A Sustainable Livelihood Analysis of Small-Scale Farmers in M'muock, Cameroon

Local Realities and Structural Constraints

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Master thesis in Human Geography

Department of Sociology and Human Geography

UNIVERSITY OF OSLO

May 2013

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ACKNOWLEDGEMENTS

First and foremost, I would like to extend my gratitude towards my informants who took the time to answer my questions, letting me into their homes and sharing their lives with me.

I would also like to express my very great appreciation to my supervisor, Jan Hesselberg, for his guidance and valuable critiques during the planning and development of this research project.

Special thanks should be given to Mbape Apabeloi for taking so well care of me and my family during our stay in Cameroon, introducing us to friends and welcoming us into your family.

My grateful thanks are also extended to my wonderful translator and assistant, Aloishius, your knowledge about the place, the people, their culture and agricultural practices enabled me learn so much, as well as getting many informative interviews in a short amount of time.

Special thanks to my loving mum and dad for financial and moral support.

Finally, I would like to thank Fredrik, my two wonderful girls Maja and Sofia, family and friends for bearing with me during this whole process, I love you so much.

Kaisa Ramona Hautala

Nesodden, May 2013

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ABBREVIATIONS

CEMAC	Economic and Monetary Community of Central Africa
CIG	Common Initiative Group
DFID	Department for International Development
FAO	Food and Agricultural Organization
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
HIPC	Heavily Indebted Poor Country
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
NIC	Newly Industrialized Country
PIP	Policies, Institutions and Processes Operation
PRGO	Poverty Reduction and Grow
PRSP	Poverty Reduction Strategy Paper
SAP	Structural Adjustment Programme
SLA	Sustainable Livelihood Analysis

FIGURES

Figure 1: SL Framework

Figure 2: Map of Cameroon and fieldwork location

Figure 3: Picture of damaged road in M'muock

Figure 4: Picture of national market in Yaoundé

1 INTRODUCTION

A large portion of the worlds poor live in rural areas, many deriving a large part of their incomes from agricultural activities. A number of international development agencies have recently shown an increasing interest in agricultural development as a means of achieving wide spread poverty alleviation (World Bank 2008, Development Fund 2011, IFAD 2011). The World Bank (2008) claims that agriculture is the most effective way of stimulating economic development and reducing poverty. Whereas most of Asia and South-America have had a Green Revolution with subsequent increases in productivity, much of sub-Saharan Africa has yet to experience any substantial modernization of their agricultural sector. African farmers are still struggling with outdated means of production and are in dire need of capital and investment to be able to expand and grow. These poorly developed agricultural sectors do not only cause the farmers to struggle for sustainable livelihoods, it is also a contributing factor in the dependency upon cheap imported foods to meet the dietary needs of their populations. As we live in a world with an unstable global food system, relying heavily on food imports is a risky and potentially lethal game.

Many sub-Saharan African countries have a comparative advantage in producing food due to their warm and wet climate, and cheap labour force (Patel 2007, Roberts 2008). However, they also face specific risks that constitute their vulnerability context, which can have critical implications for their livelihood opportunities. While globalization and free trade has lead to increased market access for farmers, developing countries are now forced to compete with highly developed and subsidized sectors in the developed world, both on national and international markets. Moreover, as neoliberal reforms were implemented across the developing world through neoliberal reforms and the Structural Adjustment Programs, support programs for farmers were removed. Farmers who had become dependent upon cheap inputs such as chemical fertilizer, were now confronted with declining prices for agricultural commodities, while the prices for inputs were rising. This price squeeze has persisted with critical implications for small-scale farmers in developing countries (Hesselberg 2010).

As farmers are highly dependent upon the natural environment, climate change and environmental degradation pose as a critical challenge for the sustainability of their livelihoods. Changing weather patterns and increased risk of shocks are likely to complicate the livelihoods of farmers in the future, as the rainy season upon which many farmers rely

will become increasingly unpredictable (Buckingham and Turner 2008, Leichenko and O'Brien 2008, Tingem et al 2008). In addition, decreasing soil fertility due to over-cropping and unsustainable use of chemical inputs is adding to the vulnerability of farmers (Gosh 2004). At present, land degradation and population growth in combination with climate change pose a serious challenge for sustainable livelihoods and food security in developing countries (Tingam et al 2008).

The main objective of this study is to establish the real constraints, local and structural, facing small-scale farmers in developing countries, using M'mouck, Cameroon as case. The analysis draws on the Sustainable Livelihoods (SL) Framework, attempting to discern the main factors that affect the livelihoods of smallholder farmers and the relationships between these factors. It situates M'muock in a global context and illuminates external factors such as neoliberalism, globalization and climate change.

1.1 RESEARCH QUESTIONS

What are the main constraints and opportunities for securing sustainable livelihoods for smallholders in M'muock?

In order to answer this question and give an understanding of the economic and environmental dimensions of sustainable livelihoods, I have developed three sub-questions:

- *What is the local and global vulnerability context of smallholders in M'muock?*

- *Which livelihood assets and combination of assets are currently available to the farmers in M'muock?*

- *How do policies, institutions, and processes impact the livelihood opportunities of smallholders in M'muock, and what are the links between global, national and community scales?*

1.2 ANALYTICAL CONCEPTS

It is necessary to elaborate the main concepts that I will use in this thesis. The concept of small-scale farming and smallholder farming is somewhat arbitrary referred to in the literature. The important variables are often the size of land holdings and focus of production

(subsistence or commercial). The farmers in M'muock all produce both for own consumption and sale. The farmers who were interviewed in M'muock were primarily small-scale and applied only household labour on their farm, while some were medium scale and had to rent a few labourers during harvest. They will all however be categorized as small-scale in this thesis, as income generation from their agricultural activities was very limited.

1.3 THESIS OUTLINE

The first chapter in this thesis provides background information on the research topic, and presents the research questions. The second chapter gives an account of the theoretical framework used in analysing the fieldwork data, the Sustainable Livelihood Approach. The third chapter consists of the methodological approach used in this thesis. The fourth chapter sheds light on the local and global vulnerability context in which M'muock farmers are situated and how these are impacting the livelihoods of small-scale farmers. This includes neoliberalism, globalization and climate change. The fifth chapter presents the empirical data from the research, consisting of the livelihood portfolios of M'muock farmers. The sixth chapter analyses the policies, institutions and processes that influence the vulnerability context and the livelihood opportunities in M'muock, and establishes links between different scales. Finally, in the seventh chapter, I will summarize the main findings from the research, discuss the usefulness of the theoretical framework, and implications of this thesis for the wider debate on the development of smallholder farming.

2 THEORY

The aim of this chapter is to give an account of the main theoretical foundations on which this thesis is built. The Sustainable Livelihoods Approach (SLA) offers a comprehensive framework for understanding the complex multi-dimensionality of poverty, from global to local level. It draws on diverse disciplinary perspectives and cuts across sectoral boundaries, offering a tool of analysis that differs from previous monovalent approaches (Scoones 2009). It is used in this thesis to help identify the vulnerability context, the livelihood strategies, and barriers to the development of small-scale farmers in M'muock.

2.1 THE LIVELIHOODS APPROACH

The livelihoods approach emerged in the late 1990s and has since been central in rural development thinking and practice. Initially, it was promoted by the British state development cooperation agency, the Department for International Development (DFID), who used it as their main poverty alleviation strategy. According to De Haan (2012), the intentions behind the framework was to create a 'Third Way' for the new Blair administration that would function as middle way between the old labour ideology and the previous neo-liberal policies of the conservative government. Scoones (2009) describes the roots and history of the SL approach and concludes that it did not emerge from nowhere in the 1990s, but rather that it shares insights with past approaches like village studies, political ecology and resilience studies. Since its first appearance in the development arena, maybe most notably in Chambers and Conways' (1992) overview paper, it has been taken on by numerous development agencies such as OXFAM, Care, UNDP and IFAD who all have adopted their own version of the SL approach.

The livelihood approach is an attempt to understand how different people live their lives in different places. The literature shows a variety of definitions of the concept 'livelihoods', which at its most basic entails 'the means of gaining a living' (Chambers in Scoones 2009). However, the most commonly used definition of Sustainable Livelihoods emerged in Chambers and Conway's working paper for the Institute of Development Studies in 1992 and captures the broad notion of livelihoods understood in this thesis:

> "A livelihood comprises of the capabilities, assets (including both material and social resources) and activities for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base."

The SL approach constitutes a complex portfolio of the divers activities and interactions people undertake to make a living. The areas of application include 'village studies, household economics and gender analyses, farming system research, agro-ecosystem analyses, rapid and participatory appraisal, studies of socio-environmental change, political ecology, sustainability science and resilience studies' (Scoones 2009), which shows the wide range of practical uses. The SL approach has strongly influenced development organizations and their development policies and interventions, development oriented research and practice for the past decade.

One of the main characteristics of the SL approach is that it puts 'poor' people and the priorities they define firmly at the centre of analysis, offering a systematic analysis of poverty and its causes. The aim is to see poverty from local perspectives. This is an important aspect of the approach, because I wanted to understand the livelihoods in M'muock from the farmers' perspectives. The focus is on opportunities and agency, as opposed to needs and constraints. It offers a new way of thinking about development that differs from the previous top-down neo-liberal policies. It is an actor-oriented perspective that analyses the lives and daily needs of the poor using a participatory and bottom-up perspective, much inspired by the work of Sen (1981) on entitlements. It is crucial to reflect upon how knowledge is created and how certain discourses may lay the development agenda; 'knowledge production is always conditioned by values, politics and institutional histories and commitments' (Keely and Scoones in Scoones 2009: 14). The particular normative framing found in the SL approach has its implications for development thought and practice. One example is the World Banks *World Development Report* 2008 "Agriculture for development", which focuses on the importance of rural livelihoods, and identifies different strategies and types of economies that make out a series of evolutionary stages to development. These assumptions make a strong normative framing of how rural development should take place, and the institutional power behind key donors like the World Bank create a certain kind of knowledge in the development field. Questioning 'the processes through which livelihoods knowledge is negotiated and used is required' (Stirling in Scoones 2009).

The SL approach intends to offer a practical framework for evidence-based intervention and policy, and is not intended to be a rigid set of rules, rather flexible and dynamic. It has a holistic multi-sector view of livelihoods, which according to DFID (1999, 1.3) means that the most pressing constraints and opportunities are explored, regardless of where people are (sector, geographical scale etc.). The wider context plays an integral part of the framework as history and the vulnerability context is explored, from local to global level. While there is an intention to link the micro with the macro in livelihood perspectives, Scoones (2009) claims that this often is more an ambition than reality and that there has been a persistent failing to address wider, global processes and how they affect livelihoods at the local level. 'As global transformation continue apace, attention to scale issues must be central to the reinvigoration of livelihood perspectives' (p.17). De Haan (2012) also argues that one of the main challenges to the SL approach is to overcome its bias towards the local. In order for this to be overcome, the livelihoods perspective needs to include global-local interactions in the analysis. More precisely, how 'the global is contested and moulded locally and how local communities create localities by crafting contested and negotiated spaces.' In addition, the way in which localities shape the global space are often neglected, leaving out an important part of the equation. Indeed, in order for a livelihood analysis to be able to capture the complexities of livelihood systems, the divers and severe impacts of globalization and the local-global interactions needs to be an integral part of the livelihood framework.

The SA approach stem from concerns about the effectiveness of development activity, and attempts to go beyond conventional definitions and approaches to poverty eradication. Despite commitments to poverty reduction, the immediate focus of much donor and government effort has been on only a few aspects of deprivation such as income, resources, and facilities (water, land, clinics, infrastructure) or on structures that provide services (education ministries, livestock services, NGOs), rather than people themselves. The livelihood approach promoted the importance of a solid understanding of the household economy, combined with attention to the policy context in order to achieve development goals (DFID 1999). The vulnerability context is a vital part of the SA framework as it serves to put livelihood strategies and outcomes into context, and identifies different factors and processes that constrain or enhance poor people's ability to make a living. This includes different economic, environmental, political, and social trends that might affect livelihoods, the various shocks that might occur, and the seasonality of the local environment and economy. It then continues with the impact of the vulnerability context on the various

livelihood assets. Finally, the analysis concludes with the processes through which community members interact with each other and the larger society (Carr 2013). This includes government services, non-governmental services, and private agencies. Poor people's livelihood strategies are embedded in structures and governed by institutions, and shaped by interactions between the local and the global (De Haan and Zomers in De Haan 2012). Through these processes, individuals and communities can access the livelihood assets and decide how to make use of them. Discerning the vulnerability context of M'muock farmers is key in understanding how present structures are impacting their livelihoods, and is therefore a vital part of my analysis.

The livelihood approach has links with other conceptual frameworks, and is influenced and inspired by many of them. There are some similarities with the Right-based approaches, as they both stress the responsibilities of the global community to eradicate poverty and to promote human rights, in addition to concerns about empowerment and participation. The Participatory movement in development promotes people's achievement of their own livelihood objectives, people's strengths, and an understanding of the effects of macro policies upon livelihoods. This bears resemblance with SLA, in addition to addressing the importance of vulnerability to shocks and trends and on various kinds of assets (DFID 1999:1.5). An other approaches that is reminiscent with SLA is Sector-wide approaches (SWA), with which they share a heavy emphasis on understanding the structures and processes that condition people's access to assets and their choice of livelihood strategies. According to DFID (1999), the sector-wide support programmes will be highly appropriate where the major constraint is poor performance by government agencies, but the SLA clearly rejects the sectoral entry point of SWA. In many respects, the SL approach also share characteristics with the old Integrated Rural Development (IRD) approach that failed in the 1970s. The IRD was also broad and multi-sectoral, but the crucial difference is that the SL approach does not necessarily aim to address all aspects of the livelihoods of the poor. The intention is rather to employ a holistic perspective in the analysis of livelihoods to identify those issues or subject areas where an intervention could be strategically important for effective poverty reduction, either at the local level or at the policy level. According to Krantz (2001) some of its proponents have therefore likened it to an 'acupuncture' approach to development ('putting the needles in the right place'). This highlights the difference from other approaches, while it is holistic at its core, the goal is to identify the specific entry points to which poverty alleviation strategies should be applied. Scoones (2009) accentuates the

diversity of livelihood strategies and how this differentiates the approach from single-sector approaches.

Amartya Sens nominal work on entitlements has strongly influenced the SL approach. Entitlements stand for "the set of different alternative commodity bundles that a person can acquire through the use of the various legal channels of acquirement open to someone in his position. In a private ownership market economy, the entitlement set of a person is determined by his original bundle of ownership (what is called his 'endowment') and the various alternative bundles he can acquire starting respectively for each initial endowment, through the use of trade and production (what is called 'exchange entitlement mapping')" (Sen 1995:5). Sens work on capabilities has also had its impact on the development of the livelihoods approach. The core characteristic of the capability approach is its focus on peoples ability to perform certain basic functionings. The term has a wide span, including quality of life, which is seen in terms of being able to choose valued activities (Chambers and Conway 1991).

> "The capability approach to a person's advantage is concerned with evaluating it in terms of his or her actual ability to achieve various valuable functions as a part of living. The corresponding approach to social advantage –for aggregative appraisal as well as for the choice of institutions and policy – takes the set of individual capabilities as constituting an indispensable and central part of the relevant informational base of such evaluation" (Sen 1993: 30).

Sen argued that in social evaluations and policy design, the focus should be on what people are able to do and be, on the quality of their life, and on removing obstacles in their lives so that they have more freedom to live the kind of life which, upon reflection, they find valuable. Within the livelihood approach, capabilities also entail being able to cope with stress and shocks, and to explore livelihood opportunities. The capabilities are not exclusively reactive, but also proactive and dynamic (Chambers and Conway 1991, Robeyns 2003).

2.2 CRITIQUE

While having played a central part of development thinking and interventions since its was first brought to fore by DFID, the SL approach also has its limitations and challenges. One of the initial critiques of the livelihood approach was that it had a too concrete and economic

take on livelihoods. There is an underlying assumption that livelihood strategies engage in activities to address material challenges to well-being, but poverty is not necessarily a matter of income or material well-being (De Haan 2012, Carr 2013). Various studies have shown that many livelihood strategies are in fact efforts to address both social and material goals. Carr (2013) argues that social goals often trump material ones, and that there is need to move beyond the instrumental livelihood approaches to something that he refers to as 'intimate government'. This entails 'local efforts to shape conduct to definite, shifting, and sometimes contradictory material and social ends' (Carr 2013: 78). While it is beyond the scope of this paper to give a full account of this approach, it shows us the need to be aware of the dominant economic take on livelihoods and how it can be useful to adopt a more encompassing view of livelihood aspirations. Clearly, there are neo-liberal tendencies in the SL approach, as it tends to focus on material well-being, more on opportunities than constraints, more on actor's agency that structure, and more on neutral strategies than on failed access due to conflicts and inequalities in power. De Haan (2012) concludes by noting: 'globalization and its dominant ideology shaped much of the new understandings of livelihoods'. 'The research and policy focus has shifted away from the contextual, transdisciplinary and cross-sectoral insights from livelihood perspectives, often back to a predictable default of macro-economic analysis.' (Scoones 2009: 13).

