Alternatively, to the extent that the socio-political status of households is linked to strong intra and inter-community connections may imply relatively better access to new information and technologies thereby improving technical

knowledge and capacity to invest in SLM practices. This finding is consistent with *a priori* expectation and supports Goldstein and Udry (2008) and Persha et al.'s (2015) findings that individuals who had powerful positions in the local political hierarchy and/or close association with traditional authorities have more secure tenure rights (strong *defacto* tenure security over cultivated plots) and therefore tended to invest more in land conservation practices in southeast Ghana and Zambia respectively.

Previous land dispute is positively related to households' adoption of all three SLM practices (soil improvement, on-farm tree planting and preservation of naturally-occurring trees) contrary to the *a priori* expectation that the existence of prior land disputes is more likely to dissuade households from investment in long-term land improvements. Considering on-farm tree planting, it presupposes that households may undertake security-enhancing tree planting as a security-enhancing investment in plots subject to prior disputation. This finding is contradictory to the conventional view that prior land disputes leading to insecurity acts as a disincentive for investment in long-term SLM investments such as tree planting (Kabubo-Mariara, 2007; Dzanku, 2008; Twerefou et al. 2011; Damnyag et al. 2011; Persha et al. 2015; Ayamga et al. 2016). A plausible explanation for this contradiction could be that households whose plots were insecure (due to prior disputation) tended to invest more in tree planting as means of enhancing their future land rights (*defacto* tenure security) over such plots. This inference also finds expression in the argument that tenure insecurity could in some instances, also serve as an incentive for households to undertake security-enhancing investments (such as tree planting) given that such investments will in themselves increase security to the extent that eviction is no longer feasible (Besley, 1995; Brasselle et al. 2002; Otsuka et al. 2003; Sjaastad and Bromley, 1997). An alternative explanation could also be that purposeful on-farm tree planting provided somewhat clearer boundary demarcations in which case

the incidence of future disputes over land is reduced. This is supported by the earlier finding that an overwhelming majority of plots in Kakum (94% or 488 plots) and Ankasa (82% or 198 plots) had planted trees or shrubs as the main boundary indicators in the studied communities (see sub-Section 6.5.1.1). A typical view in this regard is expressed by one female farmer in Nkwantanang village in Kakum as follows:

“... We plant some trees [ntome] to delineate our farmland boundaries so as to prevent any encroachment by adjoining neighbours...” (Akua Asiedua, FGD-Nkwantanang, Kakum, August 2015).

Besides, the low incidence of land disputes and general confidence in the traditional dispute resolution mechanisms as expressed by respondents perhaps implied that they were not necessarily worried such prior disputes could result in actual expropriation or loss of land rights. This inference is also supported by the fact that majority of plots in Kakum (73% or 381 plots) and Ankasa (75% or 182 plots) were regarded by respondents as secure or totally secure (see Sections 6.3.2 and 6.6.1). As regards the preservation of naturally-occurring trees (Table 7.5), the significant positive influence of the prior land dispute variable may not be surprising given the usefulness of certain naturally-occurring tree species to general household welfare and the minimal associated cost of investment.

The following narrative gathered through an FGD interview is illustrative in this respect:

“... The rationale for on-farm tree planting or conservation is often two-fold. To provide sufficient shade in the case of cocoa crops and to provide fuelwood or timber for future household construction or use... (Opanin Badu, FGD-Appiahkrom, Kakum, September 2015).

Surprisingly, however, the coefficient of the duration of stay in village variable show an inverse association with investment in long-term SLM practices (on-farm tree planting and preservation of naturally-occurring trees) but only significant in the preservation of naturally-occurring trees model (Tables 7.5 and 7.6) contrary to *a priori* expectation. It was expected that households with long established presence in their respective

communities would invest more in land improvements as they may have high social capital accumulation (through social ties and networking), better access to more (*defacto*) secure plots as well as sufficient knowledge of their immediate environment. A possible explanation for the contradiction could be that long-staying households in the studied communities probably had some prior negative experience in relation to crop damage from tree felling without any compensation which potentially dissuaded from maintaining natural regeneration trees on their farm plots. During informal group discussions (in Sabena, Otabil-Nkwanta and Totoda in Kakum and Faya and Old Ankasa in Ankasa respectively), farmers cited previous instances of on-farm logging resulting in severe crop damage without the payment of any compensation. One of such affected farmers who happened to be community elder in Otabil Nkwanta had this to say:

“...The on-farm tree logging has brought untold hardship upon us. All the timber trees we preserved on our farms in this area have been granted to timber contractors by the chief. As we speak, fifteen trees have been felled on my farm destroying my cocoa crops in the process without any compensation paid to me. My livelihood is now uncertain as replanting the cocoa is very difficult considering my age and the strenuous effort involved. I’m powerless to challenge the chief or the contractor as I do not even own the land...” (pers comm. Atta Darko, Otabil-Nkwanta, Kakum, June 2015).

The foregoing statement gives the indication that market-based tenure reforms may not necessarily improve *defacto* (and/or perceived) tenure security. Other contextual factors operate to either strengthen or weaken the (*defacto*) tenure security of landholders ultimately dissuading farmers from investment in long-term tree preservation. This lends further empirical credence to the previous observation that the narrow framings of tenure security as title documentation (legal security) may not sufficiently capture what constitutes of tenure security especially in Ghana’s pluralistic context (see Section 6.6.3).

7.5.2.3 Perceived Security and SLM Adoption

The overall results indicate that the influence of perceived security related variables on adoption of SLM investments is mixed. The perceived tenure security variables that

significantly influence households' investment decision-making across all the three SLM investments include: preferential rights, and land use restrictions. Preferential rights (i.e. right to bequeath land/ 'property' to the next of kin) exerts a positive impact on households' adoption of all three SLM investments but only significant in the tree planting model (Table 7.4). In line with expectations, households are more likely to invest in on-farm tree planting in plots they exercised preferential rights in land. This latter finding is not uncommon in the literature (see Owubah et al. 2001; Zhang and Owiredo, 2007; Dzanku, 2008; Twerefou et al. 2011; Kabubo-Mariara and Linderhof, 2015). It highlights the importance farmers attributed to the right to bequeath or gift land (in a property rights sense) in their investment decision-making. During the field interviews, some farmers alluded to their ability to transfer farm 'property' to their children and/or spouses upon their demise as a strong motivating factor in undertaking long-term investments like tree planting. A 70-year old farmer from Amokwaosuazo (Ankasa) gave a typical explanation as follows:

"...In my view, what remains important in undertaking any investment on the land is the fact that my children will retain my farm in the event of my death. Considering my age now [70 years], I know I will not live long to enjoy the returns from my tree planting but I undertook it all the same with the assurance that my children will inherit it and enjoy the benefits thereof one day [smiling]" (pers comm. Opanin Cudjoe, Amokwaosuazo-Ankasa, August 2015).

It could thus be inferred from the foregoing that though the quality of land rights matters for security and ultimately investment outcomes, what is really important from farmers' point of view is the specific dimension of land rights. Therefore, to the extent that farmers were assured of their rights to bequeath land to their children and/ or spouses in practice, they would necessarily invest in long-term tree planting irrespective of their (*dejure*) tenure status. Yet, this dimension of perceived tenure security is not adequately captured in theoretical models on the security-investment nexus. This further buttresses the

observation that context-specific proxies (beyond formal individualised titling) are needed to adequately capture conditions of tenure security as they play out on the ground. The above interpretation also finds expression in Besley's (1995) argument that a farmer may not have the formal (*dejure*) right to bequeath, but this does not necessarily imply that he may not be able to bequeath (*defacto*) his land in practice.

Paradoxically, land use restrictions exert a positive influence on the adoption of soil improvement practices but only significant in the soil improvement model (Table 7.3). It was expected that the imposition of restrictions on land use would more likely reduce the investment propensity of households so concerned because such restrictions limit their control regarding land management decision-making. This results seem to give the indication that even short-term investments are tenure enhancing for the extremely insecure (particularly caretaker farmers with precarious tenure) considering that their continuous use of land is predicated on the practice of good land husbandry (see also Sections 6.2 and 6.3.3). Altogether, it can be concluded from the foregoing results that both secure and insecure tenure status can incentivise households' investment in SLM practices albeit through different mechanisms. This challenges earlier assertions that customary tenure arrangements impeded secondary right holders control of production decisions (GoG, 1999; Damnyag et al. 2012; Antwi-Adjei et al. 2015). It therefore follows that other non-tenurial factors operate to influence the perceived (and *defacto*) tenure status of households and ultimately their investment propensity. The ensuing discussion turns attention to the impact of non-tenurial factors on households SLM investment decision-making.

7.5.3 Influence of Extra-Tenurial Factors on Adoption of SLM Investments

Aside from the security-related factors, the overall results in Table 7.6 appear to indicate that a myriad of non-tenurial factors significantly influence households' investment

propensity regarding uptake of SLM practices. These include community membership, gender, age, level of education, access to credit, household size, farm income, number of farm-plots, cooperative membership, distance to plot from homestead, access to extension (agroforestry) support and location characteristics. However, the ensuing discussion primarily focusses on the influence of household socio-demographic (community membership, age, gender and education), physical assets (plot size and number of farms), market (access to credit, cooperative membership and access to extension (agroforestry) support), plot (distance to plot from homestead) and location characteristics as they are widely identified in the literature as important determinants of households' SLM investment decision-making (Kabubo-Mariara, 2006, 2007; Abdulai et al. 2011; Persha et al. 2015; Nyanga et al. 2016).

7.5.3.1 Household Socio-Demographic Characteristics and SLM Adoption

The overall results in Table 7.6 show that the effect of household socio-demographic characteristics on adoption of the three SLM practices (soil improvements, on-farm tree planting and conservation of naturally-occurring trees) is mixed. The coefficient of the community membership variable shows a positive sign in the tree planting and preservation of naturally-occurring trees models but only statistically significant in the latter (Tables 7.4 and 7.5). This gives the indication that migrant households are more likely to maintain naturally-occurring trees in their plots compared to their indigenous counterparts. The foregoing result contradicts the commonly posited view that migrant farmers usually have a short-term planning horizon and therefore tended to invest less in long-term land improvements (like tree preservation) owing to their often-insecure tenure status within the customary tenure system (Abdulai and Goetz, 2011; Codjoe and Bilsborrow, 2012; Zhang and Owiredun, 2007; Place and Otsuka, 2000; Afikorah-Danquah, 1997). Besides, the foregoing is interesting given the evidence that most tenant

farmers deliberately eliminate naturally-occurring economic trees on their farms in order to safeguard against potential crop damage without compensation and/ or conflicts with timber companies when their farmlands are issued as part of timber utilisation contracts (see Asare 2010; Boni, 2005: 2006; Owubah et al. 2001; Section 3.4.2). It also seems to contradict Insaadoo et al.'s (2014) generalisation that investments in on-farm tree planting or conservation in Ghana favours natives with ownership rights more than migrants with less secure property rights. One reason for this contradiction could be attributable to the on-going conservation education and support programmes in the study areas on the importance of integrating trees in particularly cocoa farming systems which has perhaps increased farmers' awareness and motivation in preserving naturally-occurring tree species on their farms (see sub-Section 7.5.3.5).

Indeed, a number of community FGD participants argued that the decision to maintain certain naturally-occurring tree species was mainly based on their knowledge of the usefulness to cultivated crops and livelihoods generally. For instance, common naturally-occurring tree species including *ceiba pentandra*, *milicia excelsa*, *cola nitida*, *terminalia ivorensis*, *altsonia boonei* and *raufvolfia vomitoria* were selectively maintained by farmers because of their shade (in case of cocoa), prevention of soil erosion, food, building and construction, medicinal and fuelwood attributes. Thus, to the extent that the above-mentioned attributes are important to households implies that they would necessarily preserve some natural regeneration trees species irrespective of their tenure status (cf. Otsuka and Runge, 2014; Otsuka and Place, 2014).

As regards gender of household decision-maker variable, the coefficient shows a negative sign in the soil improvement and tree preservation models but the reverse in the case of on-farm tree planting. This result was however statistically insignificant suggesting that farmers' decision to invest in SLM practices was regardless of their gender.

The age of household decision-maker variable was found to have a significant negative relationship with SLM adoption in every model (Table 7.6). It therefore follows that older farmers are less likely to adopt SLM practices relative to their younger colleagues. For instance, an additional year in the age of household decision-maker lowers the odds of investment in on-farm tree preservation by 2.6%. This result is interesting given that the growing land scarcity vis-à-vis the complexities in gaining access to farmland by the youth in the study regions (see Sections 5.6 and 5.7.1). Besides, the foregoing results also seem to contradict some observations in the literature that older farmers tended to invest more in land because of their long experience and more accumulation of capital over time relative to their younger colleagues (Persha et al. 2015; Dzanku, 2008; Zhang and Owiredu, 2007). Concerning long-term SLM investments (on-farm tree planting and conservation), the foregoing results is not surprising to the extent that on-farm tree planting measures are characterised as cost-intensive with long payback periods which perhaps dissuaded older farmers from adopting such new technologies given their often short-term planning horizon (and/ or risk averseness) vis-à-vis the prevailing uncertainties associated with tree benefit-sharing arrangements in the study regions and Ghana generally (see sub-Section 7.5.2.2). To the extent that younger farmers cultivate land for a longer time, perhaps imply that they are better-positioned to benefit from the returns from investment in long-term tree planting, and therefore more likely to invest in such an activity.

Except for secondary education, none of the formal education dummies were found to significantly influence households' investment decisions on SLM adoption. Interestingly, farmers who had attained secondary education are less likely to invest in SLM practices relative to those with no education contrary to a priori expectation. This finding contradicts observations in the literature that households with high human capital tended

to invest more in land improvements as they may have relatively better access to relevant information, technologies and other off-farm opportunities which increases their investment propensity (Owubah et al. 2001; Kabubo-Mariara, 2006; Abdulai et al. 2011; Kassie et al. 2013; Fentie et al. 2013). During the qualitative interviews, some respondents observed that ‘highly educated’ farmers mostly engaged in other off-farm economic activities (as teachers, forestry guards, extension agents etc.) which yielded additional income thereby minimising their overall dependence on their farming work relative to those with no education who are totally reliant on their farming work.

7.5.3.2 Household Assets and SLM Adoption

The overall results in Table 7.6 suggest that household asset variables are important for adoption of SLM practices. Specifically, the results show a significant positive association between the size of the farm-plot and SLM investment in every model except the preservation of naturally-occurring trees model (Tables 7.5 and 7.6). As expected, short-term soil improvements (fertiliser application and manuring) and long-term preservation of natural regeneration trees are more likely to be undertaken in larger farms relative to smaller ones. Taking short-term productivity-enhancing soil improvements, for instance, an additional acre of farmland (plot size) increases the odds of investing in soil improvements by 5.7%. The foregoing results thus finds some expression in Otsuka and Place’s (2014) observation that increasing population pressure vis-à-vis limited cultivable land and declining soil fertility has led to intensification of farming systems in many parts of sub-Saharan Africa, which necessitates sustained investments in land improvements.

Concerning the preservation of natural regeneration trees, whereas the above finding is consistent with that of Abdulai et al. (2011), it contradicts those of Zhang and Owiredua (2007) and Dzanku (2008) who found an inverse relationship between plot size and

plantation investments in Ghana. As suggested previously (sub-Section 7.5.3.1), farmers' decision to conserve naturally-occurring trees in their farm-plots was largely predicated on the usefulness of such trees to their welfare in terms of provision of shade (for cocoa crops), food, building materials and fuelwood. This tends to give the indication that households' investment in tree preservation on their plots is based on whether the opportunity cost of forgone benefits on the said plots is lower than the benefits they derive from conserving trees. Yet, as observed by some FGD participants, the size of their farms also remains an important factor in ultimately deciding the number of trees to conserve in respective plots. To the extent that households with smaller plots find it more difficult to diversify their land use because of size constraints, it implies that those with larger plots may be better positioned to engage more in on-farm tree conservation investments. This observation is even more compelling when the number of plots cultivated is considered.