The lack of attention to power relations in the livelihoods approach is emphasized in De Haan (2012). He stresses that livelihoods are not neutral but exist in processes of inclusion and exclusion, and that power is an integral part of that. Important reflections around social and political structures that influence livelihood choices have been made, but the dominant agenda has been one of economic concerns and instrumental poverty reduction. Scoones (2009:15-16) argues that the SL framework must:

> "...move beyond the local level to examine wider structures of inequality. Basic questions of political economy and history matter: the nature of the state, the influence of private capital and terms of trade, alongside other wider structural forces, influence livelihoods in particular places. This is conditioned by histories of places and peoples, and their wider interactions with colonialism, state-making and globalization."

While power and politics already play a central part of Institutions in the SL framework, much of the livelihoods literature use it in a light, descriptive way and foresees a thorough theoretical concern for the issue. It is argued that a strategic understanding of social and political realities of power can provide a sense of perspective and thereby enhance livelihood perspectives further (Unsworth in Scoones 2009). Power relations ultimately shape the

possibilities and constraints to all livelihood strategies, and should therefore play a key part in the analysis.

The SL approach is also accused of failing to deal with one of the most pressing issues in the twenty-first century, global environmental change, and how this will affect poor rural livelihoods in the future. The term 'sustainable' is frequently used in the SL approach, but it usually refers to the ability to cope with shocks and stresses. Scoones (2009) questions whether local strategies to this all-encompassing issue are sufficient, and stresses the need to integrate livelihood thoughts with concerns for climate change. As the future effects of climate change on livelihood strategies more than likely will be of great significance, the need to integrate this aspect more thoroughly into livelihood analysis seems clear. It is difficult to imagine long-term sustainability of livelihoods that have not taken into account the challenges that lay ahead regarding issues of global environmental change.

Finally, one of the main questions regarding the SL framework, is whether it is feasible to translate it into poverty reduction and livelihood enhancement on the ground and how it can be translated into interventions. While the framework offers a comprehensive analytical tool, it is not an easy step-by-step guide to livelihood interventions. For some it has proven difficult to obtain poverty reduction by implementing the approach, while others have had more success with reaching their development goals. The different takes on the livelihoods perspective and the various variants of the framework will ultimately provide different results in different contexts. What is certain, however, is that by using the principles put forth in the SL approach as a guide, you will have solid framework to gain a better understanding of complex livelihood systems. For the SL approach to have continued relevance and application, the critiques and challenges to the perspective needs to be addressed.

2.3 SUSTAINABILITY

The notion of sustainability is central to the SL approach. Environmentally, sustainability refers to challenges with overpopulation and wasteful and polluting consumption patterns that causes climate change, pollution, desertification, and excessive use of non-renewable resources, from local to global level (Chambers and Conway 1991). In the livelihood approach, sustainability is defined in the terms of the ability of a social unit to enhance its

assets and capabilities in the face of shocks and stresses over time, and connotes self-sufficiency and self-reliance (Morse et al. 2012). In general, livelihoods are sustainable when they are resilient in the face of shocks and stresses, do not depend on external support, maintain the long-term productivity of the natural resources and do not undermine the livelihoods options of others (DFID 1999).

> "Sustainability is thus a function of how assets and capabilities are utilized, maintained and enhanced so as to preserve livelihoods." (Chambers and Conway 1991:9)

Social sustainability has two dimension, one negative that is reactive and engages in coping strategies to deal with shocks and stress. The other one is positive and revolves around dynamic exercising of capabilities to adapt to and exploit changes. DFID distinguishes between environmental, economic, social and institutional aspects of sustainable systems. Even though very few livelihoods can be defined as sustainable on all these dimensions, it is a key goal because it implies that progress in poverty reduction is sustained over time. One of the main challenges for sustainability within the SL approach is the trade-offs between livelihood outcomes and sustainability. Examples identified by DFID (1999) are among others the tension between locally identified needs for improved livelihood security and wider concerns about environmental sustainability (land degradation), and between maximizing incomes in the short term and guarding against vulnerability to external shocks in the long term (climate change). It can also include achievement of household livelihood objectives and the requirement not to compromise the livelihood opportunities open to others (water depletion, desertification). While these challenges cannot easily be overcome, the framework facilitates a coherent and structured discussion of how differing perspectives and challenging issues can be brought to fore.

Some have suggested that the people-centred aim of the approach compromises the sustainability factor, but Carney (1998) argues:

> "However, while it starts with people, it does not compromise on the environment. Indeed one of the potential strengths of the livelihoods approach is that it 'mainstreams' the environment within a holistic framework."

The ambition of mainstreaming the environment and sustainability has not however been exclusively successful. Scoones (2009) argues that sustainability has been a weak element in much of the livelihoods analysis, because it has not been able to move beyond the focus on short-term adaption and coping strategies. The approach has not been able to capture the dynamic, long-term changes that influence livelihoods and that may undermine them in the

future. ‘Sustainability and resilience cannot always emerge through local adaption in conditions of extreme vulnerability’ (Scoones 2009:18). One of the main challenges to this issue is that of global environmental change, in which case local adaption might not be sufficient. In response to long-term changes, more severe and comprehensive responses might be necessary. One possibility might be to identify multiple future livelihood strategies. Indeed, the persistent uncertainty resulting from globalization and climate change might require a range of pathways for future livelihoods.

2.4 THE SL FRAMEWORK

The SL framework is an analytical tool used to understand the set of interconnected factors that connect people to assets. It highlights key points within the SL analysis, and how these are connected. According to Scoones (1998:3) the central question to any sustainable livelihoods analysis is: ‘given what particular context, what combination of livelihood resources result in the ability to follow what combination of livelihood strategies with what outcome?’ To investigate all the aspects in the SL framework will require a vast amount of resources and is beyond the scope of this paper. Due to limited amounts of time and resources, I have chosen to analyse the vulnerability context and livelihood portfolios of farmers in M’muock to identify which constraints to livelihood outcomes are most dominant. It is however necessary to give a full account of the SL framework to understand how the different factors are connected.

The following figure shows what a typical SL framework might look like. On the far left hand side, the vulnerability context is explored, consisting of the external factors that might prevent or support access to resources and livelihood strategies from taking place. The next column called Livelihood Resources are the assets that people combine that make out a livelihood, this includes human, social, natural, financial and physical resources. The next column shows the ‘PIP’ box, which includes institutions that have widespread use and acceptance, and that determine how behaviour is structured by the rules and norms of society. Structures set and implement policy and legislation, delivering services and trade. Processes are established and implemented through structures and include legislation of international and domestic agreements. All these factors determine to which extent an individual or community is capable of accessing certain assets (DFID 1999, Scoones 2009). The next

column shows the Livelihood strategies that are employed using the various Livelihood resources. In rural communities, these strategies are limited to agricultural intensification/extensification, diversification or migration. The final column represents the livelihood aspirations and goals, the Livelihood outcomes. The sustainability of these outcomes are a key factor in the SL approach.

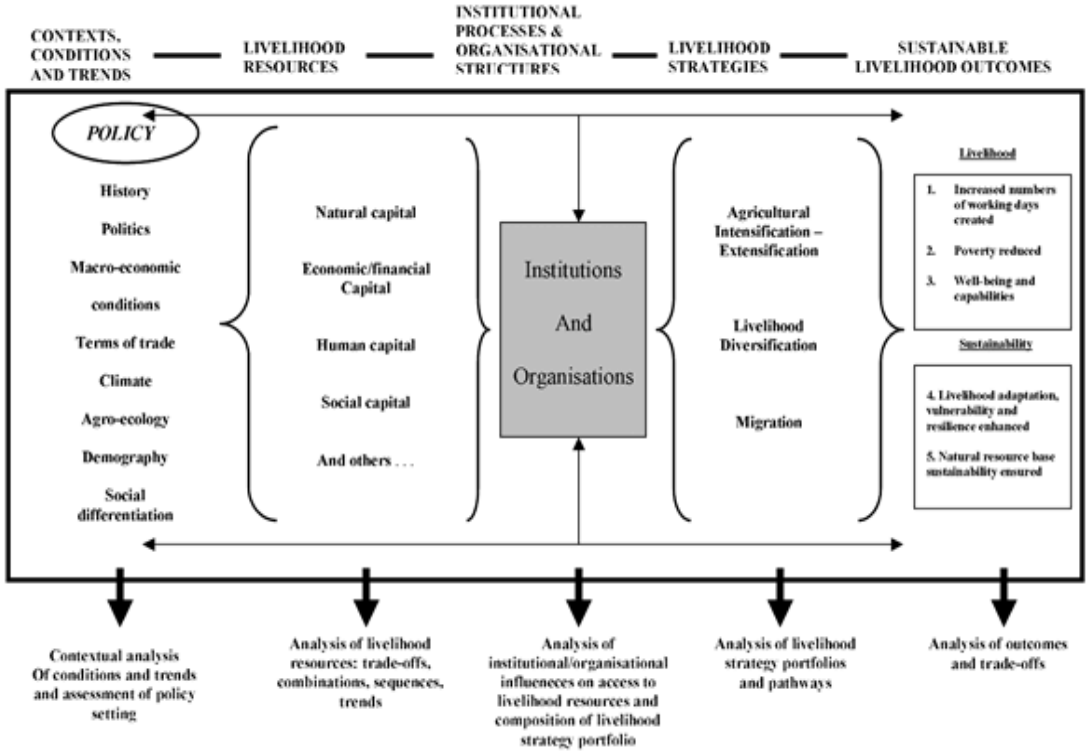

Figure 1. Sustainable livelihoods framework: a checklist (Scoones 1998).

2.5 VULNERABILITY CONTEXT

Discerning the vulnerability context is a central part of the SL framework. The vulnerability context refers to the seasonality, trends, and shocks that affect people's livelihoods. A main characteristic of these dimensions is that they cannot be controlled by local people themselves in the short an medium term (DFID 2000, 4.8). Trends comprise of factors that may be susceptible to change and those that most likely will follow their current trajectory. Distinction must also be made between local trends and national or global trends. Shocks may be explored by the communities own sense of past events to predict future events.

Vulnerability is a function of how a household's livelihoods would be affected by a certain hazard and how it is able to cope with its impact. When households are exposed to contingencies and stress, and has difficulties with coping, there is a condition of vulnerability present. There is on the one side the external risks, shocks, and stress to which a household is exposed, and there is an internal side of defencelessness that reduces the ability to cope without damaging loss (Chambers 2006). Vulnerability is a forward-looking concept aimed at evaluating community and households exposure and sensitivity to future shocks. The degree of vulnerability is determined by their ability to cope with their exposure to various risks, such as economic fluctuations, droughts, and crop blight. Ultimately, the asset base and livelihood strategies pursued by households or communities decide if and to what degree they can cope with shocks and trends (Hautala 2010). A good understanding of the indirect means by which the vulnerability context can be reduced, including building greater resilience and improving overall livelihood security, is essential. DFID (2000:4.8):

> "It is important to recognise that vulnerability or livelihood insecurity is a constant reality for many poor people, and that insecurity is a core dimension of most poverty… The SL approach seeks to militate against such insecurity through building up resilience."

The issue of vulnerability is multi-faceted, and some may rather relate to policies and institutions, and a lack of assets, than trends and shocks. Strategies to decrease vulnerability include, among others, diversification as a means of limiting exposure to risks.

2.6 LIVELIHOOD RESOURCES

A livelihood portfolio is made up of strategies to obtain certain livelihoods derived from the assets to which they have access. Vulnerability as such is a function of the presence or absence of certain assets. According to Bebbington (in De Haan 2010) 'assets are not simply resources that people use in building livelihoods: they are assets that give them the capability to be and act... They are also the basis of an agent's power to act and reproduce, challenge or change the rules that govern the control, use and transformation of resources'. In much of the early work on livelihood perspectives, claims and access is a core dimension of household assets. Claims refer to demands and appeals which can be made for material, moral or other practical support and access.' Claims are often made when contingencies arise, and can include food, work or loans. Access is the opportunity to make use of resources and services, such as transportation health facilities, and employment (Chambers and Conway 1991).

The livelihood assets are also referred to as resources or capitals, the latter drawing on an economic metaphor, which has received some critique as this implies an economic view of assets that identify with the neo-liberal agenda. As I find this critique valid, I have chosen to call the contents of the livelihood portfolio assets in this thesis. The livelihood assets are typically displayed using a pentagon, of which there are many variations. My analysis focuses on the five distinguished assets found in the DFID pentagon and each deserves a concise description because the presence or lack of assets determines the level of vulnerability in the livelihoods perspective.

2.6.1 Human assets

Human capital is probably the most important asset, because in addition to its own intrinsic value, it is necessary in order to make use of the other four assets. Human assets refers to "the skills, knowledge, creativity, ability to labour and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives" (DFID 1999:2.3.1). Essential assets include the amount of available labour within a household, and the quality of labour might be determined by health and education level. Attempts to address these core dimensions of poverty is required to obtain overall improvements in livelihood strategies and outcomes, but is not sufficient in its own. Initiatives might focus on building schools and hospitals, but for education to be attractive, issues regarding employment opportunities in the community are also vital.

2.6.2 Social assets

There has been some ambiguity regarding social assets and their place in the livelihood portfolio. All social relationships are counted as social assets, DFID (1999: 2.3.2) describe these assets as:

> "…the social resources upon which people draw in pursuit of their livelihood objectives. These are developed through networks and connectedness, membership of more formalised groups which often entails adherence to mutually-agreed or commonly accepted rules, norms and sanctions; and relationships of trust, reciprocity and exchanges that facilitate co-operation, reduce transaction costs and may provide the basis for informal safety nets amongst the poor. These are all inter-related."

Social relations ultimately determine 'the distribution of property, patterns of work and division of labour, the distribution of income and the dynamics of consumption and accumulation' (Scoones 2009:16). Social assets are strongly connected to policies, institutions and processes, and are in many ways a product of them or the other way around. Indeed, the relationship can be self-reinforcing, when relationships are nurtured they grow and it is easier to make new relationships. In addition, strong civil society groups can help people in realizing their interests into legislation. These relationships build upon trust and respect, and can determine whether people gain access to associations and institutions. There is also an intimate relationship between social and human capital when relationships produce or spread knowledge (DFID 1999). In contrast, when a person is excluded from a group or society, due to hierarchical structures or other reasons, this may inhibit livelihood strategies from being pursued.

2.6.3 Natural assets

Natural assets play a crucial part of the asset pentagon in rural areas, where most people engage in some kind of agricultural activity. The available natural assets condition the possibility of farming, as well as the level of productivity. It is not only essential for livelihood creation but to sustain life itself. The range of natural resources might consist of intangible public goods such as biodiversity and climate, to assets such as land, trees and water, used directly for production. The relationship between natural capital and the Vulnerability context is particularly close within the SL framework. 'Many of the shocks that devastate the livelihoods of the poor are themselves natural processes that destroy natural capital (e.g. fires that destroy forests, floods and earthquakes that destroy agricultural land) and seasonality is largely due to changes in the value or productivity of natural capital over the year' (DFID 1999:2.3.3). Those who derive all or part of their livelihoods from resource-based activities, like farming, fishing, and gathering in forests, are obviously particularly vulnerable to shocks and trends that damages, destroys or depletes their natural resource base. DFID (1999: 2.3.3) notes:

> "…although our understanding of linkages between resources remains limited, we know that we depend for our health and well-being upon the continued functioning of complex ecosystems (which are often undervalued until the adverse effects of disturbing them become apparent)."

2.6.4 Financial assets

Financial assets refer to the different financial resources that people use to achieve their livelihood objectives, such as cash flows, savings, and credit-providing institutions. Excluding earned income, the most common types of inflows are pensions, or other transfers from the state, and remittances. Financial capital is according to DFID, probably the most versatile of the five categories of assets. This is because it can be converted, depending upon Transforming Structures and Processes, into other types of capital. What is certain, however, is that for most poor people, access to financial assets might be the most difficult to obtain.

2.6.5 Physical assets

Physical assets include public and private infrastructure, services, goods and equipment needed to sustain livelihoods. Public infrastructure such as roads, water supply and sanitation, energy, schools, hospitals, and access to information help people meet their basic needs and to be more productive. Secure shelter and equipment needed to sustain livelihoods are also vital, and for farmers this might include livestock and farming tools.