As evidenced in Table 7.6, the overall results indicate a significant positive association between the number of plots and investment in natural regeneration tree preservation. This implies that households that have more than one plot are more likely to conserve natural regeneration trees than those with only one plot. Owubah et al. (2001) found similar evidence in the forest belt of Ghana where the establishment of forest plantations tended to be influenced by the number of plots households cultivated. The above finding further buttresses the observation that households operating fewer plots may regard the conservation of naturally-occurring trees (which is land-intensive and non-productivity-enhancing) as a secondary investment option insofar as it is a trade-off with crop productivity.

7.5.3.3 Market Factors and SLM Adoption

Market factors are observed to have different impact on households' adoption of SLM practices relative to non-adoption. The overall results indicate that the effect of the access to credit variable on adoption of SLM practices is mixed. On the one hand, access to credit is positively associated with adoption of short-term productivity-enhancing soil improvements practices (fertiliser application, soil bunding and mulching) but statistically insignificant overall. Conversely, the access to credit variable exerts a significant negative effect on adoption of long-term SLM practices (tree planting and preservation of naturally-occurring trees). Contrary to *a priori* expectation, this latter result suggests that households with access to credit opportunities are less likely to engage in long-term SLM practices in their plots. This finding is surprising to the extent that that access to credit opportunities by farmers is commonly believed as plausible avenue to stimulate their investment propensity (Kassie et al. 2015; Section 2.6.2). The limited availability of credit opportunities in the study areas and rural Ghana generally as previously indicated could probably explain the above contradiction (see Section 2.6.2). Besides, the fact that majority of the households surveyed (83%) self-financed their farming activities vis-à-vis the cost-intensive nature and attendant uncertainties of tree planting perhaps dissuaded most households from investing altogether. Furthermore, it was gathered from the informal interviews that households tended to use such credit facilities, if available, to settle their immediate livelihood and other social imperatives (like health, education, funeral and marriage ceremonies etc.) before considering investment in long-term non-productivity related SLM practices (on-farm tree planting and conservation of naturally-occurring trees) which are perceived as secondary.

Cooperative membership is positively associated with adoption of all the three SLM investments but only statistically significant in the on-farm tree planting model (Tables

7.4 and 7.6). Thus, households that belonged to farmer groups or cooperatives are more likely to adopt on-farm tree planting as they tended to have greater access to relevant information on new opportunities and technologies compared to their counterparts with no group affiliations (Abdulai and Goetz, 2014; Kassie et al. 2015; Nyanga et al. 2016; Kirui, 2016; Hayami and Ruttan, 1985; Otsuka and Runge, 2014).

Likewise, access to extension support services proxied by willingness to invest in agroforestry (if supported) variable showed a significant positive effect on households' investment in on-farm tree planting (Table 7.4). As expected, this result suggests that households with access to extension support services such as provision of tree saplings and information on tree intercropping are more likely to engage in tree planting than households with no access to such services. This finding somewhat confirms the claim by some studies that farmers with access to extension support services tended to invest more in SLM practices (Owubah et al. 2001; Insaiddoo et al. 2014 and Nyanga et al. 2016).

Altogether, the foregoing results underscore the view that compensating for market imperfections (e.g. SLM technology-related information, profitability, labour etc.), access to support institutions (including participation in farmer cooperatives) might engender the requisite incentives needed to stimulate widespread investments in SLM practices in Ghana and SSA generally.

7.5.3.4 Plot Characteristics and SLM Adoption

As regards plot characteristics, the overall results show that the distance to farm-plot is important for households SLM investment decision-making. The coefficient of the distance to plot from homestead variable is positive across all three SLM investment (soil improvement, tree planting and preservation of natural-occurring trees) but only statistically significant in the adoption of soil improvements model (Tables 7.3 and 7.6).

This result contradicts both theory and the *a priori* expectation that farmers with plots farther away from their place of residence are more likely to invest less (relative to nearby plots) given that the opportunity cost of transportation of labour and farm inputs increases (Gebremedhin and Swinton, 2003; Fentie et al. 2013). A possible explanation for this finding could be that respondents in both Kakum and Ankasa lived within a mean distance of 1.35 and 2.58 km from their farms which perhaps afforded them the opportunity to attend to their farms irrespective of their location. It was also gathered from informal discussions with key informants that those farmers who lived further away either appointed caretakers or personally paid equal attention to both their distant and nearby farms in order to safeguard against possible threats to their *de facto* tenure security through encroachment and/ or expropriation. This latter interpretation is further supported by the fact that poor land husbandry and land abandonment are perceived as valid grounds for the loss of land rights in the studied communities (see Section 6.3.3). The foregoing also highlights the interaction between other extra-tenurial considerations and *de facto* conditions of tenure which operated in tandem to influence the ultimate household SLM investment decisions in the study regions.

7.5.3.5 Locational Characteristics and SLM Adoption

Location dummy variable which was included in the regression models (Tables 7.3-7.5) to capture study area specific effects on SLM investments showed a significant positive association with all the SLM practices except for on-farm tree planting. This means that households in Kakum are more likely to invest in soil improvements relative to households in Ankasa (Table 7.3 and 7.6). Plausibly, the regional differences may be attributable to the micro-climate conditions as the semi-equatorial zone within which Ankasa is situated experiences relatively high rainfall than all the other ecological zones in Ghana. It therefore stands to reason that Kakum's location within the dry equatorial

zone (characterised by relatively warm and dry climatic conditions) may require more soil improvement measures. Alternatively, to the extent that older farms required more investments in soil improvements in order to replenish fertility (for increased productivity), farmers in Kakum relative to Ankasa were more likely to implement soil improvements considering the average farm age of 15.4 and 13.0 years respectively. Similarly, households in Kakum may require more investments in the preservation of naturally-occurring trees in their cocoa farms in order to provide sufficient shade. This inference derives from observations by some studies that the promotion of agroforestry schemes remains necessary in maintaining a conducive micro-climate particularly for cocoa development in Ghana (Gockowski et al. 2011).

Regarding on-farm tree planting, however, the overall results seem to indicate that that households in the Kakum region are less likely to invest in on-farm tree planting relative to households in the Ankasa region (Tables 7.4). This result may not be surprising considering the various tree planting initiatives and conservation-related programmes that were on-going in Ankasa which perhaps spurred farmers' interest and equipped them with the requisite technical knowledge and support engage in tree planting (see Figure 7.2). This highlights the importance of extension and other community-based support programmes in the dissemination and application of relevant information on agroforestry among farmers. Alternatively, given the severity of the land shortage problem vis-à-vis the fact that sampled farm sizes were on average smaller in Kakum (8.66 acres) relative to Ankasa (11.99 acres) could also explain the regional difference regarding the adoption of on-farm tree planting as an SLM strategy (see Section 5.6).



Figure 7.2: Evidence of a community tree nursery support project at Ohiamadwen village in the Ankasa region established to provide farmers with a variety of tree saplings to plant on their farms.

Altogether, the foregoing results seem to indicate regional differences regarding adoption of SLM investments which further underscores the importance of context-specific approaches in order to avoid the risk of masking key location-based differences in households' land use investment dynamics through extrapolating from empirical data. As evidenced by the foregoing results, even within a country, the land management dynamics are complex let alone between countries.

7.6 Summary

The chapter sets out by underlining that sufficient contextual understanding of the role of tenure (in)security (under local land use arrangements) in shaping households' investment decisions is critical in formulating effective strategies towards widespread adoption of SLM practices in order to mitigate environmental degradation problems in Ghana and SSA generally. In this light, the foregoing analysis investigated the linkages between land tenure arrangements and households' investment decision-making regarding uptake of SLM practices at the farm plot-level. This is against the backdrop of the neoclassical

economic theory postulation that well defined and secure land rights (tenure security) leads to enhanced investment incentives.

Notably, the current spate of environmental degradation in the studied communities was largely attributed to anthropogenic causes of which tenure insecurity was identified as key contributory factor. For instance, the analysis shows that 87% and 79% of respondents interviewed in Kakum and Ankasa respectively agreed or strongly agreed to the statement that tenure insecurity constitutes a major underlying cause of environmental degradation in their communities.

With respect to households' investment strategies, the findings suggest that a number of SLM practices (including soil improvements, on-farm tree planting and preservation of natural regeneration trees) are currently being promoted as remedial measures in order to reverse environmental degradation in the study areas. Depending on the type of SLM investment, however, there are a number of important factors influencing households' adoption of these measures. The descriptive and econometric analysis indicate that tenure security is indeed important for adoption of SLM practices, particularly long-term tree planting (see Sections 7.2 and 7.5.2). Nonetheless, the econometric analysis also demonstrates that other (*de facto* and/ or *perceived*) security-related factors (like duration of plot use, socio-political status, previous land dispute) other than possession of documentation and individualisation of land rights tend to play an influential role in households' investment in SLM practices in the study areas. For instance, the duration of plot use (*de facto* security) and socio-political status of households combine to improve (*perceived*) tenure security and ultimately investment decision-making even without formal land titles (see sub-Sections 7.5.2.2 and 7.5.2.3). While this is not to downplay the relevance of formal land titling in bolstering the (*de jure*) tenure security of rural landholders, it raises fundamental questions as to the narrow definition of tenure security

as formal individualised land titling without taking due-cognisance of other contextual factors within the local socio-political system that operate to positively influence security (cf. Van Gelder, 2010; Simbizi et al. 2014). It therefore follows that without consideration of such contextual security-related factors, users of non-registered farmlands for example, could be labelled as insecure invariably leading to wrong policy prescriptions on formalisation and perhaps causing further uncertainties (cf. Ayamga et al. 2015). This may well explain why decades of implementation of land titling programmes in SSA have failed to realise the desired objective of improving tenure security. It is therefore germane that land policy interventions are designed in a way that is sensitive to these contextual factors (that contribute to the *defacto* and perceived dimensions of landholders' tenure security) in order to comprehensively address issues of tenure insecurity as manifested on the ground (see Sections 2.5.1 and 2.5.2).

Importantly, the chapter highlights that the land tenure security and investment nexus is not straightforward but complex embedded within the broader geographical, institutional and social-cultural context. Aside from the security-related variables (tenure security), other non-tenorial factors (including socio-demographic factors, access to credit opportunities and targeted extension support services) also significantly influence household investment decisions (see sub-Sections 7.5.3.1-7.5.3.5). Yet, these important non-tenorial factors are hardly the focus of discussion and continue to remain at the fringes of the current policy discourse on sustainable land management in Ghana. This finding lends empirical support to Bugri (2008) and Lawry et al.'s (2014) argument that tenure security alone is not a sufficient condition for achieving sustainable land management in the sub-Saharan African context. As the chapter further demonstrates, the degree of importance households attached to informal land documentation (proxy for legal security) in safeguarding their land rights, on the one hand, has a significant positive

effect on their adoption of long-term on-farm tree planting. Conversely, the possession of informal documentation (evidencing ownership/ use of farm-holdings) showed a significant negative association with households' investment in short-term productivity-enhancing soil improvement practices (see sub-Section 7.5.2.1).

The markedly different effects of informal documentation on households' adoption of SLM practices seems to underline the extent to which the legal dimension of tenure security shapes households' investment decision-making which might not necessarily lead to enhanced investment incentives. Thus, while improving *dejure* rights of ownership or use may contribute towards bolstering the perceived (and/ or *defacto*) security of landholders, solely focussing on the legal dimension of tenure security risks overlooking other important contextual factors that might contribute to insecurity (from a *defacto* security perspective), ultimately reducing the investment propensity of households (see sub-Sections 7.5.2.2 and 7.5.2.3). As evidenced in sub-Sections 7.5.2.2 and 7.5.2.3, the existence of other impelling contextual factors such as previous land dispute, imposition of land use restrictions and the socio-political status of individual household members within the local socio-political system interact to influence the perceived (social) legitimacy and *defacto* situation of the land rights of respective households.

It therefore follows from the foregoing that more nuanced and flexible analytical approaches that accommodate the complexity and diversity of local land use arrangements remain necessary in order to better understand, on the one hand, what constitutes tenure security within a particular socio-political context and, on the other hand, how the different dimensions of tenure security interact to differentially shape household investment decision-making. In the same vein, policy-makers in their design and implementation of development interventions should focus attention to these non-

tenurial factors (that will enhance market performance) whilst simultaneously problems of tenure insecurity (from the tripartite tenure security perspective) in order to engender the appropriate incentives to promote widespread adoption of SLM practices (as a panacea to environmental degradation problems) in rural Ghana and SSA generally. Without the institution of such broad-based and inclusive measures to tackle the barriers to extension/ conservation support services and other market imperfections (including the availability, technical and economic viability of respective SLM technologies, see Section 2.2) then the current policy focus on enhancing (*dejure*) tenure security (via rural land titling programmes) as plausible avenue to achieving the theoretical benefits of rural livelihood security and investment in sustainable land management may ultimately fail. The succeeding chapter discusses in much detail the policy implications of the above findings as well as advances some suggestions towards adequately capitalising on relevant contextual factors that contribute positively to the *defacto* (and/ or perceived) tenure security under local land use arrangements to stimulate investment in sustainable land management.

CHAPTER EIGHT

SUMMARY, CONCLUSION, POLICY IMPLICATIONS AND RECOMMENDATIONS

8.1 Chapter Overview

“Any land reform process that will resolve the problems long into the future will take time, dedication and commitment of huge resources...Place the poor, hungry and deprived people at the top of the pyramid and ensure their rights of access to land are fully protected within whatever structure is derived at. Neither a pure titling solution nor a pure communal system will ensure this. The power-hungry and greedy are present in both” (H.E. Jerry John Rawlings, Former President of Ghana, April 2009).

The overarching goal of this thesis was to contribute to the complex debates about the alternative pathways to securing land rights in Ghana. In particular, the thesis focuses on the challenges and opportunities that are associated with the successful harmonisation of the disparate customary and statutory tenure structures for improved tenure security and sustainable land management at the local level. It sought to provide answers to the questions concerning whether customary tenure arrangements provide viable prospects for tackling the twin challenge of tenure security and sustainable land management in the face of increasing land scarcity and commodification. By focussing on rural Ghana, a systematic examination of the nature of customary tenure institutions and arrangements as well as the socio-political dynamics that undergird them in a constantly evolving context affords a critical entry point for exploring plausible avenues of improving security of customary land rights towards equitable and sustainable land management. Consequently, the central argument of this thesis is that sufficient understanding of customary tenure arrangements and institutions within their local socio-political contexts is necessary in designing and implementing context-specific interventions towards their successful adaptation for improved tenure security and sustainable land management.

Against this backdrop, the central question that this study examined was whether, how and to what extent customary tenure arrangements and institutions are dynamic and adaptable in guaranteeing sufficient security of access and tenure, and the associated implications for rural livelihoods and investments in sustainable land use? This main research question was further broken down into sub-questions to afford the ease of adducing appropriate and sufficient answers. Thus, through analysis of collated empirical data and review of the relevant literature on Sub-Saharan Africa generally, and on Ghana specifically, these sub-questions guiding the study were addressed accordingly (Table 8.1). The remainder of this last chapter is divided into four main sections as follows: Section 8.2 summarises the key findings and conclusions of this research and its contribution to theory and knowledge. In so doing, the empirical data analysed and discussed in Chapters 5 through to 7 are related to the broad literature review in Chapters 2 and 3. The next section (Section 8.3) attempts an answer to the overarching research question based on the key research findings of the study presented. Section 8.4 then outlines the main contributions of this study. Afterwards, a discussion on the policy implications of the findings and suggestions for the way forward in the context of the case study areas specifically, and the rest of Ghana and SSA generally is also presented (Section 8.5). The final aspect of the chapter outlines avenues for future work (Section 8.6).

Table 8.1: Summary of research objectives, questions and specific aspects of the thesis where they are primarily addressed.

Research Aim: Use an exploratory case-based approach to improve understanding of the dynamics of land tenure arrangements that determine access to and control of land, in order to contribute towards identifying the challenges and opportunities for effective adaptation of customary and statutory tenure structures to deliver tenure security and sustainable land management in rural Ghana.		
Research Objectives	Research Questions	Key Chapters and Most Relevant Sections
RO1. Examine the patterns of land ownership, distribution, mechanisms and processes of access to and control of land access mechanisms by the various social groups within the evolving local tenurial context in the study areas.	RQ1.1 What patterns of land ownership, distribution, and access mechanisms currently exist in the study areas, and how are these being shaped by the shifts in the local land tenurial arrangements?	• Chapter 5 • Sections 5.2, 5.4 and 5.5
	RQ1.2 How and to what extent are the shifting customary land tenure arrangements influencing variations in land rights among different social actors (farmers) in the study areas?	• Chapter 5 • Sections 5.7.1, 5.7.2 and 5.8
RO2. Determine the perceptions of different key social groups about land tenure security, the factors informing such perceptions and assess how these influence their investments in sustainable land management practices.	RQ2.1 How do various categories of farmers perceive and define their land tenure security?	• Chapter 6 • Section 6.2 and 6.3.1
	RQ2.2 What are the variations and sources of tenure (in) security and how do these differentially influence farmers' investments in sustainable land use and management?	• Chapter 6 • Section 6.4 • Chapter 7 • Sections 7.4.1, 7.5.2 and 7.5.3
RO3. Evaluate the challenges and prospects of the changing dynamics of customary tenure arrangements in relation to enhancing security of tenure and the implications for livelihoods and sustainable land management.	RQ3.1 How and to what extent are customary tenure institutions responding to problems of tenure insecurity and associated conflicts in the study areas, and what are the implications for promoting security of access and tenure for sustainable land management?	• Chapter 5; Chapter 6 • Sections 6.6.1, 6.6.3 • Chapter 7; Chapter 8 • Sections 8.2.5 and 8.5.1
RO4. Make appropriate suggestions towards promoting security of access and tenure and sustainable land management for sustainable development.	Considering the above research questions, what are the implications of study findings for safeguarding security of rural land rights, livelihoods and sustainable land management in Ghana?	• Chapters 8 • Sections 8.5.1 and 8.5.2

Case study – Kakum & Ankasa Conservation Areas, Ghana

Source: Author's Construct

8.2 Summary of Major Findings

Table 8.1 shows the summary research structure and which specific chapters and sections addressed the research objectives and questions. It is therefore intended in this section to elaborate on the table by highlighting the major findings of the study to assess the extent to which the formulated objectives in the introductory chapter were successfully achieved.

8.2.1 Changing Patterns of Land Ownership, Access Mechanisms and Processes

The first objective of this study was to examine the patterns of land ownership, access and control by the different social groups and how these have been shaped by the ongoing shifts in customary tenure arrangements. As established in the broader literature review in Chapters 2 and 3, local customary tenure arrangements in the study areas and Ghana generally are indeed evolving (from communal arrangements) towards individualised land ownership based on marketisation. A myriad of factors including the imposition of colonial laws and policies, demographic changes, urbanisation, socioeconomic and cultural changes have contributed to this evolutionary process (see Sections 2.3.2, 3.4.2 and 3.4.3). Yet, the emergent changes in customary tenure arrangements towards individualisation are far too complex (traversing the domains of land ownership, access and control) than the often-assumed linear conceptualisation by the evolutionary theory of land rights (see Sections 2.3, 5.2, 5.4 and 5.5). With regards to land ownership and control, the results revealed (see Section 5.2) that majority of respondents perceived the allodial or ultimate title in customary land to be vested in the *Omanhene* (88%) and Divisional Chiefs (89%) to be vested with the highest title in customary land in Kakum and Ankasa respectively. Even so, a relatively high proportion of respondents in Kakum (37%) and Ankasa (35%) respectively identified individuals/ *Odikro* as the most influential authority over land use and management. The findings of this study

corroborate Abdulai and Ndekugri's (2007) finding that customary land tenure permits individual land ownership and more broadly Otsuka et al. (2003) and Kasanga and Kotey's (2001) observation that there have been important evolutionary changes in the land ownership and control structures in Ghana (see Section 5.2). The above findings have implications for the concept of land ownership as understood in the African context. To the extent that land ownership is recognised as belonging communally instead of the individual, then it implies that the legal formalisation of customary land rights through land titling need to take cognisance of the multiple rights subsisting in land. Without this, then registration of individualised rights risk dampening the tenure security of other usufruct land users or usurping their rights in land altogether (see Section 6.6.3).

Contrary to the mainstream egalitarian view of customary tenure arrangements, the results of this study demonstrate that the emerging patterns of land access and control (based on individualisation and marketisation) have resulted in differentiation and difficulties in access to land especially by the poor and vulnerable social groups including women and the youth in the studied communities (see Sections 5.7.1, 5.7.2 and 5.8). Yet, the empirical results of this study further established that the self-transformation or dynamism of local customary tenure arrangements is inadequate in addressing issues of challenges in access to and control of land particularly by the vulnerable social groups (see Section 5.7.1). This is evidenced by the opportunities created in the emergent tenurial relations for some traditional authorities and local powerful elites to advance their individual interests at the expense of vulnerable groups thereby resulting in a situation of winners and losers (see Sections 5.5.1, 5.5.2, 5.6 and 5.7.1). It can therefore be concluded that the emergent changes in conditions of access and control of land by the different social groups is not intrinsic in the local customary tenure system *per se* but largely products of manipulations by some traditional authorities and local powerful elites exploiting the new opportunities

(afforded by marketisation) for their own parochial interests (Boni, 2005; Yaro and Zackaria, 2008).

8.2.2 What constitutes Land Tenure Security?

A central objective of this study was to determine respondents' views on what constitutes land tenure security and factors affecting its operationalisation in the study areas. Although there is a widespread consensus on the importance of land tenure security, scholastic viewpoints differ on how tenure security can be achieved and operationalised to benefit the rural poor especially in the sub-Saharan African context, including Ghana (see Section 2.5). The findings of this study indicate that contrary to the mainstream view of the lack of tenure security under customary tenure arrangements, the perceived tenure security of respondents was generally high in both Kakum and Ankasa despite the ongoing tenurial transformations (see Sections 6.3.1 and 6.3.2). For instance, patterns in Kakum and Ankasa are very similar, and on average 563 plots (representing 74% of the total 763 plots surveyed) were described as secure/ totally secure with the remaining (26% or 200 plots) being insecure/ extremely insecure (see Section 6.3.2). Kasanga and Kotey (2001) and Bugri (2008) arrived at similar findings relating to the security of customary land tenure arrangements in other parts of Ghana. This highlights the existence of different sources of tenure security (legal and *de facto* sources) shaped by different contextual factors including length of occupation of land, socio-political connections and social recognition. These different contextual factors constitute the social legitimacy of customary land rights which ultimately contributes to tenure security. This study therefore supports the view that there is more to tenure security than just legal assurance through the issuance formal or individualised land titles (cf. van Gelder, 2010; Broegaard, 2013; van Asperen, 2014; Lawry et al. 2014). Based on the findings of this study it can be concluded that customary tenure arrangements can provide reasonably high level of

(*defacto*) tenure security with the landholding community acting as the source of security. This presupposes that the absence of formalised land titling does not necessarily equate to tenure insecurity which calls into question the narrow framings of tenure security as possession of formal land titles. The above findings of this study have important policy implications for Ghana's ongoing land administration reform which appears to favour systematic rural land titling as a pathway to improving (*dejure*) tenure security towards increased investments in customary land (see Section 8.5.1). Theoretically, to the extent that other contextual factors (social recognition of land rights) is important in achieving (*defacto*) tenure security, then it underlines the need for a more nuanced conceptualisation of tenure security (beyond the classic discussion on individualisation and legal security) to sufficiently capture different situations of tenure (in) security and other important contextual factors influencing same, especially in customary dominant rural regions.

8.2.3 What Matters for Households SLM Investment Decisions – The Tenure Security and Investment Nexus

Part of this study sought to investigate and evaluate how land tenure differences (tenure security) influence or shape households' land management decision-making and pursuit of different investment strategies at the farm plot level (see Chapter 7). This is against the backdrop of neoclassical economic theory positing a definitive link between well-defined and secure land (property) rights and enhanced investment incentives (see Sections 2.6.1-2.6.4). The findings of this study demonstrate that different types of SLM investments (including soil improvements, on-farm tree planting and preservation of natural regeneration trees) were undertaken by farmers, even by those who perceived their tenure status as insecure. Though the results of the study established that formal (legal) tenure documentation is considered important for guaranteeing certainty and greater tenure security (see Sections 6.2, 6.3.2 and 6.6), depending on the type of SLM

investment, several other important factors influenced farmers' uptake of these measures. For instance, the findings of this research show that other (*defacto*) security-related factors such as duration of plot use, socio-political status, other than possession of legal titles and individualisation of land rights tend to play an influential role in households' investment decision-making in the study areas (see sub-Sections 7.5.2.2, 7.5.2.3, and 7.5.3). This further emphasises the point that it is not only legal security (through land titling or registration) that determines investment, but in rural contexts like the study areas, *defacto* recognition of land rights was sufficient to stimulate the uptake of various SLM practices, especially those with short payback periods like soil improvement practices.

Apart from the security-related factors, the findings of this research also indicate that other important non-tenurial factors (including socio-demographic factors, access to credit opportunities and targeted extension support services) also significantly influence investment decisions (see Section 7.5.3). It therefore follows that it is difficult to conclude a priori cause and effect relationship between tenure security and enhanced investment incentives as they are embedded within a complex geographic, institutional and socio-political context. The significance of this finding cannot be overemphasised. To the extent that other non-tenurial factors are chiefly responsible for the current spate of environmental degradation, invariably implies that improved tenure security occasioned by the harmonisation of customary and statutory tenure institutions may not automatically engender the appropriate incentives to stimulate investments in SLM practices. This study therefore supports the view that whilst legal formalisation of customary land rights is necessary towards creating sufficient tenure security, addressing other important contextual (extra-tenurial) factors that constrains investments in practice also remain crucial (see Section 8.5.1). As Broegaard (2013) argues, formal land titles only create

tenure security in combination with other important contextual factors. Without considering these other important factors, formal land titles may be less useful to a landholder in terms of engendering tenure security and by extension investment incentives. This somewhat explains why previous policy interventions have failed to deliver the desired outcomes of improving tenure security and engender appropriate incentives to stimulate investments in agricultural productivity and SLM practices in Ghana. The conclusion that emerges from evaluating the present research findings is that the existing customary tenure system in the study areas *per se* is not a significant barrier to agricultural investments and adoption of SLM practices. Therefore, whilst legal formalisation of customary land rights is necessary to bolster pre-existing *defacto* security provided by customary tenure arrangements, it is nevertheless not a sufficient condition for households' investment in SLM practices towards addressing environmental degradation in the study areas and Ghana generally.

8.2.4 Building on Customary Tenure Arrangements – Challenges and Opportunities

As established in the foregoing, customary tenure arrangements offer a great potential for securing rural land rights in recognition of which contemporary scholarship on land tenure in SSA have highlighted the need to build on customary tenure arrangements at the local level. Yet the findings of this study demonstrate that the process of harmonising customary and statutory tenure structures could be stifled by a myriad of challenges including protracted chieftaincy disputes and conflicts over land ownership (see Sections 5.2 and 6.4). Given the existing contestation over the ownership of customary land at the chieftaincy level in parts of Ankasa and Kakum, there is the underlying tendency that government's intention of ceding greater control over customary land in traditional authorities as part of the broader agenda of building on customary tenure arrangements could rather operate to escalate these disputes (see Sections 5.3 and 6.4). Besides, the lack

of permanent land boundaries and the undocumented nature of land rights also have propensity to trigger (latent) land disputes and perhaps loss of land rights of the poor and vulnerable social groups especially in the wake of growing land scarcity and commodification (see Sections 6.4.1 and 6.4.1.1). The resolution of these chieftaincy disputes and conflicts over allodial ownership, customary land demarcation and recording of land rights remain critical first steps in improving the certainty of land ownership in the study areas (see sub-Section 8.5.2.1). Furthermore, another imminent challenge relates to the existing power imbalances vis-à-vis the increasing marketisation of access arrangements which have created seeming spaces for the manipulation and abuse of chiefly authority to the detriment of the poor and vulnerable social groups (see Sections 5.7 and 5.8). This therefore suggests that addressing issues such as transparency, accountability and fairness in customary decisions regarding land-use and allocative decision-making is crucial to ensure efficient customary land delivery and safeguard the interests of the poor and vulnerable social groups (Arko-Adjei, 2011).

The findings of this thesis also highlight some existing opportunities within local customary tenure arrangements which could be exploited to facilitate their integration into the statutory tenure system. Within this purview, the traditional dispute resolution mechanisms appear to hold much promise in this regard. The overwhelming preference of traditional mechanisms for land dispute resolution rather than the state courts (98% and 90% of respondents in Kakum and Ankasa respectively) is a testament of the strong social legitimacy enjoyed by local customary tenure arrangements regarding land dispute resolution. Reasons adduced for the high stated preference of traditional dispute resolution included accessibility, in-depth knowledge of local tenorial issues by customary authorities, inexpensive and expeditious settlement of disputes and public image (see Sections 6.4 and 6.5). It therefore follows that the traditional dispute resolution

mechanisms could be supported and strengthened (particularly in terms of procedural equity and enforcement of decisions) as way of facilitating their integration into the formal dispute resolution system. In this view, the ongoing efforts by the Ghana Land Administration Project (LAP) in collaboration with the Ghana Judicial Service to support the creation of CLS internal dispute resolution forums through ADR are steps in the right direction (see Section 6.5.1).

8.2.5 Local Strategies for Improving Certainty and Security of Land Rights

Following the rapid transformation of local tenurial arrangements more in favour of individualisation based on market ideologies as discussed in Section 8.2.1, it was also important to investigate how and the extent to which customary tenure institutions are responding to problems of insecurity and associated conflicts in the studied communities. This is against the backdrop of widespread concerns as to the efficacy of customary tenure institutions in adequately addressing problems of insecurity, especially amongst the poor and vulnerable social groups (see Section 2.7). The findings of the study demonstrate that the institutional arrangements for safeguarding land rights under customary tenure system are dynamic evidenced by the introduction of informal (extra-legal) written documentation practices including allocation notes, written agreements, stool land receipts etc. as a response to local problems of tenure insecurity and conflicts over land. Thus, evaluating the findings of this study it can be concluded that local communities amid ongoing transformations are capable of innovating solutions to their problems. Nonetheless, it is also evident from the present study that customary tenure mechanisms alone are insufficient in safeguarding the security of rural land rights, especially those of the poor, women, migrants and the youth. The fact that a high proportion of respondents (98% and 95%) cited preference for statutory tenure from a legal security point of view is a testament of their desire to further bolster the pre-existing (*defacto*) security they

already enjoy under local tenure arrangements (see Sections 6.2). The above findings have far-reaching theoretical and policy implications. To the extent that such informal written documents are admissible as ‘sufficient’ proof of land ownership or use, then it implies that elaborate land titling may not be necessary in all rural contexts (see Sections 6.6.1, 6.6.3 and 8.5.2.1). Therefore, building on such informal written documentation practices may be a more pragmatic, inexpensive and socially legitimate approach in the legal formalisation of customary land rights, especially in rural contexts where local tenure arrangements already provide a reasonable level of (*defacto*) tenure security. This derives from the understanding that top-down approaches that neglect existing local tenurial practices and processes may be inadequate in engendering institutional change. However, as the section on future work (see Section 8.6) highlights, this contention requires a detailed empirical investigation before operationalisation.

8.3 Answer to the Main Research Question

The foregoing discussion has laid the background for answering the main research question: whether, how and to what extent customary tenure arrangements and institutions are adaptable in guaranteeing sufficient security of access and tenure, and the associated implications for investments in sustainable land use?

In this light, the present study has established that customary tenure institutions and arrangements are indeed dynamic in proffering responses to local challenges of land access and insecurity. This is evidenced by the fact that customary tenure institutions have constantly evolved over time in response to changing social, economic and political processes. Yet, as established in this study, the efficacy and capability of customary tenure arrangements and institutions to ensure equitable access to land and safeguard the security of land rights of the poor and vulnerable social groups (including women and the youth) in the face of growing land pressures and commodification is questionable.