Much research shows that lack of infrastructure can be a key dimension of poverty, lack of access to water supplies and energy can inhibit income generation activities due to the time needed to secure these assets. For farmers, transport infrastructure is a necessary to be able to transport produce and fertilizer, and to access markets. This in turn leaves producers at a comparative disadvantage in the market, when excess effort is used on non-productive activities, such as meeting basic needs, production and gaining access to market (DFID 1999).

2.7 LIVELIHOOD STRATEGIES

The first step in the livelihood analysis is to identify the livelihood assets available to the unit of analysis. The availability or use of assets to not necessarily mean that there is a conscious livelihood strategy being employed. ‘Asset utilization can only be described as a livelihood strategy when it is clear that assets are consciously exploited to achieve an end goal. The

main implication is that illogical, disconnected or erratic asset utilization does not constitute a livelihood strategy' (Njagi 2005:23).

A livelihood strategy is formed by livelihood actions and their planned outcomes, consideration must be given to what livelihood activities are to be implemented and how much income will be generated from them (DFID 1999). A livelihood portfolio is the sum of all livelihood strategies, strategies that are established through choices and goals. There are three different types of strategies that may be applied when trying to obtain a livelihood; a livelihood strategy, an adaptive strategy that consciously includes a process of change in response to long term trends, and a coping strategy that functions as a short term response to immediate shocks and stresses. Identifying what livelihood assets, or combination of assets, are necessary for different livelihood strategies is according to Scoones (1998) central in the analysis process. Establishing patterns and alternative options that may improve livelihood outcomes is key. The livelihood strategies are very diverse, varying within social groups, geographic areas, across sectors, within households and over time (Meinander 2009). Scoones (1998) identifies three options available to rural people when trying to improve their livelihoods, these are migration, agricultural intensification/extension and livelihood diversification.

2.8 The PIP box

Policies, institutions and processes (PIP) play a central part in any livelihood analysis, and:

> "…form the context within which individuals and households construct and adapt livelihood strategies... As such, the PIP dimension of the SL framework embraces complex issues concerning participation, power, authority, governance, laws, policies, public service delivery and social relations as influenced by gender, caste, ethnicity, age and so on. In effect, they determine the freedom that people have to transform their assets into livelihood outcomes." (DFID 2001:5.1)

Policy in the SL framework is defined as a 'course of action designed to achieve particular goals or targets'. Policies are formed by governments to achieve national goals, but can also be defined by private organizations or communities to address their specific aspirations. Public policies are implemented through organizations and institutions, and include legislation, taxes, subsidies and the media. Clearly, policies have severe impacts on peoples livelihoods as they can determine whether institutions become more or less concerned with

poor peoples livelihoods Institutions refer to the rules, norms and values that shape our behaviour. Formal institutions constitute laws and trade rules, while social customs like patron-client relationship forms informal institutions. Institutions can be found at every geographical scale, economic, political, legal and social institutions can all cause poverty. It is also important to define the term organizations, which sometimes is used interchangeably with institutions, because in the SL approach they differ from each other. Organizations refer to the ones enforcing or taking advantage of the institutions. The last letter in the PIP box refers to the processes that change policies, institutions and organizations. What separate the PIPs from the vulnerability context is that the PIPs are dynamic and continually evolving, whereas the vulnerability context is not something that can be controlled (DFID 2001).

2.9 LIVELIHOOD OUTCOMES

The livelihood outcomes are the aspirations that people seek to fulfill through their livelihood strategies. DFID (2000: 4.13) explains the concept of livelihood outcomes as 'the inverse of poverty'. What one individual is trying to achieve through his or her livelihood strategies is often the opposite of what they will describe as poverty. To understand livelihood outcomes, an understanding of local definitions of poverty is therefore central to determining livelihood outcomes. Peoples aspirations are very complex as they differ according to place, time, context and the individual.

A key dimension of livelihood outcomes is that of sustainability. Improvements in one livelihood may be at the expense of environmental degradation. DFID (2000) therefore calls for a need to investigate the effects of peoples livelihood strategies and outcomes that guide them to social, institutional, environmental and economic factors in order to promote positive directions of change. Another point of interest is that of the dominating economic take on livelihood outcomes. As earlier mentioned, people do not only aim to maximize their income, but also to maximize their well-being (De Haan 2012, Carr 2013). The non-economic aspirations of the unit of analysis need to be integrated into the livelihood outcomes.

2.10 SUMMARY

The Sustainable Livelihoods Framework is used as theoretical framework in this thesis as a tool to reveal not only the locally understood barriers to sustainable livelihoods, but also the national and global context that influence their livelihood opportunities. While previous approaches have focused more on analysis of sectors, the SL approach takes a holistic view on poverty and its causes to find effective entry points for development intervention. The vulnerability context of smallholders in M'muock consists of shocks and trends.

3 METHOD – A QUALITATIVE CASE STUDY

This chapter aims to outline the methodological premises on which this thesis is based. Conducting a qualitative study calls for a systematic approach, allowing the researcher to get a reflected relation to methodological decision-making (Thagaard 2009). In the following I will aim to reflect on the different methodological choices I have made, starting with an explanation of the research method, theoretical perspective, and choice of case. I will then give an account of the fieldwork experience, including access to the field, choosing informants and the interview situation. Finally, I will present ethical considerations and dilemmas from qualitative research, concluding with the reliability and validity of qualitative data.

3.1 QUALITATIVE METHODS

During the research process, I have made various methodological choices that have had implications for this thesis. After deciding on the research question, one of the main methodological decisions is to decide how data should be gathered - whether to choose a qualitative or quantitative research method. Even though they are both methods of social research aiming to construct representations of social life through scientific approaches, they create different kinds of knowledge through their data collection methods. The methods in qualitative research can be changed to fit the information gathered during the research process and subsequently necessitates openness for changes during the whole process. As I had little knowledge about the case before I started, I found the flexibility of the qualitative approach most suitable for my project. I wanted to be able to adjust the data collection and the research questions according to what I learned during the research project.

> "Qualitative research is concerned with elucidating human environments and human experiences within a variety of conceptual frameworks." (Hay 2010:5)

The qualitative approach aims to provide a deeper understanding of the complexities of people's everyday lives. It describes the characteristics and qualities of the social phenomena being studied and provides in-depth knowledge about few informants (Thagaard 2009).

The main objective of my fieldwork was to gain a deeper understanding of the complexities of the problems faced by small-scale farmers in developing countries and I

found that the qualitative approach would best facilitate this objective. The method is characterized by closeness to the informants through fieldwork and in-depth interviews. In my case, I wanted to gain knowledge and understanding about the individual experiences of the realities of small-scale farmers in developing countries by conducting in-depth interviews.

The philosophy of phenomenology values subjective experiences of truth and seeks to understand the deeper meaning in people's experiences. It is based on the assumption that reality is how it appears to be (Kvale in Thagaard 2009). A core dimension of phenomenology is that it seeks to understand phenomena from the perspectives of the informant and to describe the world as it appears to them. This lays the basis for interpretation that is central in the critical theoretical approach that is applied in this thesis.

3.2 CRITICAL THEORY

Qualitative methods and critical theory share their emphasis on interpretation, and it can therefore serve as a useful metatheoretical perspective when conducting qualitative research. An important feature of critical theory is its critical stand to established social structures and the aim to reveal pertinent power structures and ideology (Thagaard 2009). This approach is highly relevant to my thesis as I seek to understand the wider context in which M'muock farmers are situated, and how global structures are constraining their livelihood opportunities. Connecting empirical data from M'muock farmers with neoliberal political and economic theory is vital to understand the cause and effect of current structures.

Critical research can be thought of as a triple hermeneutics. While single hermeneutics revolves around the subjective interpretation of the individual and its reality, double hermeneutics refers to the researchers interpretation of that reality. The triple hermeneutics of critical theory includes both of these interpretations and adds a critical interpretation of the prevailing social structures that influence the informant and the researcher (Alvesson and Sköldber in Thagaard 2009). Ultimately, this entails that the processes that influence power relations are scrutinized and their relevance for the empirical data is established.

3.3 CASE STUDY

Case studies refer to research of few units or cases. A common perception of case studies is that it deals with an empirically limited unit, like people, a group or an organization.

> "Case study research involves the study of a single instance or small number of instances of a phenomenon in order to explore in-depth nuances of the phenomenon and the contextual influences on and explanations of that phenomenon." (Baxter in Hay 2010:81)

Case studies are characterized by a research design where the focus of analysis is aimed at one or more units that represent the case. A case study analyses a lot of information about the few units or cases comprised by the study. In this study, constraints to the sustainability of smallholders livelihoods in M'muock is understood in relation to the wider context. Indeed, there is no absolute distinction between the phenomenon, its relations and the context in which it occurs. A case study approach is justified as it aims to study the phenomenon in its own context, in my case small-scale farmers in M'muock in a neoliberal context.

> "Case studies scrutinise one or more phenomena 'in context'. In other words, while these phenomena may be very large in their scale of operation or exist independently in numerous places, they are examined *conjuncturally:* their 'local' articulation with other things may *alter* their operation across space and time." (Castree 2005:542)

3.3.1 Choosing my case

The primary criterion when choosing case should be relevance to the research objective of the study (George and Bennett 2005). I wanted to study constraints to rural development and farming, and my supervisor therefore suggested M'muock Cameroon. M'muock is a small farming area high up in the mountains of Cameroon and the volcanic soils provide a good foundation for agriculture. As I was intending to travel there with my partner and two young daughters, I wanted to go somewhere that I knew would be safe and relatively easy accessible. Because my supervisor had previously done research there, I knew that it was safe, in addition he had important contacts there that I could use. I was also hoping to go to a French-speaking country to be able to use my language skills and to my fortune, M'muock is situated right on the border of the English-speaking North-West and the French-speaking South-West. I chose to conduct the interviews in two villages in North-West and one village in the French West province. M'muock has a relatively differentiated agricultural sector consisting of mostly small-scale farmers, but also some medium- and large-scale. There are

many local intermediaries arranging for the main crop Irish potato to be sold both locally and nationally, as well as exporting it to neighbouring countries. I thought this area to be a great case because I wanted to see how farmers in an area with good productivity and market access perceive their own situation and possibilities for development.

3.4 FIELDWORK

The fieldwork for this thesis was conducted in the three villages M'muock Leteh and Fosimondi and a French village in Cameroon in October 2011. In the following, I will give an account of how the research was conducted in the field.

3.4.1 Access to the field

When deciding on where to conduct the research, it is necessary to consider whether the researcher will gain access to the field and the people defined as relevant to the research question (Thagaard 2009). Because my supervisor had previously done interviews with farmers at the location I had chosen and knew the people there to be very open and friendly, I anticipated that I would not have any problems with gaining access to the field. My supervisor needed to get some data from the same area and therefore decided to send one of his previous students from M'muock to travel together with us. I can not describe in words how much his help and friendliness helped us during our stay there and how much he contributed to me being able to get as much valuable information during my field work as I did. He had grown up in M'muock and introduced us to many important contacts, including my knowledgeable translator. He also opened up his home to us and let us live in his house.

It is sometimes necessary to build a relation of trust before the research can begin if you are doing research in an environment that is sceptical of research. When we first arrived in the village we spent a couple of days going around greeting and talking to people, introducing myself to the village elders and letting them know that I was there to do research. I felt that this was appreciated and it made it easier to ask for interviews with some of these people later. Many of the interviews were however conducted at random in the outskirts of the village and in the neighbouring villages, and I did at times feel that some of these informants were sceptical of me. The reason why they were a bit reluctant to me and my questions turned out to be out of fear that we were sent by the government, and some were

afraid that something they said could result in some kind of punishment. On a few occasions my translator had to explain several times that I was a student from Norway and that nothing they said would be exposed to the government. As the interviews went on, most of them did however realize that we were not government officials and they were happy to give us the information we needed. These sceptics were however few and often the informants knew either my translator or that I was in the village doing research.

A researcher represents a neutral outsider and when access is gained, most informants do not mind telling about themselves or their business to someone who is interested in their situation (Thagaard 2009). I found this to be very true as most of the informants seemed quite happy, and even proud, that I came to interview them and that I was interested in their lives. Once I had gained their trust, they were not afraid to tell me personal information, including their financial situation.

3.4.2 Translator

Apabeloi had arranged for a translator prior to the trip. He already knew two people who were suitable, one of which was a local man with a university degree, the other a young local girl who was planning to go off to university. As I knew that the gender of my translator could have an impact on the information given by the informants, I had a hard time deciding which translator would be most suitable. In the end, I decided to go for the young man, Aloishius, because he had the most experience and knowledge. He had lived in M'muock for several years practicing as a farmer of Irish and leeks, and both his parents still made a living from small-scale farming. It turned out to be a very wise decision, had I not had his knowledge and connections I would not have been able to find informants and conduct the interviews in such an effective manner. It seemed that almost everyone in the village knew and respected him, and were more than happy to share their thoughts about their lives with us. In many ways, he functioned as a *gatekeeper* because his presence made people trust in and open up to me. As a former farmer, he knew exactly who to talk to and where to find reliable information. The interviews that gave me most valuable information were all thanks to his knowledge about the village farmers. However, the presence of an interpreter can also influence the responses given, in particular, they might question the confidentiality of the research (Valentine in Flowerdew and Martin 2005). As Aloishious was a local, it is possible that some farmers did not feel comfortable answering all of the questions truthfully. But

because my research did not include any sensitive questions, I do not think that this has had any significant impact upon the data.

Having a translator was also challenging at times because he would small-talk with the informants before the interviews without translating it to me. This sometimes gave me a sense of lost connection with the informants as I should have been the one doing the small-talk to learn more about them, which could have enabled me to ask better questions. As the researcher you should be the one leading the interview and deciding which topics to discuss, but at times I felt like he had more power than me and that my position was undermined. I did discuss this with him a few times but I think that it might be a necessary evil when using a translator that know some of the informants beforehand.

3.4.3 Choosing informants

Qualitative research uses a method of strategic sampling where you base your research on informants that have characteristics and qualifications that are strategic to the research questions and the theoretical perspectives of the research (Thagaard 2009). As I wanted to gain knowledge about the livelihoods and problems of small-scale farmers, I chose informants that would facilitate this objective. To achieve depth in the research, I wanted the informants to have a variety of characteristics in gender, age, farming size and incomes, which lead us to use different kinds of sampling strategies.

A common method to choose informants is by applying the *snowball method*. When interviewing informants with the right characteristics, the researcher asks for the names of other people with similar characteristics. There are however ethical dilemmas with this type of sampling as the new informant does not have a chance to give informed consent to the information given about them. This can create conflict between the involved parties as they can question why they have been chosen. We did use this sampling strategy for some of the informants and my translator would often make use of occasions and opportunities off work to talk to the villagers and arrange interviews with the appropriate informants beforehand. He would then chose specific farmers that he thought would be able to give me valuable information. They would then sometimes advise us about other farmers that they thought could give a different insight to some of the questions I had asked them. This can cause the researcher to only get a certain type of information, as it might result in the same kind of

people being asked to participate in the interviews. To secure broadness in the data we also spent days where we would just go off into the fields and pick informants at random whom neither of us had any knowledge about beforehand.

Samples can be either typical to the phenomena being studied or they can be special. I have chosen mainly typical informants to give insight into the lives of typical small-scale farmers, but some of the informants were chosen specifically for not being typical to give me information about how some farmers are able to scale up and be more prosperous than others.

According to Thaagaard (2009), the size of the sample should be assessed in relation to a *saturation point.* This implies that the sample is sufficiently large when studies of more units do not give further understanding of the phenomenon. Another directive guideline for qualitative samples is that the number of informants should not exceed the number that can be analysed thoroughly. My initial plan was to perform at least 25 interviews and then continue until I felt I had reached a saturation point. The total number of informants landed on 28, at which point I did not feel that any additional interviews would provide me with more information about the research questions. Of these informants, 26 were farmers with or without other incomes, the other two include a market manager in Yaoundé and a bank manager in M'muock. An overview of the informants can be found in Appendix 1.

3.4.4 The interview situation

The objective of an interview is to gain extensive information about how other people experience their circumstances of life and which views and perspectives they have on the subjects being studied. Interviews are very effective in gaining insight in the informants experiences, thoughts and emotions (Thagaard 2009). The social interaction between the researcher and the informant characterize the knowledge and the understanding that is expressed during the interview situation. The cultural and social environment affects how the informant expresses his/her knowledge, experience and points of view during the interview.