Though the ongoing transformations in local tenurial dynamics have deep historical roots (dating back to the colonial era), the recent spate of growing land scarcity, advancing commodification and individualisation in rural areas are on one hand, increasingly creating new avenues for opportunism (elite capture) by the rich and powerful local elites, and on the other hand, heightening difficulties for the poor and vulnerable social groups. Despite customary tenure institutions engendering responses to problems of tenure insecurity and access through for example, informal written documentation and short-term grants to migrants, these solutions are inadequate and subject to several limitations. Considering the poor and vulnerable social groups, to the extent that limited safeguards have been put in place invariably implies that they are left to the whims and caprices of market forces in their quest to access land (cf. Anyidoho et al. 2008). This notwithstanding, the present study has also demonstrated that customary tenure arrangements and institutions have potential to effectively administer land and safeguard tenure security of land rights with the requisite institutional support in governance and capacity building (cf. Kasanga and Kotey, 2001; Blocher, 2006; Arko-Adjei, 2011; Bugri, 2012). This is highlighted by the fact that local tenurial arrangements to some extent have also prove capable of providing a high level of tenure security (based on *defacto* recognition of rights) even without state intervention through formal land titling (see Sections 6.3.1, 6.3.2, 8.2.2 and 8.2.5). It therefore stands to reason that current market-based land (tenure) reforms aimed at enhancing tenure security (through legal formalisation of customary land rights) can only be effective to the extent that they are designed and implemented in a manner that builds on pre-existing local dynamics that contribute positively to tenure security whilst progressively addressing any undesirable distributive effects particularly on the poor and vulnerable social groups. In addition, the study has shown that aside from tenure security other impelling contextual factors as

discussed in Section 8.2.3 operate to significantly influence households' investment decisions regarding adoption of SLM practices. This highlights the need for inclusive and broad-based programmes to sufficiently address the technical challenges such as access to modernised agricultural inputs, extension services and access to markets for rural farmers to sufficiently capitalise on the security of their land rights. That said, overly focussing on market efficiency to the relative neglect of social equity issues risk further exacerbating conditions of insecurity and social exclusion especially amongst the poor and vulnerable segment of rural communities, including women and the youth. Thus, in a unifying sense, balancing the market efficiency and social equity considerations is deemed necessary and should be pursued under ongoing land tenure reforms for inclusive and equitable outcomes. The foregoing finds expression in fact that the existing tenorial challenges are complex and context-specific, equally requiring nuanced solutions to effectively address them (cf. Blocher, 2006: 202). To the extent that previous land tenure reforms in Ghana and elsewhere in SSA were too simplistic and completely ignored these contextual issues may have chiefly contributed to their limited success or perhaps failure altogether.

8.4 The Contributions of the Thesis

The complex and interdisciplinary nature of this study necessitated the use of a mixed methods design approach (through the integration of qualitative and quantitative data analysis) to holistically address the formulated research problem. In so doing, the study corroborates some assertions, challenges others and contributes to the complex debates on land tenure security and formalisation of customary land rights within the Ghanaian rural context. The following are some of the major theoretical and empirical contributions the research has made to the land tenure literature:

First and foremost, the findings of this study have made a significant contribution to contemporary debates on the relevance of customary tenure institutions and arrangements to socio-economic development in Ghana and SSA generally. Broadly, it has responded to some of the recent calls by scholars like Cao (2012), Lawry et al. (2014), Robinson et al. (2014) and Otsuka et al. (2014) on the need for systematic examination of the nature of existing customary tenure institutions and arrangements within their wider socio-cultural and political contexts to afford sufficient understanding of how they shape or impact tenurial dynamics at the local level. In this light, the findings of this study have demonstrated that contrary to the mainstream view that customary tenure systems are insecure, local tenure arrangements already provide a reasonable level of (*defacto*) tenure security to farmers in the studied communities. The validity and generalisability of this finding across the whole of Ghana and elsewhere in SSA is however, subject to future empirical investigation. That said, the findings of this study also show that although customary tenure institutions and arrangements are constantly evolving, the patterns of their evolution are complex and not linear as often assumed by scholars, especially those associated with the evolutionary theory of land rights. This study therefore supports the view that theoretical models based on this static conceptualisation are in need of revision in favour of more flexible approaches that adequately captures the complex evolutionary patterns. Besides, certain ambiguous claims in the theoretical literature have also been clarified. For instance, there is the assertion that the inherent ‘social security’ of customary tenure arrangements ensures equitable access to land by all members of landholding groups to the extent that there is no landlessness (Berry, 1993; Benneh et al. 1996; Kasanga and Kotey, 2001; Adoko et al. 2011). Contrary to this viewpoint, the study has shown that the emerging patterns of land access based on commodification has resulted in instances of social exclusion and state of landlessness or near-landlessness

even amongst some indigenous groups, and especially the poor and vulnerable groups (like women and the youth) in the studied communities (see Sections 5.4.1.1, 5.5.2, 5.7.1 and 5.7.2). Moreover, the findings of the study challenge the implicit assumption that customary tenure arrangements are incapable of responding to problems of access to land insecurity without direct government intervention (see Sections 5.7.1, 6.6.1). As established in Section 5.7.1, for example, some traditional authorities (responsible for allocating communal lands) have put in place some ‘social security’ safeguards such as granting short-term agricultural tenancies to incoming settler farmers in some of the studied communities to ensure that native members of future generations are not rendered landless.

Secondly, this thesis has made an important contribution to the academic and policy debates on formalisation of customary land rights by addressing some of the grey areas in the literature. Unlike most previous research on the operationalisation of land tenure security which focuses on analysing only the legal dimension (through formal land titling), this study conceptualised land tenure security as legal, *defacto* and perceived. This tripartite conceptualisation of tenure security afforded the unique opportunity to capture different sources of security as manifested on the ground. Empirically, the analysis of the effects of tenure security on investment based on the tripartite conceptualisation also sheds additional light on the differences that may exist between legal, *defacto* and perceived dimensions of tenure security which otherwise would have been obscured or difficult to unpack. For instance, the findings of the study demonstrate that even without legal security (proxied by possession of formal land titles), households significantly invested in land improvement practices, especially those with shorter payback periods (see Sections 7.5.2 and 7.5.3). The consideration of informal (extra-legal) documentation as an analytical category somewhat illuminated how informal

written documentation practices influences respondents' (perceived) tenure security and ultimately their investment decision-making. To the best of the author's knowledge, no study has considered the interaction between possession of 'extra-legal' informal written documentation and investment decisions, at least in the context of Ghana. It therefore recognised that further empirical investigation in this regard could provide useful information in better informing future formalisation policies on securing customary land rights in the study areas and beyond.

Thirdly, whilst the findings of this study largely support the mainstream view that improved tenure security leads to greater investment incentives, empirically, it advances knowledge through the identification of additional contextual (extra-tenurial) factors that contribute to key investment outcomes. The study has established that though legal formalisation of customary land rights is important to enhance certainty and bolster pre-existing (*defacto*) tenure security provided by local tenurial arrangements (see Sections 6.2 and 6.6), it is not a sufficient condition to engender the appropriate incentives towards households' investments in environmentally benign land improvement practices (see Sections 7.5.1, 7.5.2 and 7.5.3).

Besides, the value of a mixed methods approach in this context is witnessed by the fact it afforded the opportunity to unravel some local level nuances influencing households' investment dynamics in the studied communities. For example, the identified associations between *defacto* and *perceived* elements of tenure security and investment outcomes in the quantitative analysis was further explained in the qualitative analysis, thereby affording an in-depth appreciation of these complex interrelationships.

Fourth and finally, the current study in furtherance to the ongoing efforts of the Ghana Land Administration Project towards improving customary land management serves as a

valuable contribution by providing systematic-evidenced-based research on land tenure security and the existing socio-political structures that undergird local tenurial arrangements in terms of constraining or enhancing efficient and equitable customary land delivery. Specifically, this thesis has contributed useful information in terms of highlighting some specific challenges and opportunities requiring attention in successfully navigating the process of institutional harmonisation and formalisation of customary land rights. A case in point is the proposed incremental framework on formalisation developed from the findings of this research (see sub-Section 8.5.2.1) which could serve as a bespoke formalisation model that can guide the design and operationalisation of the LAP's agenda on the formalisation of rural land rights (through systematic land registration) towards improved tenure security without disrupting local dynamics that already contribute positively to (*defacto*) tenure security. Having reviewed the key contributions of the research to knowledge, the ensuing section outlines the implications of the research findings for policy formulation and practice.

8.5 Policy Implications and Suggestions for the Way Forward

The findings of this study have important implications for policy formulation and implementation. This section therefore outlines the key policy lessons that flow from the findings of this research based on which some suggestions on how to successfully engineer the institutional harmonisation process towards improved tenure security and sustainable land management. Though this section and the thesis in general is delimited to Ghana's context, broader lessons can be learnt for further research and possible implementation across other SSA countries given the comparative nature and the similarities of issues about the land question.

8.5.1 Policy Implications

From the outset of this research, a recurring message emerging from the chapters of this study is the need for sufficient understanding of the social context. Thus, to the extent that context matters, then the broader policy implication of the findings of this study would be the importance of pursuing a context-specific approach to afford the design and implementation of more appropriate and effective land policy interventions towards inclusive and equitable outcomes at the local level. As established in this study, the failure of previous formalisation programmes may chiefly be attributable to their top-down approach to implementation with little or no regard for their appropriateness in specific socio-political contexts (see Section 2.4.1, 3.4.2 and 3.4.3). Therefore, this research contributes to the evidence-base on ongoing land-use policy interventions in Ghana and SSA generally.

The findings of this research have underlined some social and cultural factors that may operate to impede effective policy formulation and implementation in rural contexts like the study areas. From a gender perspective, for example, the patriarchal organisation (evidenced by the male dominance in the customary land delivery process) vis-à-vis existing socio-cultural norms and perceptions in the studied communities were shown to significantly influence secure access to and control of land by some vulnerable social groups, especially migrant women, divorcees and widows (see Sections 5.7.2.1 and 6.3.3.1). It therefore follows that any policy prescription (aimed at mainstreaming gender-equality in the customary land delivery process) to change the status quo could face stiff resistance and backlash by some interested parties (usually men) to the extent that it is deemed as undermining their masculine authority. This may well explain why despite current statutory laws providing for equal rights in land by men and women, gender-based inequality is still pervasive in most parts of Ghana (see Sewornu, 2010; Hughes and Knox,

2011; Dery, 2015; Lambrecht, 2016) and elsewhere in sub-Saharan Africa (see Yngstrom, 2002; Daley and Englert, 2010; Garber, 2012). Land reform policy guidelines should therefore be designed and implemented with these socio-cultural aspects in mind to galvanise the necessary community support and cooperation especially by the traditional authorities who are responsible for customary land administration. In this regard, continuous sensitization and education on women empowerment is recognised as a plausible avenue towards accelerating the process of socio-cultural change in rural communities.

The present study also has shown that the increasingly monetised access arrangements (in the wake of ongoing transformation in the local tenorial regimes) have far-reaching negative implications for the poor and vulnerable social groups in the studied communities. Whereas the current marketisation process appears to create new opportunities for the hitherto socially disadvantaged to easily acquire or own land, issues of economic insecurity precludes them from effectively doing so in practice (see Section 5.5.1, 5.7.1 and 5.7.2.2). Taking the case of most rural women and the youth, for instance, their inability or limited capacity to mobilise the requisite financial resources would almost invariably imply that they are constrained from effectively participating in the emerging local land markets. Even so, those who successfully acquire land could potentially lose it in the event of counter claims to ownership to the extent that they are poor and therefore unable to afford justice within the formal court system. The prevailing situation of the majority of women and youth is further exacerbated by the limited availability of off-farm economic opportunities in the study areas (see Sections 5.7.1 and 5.7.2.2). Consequently, the rich and powerful local elites are better positioned to benefit disproportionately from the current market-based access mechanisms thereby relegating the poor and vulnerable social groups into a state of landlessness or near-landlessness. It

therefore follows that a balance between market efficiency and social equity considerations remains crucial towards ameliorating the prevailing tenurial situation and achieving pro-poor outcomes (cf. Ninsin, 2015; Broegaard, 2013). The above observation also finds expression in the fact that majority of the populace in the study areas and in fact rural Ghana are directly dependent on land for their livelihoods. In this light, the current focus of Ghana's ongoing land reform (i.e. LAP) on prioritising market efficiency arguments over social equity considerations risks further entrenching and exacerbating existing inequalities, social exclusion and tenure insecurity amongst the poor and vulnerable social groups, especially in rural areas like the study areas. One way forward in addressing these social equity concerns is the institution of social safeguards as part of the broader implementation guidelines of government land policies to better protect the land rights of poor and vulnerable social groups. It is noteworthy, however, that the normative question regarding access to land being shaped by ethnicity or wealth remains a major point of political discussion.

Moreover, the generally limited involvement of farmers in statutory tenure practices (i.e. formal land registration) in the studied communities despite their overwhelming stated preference for statutory tenure from a (*dejure*) security perspective have far-reaching implications for the ongoing national land registration efforts (see Sections 6.2 and 6.6). As established in this study, the limited public awareness on the objectives of the ongoing rural land registration programme coupled with the general disillusionment in government regarding land matters in the studied communities poses a significant barrier to the current policy focus on collaborative land management between the former and traditional authorities. It therefore follows that the success of the LAP-supported Customary Land Secretariats in the registration of rural land rights in studied communities crucially depends on the concerted community engagement and

involvement of different social groups and their interests in the programme design and implementation to create a sense of ownership and involvement amongst the populace. As Bromley (2009: 26) argues, “in the absence of reasonable assurance that the government can offer effective protection of their land rights than what they already enjoy, the switch is not obviously superior”. Besides, rapid introduction of land registration without due attention to these local nuances could result in the erosion of the social capital that the rural poor depend on. It would therefore appear that incremental gradualist formalisation approaches may be more appropriate in rural contexts while progressively mitigating any undesirable impacts on the poor and vulnerable social groups. As established in this study, depending on the contextual situation, elaborate land titling may not be very beneficial or urgent in all rural communities (see Sections 6.6.1, 6.6.2 and 8.2.5).

Finally, the ongoing transformations in local tenurial arrangements coupled with increasing demographic pressure and limited alternative livelihood opportunities have far-reaching implications for sustainable land management in the study areas. Widespread environmental degradation (occasioned by unsustainable land management practices) in the studied communities and most parts of Ghana continues to be an elusive developmental challenge that successive governments continue to grapple with (GoG, 1999, 2011; Damnyag et al. 2013). The current policy objective of government appears to be largely focused on improving land tenure security as a way of inducing greater investment incentives in land conservation practices towards sustainable land management. Yet, this study has shown that apart from tenure insecurity, several other contextual (non-tenurial) factors operate to significantly influence households’ investment decisions in terms of adoption of SLM measures or technologies in the studied communities (see Section 7.5.3 and 8.2.3). That notwithstanding, these non-tenurial

factors including lack of extension services, credit opportunities, modernised agricultural inputs etc. remain at the fringes of current policy discussions on sustainable land management in Ghana. To the extent these non-tenurial factors remain unaddressed, then it implies that the current policy focus on improving tenure security may be insufficient in engendering appropriate incentives for investments in sustainable land management. As a way forward, broad-based and inclusive policies (beyond addressing tenure insecurity) are therefore needed to resolve these problems.

In sum, the existing challenges of tenure insecurity and inequities in access to land are embedded in complex social, economic, political and environmental settings. The process of institutional adaptation requires context-specific approaches to understand the backdrop of these problems and effectively address them. It is against this background that the ensuing paragraphs outline some recommendations towards improving tenure security and sustainable land management in the study areas and Ghana at large.

8.5.2 Recommendations

Following the above discussion, the preoccupation of this sub-section is to outline some policy recommendations towards the successful adaptation of customary tenure arrangements and institutions for improved tenure security and sustainable land management in Ghana.

8.5.2.1 Towards Successful Adaptation of Customary and Statutory Tenure Arrangements

Whereas there is a growing consensus on the adaptation of customary and statutory tenure institutions as a plausible pathway towards the securitisation of customary land rights, a fundamental challenge concerns how the process of integration can be engineered to translate into improved tenure security, efficient and equitable land delivery on the ground. As established in this study, the Ghana Land Administration Project (LAP) quest

to achieve this end would require balancing market efficiency and social equity considerations to achieve inclusive and equitable outcomes. The following policy recommendations are therefore presented in this light:

1. Strengthening the Capacity of Customary Land Secretariats

It is recognised that the establishment of the Assinman and Western Nzema Customary Land Secretariats (CLS) in the study areas (though still at their infantile stage) offers a promising opportunity towards building on customary tenure arrangements and practices considering the successes achieved elsewhere in Ghana (see Bugri, 2012; Biitir and Nara, 2016). In this light, the immediate passage of the omnibus land bill into law is recommended to afford CLSs the needed legal mandate and regulatory framework to guide their operations. Second, it is recommended that satellite or mobile CLS offices (as extensions of the main CLS offices) be established in villages farther away from the main CLS offices (especially in Ankasa) to improve their visibility and accessibility. To ensure CLSs smooth operation and sustainability, continuous funding, technical support and personnel training remains necessary particularly in rural settings like the study areas where land market activity is low and for that matter internally mobilised revenue maybe inadequate. In this regard, the proposed funding modalities under the omnibus Land Bill where a percentage of the stool land revenue would be set aside for the running of the CLS could prove very beneficial if successfully passed into law. Additionally, the Lands Commission should provide technical assistance to the CLSs in the areas of land registration, demarcation and revenue management in ensuring that the customary land delivery process is equitable and transparent in accordance with statutory processes. Besides, the Lands Commission through the District Stool Lands Offices could act as a

check and monitor the operations of CLSs by undertaking periodic visits to safeguard against abuse of power and elite capture.

2. Representation of Marginalised Groups on Local Land Management Committees

Considering the peculiar challenges faced by some socially disadvantaged groups including women, migrants and the youth in terms of access to land, it is recommended that these social groups be allocated seats on the village land management committees to give a voice to these groups and sufficient consideration of their interests in land allocation. An encouraging sign that this could be achieved in Kakum and Ankasa is that a few migrant settlers in some communities have been elevated to the position of village headmen. Besides, adopting such an inclusive stance in the composition of local land management committees could foster institutional trust and possibly dispel any misconceptions of the CLS being a collusion between government and traditional authorities to usurp the land rights of rural farmers. The creation of a permanent gender desk under the CLS would also provide useful support and protection of land rights of women and other marginalised groups. Equally important is the need to review the excessive concentration of power in traditional authorities under the existing regulatory framework on customary land administration to safeguard against potential abuse of authority and discrimination. One way to achieving this end, would perhaps be the codification of existing customary rules and norms on land allocation and use in different traditional areas to afford clarity and unbiased interpretation as well as minimise their susceptibility to manipulation by traditional authorities. This is however a very complex issue considering that the codification has the propensity to ‘fossilise’ fluid customary

norms, thereby limiting their flexibility (see Oba, 2011; Woodman, 2011; Arko-Adjei, 2011). Besides, the fact that land matters are politically sensitive sitting at the cleavage of national politics and tradition in Ghana vis-à-vis the government's 'policy of non-interference' (as Ubink, 2008 prefers to put it) highlights the need for cautious approach to legal reforms in this direction. Navigating this dilemma thus requires serious political willingness on the part of government and traditional authorities in facilitating the creation of more 'neutral policy' spaces for these sensitive and yet important issues to be deliberated amongst politicians, representatives of the Regional and National Houses of Chiefs and civil society groups at large. Academia also has an important role to play in continuously undertaking independent evidence-based research to inform policy deliberations and actions on the afore-mentioned issues.

3. Institution of Legal Advocacy and Social Service Support

As established by this study, aside from economic barriers, women and other vulnerable groups may face significant obstacles in accessing land and asserting their rights over land. These barriers are found to be deeply rooted in existing socio-cultural norms and practices. It is therefore recommended that access to legal aid and social service support at the community level is paramount. To operationalise this, the CLSs could serve as basis where some personnel (including female CLS staff and women leaders) may be trained as community volunteer paralegals to provide local support mechanisms for women and other vulnerable groups seeking to enforce their land rights in both the customary and statutory spheres. Also, traditional authorities may be also schooled or trained on these areas (under the auspices of the traditional councils, Regional and National House of Chiefs and the Ministry of Chieftaincy and Culture) to ensure fairness in their administration of land and dispute settlement. In addition, legal advocacy work by the Civil Society Coalition on Land (CICOL), District Assemblies, Customary Land

Secretariats, non-governmental organisations (NGOs) and other community action groups through television and radio programmes in local languages could complement the efforts of government towards increasing public awareness about women's rights and ensure their protection at the local level. Moreover, the institution of social interventions and schemes such as special loan facilities (say under the LEAP, MASLOC and GYEEDA) could be extended to women and other vulnerable groups like the youth interested in farming to afford them the opportunity to effectively participate in the emerging monetised land markets. To achieve this, government partnership with NGOs, rural development organisations and micro-credit institutions would be essential in working out for example, possible funding modalities and targeting of suitable beneficiaries for effective operationalisation.

4. Adopt an Incremental Framework on Formalisation of Customary Land Rights

Given that respondents commonly cited cost of documentation and cumbersomeness of the registration process as major reasons for the non-registration of their land rights, it is recommended that cost of first registration be subsidized by government and the processes simplified to afford registration by the rural poor. Widowed and divorced women who appear to be marginalised (facing imminent risk of loss of land rights) could be extended special exemptions from the payment of fees for the first registration as a way of supporting the protection of the rights of such vulnerable groups. Recognising that the process of formalisation of customary land rights can take a long time to be successfully concluded vis-à-vis the substantial concerns and risks associated with the formal titling approach, many of which have been elucidated in this thesis, it does appear that both short-term and long-term recommendations to enhance local tenure security are inevitable. That said, in the short-term, building on the local innovation of informal written documentation practices, through standardisation and legal recognition, presents

a promising opportunity towards achieving cost-effectiveness and social legitimacy in most rural communities (see Section 8.2.5). Compared to systematic land titling, the value of formalising informal extra-legal documentation practices hinges on the fact that multiple land rights can be recorded in-situ while giving room for upgradeability towards full land titles in the future. This gradual formalisation approach also affords the opportunity to further bolster pre-existing (*defacto*) security enjoyed by landholders and at the same time, progressively mitigating any undesirable impacts on the poor and vulnerable social groups.

In terms of operationalisation, this thesis proposes that government and donor-policy makers adopt a ‘three-phased’ incremental formalisation approach towards the formalisation of rural land rights. Phase 1 may involve a detailed assessment of the prevailing tenorial situation in the community, inventory of all land rights and uses and surveying and identification of customary land boundaries. Phase 2 involves the standardisation of informal written documentation practices and recordation of land rights as manifested on the ground subject to community verification. Phase 3 builds on the second phase through the issuance of (upgrading use rights certificates) full-scale land title or deeds to land users after actual survey and demarcation of individual farmland boundaries (Figure 8.1). A detailed description of each phase including the processes involved is outlined below.

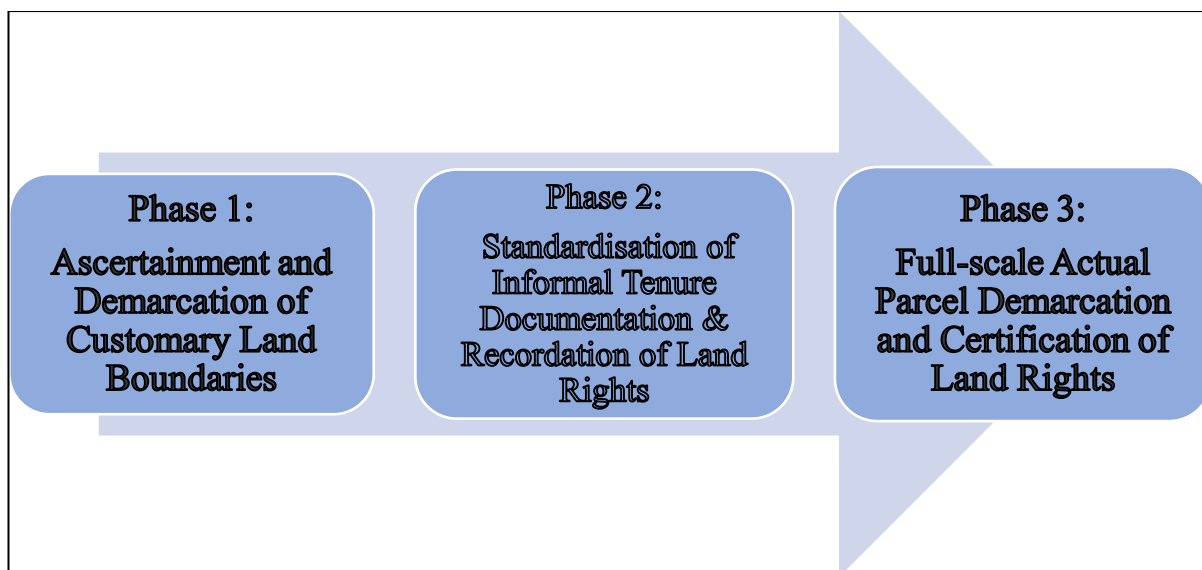


Figure 8.1: Proposed Incremental Framework on Formalisation of Rural Land Rights

- **Phase 1: Ascertainment and Demarcation of Customary Land Boundaries**

The findings of this research have highlighted protracted chieftaincy disputes and conflicts over land ownership (occasioned by indeterminate communal and farmland boundaries) as underlying challenges impinging the effectiveness of local tenurial arrangements in the study areas (see Sections 5.2 and 6.4). It is therefore proposed in Phase 1 that the CLS in collaboration with the Survey and Mapping Division and traditional authorities in the various communities to ascertain and delineate the extent of their customary land boundaries (including other communally-held land resources like forest patches and sacred groves etc.) in the study areas. By securing the periphery of customary land boundaries, it safeguards the collective rights of communities against external encroachment and minimises the risk of potential land boundary disputes. This exercise should however be preceded by the resolution or settlement of existing chieftaincy disputes and conflicts over customary land ownership. The effective collaboration and sustained dialogue between Regional and National House of Chiefs,

Ministry of Chieftaincy and Culture and the relevant traditional councils remains necessary in this context so as to the speedy resolution of contestation over land ownership. It is acknowledged that the ongoing customary land boundary demarcation and resolution of associated disputes under the auspices of the LAP are steps in the right direction and should therefore be extended beyond their current pilot ‘project area’ focus.

- **Phase 2: Standardisation of Informal Tenure Documentation Practices and Recordation of Land Rights**

As informal written documentation practices are already underway in some of the studied communities, it is proposed in Phase 2 that informal tenure documents should be standardised to afford them sufficient legal legitimacy and to facilitate their easy conversion into full titles or deeds in the future. This may be followed by a preliminary survey of individual land parcels and the verification of land rights by households, communities and traditional authorities in a broader consultative manner. This will obviously require close collaboration between the CLS, OASL, traditional authorities and local opinion leaders to spearhead extensive community engagement about the formalisation process and its benefits in order to garner community support. To this end, community members may be recruited to partake in the verification process to identify and agree on ‘loose’ land boundaries with adjoining neighbours (farmers) in a participatory manner and the resolution of any dispute arising during the identification and demarcation process through ADR mechanisms. The recommendation on increased support for the CLS, the primary facilitative agency as above-explained also apply in this context.

The ‘standardised’ tenure documents (or use rights certificates) could be captured in local languages and should specify the location and size of the subject property (referenced to a site/ farm plan), the main land use (e.g. farming) and other incidental use rights

subsisting in the same parcel, the names of the grantor(s) and grantee(s), their successors in title (and adjoining landholders), conditions of use and revocation/ loss of land rights and the embossed seal of the traditional authority/ family alienating the land. Besides, these use rights certificates could also be adapted to capture the registration of planted trees on farmlands and clear benefit-sharing arrangements to afford security of ownership and incentivise investments in long-term SLM. In the case of sub-tenancies, there should be clear specification of conditions of use subject to the past and future observance of the head lease and the holder of the superior title. In doing so, the local knowledge of landholders, their neighbours and traditional authorities remain essential in clarifying the scope of land rights and farmland boundaries. The final activity in Phase 2 involves the issuance of the use rights certificates to farmers upon official entry into the community land register at the local CLS offices.

- **Phase 3: Actual Individual Parcel Demarcation and Full-Scale Certification of Land Rights**

The final phase, Phase 3 is an extension of the second phase. It is proposed in this phase that the actual surveying and demarcation of individual farmlands be undertaken after arriving at initial agreements and verification of farmland boundaries with landholders and owners of adjoining farmlands. This should be followed with the preparation of farm plans and composite maps of the surveyed farmlands subject to final validation at the community level. The final activity may involve upgrading use rights certificates to full land titles after considering the local exigencies of specific communities. This derives from the understanding that the rural poor may not immediately require freehold titles, but do need legal security that would safeguard against arbitrary expropriation or loss of land rights (cf. Christensen, 2005; Arko-Adjei, 2011). In the operationalisation of this incremental formalisation framework, learning from the experiences of other sub-Saharan

African countries is recommended. For instance, useful lessons could be drawn from the implementation of the certificate of rights (COR) and the flexible tenure registration in Botswana and Namibia respectively to inform the standardisation of informal tenure documentation practices in rural Ghana (see, e.g. Nkwae and Dumba, 2010; Christensen, 2005). Depending on the contextual situation, however, the immediate introduction of elaborate land titling may be necessary to enhance (*dejure*) tenure security (see Sections 8.2.5 and 8.5.1).

8.5.2.2 Towards Enhanced Investments in Sustainable Land Management

As established in this study, exclusively focussing on improving tenure security alone would be inadequate to stimulate investments in sustainable land management in the study areas and Ghana generally. Notably, other important non-tenurial challenges including limited access to extension support services, modern farm inputs, lack of credit access etc. operate to constrain household investment decisions. Thus, following the recognition that addressing these extra-tenurial constraints would engender widespread adoption of SLM practices and technologies, the following recommendation are advanced.

1. Intensify Environmental Education and Training

Intensification of conservation-based educational campaigns and projects especially in Kakum in terms of sensitizing communities on the anthropogenic causes of environmental degradation and possible SLM technologies or measures to mitigate same. It is however recognised that successful dissemination of such relevant information and training on SLM technologies, requires quality extension service delivery. That said, it is common-knowledge that agricultural extension service delivery in Ghana is saddled with several challenges including limited extension staff, inadequate logistics, poor remuneration and lack of continuous professional development etc. that hamper overall

effectiveness. Against this backdrop, this thesis recommends that government and donor-policy makers apart from improving the capacity and skills of agricultural extension officers (through sponsored training programmes and refresher courses), increasing their numbers and supply of requisite logistics such as motor-bikes and field training kits remain necessary to facilitate access to extension service support in the studied communities. Besides, fostering active collaborations between relevant government agencies such as MOFA and EPA and local conservation-oriented NGOs and farmer associations (like ANCOFA and CREMAs in Kakum and Ankasa respectively) could play a vital role in augmenting the activities of the mainstream extension agents in the studied communities. The existing collaboration between some CREMA communities, local conservation-based NGOs, the Ankasa National Park Management and FORIG on promoting environmental education and support on on-farm tree planting in Ankasa provides some evidence of the success of these partnerships in advancing farmers' knowledge and uptake of new SLM technologies on the ground (see Section 7.5.3).