Interviews can have an instrumental character because they represent conversations about subjects that are relevant to the research objective/questions. It can also be understood in an interactionist perspective that emphasizes how the interaction between the researcher and the informant contributes to the creation of knowledge. The latter presents the interview as a dynamic, meaning-creating process where the focus is on an informal exchange and

mutual openness that contributes to the elaboration of the content of the conversation (Thagaard 2009). The question of the neutrality of the researcher has been widely discussed in the methodology literature. The earlier perception that the researcher should be neutral and thereby not affect the data of the research has received wide spread critiques. The arguments claim that a neutral role amplifies the asymmetric relation between the researcher and the informant where the informant is understood as an object. The current interactionist perspective on the other hand emphasizes reciprocity between researcher and informant. Rapely (in Thagaard 2009) claims that there is no disparate position between the two, just different practices in the interview situation. While the researcher in certain situations is an almost neutral intermediary of questions, in other situations a more interactive process is eminent.

A research interview can be designed in different ways, from unstructured to fully structured. I choose to do my interviews in a semi-structured manner, which is the most common method in qualitative methods. The subjects are predefined but the order of the subjects and questions are determined during the interview. This method makes it possible for the researcher to follow the story of the informant while ensuring information being obtained about the subjects. Flexibility is central to this method as you need to tie the questions to each individual informants condition and at the same time be open for unplanned subjects to be presented (Hay 2010). This type of interview facilitates an interaction between the researcher and the informant that can have an impact on the interview data. I had made a list of topics and possible questions that I wanted to use as an interview guide, this enabled me to make sure that all important subjects were discussed during the interview. The order of the topics varied with each informant as I tried to adjust to the information given and the flow of the conversation. Sometimes the information given would lead to new questions that I had not already thought of which in turn gave me a lot of valuable information. During the first few interviews I used the guide quite frequently, but as the fieldwork proceeded I was able to just start a conversation and the appropriate questions would come automatically. The interview guide can be found in Appendix 2.

To be able to have a successful interview the researcher must be familiar with the culture of the informants, this in turn will provide a good foundation to ask relevant questions (Hay 2010). A main problem in many interviews is that the questions are too abstract and general. It is challenging for the researcher to ask questions in a way that makes the informant give nuanced answers. A good interview can be characterized by the researcher

asking concrete opinions and experiences, and then follow up on the descriptions by encouraging the informant to tell about their reactions and points of view. I experienced this to be very true and after doing a few interviews, I realized that some of my questions were in fact too abstract. As you do more interviews, you gain an increasing confidence in the interview situation and are able to show sincerity and commitment. According to Thagaard (2009), practice contributes to the researcher being able to free him or herself from what he has learned and be more authentic in the interview situation. As I had little experience doing interviews, it did take some time before I felt that I was able to be fully authentic and relaxed during the interviews.

The location of the interviews can also influence the data. It can often be conducive to conduct the interviews in a private area where there are no disturbances. In addition, talking to people in their own territory can help facilitate a more relaxed conversation (Valentine in Flowerdew and Roberts 2005). My interviews were mainly carried out in the fields or in the homes of the informants, and they all seemed quite comfortable with the interview setting. As most of them were working, they had to take a welcome break from their chores to talk with me. All interviews were done in one-on-one setting, but during an interview with a female farmer in the field, some other women came and sat down with us. It turned out to increase the amount of information I was able to obtain, because the other women reminded her of things that she could not recall herself.

3.4.5 Taking notes

I choose to exclusively take notes during the interviews. Because I had a translator with me at all times, I did not find it difficult to take good notes because I was able to hear their stories twice. While some informants did not speak English or French that I could understand, most of them were however able to make themselves understood to me and the translation from the translator gave me sufficient time to analyse what to write down. I wrote key words from all the answers and transcribed the interviews every night when I came back to the house so that all the transcripts were written while my memory of the interviews was still fresh in mind.

Writing notes requires analysis because the researcher has to sort the information whilst writing. While the researcher is writing, the informant has the opportunity to consider whether he or she has more information to share. Problems that can arise when choosing to

take notes is according to Thagaard (2009) that it can contribute to a reduced sense of contact between the researcher and the informant as the researcher does not have an equally good opportunity to have a social interaction with the informant. My experience of taking notes was exclusively positive, and I think that having a translator present caused me to have more time to take notes and to analyse and understand what was being said.

3.5 ETHICAL CONSIDERATIONS

All scientific activity requires that the researcher follow the ethical principles that are prevailing in research environments. Ethical principles that exist between researchers require that the researcher must show honesty and accuracy in the presentation of the research results. Qualitative research often involves a close relationship between the researcher and the informants, therefore ethical dilemmas have gained a prominent place in this method. The choices made by the researcher have consequences for the people being studied. As a result, the ethical aspects associated with the different phases of the research process must be reflected upon. In studies that entail a close relationship between the researcher and the informants, such as in-depth interviews, the handling of personal information requires specific ethical guidelines.

3.5.1 Informed consent

The starting point of any research project is according to Thagaard (2009) that the researcher must have the participants informed consent. This entails that the consent is free and not a result of pressure, in addition the informant should be informed about the projects goals. I started each of my interviews with a short introduction about the project and a kind request to participate, stating that the information given would not be surpassed to a third person and would only be used in this research project.

3.5.2 Confidentiality

A second important ethical principal when doing research is the request for confidentiality. This signifies that the researcher has to make the informants anonymous when the results of

the research are being presented. The researcher has to be careful when handling the data from the interviews so that the identity of the informants cannot be exposed. It also encompasses that re-use of the data material cannot happen unless the informants have given their consent to this.

3.5.3 Consequences for participation

A third and final fundamental principle to conduct an ethical research project is that the researcher needs to consider the possible consequences for the informants for taking part in the project. There is an ethical responsibility when conducting a research project and the researcher is responsible for protecting the integrity and freedom of the informants. I did not find this to be a problem in my interviews, as I did not ask sensitive questions.

3.5.4 Positionality

When conducting an interview it is important to consider how the informants reactions and answers might be influenced by how the researcher is perceived by the informant. This includes personal qualities as well as gender, age and social background, which ultimately shape our interpretations of the world. It is particularly important to recognize the different power relationships that exist between yourself and your informants (Valentine in Flowerdew and Martin 2005). The personal contact gained in a qualitative interview situation is challenging as it can influence the data being collected. The informants might also have expectations about what the researcher can do for them outside the interview situation. To avoid any misunderstandings, I initiated every interview with explaining the purpose of the research and that it was only going to be used as part of my study.

3.6 RELIABILITY AND VALIDITY

The term *reliability* originally refers to whether other researchers using the same methods would obtain the same results. The question of replicating a research project is linked to a positivistic research logic that accentuates neutrality as a relevant research ideal, and where the results should be independent of relations in the research situation. This is however not

applicable to the qualitative approach as it is based on the premise that the data is a result of the interaction between the researcher and the informant. Hence, the project cannot be replicated as each situation is unique and the results may vary depending upon the relation between the people interacting. According to Thaagard (2009), achieving reliability in a qualitative study must be done by argumenting for the reliability by clarifying how the data has been developed during the research process. The methodological chapter of my thesis should provide a clear and thorough explanation for the various choices made during the research project and the reflections that led to them.

Validity is associated with interpretation of data and whether the researchers interpretations are representative descriptions of reality. Seale (in Thagaard 2009) differentiates between internal and external validity, where internal validity is connected to how causality is supported within a certain study. The term external validity on the other hand, signifies that the understanding that is developed within a certain study must also be valid in other contexts. Transferability is in accordance with the understanding of extern validity. Transparency can be used to support the validity of the research. The term entails that the researcher clarifies the basis of the interpretations by explaining how the analysis supports the conclusions that he or she has drawn.

3.7 SUMMARY

This chapter has outlined the methodological choices I have made during my research project. The choice of qualitative research method and case directly reflect upon the objective of my research, namely to discern the main perceived constraints to sustainable livelihoods for small-scale farmers in M'muock, and which contextual factors are contributing to them. When conducting qualitative research it is vital to make the data collection process as transparent as possible, enabling the reader to assess the data gathered. By doing so, I have strengthened the reliability and validity of the data. A weakness in the data may be my inexperience and the fact that my translator chose some of the informants causing a certain type of information being gathered from subjectively defined suitable research objects. However, I did strive to secure broadness in the data by conducting many random interviews as well. I believe my findings from the fieldwork are reliable, reflecting the thorough preparation and interview process for the research.

4 VULNERABILITY CONTEXT

The vulnerability context in M'muock is comprised of the trends, shocks and seasonality that are typical for this location. Their specific context has a direct impact upon their livelihood assets and the strategies they are able to pursue. Relevant historical background is often a critical but neglected part of the vulnerability context, and relevant historical, demographic and biological information will be presented in this chapter. By establishing the context of M'muock farmers, we will be able to increase our understanding of the present structures and institutions, and the measures needed to change them. What distinguishes the vulnerability context from policies, institutions and processes is that people have limited or no control over them. The PIPs however are dynamic and can produce externally-driven change to the vulnerability context. New policies intended to support poor households, such as subsidies to farmers or fortification of property rights can produce important livelihood opportunities. Establishing the vulnerability context can also 'help people to become more resilient and better able to capitalize on its positive aspects.' (DFID 1999:2.2). Entertaining in agricultural activities is a vulnerable livelihood activity because they are completely dependent upon an unpredictable natural environment. To help mitigate this vulnerability, insurance for farmers would be a logical option.

A livelihood analysis does not according to DFID (1999) have to be exhaustive in order to be effective. Aiming to give a full account of the vulnerability context in M'muock is out of scope for this thesis, and the following section therefore includes the most salient factors of vulnerability in the environment of small-scale farmers in M'muock that have emerged through the interviews and the analysis of data. I will start by giving an account of the history of the fieldwork location. I will then proceed with the factors in the local environment causing the vulnerability to the farmers in M'muock. What is the impact of these factors and how can negative aspects be minimized?

4.1 BACKGROUND OF FIELDWORK LOCATION

Cameroon has a diverse commodity-based economy, and is one of the most favourable in Sub-Saharan Africa. It is naturally endowed with unusually rich ecological systems,

representing nearly 90% of African ecosystems. The population is estimated at 20 549 221 in July 2013 (CIA, World Factbook 2013)[1]. Poverty is widespread with 40% of the population living below the national poverty line in 2007. The sitting president Paul Biya has ruled the country since 1982 and is now one of the longest sitting presidents in Africa. Last election took place on 9 October 2011, where Biya was re-elected for another seven-year term, with no term limits since a 2008 constitutional amendment.

The economy suffers from stagnant per capita income, an inequitable distribution of income, endemic corruption and an unfavourable climate for foreign investment. Since the 1990s, the country has embarked on several IMF and World Bank programs to enhance the economic performance and attract investment but growth rates have remained stable at between 3-4%, only dropping in 2008-9, with a projection of 4,2% and 4,7% in 2010 and 2011.

Cameroon has a large urban population with 58% of the population living in urban areas, whereas 42% reside in rural areas. While the literature states that 70% of the population has farming as their main occupation, it seems probable that this number is smaller when the numbers of people living in urban areas are taken into account. Only 20% of GDP originate from the agricultural sector, specialists attribute this to low levels of investment in rural areas and agriculture, with 2,5% of the national budget currently being allocated to rural development. In addition, the sector is suffering under high costs of inputs like seeds, fertilizers and pesticides, and lacking infrastructure such as warehouses and roads for transport. In the current trade climate, it is often cheaper for urban consumers to buy imported food, than locally produced foods. Of the total land surface, 13% is classified as arable, while 78% consists of forests and woodland. Most agricultural production is in the hands of smallholders, but some export crops like rubber, coffee and palm oil are run under the plantation system. Cameroons food imports have increased substantially over the past three decades, accounting for 5% of national budget in 2010 (CIA Factbook).

The country has rich natural resources, with crude oil and petroleum products, lumber, cocoa beans, aluminium, coffee, and cotton being main export commodities. Millet, sorghum, rice, yam, cassava, plantain and potatoes are produced for both domestic consumption and for exports to neighbouring countries within the central African region.

[1] https://www.cia.gov/library/publications/the-world-factbook/geos/cm.html

Since 1994, there has been a decline in the production of domestic food crops. Due to unsustainable exploitation, such as poaching, over-grazing, bush fires and itinerant agriculture, many important ecosystems are deteriorating at a rapid pace.

My fieldwork was conducted in M'muock Leteh, Fosimondi and a neighbouring French village in the Bamboutos caldera in the Western Cameroon Highlands, located right on the border between the Anglophone North West province and the French speaking western province. The Bamboutos caldera is surrounded by peaks and mountains that range between 2470 -2740m above sea level. The original settlement cores were sited along the bottom floor of the caldera, but the area has been subjected to large population movements over the past 50 years as people looking for new land to cultivate have moved up into the highlands to look for a better life. Around three quarters of the land consists of hilly terrain and steep slopes and the soils are highly fertile. The public roads reach only to the village centres, while community roads dug with local labour are the sole means of transportation to the dispersed settlements.

Figure 2: Cameroon and its provinces. Source: emapsworld.com

The large population flows up to the highlands have resulted in extensive clearing of vegetation, and land is cultivated and cropped with monoculture of commercial vegetable

crops, notably Irish potatoes, cabbages, leeks, beans, garlic. The intense exploitation of the soils without due fallowing for natural regeneration, exposure to rain and erosion, the use of ill-adapted techniques of cultivation and the vast application of toxic chemicals and fertilizers have substantially decreased its fertility. Uncontrolled and repeated use of chemical fertilizers and other toxic herbicides and insecticides such as dieldrine, gamaline, amarda and round up, together with irrigated dry season cropping using water pumped up from dammed reservoirs, are all a means to achieve highest possible yields for short term income gain. This threatens the environment and can contribute to the spread of toxic chemicals into the drinkable water sources.

Landslides are one of the most catastrophic effects of the farming methods used. Their occurrence is most prevalent in July, August, and September when agricultural activities and rainfall are at their peak. Landslides often result in the destruction of livestock, houses, roads, bridges, other property, and sometimes even human lives. Farmer-grazier conflicts occur between crop cultivators and livestock breeders. They are triggered by the successive spontaneous colonization, expansion and encroachments into traditional pasturelands by commercial vegetable cultivators. The growing number of cattle is resulting in overgrazing, cause degradation of the soils by provoking and accelerating erosion and gulleying. Land disputes result from the increasing shortage of available land for agricultural activities and settlements (Achu and Tiafack 2005).

The rich volcanic soils are now cultivated by adapted, high yielding, and short term maturing vegetable market garden crops, such as Irish potatoes, carrots, leeks, cabbages and beans. The crops earn high-cash incomes in the urban markets of Cameroon and the Central African region and have replaced traditional food crops, such as plaintains, cocoyams and maize. Both women and men are working in production and marketing of vegetable crops in the area. The polygamy rate is high at 28,5%, used as a coping mechanism to meet the demands for labour supply. Farmers and their wives work, either on the same plot(s), or if more affluent, they have their own additional plots. The land tenure system consists of customary pledging inheritance, trusteeship and gift of land, but land is also increasingly freely purchased and rented out for cash (Achu and Tiafack 2005).

4.2 LOCAL VULNERABILITY FACTORS AND LIVELIHOOD IMPLICATIONS

Trends are usually predictable, while some are more likely to continue in their current trajectory others are more likely to change in the future. They can have an influence on rate of return.

4.2.1 Population growth and pressure on natural resources

A distinct trend the past decades has been a steady population growth. Population growth rate in Cameroon in 2012 was at just over 2%, but the population has more than doubled since 1980, growing from 8,75 million to nearly 20 million in 2012. Data from the research indicate that population growth in the M'muock region is considerably higher than the rest of the country. The family size of the informants varied between 3-18 children, with an average at around four children per wife. This can probably be linked with the high polygamy rate and the labour intensive work required on the scattered hilly plots. The population pressure has severe impacts upon the natural environment, as an increasing number of people are seeking land to cultivate to make a living. The availability of fertile land is decreasing. Other job opportunities in the area are lacking and farming is for most people the only option. Conflicts among farmers have become more common, as people struggle to find adequate land for their crops and for their livestock. Goats are kept on scattered places, tied to poles by ropes because there is no available land for them to graze. If the goat attempts to enter the land of a neighbour, conflict will most probably arise. These conflicts have lead to more than quarrels, according to some farmers there have been attacks where malevolent neighbours have set fire to someone else land. Due to increased pressure on the land, conflicts are increasing in numbers and severity.