2. Need for Complementary Support Services and Infrastructure

Following the above, equipping rural farmers with the relevant technical information and training on SLM practices and technologies without the requisite complementary support may be inadequate in engendering widespread adoption, especially in the case of long-term land conservation investments like on-farm tree planting. It is therefore recommended that the provision of targeted support in the form of modernised agricultural inputs, subsidised fertilisers, improved seedlings, tree saplings and access to credit facilities remains crucial in improving land use efficiency and stimulating farmers' investment in SLM practices. Achieving this end would however require relevant government agencies like MOFA, EPA, community-based NGOs and farmer cooperatives to work collaboratively with rural communities to ascertain their specific

support needed for addressing environmental degradation problems. A positive indication that this is achievable is the current collaboration between the CREMA groups, local NGOs, the Ankasa National Park Management and FORIG organising farmer training on SLM practices, establishment of demonstration projects and provision of preferred tree saplings for cultivation in some communities (see sub-Section 7.5.3.5). This approach should be encouraged and replicated in the other fringe communities in Ankasa and Kakum to improved uptake of land conservation practices. Besides, the provision of critical infrastructure such as roads, health posts and markets by the government could attract investments into the study areas, thereby creating alternative livelihood opportunities for the rural populace invariably contributing towards reducing the pressure on land and other natural resources.

3. Need to Mainstream SLM into the Rural Development Process

Since investments in sustainable land management is critical to addressing environmental degradation for rural livelihood security and sustainable development, this thesis recommends the mainstreaming of sustainable land management into rural development agenda especially at the regional and district levels. To facilitate this, the National Development Planning Commission (NDPC) in conjunction with the National Sustainable Land Management Committee (NSLMC) of the EPA could work with other relevant state institutions, environmental NGOs and private sector organisations to devise practical strategies for upscaling sustainable land management that could feed into government's rural development policies and programmes. In this view, the Ghana Strategic Investment Framework (GSIF) which seeks to address land degradation issues and promote SLM presents a good opportunity towards achieving this end (GoG, 2011). This recommendation also requires the attention of relevant academic and research institutions who, as noted earlier, could conduct detailed research into the social,

economic and environmental benefits of existing SLM technologies, their suitability across the different agro-ecological zones, the challenges and opportunities for widespread SLM adoption in the country. With the requisite funding from government and international donor partners, research engagements in this direction will provide useful baseline information for appropriate targeting of policy interventions on SLM implementation on the ground towards alleviating environmental degradation and improving rural livelihoods.

8.6 Suggestions for Future Work

Several issues have been raised which warrant further investigation. First, there is the need to replicate the present research in other rural regions of Ghana with different tenorial contexts (especially in the northern third of the country) to be able to make generalisations about the study findings. Further investigation in this direction should focus on collating panel data at the community, household and plot levels to sufficiently capture and examine variations in levels of tenure security and investment decisions across different tenorial contexts which was not addressed in this study. Secondly, future studies could also explore the changing nature of customary tenure institutions and socio-political processes (determining conditions of access to and control of land) and how these have been impacted by large-scale commercial land acquisitions. This is particularly important in the wake of burgeoning large-scale commercial land acquisitions which is contributing to the reconfiguration of local tenorial relations with far-reaching implications for the poor and vulnerable segment of the rural population. Third, the findings of this research demonstrate that tenure security alone is insufficient to generate the appropriate incentives for investment in SLM practices by the rural poor. Though the current study has identified other important contextual factors that operate to influence the investment propensity of the rural poor, there is the need for more research in other

contexts to unveil pertinent factors that influences the circumstances and inability of rural farmers to capitalise on the pre-existing security they already enjoy. For instance, the present research has identified the importance of social capital in household investment dynamics but there is the need for detailed investigation in this direction. Fourth and finally, considering the utility of informal documentation of customary land rights (e.g. allocation notes, written agreements etc.) in terms of providing ‘sufficient’ proof of ownership or use to land users, it would be instructive to conduct further research into their legal admissibility and value in event of disputation over land. In addition, detailed ‘cost and benefit’ analysis of the procurement procedures, affordability, social and institutional legitimacy of such informal tenure documentation practices would provide useful information towards formalising customary land rights in the study areas and other rural communities.

Ultimately, there is no simple clear-cut or one-size-fits-all solution to the complex challenges of tenure insecurity and sustainable land management in rural Ghana and SSA generally. In any event, well balanced, contextualised and nuanced solutions are needed to effectively address them.

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APPENDICES

Appendix 1: Categories of Land Rights in Ghana

Type of Land Right	Description
The Allodial Title	The allodial title is the paramount title and the root of all other interests in land in Ghana. It is regarded as the absolute title often vested in the community represented by chiefs, land priests, clan or family heads only subject to the general laws of the country. The allodial title is alienable although the fact that it is vested in the community (for the benefit of entire membership including those yet unborn) practically renders outright alienation almost impossible (da Rocha and Lodoh, 1995; Bugri, 2012).
Customary Freehold	The customary freehold, also known as the usufructuary interest is often held by subgroups and individuals who are members of the landholding community and only subject to the higher allodial title. This interest could be held in perpetuity prevailing against the whole world, including the allodial title from which it derived and is also transferable to successors in title of the immediate holder.
Common Law Freehold	The common-law freehold can be acquired by a native or stranger only through an express grant made by the landholding group in accordance with the rules of common law. Like to the customary freehold, it confers the right of use and enjoyment on the holder subject to specified terms and conditions which must necessarily conform to public policy. Nevertheless, Article 267(5) of the 1992 Constitution of Ghana which states that “ <i>subject to this Constitution, no interest in, or right over, any stool land in Ghana shall be created which vests in any person or body of persons a freehold interest howsoever described</i> ” renders the creation of this category of interest impermissible. Under the present arrangement, all non-Ghanaians who hitherto possessed a common-law freehold are entitled to a maximum period of 50 years although the position remains unclear in the case of Ghanaians.
Leasehold	Generally, leasehold arrangements stem from common law and could be derived from allodial title, customary freehold and or common law freehold on the proviso that a similar quantum of interest have not already been granted. In this regard, a lease could be acquired in any given piece of land for a maximum period of 99 years in the case of a residential or farm user and it is subject to any other higher interests subsisting in the land parcel. Holders of this title can create subleases and other lesser rights provided such actions are constrained by any restrictive covenants.
Customary Tenancies	Customary tenancies embody all other form of lesser interests (including abunu and abusa originating from contractual arrangements between holders of an allodial, customary or common law freehold titles and a tenant. These forms of tenancies are mostly visible in the rural areas of Ghana often between various landholders and tenant-farmers.

Source: Author’s construct based on da Rocha and Lodoh (1995) and Bugri (2012)

Appendix 2: Sizes of Landholdings by Community Membership

Kakum				Ankasa		
Farm Sizes (Acres)	Indigenes (n=17)	Migrants (n=215)	Total (N=232)	Indigenes (n=40)	Migrants (n=108)	Total (N=148)
≤ 3	23%	24%	24%	33%	14%	19%
4 – 6	29%	33%	33%	33%	29%	30%
7 – 9	12%	15%	15%	5%	18%	14%
10 –12	12%	10%	10%	5%	9%	8%
13–15	18%	5%	5%	2%	4%	4%
16 +	6%	13%	13%	22%	26%	25%

Appendix 3: Disaggregated Property Rights at the Household Plot Level by Study Area

<i>Do you have the following rights over the plot of land you own or cultivate?</i>	Kakum (N=520)	Ankasa (N=243)
	Mean score	Mean score
Indicator: Cultivation/ Use Rights		
1. Plant, maintain and harvest the crops you choose	2.5	2.7
2. Plant any tree species you choose	2.5	2.8
3. Use non-timber forest products occurring on the plot	2.9	2.9
4. Collect water from the land	3.0	3.0
5. Cut trees to make charcoal/ other personal uses	2.4	2.8
6. Cut timber trees on plot for sale	1.2	1.5
7. Make changes to land (plant trees, build etc.)	1.9	2.6
Mean sub-total of Use Rights	2.3	2.6
Indicator: Exclusion Rights		
8. Decide who is allowed to access and use this land	2.4	2.5
9. Exclude/ prevent anyone from accessing this land	2.7	2.9
10. Prevent anyone from harvesting timber trees on this plot	2.6	2.8
11. Exclude others from harvesting NTFPs on this plot	2.9	2.9
Mean sub-total of Exclusion Rights	2.7	2.8
Indicator: Alienation Rights		
12. Transfer land to children without any difficulties	2.5	2.6
13. Transfer land to spouse without any difficulties	2.4	2.6
14. Sell, lease or rent part/ all of this land to others	1.3	1.8
15. Use land as collateral security to secure a loan	1.5	2.4
Mean sub-total of Alienation Rights	1.9	2.4
Overall Property Rights Summation Index	2.3	2.6

Source: Field Survey, 2015.

APPENDIX 4: SURVEY QUESTIONNAIRE FOR FARMERS



SCHOOL OF GEOGRAPHY AND THE ENVIRONMENT
ENVIRONMENTAL CHANGE INSTITUTE

HOUSEHOLD SURVEY QUESTIONNAIRE

Name of enumerator: _____

Date: _____

Name of Village: _____

GPS Location: _____

Introduction: “Good morning/afternoon/evening, my name is Festus Asaaga from the School of Geography and the Environment, University of Oxford in the United Kingdom. I would like to invite you to participate in a research study on land tenure and resource use in communities fringing the Kakum and Ankasa Conservation Areas. The research aims to: 1) Identify the existing land ownership pattern in this community; 2) Understand how farmers make decisions about their farm; 3) Develop strategies for enhancing tenure security and sustainable land use around Kakum and Ankasa Conservation Areas and Ghana as a whole. I am particularly interested in your experiences and opinions in order to enable us better understand the land tenure and resource use situation in this village”.

Enumerator: Ask the respondent if they are willing to proceed with the conversation. Tick here to confirm consent:

☐

“Before we proceed with the main interview, I will like to explain a number of issues to you in order to ensure that you understand the interview process and to protect your privacy:

- a. *It is not compulsory for you to participate in the interview; you can refuse to answer any of the questions posed and withdraw from the interview at any time.*
- b. *Your participation in the interview is voluntary.*
- c. *Should you decide to withdraw from the interview, you have the right to request that information already provided be removed and excluded from the study and not used for any other purposes. You can exercise this right at any time and for any reason.*
- d. *Your personal information and other data collected will not be passed on to any person and/ or organisation. Your information is confidential and will be treated with utmost privacy in order to protect you from any legal liability that may arise.*
- e. *You are free to contact **Professor Yadvinder Malhi** or **myself** at the School of Geography and the Environment of the University of Oxford in the event that you have any queries or concerns. I will provide you with the requisite contact details.*

- f. The information provided and the ultimate results of the study are to be used for a PhD thesis only.
- g. If you are interested in any information about this study and or results of the study, you can contact Professor Yadvinder Malhi or myself at the University of Oxford via the contact details to be provided by me.
- h. Should you have any questions or concerns about the ethics of the study, you can contact the School of Geography and the Environment Departmental CUREC Committee via the email address: curec@ouce.ox.ac.uk or **Mrs. Ruth Saxton**, the Postgraduate Research Degrees Coordinator at first instance. In the subject section of your email, please make reference to **Festus Asaaga- DPhil Fieldwork in Ghana**”.

Enumerator: Ask the respondent if they consent to participating in the research by completing the survey. Tick here to confirm consent: ☐

Name of household head: _____ Name of respondent if different: _____

Household Reference #: _____ Communal Status: **1. Indigene** [] **2. Migrant** []

Place of Birth: _____ Years of stay in current village: _____

Time started: _____ Time ended: _____

- 1. Household demography Characteristics** (Household = group of people related or unrelated having a recognisable head, sleeping in the same house/compound and sharing the same cooking arrangements)

Household member	Respondent (tick)	Relationship to respondent CODE 1A	Age	Marital Status CODE 1B	Education Code 1C	Number of children			Other adults living in house	Any Household member left in the past year/ reason CODES1D	
						0-5	6-12	13-18		YES	REASON
Main decision-maker male										NO	
Main decision maker female						Position of respondent CODE 1E			Other household member occupying a position CODE 1E		
Joint (male + female) decision-making											

CODE 1A: Relationship to respondent | 1 = Spouse; 2 = (step)son/(step)daughter; 3 = Grandchild; 4 = Father/Mother 5 = Father-in-law/Mother-in-law; 6 = Brother/sister; 7 = Brother-in-law/sister-in-law; 8 = Niece/Nephew; 9 = Uncle/Aunt; Other (Specify) _____

CODE 1B: Marital status | 1 = Married; 2 = Widowed; 3 = Divorced; 4 = Single; 5 = Separated; 6 = Consensual union; 7 = Never married; 8 = Betrothed

CODE 1C: Education | 0 = no formal education; 1= Primary; 2 = Middle School/ JHS; 3 = SHS; 4 = Vocational School; 5 = Polytechnic; 6 = University; 7 = Religious education; Other (specify) _____

CODE 1D: Reason for Leaving | 1 = Job transfer; 2 = Seeking employment; 3 = Spouse's employment; 4 = Marriage; 5 = Education; 6 = Visit; 7 = Other family reason; 8 = Political/religious; Other (specify) _____

CODE 1E: Position of Respondent | 1 = Paramount chief (Omanhene); 2 = Sub-chief; 3 = Regent/Village headman (Odikro); 3 = Queen mother (Ohemaa); 4 = Head of family (Abusuapanyin); 5 = Elder/Linguist; 6 = Assembly man/woman; 7 = Political party executive/representative; Other (specify) _____

2. Household Financial Assets (Expenditure/Income sources)

Indicator	Answer	Indicator	Answer
A1. How do you (household) finance your farming operations? CODE 2A		A7. Do you or any household member have access to credit? 1= Yes; 2= No>> A9	
A2. Do you or any member of the household engage in other economic activities apart from farming? 1= Yes; 2= No>> A6		A8. How much credit (specify amount in GH cedis) and source?	
A3. How many members of the household are engaged in other activities?		A9. Is you or any household member currently indebted (owe money or goods) to other people or an organisation? 1= Yes; 2= No	
A4. What is/are the economic activity(s)? CODE 2B		A10. What is the source of this loan/debt? CODE 2C	
A5. How much money (in a month/year) do you make from the specific activity(s)? (quote amount in GH cedis)		A11. For what purpose was the loan contracted? CODE 2D	
A6. What was the total income (in GH cedis) of the household last year?		A12. What kind of guarantee was required by lender? CODE 2E	

CODE 2A: Financing farming operations | 1 = Self; 2 = Family; 3 = Remittances; 4 = Money lender; 5 = Bank loan; 6 = Cooperative assistance/loan; 7 = NGO assistance; 8 = Trader; 9 = Off-farm employment; 10 = Loan from relative/neighbour/friend; 11 = Government assistance; other (specify) _____

CODE 2B: Other economic activity | (Select up to 3 other economic activities) 1 = Teaching; 2 = Security; 3 = Trading; 4 = Labourer; 5 = Chainsaw operator; 6 = Purchasing clerk; 7 = Driving/transport services; 8 = Carpenter; 9 = Forestry/ wildlife officer; 10 = other government employment; other _____

CODE 3C: Source of Loan | 1 = Moneylender; 2 = Bank; 3 = Cooperative; 4 = Government agency; 5 = Employer; 6 = Trader; 7 = Farmer; 8 = Relative/neighbour/friend; other (specify) _____

CODE 2D: Purpose for contracting Loan | (select as many as apply) 1 = Agricultural land/equipment; 2 = Agricultural inputs; 3 = Business; 4 = Housing; 5 = Education/training; 6 = Health; 7 = Ceremonies (weddings, funerals etc.); 8 = Vehicle; 9 = other consumer goods; other (specify) _____

CODE 2E: Guarantee for loan | (select as many as apply) 1 = none; 2 = Land; 3 = Cattle; 4 = House/building; 5 = Employer; 6 = Relatives; 7 = Non-relatives; other (specify) _____