The increased population pressure in M'muock is contributing to unsustainable use of land resources. Cultivated land is more prone to erosion and when heavy rain falls in the rainy season, landslides will become increasingly common. A livelihood opportunity for the farmers in the area is to intensify or buy/rent more land, but in this case it is not certain that they will produce sustainable livelihoods. The land that is left for rent or sale is generally small plots in different places, requiring vast amounts of labour supply to create surplus value. Increasing the use of fertilizer for intensification is discussed in the nest section.

4.2.2 Soil fertility

Farmers in Cameroon grew dependent on using chemical fertilizers and pesticides during the 1970s when oil was still cheap and state intervention and agricultural support was extensive. The use of inputs was also promoted by the international development agencies and financial institutions. The use of chemical fertilizer has increased yields, but also brought long-term damage to soil quality. One farmer explains:

> "After years of using chemical fertilizer, people are noticing that the soil fertility is decreasing. The prices for fertilizers are high and many farmers can't afford to use sufficient amounts, and this affects our crops negatively."

The continued use of chemical fertilizer now seems unsustainable due its ecological implications, and the financial burden. Gosh (2004:2) describes the implications:

> "Prolonged use of the chemical based technology in (…) agriculture has undermined soil quality in terms of its physical, biological and chemical properties afflicting its ability to satisfy healthy plant growth and crop production. The nutrient mining process with fertilizer leaves the soil hungrier for replenishment, a property likely to be encouraged by the competition stimulated by the globalization process."

When the soil has grown accustomed to the use of chemical fertilizer, it will need increasingly more to produce the same amount of output. Moreover, if you try to reduce the amount of fertilizer it will cause an immediate reduction in yields. When support for inputs was removed during the end of the 1980s and in the beginning of the 1990s, the farmers had no choice but to continue to apply chemical fertilizer to their soils. At that time, the prices for inputs had increased substantially relative to that of agricultural produce, and many farmers have been struggling to pay for these inputs ever since. In addition, climate change is expected to cause heavy precipitation, resulting in soil erosion and landslides. Degraded soils erode much more easily than soils that are fertile and nutrient rich. This is already an area of concern for the farmers in M'muock and the problem will most likely increase in the future. One of the farmers who was helping repair a damaged community road when he was interviewed, explains:

> "Landslides are becoming increasingly common. The rainy season is much heavier than in the past and the soils are easily washed away. This is a major concern for many of the farmers in the are."

The combination of chemical input dependency and vulnerability to external price fluctuations, with climate change and increased precipitation leave the farmers of M'muock double exposed to these risks.

The informants explained that the soil fertility in M'muock has been deteriorating in recent years and that they constantly have to increase the amount of fertilizer used to get the same yields as they used to. Due to lack of knowledge, excess use of chemical fertilizer is common, causing detrimental effects on the soil fertility. An informant, Paul, describes how they are not able to let the land rest sufficiently:

> "The soil fertility is bad because there is no opportunity to let the land rest. This is leading to increased use of fertilizer to produce enough on the land".

One way to ensure that the land gets to rest is to fallow, which refers to land that is plowed and tilled but left unseeded during a growing season. William comments:

> "The land is worked to hard and this causes a loss of soil fertility. Most farmers here do not have the possibility to fallow the land because they are dependent on constant incomes. If they let the land lay fallow, they starve".

In the households completely dependent on farming as their main income, nobody was able to fallow their land. The informants who also worked as school employees already had a secure income, hence they were able to fallow their land to secure the soil fertility. This shows how important it is to diversify livelihoods in order to make them sustainable. The practice of shifting cultivation can also secure important nutrients to the soils, but this is not an option for the farmers in the area. Fredrik explains:

> " Almost nobody has the opportunity to practice shifting cultivation because of the heavy domination of Irish. Because Irish earns the best incomes we can't afford to use the fields for other crops".

Living in a constant state of vulnerability causes uncertainty and leaves some farmers unable to cope with stress, trends and shocks. Because they are constantly struggling to make ends meet, manipulating their environment to boost resilience is not something that most farmers can afford to do. Building resilience would have to encompass the availability of institutional arrangements, financial services, credit and insurance to support farmers. What is most striking however is the fact that prices received for agricultural products in M'muock do not correspond to the actual resources used in production. It seems clear that for most of the farmers in M'muock, farming is a mere coping strategy. This is their only option to make a living but they are barely making it from one season to the next. These livelihoods are far

from sustainable as their vulnerability level and exposure to risk is exceeding their ability to cope.

4.3 VULNERABILITY CONTEXT AT GLOBAL SCALE

The aim of this section is to give an account of the global vulnerability context of small-scale farmers in M'muock, revealing the forces and processes of change that have a direct or indirect impact upon their livelihood opportunities. The global economic and political environment creates a context in which the state of Cameroon is firmly situated, influencing policy decisions of the state. Globalization, trade liberalization and the global integration of markets are shaping the opportunities and constraints for producers of agricultural products all over the world. Farming is also the occupation most vulnerable to climate change. The local manifestations of the global forces of neoliberalism, globalization and global environmental change and the interplay between them are comprehensive. They serve as a backdrop of the livelihood opportunities and aspirations available to farmers, and discerning links between geographical scales, from local to global, or micro to meso is critical. A comprehensive analysis of these forces is out of scope for this thesis, rather, the goal is to paint a picture of how the main contributing forces at global level manifest themselves locally, and how multiple linkages and interactions between these forces intensifies livelihood outcomes. Understanding the all-encompassing nature of these relationships is crucial to comprehend the scope and magnitude of the problems in M'muock.

4.3.1 Neoliberalism

Cameroons economy is intimately integrated into the world economy. Since the 1980s, the hegemonic global economic paradigm has been neoliberalism, replacing the Keynesianism of the post-World War Two period (Barnett 2009). David Harvey's definition of neoliberalism describes the understandings of this concept used in this thesis:

> "Neoliberalism is in the first instance a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade. The role of the state is to create preserve an institutional framework appropriate to such practices. (…) State interventions in markets (once created) must be kept to a bare minimum, because, according to the

> theory, the state cannot possibly possess enough information to second-guess market signals (prices) and because powerful interest groups will inevitably distort and bias state interventions (particularly in democracies) for their own benefit." (Harvey in Barnett 2009:2)

At the core of neoliberal policy lays privatization and deregulation of the economy. Essentially, neoliberalism is a 'revival and renewal of *laissez-faire* economic liberalism, holding to principles of free markets and the minimal state' (Barnett 2009:4). The state's sole responsibility is to create an environment in which the market can operate freely, in addition to the goods and services that are not offered in the private market.

Neoliberalism gained momentum as a political-economic ideology in response to the economic stagnation of the 1970s, and was meant to address the problem with stagflation in the economy. Neoliberals believed that a short-term intervention to free the market forces would automatically yield long-term material prosperity for all humanity (Dollar and Kraay in Scholte 2009). The new policy scenarios that had previously merely been marginal economic theories were now spread through Thatcher in the UK and Reagan in the USA during the 1980s. The Bretton Woods institutions of the International Monetary Fund (IMF) and the World Bank further diffused the ideology through the Washington Consensus on development assistance and interventions in 1989 (Barnett 2009, Bond and Dor 2003). The plan was to induce heavy doses of neoliberal medicine to create growth through free market forces in the South.

When Mexico announced that it was no longer able to repay its debt in 1982, it sparked the debt crisis of the 1980s. The members of the Organization of Petroleum Exporting Countries (OPEC) increased the price for oil manifold in 1973, resulting in high revenues, which they invested in commercial banks. Many countries in the South became target for the banks' new investments and loans were given out to anyone who was interested. Eventually, when oil prices spiked again in 1979, and combined with increased interest rates, a worldwide recession was a fact. The developing countries were hit hard and many were no longer able to repay their loans. This is where the Bretton Woods institutions enter the picture. By agreeing to structural adjustment programs (SAPs), developing countries unable to repay their foreign debt were given favourable loans. Essentially, this meant freeing the market forces by a privatization of public enterprises, devaluation of national currencies, deflation, and a 'rolling back' of the state apparatus and public assistance programs to decrease public expenditures. For agriculture, the result was an abolition of protectionist

measures with removal of subsidies and support. New agricultural programs were enforced, abandoning help to subsistence staple crop farming and promoting cash crop export production.

The capitalist mode of accumulation involves a commodification of all aspects of the production process, including land, labour, and capital. These commodities are to be produced and sold on the free market, regulated only by market prices. This gives incentives to exploitation, resulting in exhaustion of natural resources, deforestation, land degradation and pollution to the environment. Polanyi (1944) argues that land and labour are "fictitious" commodities, that each possesses qualities that are not expressed in the formal rationality of the market. Because these fictitious commodities are inherently different from other commodities, they should not be left to the self-regulating market. Rather, they need to be treated like pseudo-commodities within a regulatory framework that exceeds the free market and protects humans and nature from being exploited. The reality of neoliberalism in the post-Fordism mode of accumulation is however based on economical rationality, where extraction of surplus value from all commodities is key.

Ultimately, the integration of much of the world into the global economy has profound effects on the vulnerability of farmers (Dalby 2009, Leichenko and O'Brien 2009). Anti-protectionist neoliberal policies have left many of the worlds poorest farmers without much needed support-mechanisms. At the same time, the world food system has become increasingly volatile. One example is the global world food price inflation in 2007/2008 where global food prices soared, pushing according to FAO another 115 million people into chronic hunger. The impact was most severe in countries that rely heavily on imported foodstuffs, including many African countries, because the prices for tropical export crops did not increase nearly as much, resulting in great balance of payments problems. According to the logic of neoliberalism and comparative advantage, countries should produce whatever is best suited to their specific context, and for the rest rely on cheap imports. The world prices for food had fallen by approximately half during the previous three decades, leaving consumers accustomed to cheap food and unprepared for the price spike. While the causes of the crisis are multi-faceted, suggestions include droughts in major exporting countries and the new demand for feed stocks for biofuels, policy settings affecting world stock levels and general speculation in commodity markets (Hautala 2010). Indeed, as Roberts (2008:147) argues:

> "The various technological and commercial revolutions that transformed much of the rest of the global food economy have largely bypassed the poorer countries, while the though live of neo-liberal trade policies has often been *too* though."

4.3.2 GLOBAL FORCES OF CHANGE

Global environmental change and globalization are two of the main forces of change in our society today. Leichenko and O'Brien (2008:4) argues that these two processes are highly intertwined, creating 'situations of "double exposure" for many regions, communities, and individuals.' The denomination 'double exposure' describes a situation where vulnerable groups are exposed to combinations of shocks and stresses from both processes of global environmental change and globalization at the same time, leaving them double exposed (Sampson in Dicken 2007:451). Both these processes and their interplay have severe impacts upon the vulnerability context and livelihoods of small-scale farmers in M'muock, and an account of them is warranted to understand the all-encompassing nature of these relationships. Global environmental change is typically defined as:

> " a set of changes to the Earth system that are expected to have major effects on human society and ecosystem services. Most of these changes can be attributed to human activities, which have increased in magnitude, extent, and tempo." (Steffen et al. in Leichenko and O'Brien 2008:5).

A main concern about these processes is that they are undermining long-term sustainability by surpassing the capacity of humans and ecosystems to adapt, contributing to vulnerability. Systemic changes at global level include increasing concentrations of greenhouse gases that result in climate change and global warming, and sea level rise. Cumulative changes that manifest at local level are land use changes, soil degradation and water pollution, with significant implications for ecosystem services. Human actions such as population growth, resource extraction, energy consumption, changes in consumer demands are considered to be the main cause of global environmental change, and actions to limit the extent and consequences of climate change rest on our shoulders (FAO 2006, Buckingham and Turner 2008, IPCC 2008, Leichenko and O'Brien 2008).

4.3.3 GLOBALIZATION

Globalization is often understood as 'a movement toward greater economic, political, and cultural integration across nations' (Leichenko and O'Brien 2008:7). Salient features of globalization include rising levels of international trade and investment, formation of transnational commodity chains, expansion of communication networks and homogenization of consumer cultures. The process of globalization and climate change are expected to have unequal consequences across regions, sectors and social groups, producing 'winners and losers' in their trajectory.

> "Inequalities in globalization is reflected in uneven rates of economic growth and capital mobility, polarization of income and wages, differential access to political power, and limited diffusion of new technologies." (Leichenko and O'Brien 2008:4)

While globalization indeed can increase inequalities, Jan Aart Scholte (2009:346) argues that it is not so much globalization in itself, rather the shift in policy paradigm to neoliberalism that is the cause of increased inequalities:

> "Contemporary intense globalization has promoted greater unfairness not because of the changed geography itself, but mainly because of the accompanying broad policy shift since the 1970s from welfarism to neoliberalism. The implicit neoliberal assumption that 'free' markets maximize equity as they maximize efficiency is fundamentally flawed. As shown above, most recent indicators suggest that neoliberalist preoccupations with competition, productivity and economic growth have exacerbated social inequalities."

While it is out of scope for this thesis to give a thorough examination of globalization and its critics and proponents, it is important to note that while globalization often is accused of increasing inequalities and poverty, this is merely one side of the story. Proponents of globalization such as Bhagwati (2004), believes that globalization is the most powerful force for social good in the world today, when properly governed. This in fact seems to be a key in the discussion on globalization. The current neoliberal paradigm does not provide proper polices to govern intensive globalization. While being an advocate for globalization, Bhagwati also realizes that there are some downsides to this process, global agriculture being one of them. A complex set of new policies and institutions are required to be able to handle the downside to integrating into the world economy. Moreover, since these new institutions have not yet been developed by poor countries, the design and financing cannot be left to the governments of these countries.

> "International development agencies and rich-country donors also have a role to play, particularly in financing cash-strapped governments when those policies require

> disbursements of funds and in ensuring that institutional support to manage the downside of openness is rapidly created in the poor countries as well." (Bhagwati 2004:239)

The outcomes of globalization are particularly salient in the agricultural sector, where 'there is a growing polarization between large and small farmers, landowners and landless labourers, and productive and marginal regions.' (Leichenko and O'Brien 2008:57). Moreover, it causes an 'expansion in international trade of agricultural products, reduction of domestic subsides and supports for agricultural production, and the proliferation of new biotechnologies, including genetically modified organisms (GMOs).' (Conway and Toenniessen in Leichenko and O'Brien 2008:59). Another global trend that is spreading with globalization is the changing consumer patterns towards worldwide preferences for meat and dairy products.

The liberalization of international trade in agricultural production constitutes the change with the most severe implications for small-scale farmers in M'muock. Agricultural trade liberalization refers to 'reduction or elimination of tariff and non-tariff barriers to trade in agricultural and food products, as well as reductions in national agricultural subsidies and institutional support' (Kennedy and Koo in Leichenko and O'Brien 2008). The removal of domestic subsidies for farmers in developing countries has significantly altered the economic basis for agricultural production, both in developing and developed countries. According to Leichenko and O'Brien (2008), it is in fact 'challenging the viability of the farming sector.' Small-scale famers are subjected to increased international competition without having the same beneficial agricultural support systems that many developed countries offer to their farmers, exacerbating inequalities.

> "Liberalized trade not only alters patterns, strategies, and rewards associated with agricultural production, but also introduces significant volatility and variability to agricultural commodity prices, adding new uncertainties to rural livelihoods" (Chand et al. in Leichenko and O'Brien 2008:62).

The liberalization of trade in agricultural products aims to improve efficiency of world agricultural production, using the law of comparative advantage. This entails that countries and regions should specialize in production in which they hold a comparative advantage, be it due to labour supply, climatic or environmental conditions. Not only is this thought to increase productivity, in addition, it will supply the world market with a great variety of products at low prices. While there is recognition among the proponents of free trade that this might produce uneven outcomes, in time these differences are expected to diminish. While

some developing countries, most notably the Newly Industrialized countries (NICs) have been able to benefit from trade liberalization, most poor countries that rely heavily on exports of primary commodities, have experienced a steady decline in terms of trade since the 1970s. Indeed, in the mid-1990s, world prices for primary commodities stood at their lowest since the 1930s (Coote in Scholte 2009).

However, the 'doctrine of comparative advantage is regarded as difficult to apply to a world that is increasingly characterized by unequal global value chains' (Friedman in Leichenko and O'Brien 2008). Here discourses differ in their perspectives, those who are anti free trade, believe that these differences are permanent and pose major threats to the livelihoods of rural communities and small-scale farmers, and environmental sustainability.

> "These farmers, particularly in developing countries, are not expected to be able to compete in global agricultural markets, because of structural and institutional constraints as well as systematic biases in the rules. The logic of free trade suggests that these farmers should no be engaged in agriculture. However, alternative livelihood strategies may not be available without migration to other areas, including cities, where there are no guarantees for improved well-being." (Halweil in Leichenko and O'Brien 2008)

Globalization is a global systemic change with widespread effects for farmers, but some suggestions might mitigate its negative impacts/uneven outcomes on the poor. The current rules of the game are highly unequal, with substantial differences in support systems and trade barriers. In order to decrease uneven outcomes, the rules need to be equal. Some advocate the need for a larger state, where social welfare programs and public insurance systems play an integral part.