3. Plot Specific Information (To be asked of the holder of each plot)

I. Background information on land parcels

	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A1. Who is the plot holder or cultivator and the person interviewed? 1. ID Owner/ user (Refer to CODE 1A) 2. ID interviewed (Refer to CODE 1A)	1. 2.	1. 2.	1. 2.	1. 2.	1. 2.	1. 2.	1. 2.	1. 2.	1. 2.	1. 2.
A2. What is the tenure status of this land? CODE 3A										
A3. Length of time on parcel (years) (Use > if necessary)										
A4. What is the size of this plot? (Area)										
A5. In what unit is this size measured/reported? CODE 3B										
A6. How far is the plot from your house? (distance)										
A7. What is the travel time (in minutes) from your homestead to this plot?										
A8. What is the main use of this plot? CODE 3C										
A9. How did you gain access to this plot? CODE 3D										
	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A10. Does the plot have clear boundaries? 1= Yes;2= No>> A13										
A11. What is the nature/type of boundaries around the plot? CODE 3E										
A12. Did you or someone else create these boundaries? 1= Yes; 2 = No (Natural boundaries); 3 =DK										
A13. Is/are your plot(s) located outside this village? 1= Yes; 2 = No										
A14. Any form of documentation on the plot? CODE 3F										
A15. Could you leave the land empty (fallow) for a period of several months without being worried about losing it? 1 = Yes; 2 = No>> A18										
A16. How long do you think you could leave the land empty (fallow) without losing it...?	Years									
	Months									
A17. Why/ how would you lose the land? CODE 3G										
A18. Have you ever had a dispute with anyone over this land? 1= Yes; 2 = No>> A21										

A19. What was the nature of the dispute? CODE 3H										
A20. With whom (relationship to the person) did you have the dispute? CODE 3I										
A21. Is the land inheritable? 1 = Yes; 2 = No>>4										
A22. To whom does the land revert to? CODE 3J										

CODE 3A: Tenure status | 1 = Land owner (freehold); 2 = Land will be shared once cocoa matures (Abunu); 3 = Receives share of crop Abunu (1:1) (land-owner/caretaker); 4 = Shares yield Abunu 1:1 with land owner (caretaker); 5 = Receives share Abusa 1/3 share; 6 = Receives share Abusa 2/3 share; 7 = Abusa – shares yield 1/3 (caretaker); 8 = Abusa shares yield 2/3 (caretaker); 9 = Long-term Leasehold (>20yrs); 10 = Short-term leasehold (between 10 to 20 years);

CODE 3B: Area unit code | 1 = Acre; 2 = Pole; 3 = Rope; 4 = Plot; other (specify) _____

CODE 3C: Land-use | 1 = Homestead; 2 = annual (food) crops; 3 = Cocoa; 4 = Oil palm; 5 = oranges; 6 = Timber; 7 = Fallow; 8 = Charcoal; 9 = unused land Other (specify) _____

CODE 3D: Method of acquisition | 1 = Acquired land from chief freely; 2 = Purchased land from chief; 3 = Acquired land from land owner freely (gift); 4 = Purchased land from land owner; 5 = acquired land from government; 6 = inherited land; 7 = Acquired land through Abunu agreement (share land after cocoa is mature); 8 = Expanded into available land; 9 = Acquired land through rental; 10 = Acquired land through short-term lease, 11 = Family land; other (specify) _____

CODE 3E: Nature/type of plot boundaries | 1 = Natural boundaries (e.g. river, stream); 2 = Wood fencing; 3 = Planted trees; 4 = Erected walls; other _____

CODE 3F: Form of plot documentation | 1 = no document; 2 = deeds certificate; 3 = title certificate; 4 = stool lands receipt; 5 = Allocation note from stool/chief; 6 = site plan/farm plan/indenture; 7 = Agreement paper from landowner; 8 = will/testament; 9 = declaration of succession; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 3G: Reasons for fallow decision | (select as many as apply) 1 = landlord would reallocate to someone else; 2 = amount to forfeiture of land rights; 3 = lose title to land; 4 = encroachment by someone else; other (specify) _____

CODE 3H: Nature of land dispute | 1 = Boundaries of land; 2 = Multiple claims to land; 3 = Breach of contract by former landlord; 4 = Breach of contract by potential buyer; 5 = Breach of terms of tenancy; 6 = Breach of terms of sharecropping; 6 = Rent default; other (specify) _____

CODE 3I: Relationship to the disputing party | 1 = same family member; 2 = Member of same ethnic group; 3 = Member of same village; 4 = Member of a different ethnic group; 5 = Member of a different village; 6 = subject of the stool/landholding family; 7 = chief/traditional authority; 8 = the state/government institution; 9 = Commercial/private enterprise

CODE 3J: Reversionary right holder | 1 = Landlord; 2 = Chief/Stool; 3 = Family; other (specify) _____

4. LAND USE INVESTMENT/IMPROVEMENTS DECISION-MAKING

Who holds the highest title to land in this village? _____

Who has the most influence on land use and management decisions in this village? _____

I. **Tree decision-making:**

Long Term – Tree investments	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A1. Are there any species of tree you prefer to keep or plant on your plot? 1 = Yes; 2 = No>>A5										
A2. What species do you keep on the farm? CODE 4A										
A3. What is/are the primary reasons decision? CODE 4B										
A4. Have you or any member of your household ever planted any trees on this land? 1 = Yes; 2 = No>>A9										
A5. What is/are the (primary/secondary) reasons for planting trees on the land? CODE 4B										
A6. What do you think the role your tenure status (security) played in undertaking this decision? CODE 4C										
A7. Did you receive any support? 1 = Yes; 2 = No>>A11										
A8. From whom and what kind of support was received? CODE 4D										
A9. Why was the specific investment not undertaken? CODE 4E										
A10. Naturally occurring tree species retained on the plot? CODE 4A										

CODE 4A: Tree Species | 1= Fruit trees; 2 = Odum; 3= Wawa; 4= Oyina; 5 = Teak; 6 = Rubber; 7 = Odwen; 8 = Nyamedua; 9 = Emire; 10 = Akakapenpen; 11 = Owudifo akete; 12 = Kyenkyen; 13 = Abrewa aninsu; 14 = Onyankyren; 15 = Atua; 16 = Atwere; 17 = Agyama; other (specify) _____

CODE 4B: Factors affecting choice of tree – kept/planted | (select as many as apply) 1 = Appropriate shade; 2 = Good for Pollinators; 3 = Improves Soil fertility; 3 = Prevents soil erosion; 4 = Fire wood; 5 = Good for timber; 6 = Provides good material for construction (including beehives); 7 = Has medicinal benefits; 8 = Ownership right and 100% benefit-share of trees; 9 = to stake a claim on land; Other (specify) _____

CODE 4C: Importance of tenure security | 1 = not at all significant; 2 = somewhat important; 3 = important; 4 = very important; 5= essential

CODE 4D: Support for undertaking Investment | 1 = no support; 2 = support in kind from a household/family member; 3 = support in kind from a neighbour/friend in the village; 4 = loan from a cooperative of which I'm a member; 7= input (saplings) support from an NGO; other _____

CODE 4E: Reasons for not undertaking Investment | (select as many as apply) 1= no financial support; 2 = not necessary/needed; 3 = limited/no land available; 4 = non-availability of labour; 5 = insecure tenure status; 6 = Adverse claim to land owner's title; 7 = Violates the conditions of grant; other (specify) _____

II. Other land use investments/improvement decision-making:

Medium/Short Term– Soil/water land improvements	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A11. Have you or any household member made any medium soil improvements in the last 1-year? 1 = Yes; 2 = No>>A17										
A12. What are the two most important of such investments on the land? CODE 4F										
A13. What do you think the role your tenure status (security) played in undertaking this decision? CODE 4C										
A14. What factors motivated the decision to undertake the specific investment(s)? CODE 4G										
A15. Did you receive any support? 1 = Yes; 2 = No>>A18										
A16. From whom and what kind of support was received? CODE 4D										
A17. Why was the specific investment not undertaken? CODE 4E										

CODE 4F: Two most important soil/water improvements | (select up to two in order of importance) 1 = Levelling the terrain; 2 = Terracing/Land levelling; 3 = Bunding for soil and water conservation; 4 = Fencing; 5 = Reclamation; 6 = Fallowing; 7 = Mulching/Compost; 8 = Fertiliser/Pesticide; other _____

CODE 4G: Motivation for Decision | (select as many as apply) 1 = economic/financial returns; 2 = to boost productivity/yield; 3 = availability of land; 4 = pre-condition for the use of land; 5 = Prevent encroachment of land; 6 = Maintain soil fertility; 7 = Prevent crop raiding; other (specify) _____

III. Investment, ownership and/or Rental decision-making:

Land Investment/Ownership/rental Information	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A13. What is the duration (in years/months) for which the rental agreement covers?										
A14. Has the landlord provided any inputs for the land in the last 1 year? 1 = Yes; 2 = No>>A15										
A15. What proportion of the crops (farm produce) goes to the landlord? CODE 4H										
A15. What qualifies you to be allocated this land? CODE 4I										
A16. From whom did you obtain the land when you began to use or own it? CODE 4J										

A17. Did this person occupy a special political or traditional position? CODE 4K										
A18. Was this person a member of the village at the time the land was obtained? 1 = Yes; 2 = No										
A19. Is this person currently a resident of your village? 1 = Yes; 2 = No										
A20. Is this plot given out to someone outside the household (e.g. rented/sharecropped/allocated)? 1 = Yes; 2 = No>>5										
A21. For how long (in years/months) has this plot been leased out, sharecropped, or rented?										
A22. What is the main reason for the decision to rent/share crop/allocate this land? CODE 4L										

CODE 4H: Proportion of Crops to landlord | 0 = none; 1 = Two-thirds, 67% (2/3); 2 = One-half, 50% (1/2); 3 = One-third, 33% (1/3); 4 = One-fourth, 25% (1/4); 5 = One-fifth, 20% (1/5); other proportion (specify) _____

CODE 4I: Qualification for land access | (select as many as apply) 1 = member of landholding stool/family; 2 = member of village; 3 = Friend of land owner; 4 = employee of land owner; 5 = friend of village headman/odikro; 6 = family member of village headman/Odikro; other (specify) _____

CODE 4J: Authority/person who granted land | 1 = Family Head (Abusuapanyin); 2 = Paramount Chief (Omanhene); 3 = Sub-chief; 4 = Government (Aban); 5 = other male relative; 6 = other female relative; 7 = Non-relative; 8 = No-one; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 4K: Position of grantor | 1 = none; 2 = Member of Parliament; 3 = District Chief Executive; 4 = Assembly man/woman; 5 = Unit Committee Member; 6 = National Political Office (minister/deputy minister etc.); 7 = District/Village Political Party Executive; 8 = Paramount Chief (Omanhene); 9 = Sub-chief; 10 = Regent/Village Headman (Odikro); 11 = other party official; other (specify) _____

CODE 4L Reason for decision to rent land | 1 = needed money; 2 = plot undesirable; 3 = wanted to quit farming; 4 = already have enough land; 5 = labour constraints; 6 = help recipient; other (specify) _____

5. HOUSEHOLD PRODUCTION: CROPPING/AGRO-INPUT

I. Last Year: crop (harvest) [Enumerator: Ask about crop harvest in order of most important to least important]

Two major crops cultivated/sold by household	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A1. Name of the crop(s) harvested on this plot? CODE 5A	I. II.	I. II.	I. II.	I. II.	I. II.	I. II.	I. II.	I. II.	I. II.	I. II.

CODE 5A: ID of harvested crop | 1 = Cocoa (kokoo); 2 = Oil palm (abè/ngo nsamu); 3 = Citrus/orange (ankaa); 4 = Cassava (bankye); 5 = Plantain (borède); other

II. Agro-chemical inputs: [Answer about all plots currently owned/used. Use the same plot numbers as previous pages]

A2. In the last year, did you or any member of household apply any agro-chemical(s) on any of your plots? 1. Yes 2. No>>Next part										
Application of fertilisers on plot	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A3. Have you used any fertiliser on your plot? 1 = Yes; 2 = No>>next plot										
A4. What type of fertiliser is this? CODE 5B										
A5. Did you obtain any of this fertiliser through a government subsidy or an NGO? 1 = Yes all; 2 = Yes, some; 3 = No, none>>6										

CODE 5B: Type of fertiliser | 1 = Compost/Manure; 2 = Chemical/inorganic fertiliser; other (specify) _____

6. Perceptions about Land rights and tenure security

I. General land tenure security

Indicator – Perceived land tenure security	Answer	Indicator – Perceived land tenure security	Answer
A1. What do you perceive land tenure security to be or constitute? CODE 6B (Please do not prompt options)		A5. If yes, what are the conditions/restrictions? CODE 6C	
A2. Which land tenure system do you perceive as guaranteeing sufficient security of tenure? CODE 6B		A6. Are the conditions under which you occupy the land favourable to you? 1 = Yes, to some extent; 2 = Yes, absolute; 3= No;	
A3. Why do you consider the specific land tenure system as offering sufficient guarantee of tenure security?-----		A7. How do these conditions influence your farming decisions? CODE 6D	
A4. Are there any conditions to use of your land? 1 = Yes; 2 = No; 3 =DK			

CODE 6A: Perception of Land tenure security | (select as many as apply) 1 = Ability to continually cultivate land; 2 = Ability to reap the benefits of capital or labour invested in the land; 4 = Ability to exclude others from the use of the land temporarily or permanently; 5 = Ability to reap and enjoy the benefits from land resources (e.g. timber/NTFPs) thereon, other (specify) _____

CODE 6B: Guarantee of land tenure security | 1 = Customary land tenure; 2 = Statutory land tenure; 99 = don't know/no answer/ not applicable; other _____

CODE 6C: Conditions on the use of land | 1 = choice of crops cultivated; 2 = choice of trees planted; 3 = farm expansion; 4 = alienation/transfer of land; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 6D: Influence on land use decisions | 1 = not at all significant; 2 = somewhat important; 3 = important; 4 = very important; 5= essential

II. Perceived tenure security (Ask respondent his/her opinion on the following using the appropriate codes provided)

Indicator – Actual Expropriation Risk		Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A8. Has someone ever changed the boundaries of your land? 1 = Yes; 2 = No>>next plot											
A9. Has someone ever taken/encroached some or all of your land? 1 = Yes; 2 = No>>next plot											
A10. Has someone ever made a claim on some/all of your land? 1 = Yes; 2 = No>>next plot											
A11. Has someone ever used your land without your consent? 1 = Yes; 2 = No>>next plot											
A12. If yes to any of the above, who? CODE 6E											
A13. If land was taken, did you ever get any of this land back? 1 =Yes, all; 2 = Yes, some; 3 = No											
A14. Have you ever been to village authorities/ court to solve a problem with this land? 1 = Yes; 2 = No											
A15. How do you identify your plot boundaries? CODE 6F											
Indicator – Perceived Expropriation Risk		Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A16. Are you worried/ afraid of losing part or all of your land rights over your plot? CODE 6G											
A17. Are you worried that government might take your land one day? CODE 6G											
A18. Are you worried of losing or part of your land rights over the plot from...? CODE 6G	Extended family members										
	Other household in the village										
	Someone in other villages										
	Chief, village elders/ other elites										
A19. Are you worried that your land will be reallocated to someone else if left idle/fallow for several months?											
A20. Overall, do you feel secure in your ownership/use of this land? 1 = Not at all; 2 = somewhat; 3 = Yes											
A21. How would you describe the status of your right over this land? CODE 6H											
Actual/perceived risk of land conflicts/disputes – Ask respondents											Answer
Within the last 5 years, has this village experienced any land dispute? 1 = Yes; 2 = No; 3 =DK											

What is/are the nature of these conflicts/disputes?(as many as apply) 1 = Farmland boundary disputes; 2 = sharecropping conflicts; 3 = Chieftaincy disputes; 4 = Land rental disputes; 5 = timber tenure/benefit-sharing conflicts; 6 = Landlord/migrant conflicts; 99 =Don't know; other (specify) -----	
How is/are the dispute(s) being settled? 1 = Chief and elders; 2 = Odikro and elders; 3 = Stool Lands; 4 = Court; 5 = Abusuapanyin, 99 = DK; other-----	
Are you always satisfied with the dispute resolution mechanism in this village? 1 = Yes; 2 = No; 3 = DK	
If not satisfied with dispute solution mechanism, why? (please explain)-----	
In your view, what can be done land dispute resolution this village? -----	
Do you perceive land conflict/dispute as problem in this village over the next 5 years? 1 = not at all; 2 = somewhat of a problem; 3 = a serious problem	

CODE 6E: Person involved | (select as many as apply) 1 = Neighbour; 2 = Previous owner; 3 = A family member; 4 = Chief/Sub-chief; 5 = Stranger; 5 = other person in village; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 6F: Identification of plot boundaries | (select as many as apply) 1 = Social/customary recognition; 2 = Streams/rivers/ponds; 3 = Footpaths/anthills/hills; 4 = Trees/shrubs; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 6G: Perceived expropriation risk | 1 = Not at all; 2 = somewhat; 3 = Yes

CODE 6H: Perception of land tenure security | (select once) 1 = totally secure; 2 = secure; 3 = insecure; 4 = extremely insecure; 99 = don't know/no answer

III. Land rights index (Enumerator = Ask respondent whether they the following rights over the plot(s) they own/cultivate)

Indicator: Cultivation Rights – the right to use, harvest from, and make improvements to the land (Refer to CODE 6I below)	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A22. Plant, maintain and harvest the crops you choose.										
A23. Plant any tree species you choose.										
A24. Use non-timber forest products occurring on the plot										
A25. Collect water from the land										
A26. Cut trees to make charcoal/ other personal uses										
A27. Cut timber trees on land for sale										
A28.Make changes to the land (plant trees, cut trees, build etc.)										

CODE 6I: Perception of land right(s) | (select once) 1 = does not have the specific right; 2 = Uncertain about the specific right; 3 = certain about specific right

Indicator: Exclusion and Alienation Rights – The right to determine who can access and use the land, as well as the right to sell, rent, lease, or mortgage the land (Refer to CODE 6I)	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A29. Decide who is allowed to access and use this land										
A30. Exclude/ prevent anyone from accessing this land										

A31. Exclude/ prevent anyone from accessing and harvesting timber trees on this land										
A32. Exclude others in the harvesting of NTFPs on this plot										
A33. Transfer land to children without any difficulties										
A34. Transfer land to spouse without any difficulties										
A35. Sell, lease or rent some or all of this land to somebody in this village										
A36. Sell, lease or rent some or all of this land to somebody in neighbouring village										
A37. Sell, lease or rent some or all of this land to an outsider										
A38. Use land as collateral security to secure a loan										
A39. Decide who is allowed to access and use this land										
A40. Exclude/ prevent anyone from accessing this land										
A41. Exclude/ prevent anyone from accessing and harvesting timber trees on my farm plot										

7. Land/ Tree Documentation, Registration and Knowledge of Tenure Laws

Indicator: Land documentation/registration	Plot1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Plot 8	Plot 9	Plot 10
A1. What form/ type of documentation do you possess? CODE 7A (If none>>A11)										
A2. Where did you register/ who approved it? CODE 7B										
A3. How would you describe the cost of documentation? CODE 7C										
A4. How would you describe the land documentation process? CODE 7D										
A5. If no documentation covering your land, what are the reasons for non-registration/documentation? CODE 7E										
A6. Would you be willing to document/register your land if assisted/support? 1= Yes; 2 = No										

CODE 7A: Form of Documentation | 1 = no document; 2 = deeds certificate; 3 = title certificate; 4 = stool lands receipt; 5 = Allocation note from stool/chief; 6 = site plan/farm plan/indenture; 7 = Agreement paper from landowner; 8 = will/testament; 99 = don't know/no answer/ not applicable; other _____

CODE 7B: Source of Documentation and Approval | 1 = palace and approved by the chief; 2 = Lands Commission approved by registrar of lands; 3 = district

CODE 7C: Cost of Documentation | 0-7 scale where 0 = no charge/ don't know/ not applicable; 1 = extremely reasonable; 2 = reasonable; 3 = somewhat reasonable/uncertain; 4 = indifferent/okay; 5 = somewhat expensive; 6 = expensive; 7 = extremely expensive

CODE 7D: Satisfaction with documentation process | 0-7 scale where 0 = don't know/ not applicable; 1 = completely dissatisfied; 2 = dissatisfied; 3 = somewhat dissatisfied; 4 = indifferent/okay; 5 = somewhat satisfied; 6 = satisfied; 7 = completely satisfied

CODE 7E: Reasons for non-documentation | (select as many as apply) 1 = not at all necessary; 2 = unaware of land registration legislation; 3 = cost of land documentation/registration; 4 = cumbersome procedure of land documentation; 5 = no additional benefits to enjoy from land documentation; other _____

8. Land rights of women and strangers/migrants (Enumerator = Ask respondent his/ her views on the rights of the women/strangers)

Indicator – Perceptions of women’s land rights		Answer	Indicator – Perceptions of strangers’ land rights	Answer
A1. Are women able to gain access to land in this village for farming? 1 = Yes; 2 = No>>A3; 3 = DK			A9. Are strangers able to gain access to land in this community for farming? 1 = Yes; 2 = No>>A11; 3 = DK	
A2. Under what conditions can a woman own land in this village for farming? CODE 8A			A10. By what means are strangers able to gain access to land for farming? CODE 8D	
A3. If women cannot own land through any of the methods in CODE 8A above, what are the reasons?-----			A11. Who is vested the power to grant land to strangers in this community? CODE 8E	
A4. Can women pass on to their heirs (including anyone of their choice) their land rights without difficulties? 1 = Yes; 2 = No; 3 = DK			A12. Are strangers required to make any payment(s) for allocation of farmland? 1 = Yes; 2 = No>>A16; 3 = DK	
A5. If no, why can’t women pass on to her heirs their land rights? CODE 8B			A13. What payment(s) is/are required to be made by strangers for the grant of farmland? CODE 8F	
A6. Can a woman lose the following rights to land? 1 = Yes; 2 = No>>A8; 3 = DK	Use rights over her land		A14. Who receives the payment(s) for grant of farmland? CODE 8G	
	Title (interest) to her land			
A7. Under what circumstance(s) can a woman lose her use rights? CODE 8C			A15. Why are customary payments made by strangers to this person(s) or authority? -----	
A8. Are there role variations/ differences between men (male) and women (female) in the management of land resources in this community? 1 = Yes; 2 = No>>A9; 3 = DK			A16. Why can’t strangers pass on to their heirs their rights/ title to land? CODE 8B	
			A18. Can strangers lose their use rights/title to their farmland? 1 = Yes; 2 = No; 3 = DK	
			A19. Under what conditions can strangers lose their use rights/title to farmland? CODE 8H	

CODE 8A: Methods for Women land ownership | (Select as many as apply) 1 = inheritance; 2 = gift; 3 = on widowhood; 4 = absolute/outright purchase; 5 = barter; 6 = sharecropping; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 8B: Reasons for non-transferability of land rights | 1 = Prohibited by customary law; 2 = Prohibited by statutory legislation; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 8C: Conditions for loss of women's land rights | (Select as many as apply) 1 = divorce; 2 = widowhood; 3 = neglect of customary practices; 4 = desertion of matrimonial home; 5 = non-payment of rent (awowa); 6 = abandonment of land; 7 = poor land husbandry; 8 = loss of cocoa on land; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 8D: Acquisition of land rights by strangers | (Select as many as apply) 1 = absolute/outright purchase; 2 = borrowing; 3 = inheritance; 4 = rent; 5 = gift; 6 = pledge; 7 = barter; 8 = sharecropping (Abunu); 9 = sharecropping (Abusa); communal right; 99 = don't know/no answer/ not applicable; other _____

CODE 8E: Authority to grant land to strangers | (Select as many as apply) 1 = The Omanhene (Paramount chief); 2 = The Divisional/ sub-chiefs; 3 = The Odikro/sub-Odikro (Village headman); 4 = The Abusuapanyin (Clan/family head); 5 = The Individual land owner; 6 = Government; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 8F: Customary payments for grant of land | (Select as many as apply) 1 = Cash rental; 2 = Lump sum purchase; 3 = Food crops; 4 = cocoa; 5 = drinks (aseda); 6 = don't know/no answer/ not applicable; other (specify) _____

CODE 8G: Recipient of customary payments | (Select as many as apply) 1 = The Omanhene (Paramount chief); 2 = The Divisional/ sub-chiefs; 3 = The Odikro/sub-Odikro (Village headman); 4 = The Abusuapanyin (Clan/family head); 5 = The Individual land owner; 6 = Government; 99 = don't know/no answer/ not applicable; other (specify) _____

CODE 8H: Conditions for loss of stranger's land rights | (Select as many as apply) 1 = Abandonment of land; 2 = Poor land husbandry (stewardship); 3 = Vacates/leave the village; 4 = Neglects/violate customary practices; 5 = Rent default; 6 = Adverse claim to land owner's title; 7 = Violates the conditions of grant; 8 = Government expropriation; 99 = don't know/no answer/ not applicable; other (specify) _____

9. Social organisation – Cooperatives, Community groups and extension

	Answer		Answer
A1. Do you belong to any organisation/cooperative? 1 = Yes; 2 = No>> A5		A5. Do you have access to agricultural extension services? 1 = Yes; 2 = No	
A2. If yes, which organisation/cooperative is this? CODE 9A		A6. Who is providing the extension services to you? CODE 9C	
A3. For how long (months/years) have you being a member?		A7. If yes, please indicate your extent of satisfaction with extension services? CODE 9D	
A4. Does the group provide any support/incentive? CODE 9B			

CODE 9A: Organisation/Group | 1 = Enobua (Communal labour group); 2 = Community volunteer group; 3 = Co-operative/NGO; 4 = Church/Christian group; 5 = Islamic group; 6 = CREMA; other (specify) _____

CODE 9B: Organisation/Group | 0 = No incentives provided; 1 = Agrochemicals; 2 = Agricultural inputs; 3 = Seedlings; other (specify) _____

CODE 9C: Provider of extension service | 1 =COCOBOD; 2 = MOFA; 3 = NGO; 4 = Farmer Co-operative; 5 = CREMA; other (specify) _____

CODE 9D: Satisfaction with extension services | 1 =Very unsatisfied; 2 = Unsatisfied; 3 = Uncertain; 4 = Satisfied; 5 = Very satisfied

10. Satisfaction/Choice questions (Enumerator = Ask respondent the extent of his/her opinion on the following statements)

	Agree/disagree CODE 10A		Agree/disagree CODE 10A
A1. I could easy to get more land for farming		A9. I have total control over all timber trees on my farm plot(s)	
A2. I would find it easy to rent (Abunu/Abusa) my land to someone else		A10. Customary land tenure does not provide sufficient security of tenure to land owners/users	
A3. I would find it easy to rent (Abunu/Abusa) from someone else		A12. Tenure insecurity is a major constraint to sustainable land management	
A4. I have no control over the management decisions on the land I currently work on		A13. Tenure insecurity is a major cause of environmental degradation	
A5. I am confident that my children will inherit the land I currently work on/ own for cocoa		A14. Existing land use and farming practices contributes to environmental degradation	
A6. I am confident that my children will inherit the land I currently work on/ own for non-cocoa products/ oil palm/coconut		A15. Statutory land tenure provides sufficient security of tenure than customary land tenure	
A7. I could easily change the crops I grow on my farm		A16. Are willing to engage in tree planting if supported?	
A8. I could easily cut a tree on my farm for personal use without any restrictions			

CODE 10A: Agree or disagree | 1 = Strongly Agree; 2 = Agree; 3 = Disagree; 4 = Strongly Disagree; 99 = don't know/no answer/ not applicable

In your view what are the most serious tenurial and environmental challenges in this village?

How do you think these tenurial problems identified above can be solved?

-THANK YOU

APPENDIX 5: INTERVIEW GUIDE

Name of Interviewer:	Date of Interview:
Name of Village:	Location of Village:
Communal Status: Indigene [] 1 / Migrant [] 2	Respondent's Name:
Position in the Village:	Age:
Educational Level:	Sex:

PART 1: GENERAL QUESTIONS FOR COMMUNITY-LEVEL RESPONDENTS

1. Can you give a brief history of this village?
[Probe: origin of early settlers, means of settlement etc.]
2. Which stool (paramountcy) has jurisdiction over this traditional area?
3. What are the different categories of land ownership in this village?
[Probe: stool lands, family lands, individual lands]
4. In your view, which people and or institutions are the most relevant source(s) of information regarding land management in this village?

PART 2: VILLAGE HEADMAN/ COMMUNITY ELDERS

1. How did you occupy your position?
2. How long have you occupied this position?
3. Given your position, what key function(s) do you perform in this village?
[Probe: land allocation, use, management etc.]
4. Which persons or institutions are involved in land management in this village?
[Probe: Chief, Odikro, Abusuapanyin/ Obaapanyin, Stool Lands, CLS]
5. In your view, what are the respective roles of these people or institutions in the management of land and other natural resources in this village?
[Probe: roles of chiefs, Odikros as the custodians of the allodial titles in land]
6. How do these people or institutions influence the management of land and other natural resources in this village?
[Probe: decision-making processes, resource benefits-sharing, land dispute resolution etc.]
7. In whom is the absolute title to land in this traditional area vested? Why?
8. In your capacity as a farmer, how are you affected by the people or institutions responsible for the management of land and other natural resources in this village?
9. What is/are the commonest means of land acquisition in this village?
[Probe: modes of land acquisition – inheritance, gift, purchase, sharecropping etc.]
10. What are the current procedures for land acquisition in this village?

[Probe: procedures for land acquisition by different social groups – women, migrants and the youth]

11. As a land user, what role does the tenure play in the management and use of your land? *[Probe: land use and management decision-making]*
13. What are the key features of customary tenure arrangements in this village?
[Probe: conditions of access, use and management of land and other nature resources]
14. What variations or differences (if any) exist in terms of tenurial arrangements for different categories of people in this village?
[Probe: conditions of access, use and management of land by women, youth and migrants]
15. What is your understanding of the term “land tenure security”?
[Probe: interpretation of the term based on respondents’ perception]
16. What in your view constitutes a secure ownership/ use over land?
[Probe: Indicators of tenure security based on respondent’s own experiences]
17. In your view, does the existing tenurial conditions influence land use arrangements? If yes, how?
18. In your opinion, has there been any changes in the local tenurial arrangements in the last 5-10 years? How? *[Probe: changes in conditions of ownership, access, control and transfer etc. by different social groups]*
19. In your view, are there any tenurial problems in this village? If yes, please explain.
20. What in your view are the serious environmental challenges in this village?
21. In your view, what are the implications of the above-mentioned challenges for the sustainable use and management of land in this village?
22. In your view, how could the afore-mentioned challenges be solved?
23. Are there any issues regarding land and resource tenure practices and land use in this village that have not been covered by this interview?

PART THREE: TRADITIONAL AUTHORITIES (NANANOM)

1. What is your stool name or chiefship?
2. How did you occupy this position?
3. How long have you occupied this position?
4. What is the composition of this traditional area and which communities fall under your jurisdiction?
5. Do you have under sub-chief(s) under your jurisdiction? If yes, please name them
6. What role do these sub-chiefs play in relation to land and resource management?

7. Do you interact with state institutions in the performance of your duties? If yes, how?
8. Who holds the absolute interest in land in this traditional area?
9. What core functions do you perform that are land management oriented?
10. What would you say are the serious challenges you face in the performance of your duties?
11. In your view, are there any tenurial problems in this village? If yes, please explain.
12. In your view, what are the serious environmental changes in this village?
13. In your view, what are the implications of the above-mentioned challenges for the sustainable use and management of land in this village?
14. In your view, how could the afore-mentioned challenges be solved?

PART FOUR: INSTITUTIONAL STAKEHOLDERS (OFFICIALS OF OASL, CLS etc.)

1. What are the functions of your organisation?
2. For how long has your organisation being in operation in this district?
3. What are your specific duties you perform in your organisation?
4. How long have you have you occupied your position?
5. How does your organisation relate to the traditional authorities in the performance in the management of land and natural resources?
6. What would you say are the major achievements of your organisation so far?
7. What in your view are the constraining factors that hinder the performance of your duties as an organisation?
8. In your view, are there any tenurial challenges in this district? If yes, please explain.
9. In your view, what factors that inhibit the adoption of sustainable land management practices in this district?
10. What is the role of tenure in promoting sustainable land management in this district?
11. What would you say are the most important environmental challenges in this district?
12. In your view, how could the afore-mentioned challenges be solved?

Thank you