> "The challenge for the future is to develop livelihood analysis which examine networks, linkages, connections, flows and chains across scales, but remain firmly rooted in place and context. But this must go beyond a mechanic description of links and connections. Such approaches must also illuminate the social and political processes of exchange, extraction, exploitation and empowerment, and so explore the multiple contingent consequences of globalization on rural livelihoods." (Scoones 2009:18)

4.3.4 GLOBAL ENVIRONMENTAL CHANGE

Increases in temperature are expected to be higher at higher latitudes and inland areas, whilst changes in precipitation will reinforce the current dry or moist areas. 'Uneven outcomes from global environmental change manifest via changing temperature patterns, changes in water availability, reduction of species habitat, and loss or gain of livelihood opportunities'

(Leichenko and O'Brien 2008:4). They are also characterized by high levels of uncertainty that might manifest through shocks and stresses such as floods or droughts. The results of which, ultimately, are determined by the capacity to respond and adapt to change.

Agriculture and global environmental change are mutually influencing each other. According to FAO (2006), agriculture is responsible for 1/5 of the global greenhouse gas emissions (GHGs), most of which originate from the direct or indirect production of livestock, releasing large amounts of methane, nitrous dioxides and carbon dioxide into the environment. Main sources are land use changes due to production of animal feed (which now use 1/3 of all cereal production and 90% of soy production), clearing of forests for pastures, emissions from livestock digestive systems, and the production and widespread use of chemical fertilizers and pesticides.

The effects of global environmental change on the agricultural sector are also extensive, and include changes in climate conditions, desertification and reductions in soil productivity, and water depletion. Climate change is of particular importance because it has such all-encompassing effects on every aspect of production, from sowing to harvesting, to infrastructure and access to markets. Changes resulting from climate change are changes in timing and length of rainy season and growing season, soil erosion from heavy precipitation, increased salinization of soils, and introduction of new plant and animal diseases. Extreme events such as droughts, floods, and pest outbreaks are also expected to increase. Such events will not only have detrimental effects at the household level, but can threaten national food security. While the global effect of climate change may not have significant impact on total agricultural yields, there will be tremendous regional differences. Projections show that many developing regions, including Africa, will suffer negative outcomes. In addition:

> "the impacts of climate change will not be uniform, even within homogenous agro-ecological regions, because differing assets, technologies, knowledge, and other contextual factors influence farming practices and rural livelihoods." (Leichenko and O'Brien 2008:61)

The concept of social vulnerability also takes into account these contextual factors and what their consequences are for change. Khandlhela and May (in Leichenko and O'Brien 2008) notes that vulnerability is not simply caused by poverty, but more so because economic, political, and social processes influence their exposure and capacity to respond to stressors and shocks.

Different discourses are associated with globalization and global environmental change. Discourses show their distinct understanding of processes of global change, and compete to become the dominant discourse.

> "A discourse can be described as a specialist language that describes the world in a particular way, making certain claims to truth and justifying certain types of knowledge and certain forms of action." (Leichenko and O'Brien 2008:14)

Ultimately, discourses reflect underlying power structures and influence political decision making, giving some viewpoints primacy over others, usually at the cost of the others well-being. While it is out of scope for this thesis to give an account of the various global change discourses, it is necessary to contemplate the effects of discourse on understandings of responsibility of outcomes caused by globalization and global environmental change, which differ substantially across the various discourses.

4.4 PROCESSES OF CHANGE IN CAMEROON

Climate change and trade liberalization can have critical impacts on the agricultural sector, depending on the location and context where change is occurring. In the following, I will an account of the various phases of agricultural reforms in Cameroon, and how the current institutions and policies affect the outcome of climate change and trade liberalization on the livelihoods of farmers in M'muock.

4.4.1 The changing context of agriculture

Agriculture plays a central part in Cameroons economy, and various agricultural strategies have been implemented in the past. The pre-colonial economy was primarily characterized by subsistence agriculture. During the colonial period, the economy was oriented towards exporting cash crops to the colonial rulers, first Germany, and later to France and England. As the wave of independence swept over Africa, Cameroon achieved its independence in 1960. According to Bambou and Masters (2007), Cameroonian agricultural policies can be divided into four separate faces after independence.

In the first phase that lasted until a decade after independence, government agricultural policies continued to focus on the production of cash crops exported to the

former colonial powers. Policies encouraged the creation and expansion of plantations, while small-scale subsistence farmers were neglected.

During the second phase, lasting from the late 1960s to the late 1970s, the agricultural sector experienced increased intervention from the state, including agricultural input distribution and marketing of food crops. This strategy was however not very successful, Bamou and Masters (2007:5) note:

> "But Cameroon's attempt to create a modern agricultural sector through this kind of intervention proved to be very costly and had only a marginal impact on total agricultural output. The proliferation of new institutions and structures was particularly counter-productive. Agencies were supervised by different government ministries with little provision for the coordination of activities. Lines of responsibility often overlapped, agencies worked at cross purposes, and leaders were occupied in power conflicts among themselves. The poor performance of the interventionist strategy led to donor retreat and helped to awaken government doubts about the approach."

During this period, Cameroon's development strategy was managed through a series of five-year Development Plans. Agriculture was described as 'the priority sector and the government intervened massively in rural development, both directly through the establishment of state-owned agro-industries, rural corporations and settlements, and also indirectly through various support programs.' (Bamou and Masters 2007:8)

The third phase that lasted through the 1980s, and emphasized agricultural reforms. Cameroon experienced a long-lasting economic crisis from 1985-1994. When crisis struck in 1985, planned liberalism under Paul Biya replaced the plans, with the last one ending in 1986. The Bretton Woods institutions, IMF and WB, ordered privatization of state enterprises, and cuts in all public expenditures, including support to farmers.

The fourth phase, in which the Cameroonian agricultural sector still finds itself today, continues to reflect the liberalization policies of the 1980s. Structural reforms aimed at liberalising the economy and foreign trade, and stimulating private initiatives were introduced. The government phased out subsidies for fertilizers, pesticides and herbicides in 1989–92 (Ndoye and Kaimowitz, Sunderlin et al. in Bamou and Masters 2007). In 1994, the national currency CFA franc was devaluated. In 1996, Cameroon's government launched a three-year economic and financial reform programme in cooperation with the IMF and the World Bank, under the Poverty Reduction and Growth Operation (PRGO) programme. Building on the results achieved under these reforms, Cameroon then benefited from another international initiative, the Heavily Indebted Poor Countries (HIPC) initiative. Following a

second economic reform programme in 2003, Cameroon adopted a poverty reduction strategy (PRSP), and in April 2006 reached the HIPC completion point. It is difficult to measure the exact results from the SAPs in developing countries, because it is impossible to know how the economy would have responded to the debt crisis without this reform intervention. But as Easterly (2006) notes, many African countries experienced negative growth during the years of structural adjustment, and it is probable that the effect have been minimal.

Cameroon is often portrayed as the poster child for agricultural growth in Sub-Saharan Africa, and has in terms of GDP benefited from the agricultural reforms. However, according to Bambou and Masters (2007), this growth is primarily based on early unsustainable expansion of cropped area, with very limited growth in land productivity. In addition, the yield growth of key crops has not corresponded with the strong increase in fertilizer use.

> "The net result in terms of per capita production of both food and non-food crops suggests that Cameroon has done little better than the average for Sub-Saharan Africa since the late 1960s." (Bamou and Masters 2007:8)

4.4.2 Climate change – local implications

According to Yengoh et al. (2010:827), various parts of Cameroon have experienced exceptionally long extensions of the rainy season since 2005, and 'pronounced seasonality (with the dry season becoming dryer and the rainy season becoming wetter) is observed from the country's climate data'. Cameroonian agriculture is dominated by small-scale farmers who mostly depend on rain-fed agriculture. Because much of the production system is poorly developed, climate is a key control factor in the crops that are cultivated (Malua 2010). As such, climate controls almost every aspect of the economic and social lives of small scale-farmers. Clearly, changes in climate conditions vary from year to year and farmers continually develop adaptive capacities to cope with short and long-term climatic variations. However, variations that significantly differ in frequency and magnitude may fall outside their coping range.

> "Exposure to isolated shocks of natural or man-made origin leads to a degradation of their adaptive capacity and reduces their potential of attaining the goal of sufficiency in food, nutrition, and health. Locally specific climate stressors with low predictability are most likely to negatively affect smallholders and subsistence famers." (Morton in Yengoh et al. 2010:826)

Evidence shows that outcomes of vulnerability for individual households who largely base their livelihoods on small-scale farming, and therefore have smaller production margins to spare, a substantial decrease in agricultural output may result in less available food for the household and less income to reinvest into the farm for the next agricultural season. As a result, an extension of lower productivity may follow well into the nest season.

> "Outcomes arising from an extension of the rainy season are complex enough to provide insights into issues of vulnerability, mitigation and adaption to global environmental change in Cameroon as well as in similar agro-ecosystems in the west and central African sub-region" (Yengoh et al. 2010:826).

The climate is expected to change rapidly over the next decennia, and the strongest impact will be on poor people in the South (Devèze 2011). The farmers in M'muock explained that they were already experiencing changes in climate and that they in the past few years had witnessed a rapid change in seasons and in temperature. They noted that the rainy season would come at different times than in the past with more and heavier rainfall, in addition there was an increased need for insecticides due to the rising temperature. Especially the changes from the past couple of years have made it difficult to plan seeding times because of the unpredictable rainy season. Pauls comments:

> "Climate change has become a big factor in recent years, the weather has become increasingly unpredictable. The rains come at different times than in the past and makes it difficult to plan when to plant the seeds, if the rains come too late the crops are destroyed".

Other informants commented on the fact that new insects are attacking the crops and they believe this has to do with the change in climate. The increased amounts of rain also causes erosion that affects both the land and the roads, making it ever more difficult to repair the roads for transportation of the crops. Landslides are becoming more common, and this causes farm land to be washed away. Carlosse notes:

> "Normally the rain would come in March but now it doesn't arrive until May. There is also excess sun that damages the crops in the rainy season, it never used to be like that in the past".

In the French village, irrigation has started to become problematic as well. Herlian comments:

> "Because the sun comes earlier I need irrigation, but the water ponds for irrigation are drying out and I have to travel 2 km to fetch more water".

Many of the farmers complained that their crops had been destroyed because they are not able to plan seeding. However, the adaptive capabilities differ from farmer to farmer. One informant, Justine, explains how she is able to plan the seeding:

> "I have noticed a big change in temperature the past few years, but I am able to predict when it is going to rain by studying the temperature. That's why I have not been affected negatively by climate change so far".

If the seasons and the rainfall continue to be this unpredictable, it will be hard for the farmers to predict when to plant the seeds. Even if they are able to plan the seeding, excess sun in the rainy season might make it very difficult to protect the crops from damage with the same techniques as in the past. The data indicates that the climate in M'muock is changing at an unprecedented pace, and the future for the farmers is highly unpredictable. Even the farmers who are used to adjusting their cultivation practices might not be able to adapt when new pests and insects destroy their crops due to increased temperature.

To address issues of vulnerability for small-scale farmers, Yengoh et al. (2010) suggest emphasizing access to relevant knowledge and information, and knowledge-sharing in order to increase the possibility for adaption. Adaption techniques performed by some farmers could have helped other farmers in the area if there was an institution for knowledge-sharing present. Maybe more importantly, as Dalby (2009:107-108) notes, the extent of vulnerability depends on 'the larger societal context and the availability of effective governance and relief arrangements'. At present, these are non-existent for the farmers in M'muock.

4.5 SYNERGETIC EFFECTS OF PROCESSES ON VULNERABILITY

As Dicken (2004) and Leichenko and O'Brien (2009) note, there are evident linkages between globalization and global environmental change that produce certain outcomes in Cameroon in general, and M'muock in particular. The literature on climate change and trade liberalization shows that these are highly contentious topics. There has been much research regarding the effects on agriculture of both processes separately, but with little regard to how synergies from both processes may impact on livelihoods and communities together. Which implications can a double exposure of these processes have on farmers in M'muock? I will try to answer this question in the following section.

The spread of globalization and free trade under the neoliberal policies of the Cameroonian government has resulted in a removal of all protectionist measures for agricultural products in Cameroon. This leaves farmers highly vulnerable to shocks and trends. As the effects of climate change are becoming evident, the lack of appropriate support-mechanisms for farmers is exposing their extreme vulnerability to these changes. Climatic shocks like droughts, floods, or unpredictable timing of rainy season can devastate farming livelihoods. Most small-scale farmers are completely dependent upon the seasonal incomes from selling their crops on the market, if crops fail partially or completely due to changes in climate, they have nothing to fall back on. The inherent vulnerability of relying on the natural environment for your livelihood is not compatible with trade liberalization of agricultural products and a lack of institutional arrangements to protect them (Polanyi 1944).

Trends are unlike shock, predictable, but this does not necessarily imply that it is easy to develop coping or adaptive strategies to them. The climatic trends towards increased temperature, prolonged rainy season and heavier precipitation in some areas, will require appropriate strategies to avoid increased vulnerability. This might entail gaining knowledge and skills to adapt agricultural practices, gaining access to different types of seeds, crops and pesticides. Without institutions to provide this, farmers are left at their own perils, and increased vulnerability is unavoidable. Extension service for farmers in M'muock is supposed to be present, but during my field research, no extension service employee was available. Moreover, the farmers I interviewed had not been in contact with this person and did not seem to know that they could get advice. According to the Cameroonian government, they will promote institutions like these in future agricultural programmes, but it remains to see whether this was mere propaganda to win the (fraud) election, or if they in fact are going to allocate money into the agricultural sector in future policies.

Price fluctuations can take the form of both trends and shocks. For example, the tendency of decreasing prices for primary agricultural commodities relative to processed commodities is a long-term predictable downward trend. When the first great fall in agricultural commodities prices occurred in the 1980s, it was however a shock to farmers and governments in developing countries who had concentrated their economic development on producing export crops. Cameroon was also badly affected by the spike in world food prices in 2008. As many Cameroonians no longer could afford staple food products, riots broke out all over the country and 40 people were reported dead. As a response to the crisis, the government announced that they would invest $1 million to improve food production in the

two consecutive years. Critics say that most of the money was diverted by agriculture ministry officials to ghost producer organizations run by family members. While the food prices did decrease somewhat after the initial crisis, food prices in Cameroon have remained high and have the past two years increased with 1/3. Effective government policies have not yet been implemented and many Cameroonians are still struggling to pay for staple foods.

Notwithstanding, farmers livelihoods rely on both prices they receive for their crops, as well the prices they pay for basic food products. Changes, small or big can have significant impacts upon their livelihoods. Unfortunately, increased prices for their own produce rarely benefit the farmers themselves but tend to end up in the pockets of intermediaries. More often than not, these spikes and fluctuations coincide with extreme weather events, such as the droughts in Russia and Ukraine that contributed to the inflation in prices for wheat in 2008. If unpredictable changes in climate that affect your crops occur simultaneous as food prices soar, the double exposure can prove to be fatal.

The global vulnerability context for the small-scale farmers in M'muock is dominated by all-encompassing forces that have severe implications upon their livelihood opportunities. The neoliberal economic and political paradigm prevalent in the world conditions the agricultural policies that are promoted by the government in Cameroon. Moreover, globalization and climate change and their interplay produce critical constraints upon the livelihoods of farmers. Findings from the research indicate that farmers in M'muock are already struggling to adapt and cope with the changes that are occurring, exacerbated by the lack of institutional arrangements and government support. If the small-scale farmers in M'muock are to stand a chance in this uncertain global environment and obtain sustainable livelihoods, it seems obvious that they cannot continue to be left at their own perils.

5 M'MUOCK LIVELIHOOD PORTFOLIOS

This chapter will assess the empirical data drawn from my fieldwork, revealing the available livelihood assets for farmers in M'muock, their linkages and the various strategies they apply to improve their livelihoods. The livelihood portfolios of the smallholder farmers in M'muock Leteh, Fosimondi and the French village comprise of divergent capabilities and access to assets, making them unequally vulnerable to external shocks and trends. The strategies applied to obtain or maintain sustainable livelihoods directly reflect upon the various assets available to each unit of analysis, and the vulnerability context in which they are operating. In the following sections, I will give an account of the various livelihood assets discerned in the M'muock households, and their constraints. This will enable me to expose links between livelihood assets and the employed strategies. It is important to note that asset endowments are constantly changing, influenced by both the vulnerability context and the PIPs. Finally, the livelihood aspirations of the farmers will be described.

5.1 HUMAN ASSETS

Human assets are necessary for making use of any other assets available and are, therefore, required for creating an income. Human assets are the quantity and quality of labour force, enabling people to pursue different livelihood strategies and achieve their livelihood objectives. Human assets are determined by household size, health status, knowledge and education as well as skill levels and leadership qualities. According to Devèze, human assets need particular attention within a farming household (2011:197):

> "The human dimension of agricultural development are too often neglected, making it particularly important to promote the professional skills of farmers and strengthen community dynamics, especially through professional organizations and by building more balanced relations among participants. Particular attention must be paid to the training of farmers and the integration of young people."

5.1.1 Labour

One of the main human assets available to a healthy person in working age is his or her labour force. As the unit of analysis in this study is the small-scale farming household, all interviewees applied some of their labour asset in farming activities. M'muock and the

surrounding areas are heavily dominated by agriculture, and hence this is where most of the labour supply is concentrated. Farming practices conducted in M'muock consist mainly of traditional labour intensive techniques with simple tools. The hilly landscape that constitute the majority of cultivated land in this highland region render it impossible to use tractors or draft animals to assist with physically demanding tasks. Demand for labour is therefore high and it can be challenging to acquire sufficient labour, especially during times of harvest. The majority of farmers only apply the household labour force in cultivation, but some of the farmers with larger plots of land or who has an additional job, struggle to find adequate labour supply. One of the farmers, Paul comments:

> " There is a lack of labour force in the community, and I sometimes have to hire expensive labourers from other villages."

As previously mentioned, polygamy is widespread in the M'muock area, much more so than in the rest of the country. This can be explained by the history of labour intensive farming in the area; in order to extract as much value from the land as possible, sufficient amounts of labour are necessary. Hence, the more wives and children you have, the bigger the area you are able to cultivate. According to the informants asked about the issue of polygamy, it existed and continued to do so because of tradition, but also due to a general lack of labour supply. The farming activities performed are extremely labour intensive and the only tools used are simple hatches. Transportation of crops from farm to market happens mainly by foot. Big bags of potato, often up to 40 kilos, are carried by men, women and children on top of their heads to the village. Some are able to pay for transportation by car or motorcycle, but many households are conducting this heavy task by foot.

While most of the informants were full-time farmers, I also interviewed some farmers who worked in the local schools as teachers or administrators. Their own labour supply would mainly go to their full-time job in the school, but in addition they owned or rented a piece of land that they partially cultivated themselves, in addition to hiring labour supply when needed. From conversations with my interpreter, it became clear that everyone in M'muock farmed in one way or another. Even the ones owning their own business, the small shops and bars, they also had their plots that they cultivated with their wives and children. The livelihood opportunity offered by growing Irish potato in the rich and fertile soils in the highlands of Cameroon with sustained markets access to local, national and regional markets, had not escaped the inhabitants of M'muock who all tried to benefit the best they could from this opportunity.

5.1.2 Health

Health is a very important asset when conducting labour intensive work. The effects of working long days with hard physical labour was one of the main reasons, next to the economic disadvantage, why none of my informants wanted their children to take over the family farm or to work in the farming sector at all. As one farmer explained:

> "Farming is very hard on the body, and because of this farmers don't get to be old. "

Another issue that was brought up by during the interviews is the use of pesticides and herbicides without proper protection. The chemicals are labelled as toxic, but evidently, no one takes the advised precautions. An old farmer, Michael, describes why protection is not used:

> "The use of pesticides is toxic for the body and the people around here do not protect themselves when they are spraying. They think it is the White mans way and they do it the African way."

Indeed, wherever you go in M'muock, you can always see someone in the fields carrying big cans of pesticides on their backs, or driving past on motorbikes and pick-ups with spraying equipment. Not once did I see someone using protective masks or other kinds of protection. One of the farmers in the French village was convinced that this made farmers in the area sick:

> "I'm afraid of the toxins in the pesticides, people can get very sick from them."

Studying the health effects of this is not within the scope of this thesis, however it seems likely that some negative health effects have been experienced.

5.1.3 Education and skills

Access to education is an important factor impacting human assets. The farmers in M'muock grew up in a time when it was not common for everyone to go to school. During the past decade, it has however become increasingly common to enrol your children in the local schools, and most people now prioritize education for their children. None of the informants in the M'muock villages withheld their children from school, but in the more remote areas, I encountered parents who kept their children at home. In these remote areas, it is still common to expect that children follow their parents footsteps by working in farming as they grow up.

Some do not see any other opportunities, while others cannot afford the school fees or need the extra labour on their farm.

To work as a farmer, you need to have some basic skills in agronomy and farming techniques. The informants all came from farming households, and had learned their techniques and practices from their parents. The government had recently appointed an agricultural administrator to the village, who was supposed to advise and help the farmers with farming related questions and problems. This person had however been hurt in a motorcycle accident and had not been working for a while. The presence of this agricultural extension worker seemed to have escaped the farmers, most of whom did not have any knowledge about this service.

The farmers obviously differed in their skills and knowledge but they were all using the same tools, techniques, crops and inputs. The most resourceful farmers seemed much more assertive than the others concerning issues of soil preservation and climate change, and were making conscious choices to decrease their vulnerability accordingly. Others again seemed to think that they were left to their fate and that nothing within their control could influence how well they did. Social assets and knowledge-sharing can play an important role in helping to diminish the degree of vulnerability to such contextual factors.

5.2 FINANCIAL ASSETS

The unit of analysis of this thesis is the small-scale farmer household, and hence all informants earned some of their income by farming and selling their produce. The farmers were mainly small-scale but there was a difference in their capacity to earn money from their farming activities and to secure their livelihoods. It is important to note that while financial assets tend to be versatile, they cannot alone solve all the problems of poverty. People may not be able to put their financial resources to good use due to a lack of knowledge, or they can be constrained by inappropriate policies, institutions or processes. On the positive side, it is also important to be aware of the way in which existing social structures and relations can help facilitate group-based lending approaches (DFID 1999).

5.2.1 Income generation

The main economic assets defined in the livelihoods framework is income generation. For the farmers in M'muock, the main product cultivated was Irish potato, along with some leeks, garlic, cabbage, carrots and beans. Irish potato was their main income-generating product, because according to the villagers, "there is always a market for potato". The general picture of the M'muock area inhabitants is that the least resourceful people tend to exclusively grow crops and sell these to intermediaries, without being able to benefit from livelihood opportunities. However, different strategies are applied to increase income generation from farming activities. One farmer explained how he was able to benefit from price fluctuations:

> "When the prices in Douala and Yaoundé are low, I sell at the local market, otherwise I sell in the big cities and export to Gabon. When the market is good, I borrow money to buy and sell more potatoes."

Others strategies entailed saving or borrowing money to buy a motorbike or pick-up truck that they used to transport bags of potatoes from the farms to the local market. This enabled them to earn some extra cash in addition to the incomes from selling their crops. Some farmers also borrowed money to buy crops from the smallest farms, stored, and then organized transportation to wholesale dealers in Yaoundé. This was done directly by some farmers, but also by local business women and business men from outside the village. Working as an intermediary increased incomes substantially, Justine explains how she is able to benefit from buying potatoes from the smaller farms:

> "I earn much more money from buying and selling potatoes than I do from farming. Farming only earns about 500 000 (CFA: 1000 CFA = $1,95) a year, while my work as an intermediary gives me 1 million. This is because the local market price for a bag of potato is 13 000, while I can get 21 000 at the market in Yaoundé. Because I arrange for transportation myself, it only costs 2500 per bag."

Other agricultural related activities undertaken by the farmers included small-scale animal rearing, mainly pigs or goats. The findings show that this diversification of agricultural activities, the progressions from plant-based agriculture to include animal rearing increased incomes and livelihood sustainability for the farmers as indicated in the literature.

Non-farm income generating activities was exclusively undertaken by the school employees. Neither of them came from M'muock, they had all been placed there by the government and were working there awaiting their next relocation. As a an employee in the

Cameroonian public service, the government can assign you to any part of the country at any time, without consideration to your family situation. One of the teachers, Ezekiel, explains:

> "I have a wife and two children, but they don't live here. My wife is also a teacher, so we both have to go where the government assigns us. It is difficult, but we don't have a choice. In the future I hope to be a full-time farmer so that we can be together."

Working in the public sector offers an opportunity to a sustainable livelihood for Cameroonians. Once you have become a public servant you are guaranteed a job and a secure income, but it also clearly poses its challenges. Many of the full-time farmers aspired for their children to work in the public sector, but the school employees I interviewed all wanted to work full-time as a farmer in the future. This indicates that income generation is not necessarily the most valued asset, and rather accentuates the importance of social relationships in livelihood aspirations.

5.2.2 Credit and savings

It became evident early on during the fieldwork that the core perceived barrier to livelihoods aspirations and growth was the lack of access to credit facilities. This is not surprising as it is a common problem for African farmers in the wake of neoliberal reforms.

> "Smaller and more remote farmers have no access at all to formal credit. The emergence of financial intermediaries has been limited by high risk and limited availability of collateral, so farmers must rely on loans from family members and local informal lenders." Bamou and Masters (2007:8)

The farmers in M'muock produce agricultural commodities for income generation and own consumption. The average farmer does not have the opportunity to save money, after each harvest, the crops are sold at local or national markets and cash is generated, but according to the farmers, all of this cash is immediately invested back into the farm as new inputs are acquired. The cash earned is not sufficient to buy what is required for high output cultivation, and there is a dire need for better seeds and more fertilizers and pesticides. Access to reliable and good credit facilities was a major constraint to achieve livelihood outcomes for the farmers.

Less than two years ago, a local village bank was initiated by the International Development Fund. According to the bank administration, most people borrow money to expand their farms or to pay for school fees. In order to get credit in the bank one must be a

member, and to be a member one must open a savings account. To be able to borrow a certain amount of money, you must have a 30% collateral of the amount you want to borrow. The current interest rate is 5%, depending on whether you have sufficient savings in the bank, otherwise it is 30%. For the poorest farmers, this is not a viable option. Another important constraint to using the bank is however the community's lack of confidence in financial facilities. Leteh has had two previous private banks, Salocom ten years ago and Niscam seven years ago. Both times the bank owners have run away with the villagers savings. After these two episodes, it has understandably proven difficult to convince the community inhabitants that it is safe to put their money in a bank. There is also a general lack of knowledge about how loans work. As William notes:

> "The community is still struggling to educate people about loans and how it all works. After being tricked in the past, it is hard for people to regain confidence in the advantages of lending from banks."

The Leteh village bank was still struggling to gain members to obtain sufficient funding, caused by a lack of confidence and the financial threshold to become a client.

The most common way to finance expansion or helping in times of crisis is through small loans in family groups. These groups provide safety nets and can sometimes provide small loans, and have emerged due to lack of other financial services. In these groups, the interest rate is low, usually between 5-10%. The loans are provided as a matter of trust and have to be payed back to the group often within a couple of months. The available credit is typically low, as the money has to be shared between many people. Although this functioned as a good safety net in the case of shocks, it did not seem as if this lent a great opportunity for expansion. The funds available were too limited to have any significant impact upon their livelihoods.

One informant was a member of a farming group where he could borrow money at a 5% interest rate. The group had about 200 members and you had to have an old member vouch for you in order to become a member. The loans are then a matter of confidence. The informant explains:

> "Sometimes the group does not have enough money to lend, in such cases I wait until there is more money. There are also private persons in the community who lends out money, but the interest rate is 14-15%."

A few of the farmers were members of Local Initiative Groups (CIGs). The CIGs have been around since around 1995 and their numbers are increasing. The groups were established by the state when subsidies were removed by the SAP reforms. Any group of farmers that exceeds ten people can apply to the government to form a CIG. The group then raises money from members and applies for projects with the government in order to get loans. The groups then receive loans in the form of materials like fertilizer, herbicides and tools. The loans have to be payed back in cash. Only a few of the farmers were aware of the existence of these CIGs, and the possibility they offer to get loans or subsidies for specific projects. The groups are often family based and you need to have a family member inside the group to become a member. Kalenta comments:

> "There are available groups to get credit, but I have never gotten any assistance. If you don't already have a family member inside the group, you don't know how it operates and you won't be able to benefit."

There are also issues with confidence in the CIGs. Justine explains why she does not trust them:

> "I used to be a member of a Common Initiative Group and we applied for subsidies, but the leaders of the group took all of the money that was appointed to the rest of the group. After this, I prefer to do things on my own and I don't want to borrow money. If I have to borrow, I'd rather borrow from relatives who are able to lend a helping hand if necessary."

Another obstacle to becoming a member of a CIG is the fact that you have to pay cash to be accepted in the group. Magdaline says:

> "I know of these Common Initiative Groups, but you have to pay a big deposit to become a member and I don't have any money."

The farmers who were aware of the CIGs and the possibility to get loans through them mostly aspired to become members, but did not have the appropriate financial or social capital. The current entry rate was according to the farmers 10 000 CFA, in addition there are recurrent collections. If you are lucky enough to become a member, there is still no guarantee that you will receive any support.

This general lack of access to safe credit institutions obviously has a severe impact on the livelihoods of the farmers. The informants were all keen to intensify their production and some aspired to buy or rent more land, but did not have the necessary capital to do so. This inhibits their chance of income generation severely, as their main skills are in agricultural

production and consequently this is where they focus their livelihood aspirations. The rural non-farm sector in the M'muock area is limited to educational services and a few small outlets where they sell some foodstuffs and beverages, or the local pubs. For most people, farming is the only option. Increasing access to financial services can be key in helping them create livelihood opportunities. This includes overcoming barriers associated with poor people's lack of collateral, or working to reform the environment in which financial services operate or to help governments provide better safety nets for the poor (DFID 1999).

5.2.3 Intensification and extensification

Having farming as your main income, there are mainly two strategies for increasing incomes; intensification or extensification. You can intensify production by using better seeds and more inputs like fertilizers and pesticides/herbicides, or you can buy or rent more land to cultivate and increase yields. Both strategies do however require access to credit, either in the form of savings or loans. If this is available, a cost-benefit analysis can be done to estimate whether the costs of buying more inputs or land will pay off in the future. However, in the current vulnerability context, this can prove to be increasingly difficult to predict. Future weather patterns and the prices for commodities and inputs are changes outside of the control of farmers. Investing in agriculture, though it might be the only possible livelihood strategy for the farmers in M'muock, is a highly risky enterprise. Notwithstanding, their future aspirations often included investment in and an expansion of the farm.

A recurring constraining issue for the farmers was that they were not able to buy good seeds, and that they often had to use old seeds due to lack of capital. The bad seeds in turn resulted in a much lower yield than they knew was feasible for the area of land they were cultivating, but they had no other option than to use these bad seeds. One informant, Fredrik, explains:

> "There are improved seeds available but I am not able to buy. Sometimes I have to use the same seed three times because I can't afford new ones, this reduces the harvest significantly. The seeds are from Irad Bambu and the prices are very high."

An old farmer, Michael, confirms:

> "The Agronomic School in Chang distribute seeds to farmers. I know there are improved seeds from Holland available that would increase yields substantially, but I can only afford the bad ones from France."

Good quality seeds are key in order to increase agricultural outputs and to maximise incomes, this lack of access to high output seeds obviously decrease their possibility of obtaining sustainable livelihoods.

The use of chemical fertilizer, fowl droppings, pesticides and herbicides is widespread in M'muock. While appropriate use of these inputs can increase yields and incomes, extensive use also contribute to vulnerability. As described in the chapter on vulnerability, soils can get exhausted from intensive use of chemical inputs, in addition, the prices of inputs relative to agricultural commodities, has a double detrimental affect upon livelihoods.

Extensification of the farm is difficult in the M'muock scenario, but small pieces of land are available and can serve as a livelihood opportunity. However, the extent of which is probably very limited due to land scarcity. In the French village, land was still abundant and extensification could serve as a good livelihood strategy if credit was available.

5.2.4 Substitution

To increase incomes as a farmer it can be beneficial to substitute your crops with crops that have a higher market price or that are more appropriate for the land type you are cultivating resulting in higher yields. In the case of the two villages Leteh and Fosimondi that both are situated high up in the mountain area with highly fertile volcanic soils, it was well established that potato was the most productive crop to cultivate. Moreover, the market for potato in Cameroon and the neighbouring countries is still far from saturated, making unlikely that crop substitution could improve livelihoods. In the French village a bit further down the mountainside, the farmers claimed that the soil was not as optimal for potato cultivation, and hence there was some cultivation of tomatoes and beans as well. Despite this fact, they all used large parts of their land for potato cultivation, reasoning it with the good market for potato.

5.3 NATURAL ASSETS

Natural assets are highly important in rural areas as much of the income generating activities depend upon natural resources, most notably land.

5.3.1 Land use

As previously mentioned, the land type in the M'muock villages is mainly highly rich and fertile volcanic soils. The soil type is very well suited for the cultivation of Irish potato and produces large yields. The scale of production in M'muock is small to medium, the reason for this is that too many people are cultivating on a limited amount of land, each farmer only cultivating small, often scattered plots. Available arable land in the two villages in the Anglophone North West province is very scarce, and what is left for rent or for sale is not the most fertile or easy accessible land. In the French areas surrounding Leteh and Fosimondi, land is more abundant, but the quality is not as high. In addition, the Anglophone farmers are not allowed to buy land in the French areas. Because of the scarcity of land, the government has taken over private agricultural land to sell to other farmers. Maurice tells how his land was taken from him:

> "I used to be an animal rearer in the past but the land was converted into farming land by the government. Now I mainly cultivate Irish, in addition to a few pigs. In the future I hope to be an animal rearer again, but there is no land available for grazing."

The lack of available land in the North West province serves as a critical constraint to future livelihood opportunities, both for farmers who wish to expand their production, as well as the opportunities for their children. This problem is very prominent in this specific area, and severely limits available livelihood strategies.

5.4 SOCIAL ASSETS

Social assets are important, since they create a safety net and a buffer against shocks, can assist in creating livelihoods. They are formed by all social relations from networks, groups, social connections, kinship, and family.

5.4.1 Participation

In Cameroon, most farmers are small-scale and not organized. The informants were not aware of any organization for farmers and most of them did not seem to be organized with the local farmers either. A few were members of CIGs, and these groups had regular meetings where they discussed farming related issues and advised each other. The family

groups also contributed to their social assets as these groups help each other in times of need. Those who for some reason is not a member of a family group have a complete lack of safety net and buffer that the family group normally offers, which has a strong negative effect on their livelihoods. The farmers who seemed more better off than some of the others clearly had a stronger social network, often being member of a CIG, a farming group and a family group.

There is a complete lack of possibility to influence government decisions about farming policies, a steep contrast to the Norwegian system where the farmers themselves negotiate through their farming unions with the government each year about government subsidies. The only contact with the government is through CIGs where only a few of the farmers were members. The contact did not however serve as purpose to hear the voices of the farmers, but rather to assist with loans for inputs with projects that were of a relative size, and thereby contributing to the further marginalization of the smallest farms.

5.5 PHYSICAL ASSETS

Physical assets include both private and public owned resources. These types of assets can be particularly expensive, as in the case of infrastructure, because it requires not only the initial investment, but also a lasting commitment of financial and human resources to meet the operation and maintenance costs of the service (DFID 1999).

5.5.1 Roads

During the rainy season, much of the community roads are damaged by the heavy rains, leaving in its trail deep mud, huge dumps and missing pieces of the road. As I arrived in October at the end of the rainy season, I was able to experience first hand how the roads appear after a heavy rainy season. In normal years, the rainy season would have ended by the end of October and the roads would have been repaired. However, according to the villagers, the community had been experiencing recent changes in weather patterns. I was warned right before my departure to Cameroon that it might not be possible to drive all the way up to M'muock on my arrival as planned, due to an unprecedented heavy and long lasting rainy season. On our drive up the mountainside to M'muock, the four-wheel drive vehicle

struggled to get through the deep mud and past the huge wholes in the road. Had it not been for a strong driver and helpful locals along the way, it would not have been possible to get all the way up to M'muock. We could see large trucks with agricultural produce standing alongside the road, where they had temporary given up the fight to get down the mountainside to deliver potatoes and other vegetables on the national markets. The weather clearly determined whether access to markets would be possible, if the rain lasted longer than anticipated, the vegetables would be destroyed, waiting on the weather and the roads to be more accommodating. The community inhabitants would repair the roads themselves as soon as the rain stopped, and in M'muock they had mandatory community reparation groups that would rush to a site as soon as the rain ceased to fall. However, as long as the rain was still pouring down, there was nothing else to do but wait. Obviously, this has drastic impacts on the incomes of the farmers as they are producing fresh foodstuffs that need to be stored well or transported soon after harvest.

Picture 1: A pick-up truck trying to reach the village with a load of Irish. Photo: Hautala

A consequence of the bad roads is that the price for transportation, both to the local market and to the big cities is much higher than it needs to be. The intermediaries take advantage of the situation and the prices for transportation understandably skyrocket when the roads complicate transportation. Justine, a female intermediary comments:

> "I drive to Yaoundé with 50-60 bags 2-3 times a week. When the roads make it impossible to transport by large trucks, I pay for smaller trucks that are always able to drive no matter how bad the roads get."

Another farmer, Fredrik, using intermediaries for transport to national markets complained over the lack of control of these transports:

> "There is a big problem with transportation as I do not have control over the transporters. They are payed when they reach Yaoundé and that is why I can't trust them. Sometimes they do not go straight to the city but uses excuses to be delayed and to charge me for extra money".

Infrastructure has not been a priority in Cameroon for the past decades and especially remote rural areas are not being targeted with project money for infrastructure. The responsibility is now placed on the different communities that are situated far from political and economic centres, and thus far from project money. They make the best of their situation and arrange for road repair groups, but as long as the roads are not tarmacked, they will continue to be washed away during the rainy season. The heavy trucks full of vegetable crops destined for national markets also take their toll, contributing to the destruction of these roads that are ultimately not suited for heavy transportation. National markets are dependent on the continued access to the food crops coming from these remote areas, and a lack of investment in road infrastructure affects not only the livelihoods of farmers in remote areas but also national food security.

5.5.2 Storage

Storage facilities are very important in the agricultural sector, including at household, village and national level. My first introduction to the challenges with adequate storage facilities was on my second day in Yaoundé when we visited one of the largest vegetable markets in the capital. My first interview was with one of the head employees at the market who explained the procedures at the market. Big trucks full of fresh vegetables arrived daily from rural areas all over Cameroon, this was also where the potato trucks from M'mouck were destined. The

market consisted of a huge square with some basic sheds surrounding it. The vegetables were scattered around the square on wooden pallets laying in direct exposure to the weather, it being sun or rain.

Picture: Fresh loads of Irish at the national market in Yaoundé. Photo: Hautala

The market informant explained that if the vegetables are not sold within three days, the crops will start to rotten and significantly decrease in value. The vegetables in the market were a combination of fresh and already decomposing produce, and the average loss due to lack of good storage was by the market manager estimated at about 1/3 of the total value of the crops. Bearing in mind, this was one of the biggest markets in the capital where produce was bought either locally or waiting to be exported to Gabon and other neighbouring countries, it is highly questionable that the vegetable market was not better equipped with adequate storage facilities. The provision of fundamental facilities would increase the payments made to the farmers as well as raising the national food security substantially. When 1/3 of the crops in the cities are unnecessary lost due to exposure to extreme weather conditions, investment in infrastructural storage facilities is a dire necessity. The building of basic storage infrastructure in the biggest city markets would not have to be an expensive endeavour and would rather be a cost-efficient way to accommodate the needs of farmers and agricultural intermediaries.

At local level in the M'muock villages, the storage situation was not much different than in Yaoundé. A few of the households were able to store for a short period of time, but many completely lacked adequate storage and had to sell their produce immediately after harvest. For those lacking storage this meant that they were not able to benefit from price fluctuations and that they were forced to sell their crops at the height of the season when everybody else are selling and prices are at a low point. Some farmers told me that if the prices were too low, they would just keep the crops in the ground and in this way you could preserve them for 2-3 months or until the prices increased. Storing the crops might however not be possible for everyone as it implies that cash generation is postponed, and when many of the farmers live completely from hand to mouth there is simply no way that they will make it until the prices rise again. The village community in Leteh had recently been able to save money to build a communal storage in the village, but still there was not enough space for everyone's crops and many still had to sell immediately after harvest.

5.5.3 Privately owned assets

The farmers in M'muock all owned their own house, and their housing usually comprised of one-room brick buildings around a yard. One would typically be for cooking with a fireplace in the middle, sometimes with one or more beds in the back of the room. The cooking houses were completely black on the inside from the constant smoke from the open fireplace, as the only air passage was through the door. The health effects of extreme exposure to smoke is probably significant, but the lack of ventilation might be explained by the fact that the community used to live at the bottom floor of the caldera before moving up to Leteh. In that area Malaria was easily transmitted by mosquitos, whereas Leteh is too high for mosquitos to survive. The other buildings surrounding the yard would typically consist of one house for the man in the family, and one for each of the wives with children. In addition, a few had a dining room for special occasions, and one house for storage. A few of the houses had recently been connected to electricity, but the electricity was not very reliable and was mainly used for watching television. Most houses were not connected to a water line, but a few of the more affluent households in the community were, and most of the families would have to walk to these neighbours or a public water line to fetch water. The water was however very clean, coming from high up in the mountain regions, and you could safely drink it. The living standard in this smallholder community is generally low and there are not many physical

assets besides the house and some very basic furniture and tools for cooking. A few of the more affluent had been able to purchase a motorbike or a pick-up car that was used as a means to transport their own and others crops from farm to market. This enabled them to move up the social ladder from working solely as a farmer to also working as an intermediary who transports or/and rents his vehicle for crop transportation. More importantly, it provided extra income that served to diversify their incomes and make their livelihood more sustainable. If crops fail, they will at least have this basic, secure income, as transportation is highly demanded in the area.

Physical assets that are of great importance to farmers are inputs, tools and livestock. The farmers in M'muock all complained about a lack of capital to buy sufficient inputs, ranging from seeds, to fertilizers and pesticides. The inputs used are a combination of chemical and natural, and as the prices for mineral fertilizers have increased, the use of fowl droppings is now becoming increasingly common again. Tool used were very basic, hence they all had access to these basic tools for plowing, seeding and harvesting. The purchase of livestock is an investment not available to most farmers in M'muock due to lack of capital, while others had been able to increase security of their livelihoods by keeping a few animals. It was a clear livelihood aspiration for many to become an animal rearer in the future, providing a more secure income base that is resilient to global processes of climate change.

5.5.4 Social infrastructure

In order to secure a good livelihood it is necessary to have access to health and education facilities. The past few years it had become increasingly common to send your kids to school in M'mouck, but only a decade back this was for the few and privileged. Primary school is supposed to be free in Cameroon, but the parents have to pay school fees, uniforms and books. For the poorest households, this clearly was not an easy accomplishment, but it seemed as this had become something that was expected and the farmers all claimed to make this a priority. Not only for the children themselves, but also as a safety net for the parents so that the children would be able to support them as they grew older. Having worked as farmers their whole lives, knowing the hardship that comes with it, both in economic terms and the physical impacts of hard physical labour, the general consensus was that education and work in the public sector was the future for the younger ones. Available education facilities included a pre-school, a primary school, a vocational school and a high school. The high

school was recently built and was still lacking essential infrastructure, and the school administration was hoping that parent funding would enable them to finish within a year or two. As we walked up the school, we encountered students walking from the school towards the village to get bricks and carry them back to the school by feet. This was a way for the students to get extra credit, and if not offered freely, the teachers appointed the students who had to do this heavy work.

The only health facility in the area was a health centre with a doctor and a health care provider. They offered simple treatments and medicine, and check-up and vaccines for children. We visited the clinic when our daughter fell ill, and we were immediately taken care of and provided medicine by the doctor. The clinic was recently built by the community inhabitants from money collected from expatriates in Norway. It now offered assistance to the most immediate health needs and therefore added greatly to the community's social infrastructure and the local households livelihoods.

5.6 LIVELIHOOD STRATEGIES

As noted by Scoones (1998), the available livelihood strategies for farmers include intensification/extensification, diversification or migration. I will only discuss the first two options, as migration will not serve to improve the livelihoods of farming families, but rather constitutes a complete change in location and/or occupation. The most successful livelihood strategy discerned in M'muock is diversification. Incomes increased substantially when the household was able to diversify by rearing animals or moving up the commodity value chain by transporting or reselling agricultural produce. This however requires an initial amount of money to be invested in animals, vehicles or crops, which serves as a limitation for many of the poorest households, unable to save or get credit. The availability of social assets can also increase chances for livelihood diversification as family groups, farming groups and CIGs can offer credit for trusted members. In addition, human assets like knowledge and skills can improve the likelihood that you are able to take advantage of possibilities for income generation in the community, or that you are able to adapt to trends such as decreasing soil fertility and climate change.

Intensification and extensification of the farms was also a livelihood strategy recognized and applied by the farmers. The size of land cultivated differed between the

farms, those having larger plots of land earned a better income than those who did not. However, the older farmers had been able to extensify in the past, but for the younger farmers this was no longer a possibility. Increasing the use of good quality inputs was carried out whenever there was some extra cash to spare, but for most of the farmers in M'muock they had to use the cheapest available inputs due to a lack of credit.

Diversification in the non-farm sector is not an option in M'muock because there are no jobs available. However, those earning a public service income did diversify and add to their livelihoods by cultivating some land.

5.7 LIVELIHOOD ASPIRATIONS IN M'MUOCK

When planning development interventions to increase livelihood opportunities, a main consideration is what the actual livelihood aspirations for the unit of analysis is. What some may define as a desirable livelihood might not necessarily be so for someone else. In the top-down development interventions in the past, the opinions of the poor were not always considered when deciding what the poor actually needed. A core dimension of the SLA is however that the poor and their aspirations take centre stage when planning suitable strategies. I find this to be one of the strong points of the SL framework, because it acknowledges that poverty is subjectively understood. To understand where intervention is needed and what can be most advantageous, it is pivotal to take into account what the poor themselves emphasize in their livelihood outcomes.

When asked about their future aspirations for themselves and their children, the farmers in M'muock had a clear opinion about what they needed in order to improve their livelihoods. Whether this included intensification, extensification, or creating some kind of business, their main aspiration was to be able to get credit to improve their livelihood situation. Many of the younger farmers hoped to be able to start a small business where they could sell inputs or foodstuffs. The business environment in M'muock is however very difficult and even with a loan it might prove difficult to increase livelihood sustainability. The older ones who had worked their whole lives as farmers, could not imagine leaving their farms and hoped to increase their income from farming. An old widow with ten children explains:

> "I'm too old to change occupation, but I work hard everyday to be able to put my children through school so that they can have other options than farming. Farming is hard labour and makes you grow old faster. It also earns too little money."

Ultimately, parents always wish for their children to have a better life than themselves. The farmers in M'muock are no exception to this rule, they all emphasized how they were working hard to be able to give their children an education so that they did not have to become farmers. However, at present time in M'muock, there is neither new land to cultivate, nor other job options. The question is what the future holds for the children of these farmers.

5.8 BARRIERS TO CREATING LIVELIHOODS

The research in M'muock indicates several barriers to achieving aspirations and sustainable livelihoods. First of all, they are trapped in an occupation with minimal return on investment, and with multiple inherent risks. In addition, their vulnerability context provides an uncertain environment in which they have to implement their livelihood strategies.

> "The risk environment confronting poor rural people is becoming more difficult in many parts of the world. Not only do poor rural people face long-standing risks related to ill health, climate variability, markets, the costs of important social ceremonies and poor governance – including state fragility – but today they must also cope with many other factors. These include natural resource degradation and climate change, growing insecurity of access to land, increasing pressure on common property resources and related institutions, and greater volatility of food prices. In this environment, new opportunities for growth in rural areas are likely to be beyond the reach of many poor rural people." IFAD (2011:17)

This poses as a serious constraint to development interventions in M'muock, because current structures do not enable sustainable livelihoods to take place. The prices for primary commodities on the world market are too low for a small-scale farmer to be able to extract any significant surplus value. To their advantage, they are cultivating Irish potato, a crop for which there is still a big demand in national and regional markets, and which gives a better return than many other crops. Notwithstanding, their incomes and the lack of available land make it impossible to fallow or practice shifting cultivation. As a result, the soils are getting increasingly infertile. From an agronomic perspective, this is not sustainable in the long-term, and if continued, it will have a serious detrimental effect on future livelihood opportunities in cultivation for themselves and their children. Moreover, in areas where land is scarce, it complicates livelihood options even further. If one farmer expands, it has to happen at the

expense of another farmer. Many of the smallest farms in M'muock would probably benefit from scaling up, but the natural resources have already been pushed to their limits.

My research findings reveal that all of this reflects the main barrier to achieving sustainable livelihoods for the farmers in M'muock, namely a general lack of institutional arrangements in place to help farmers. As the previous discussion shows, the government of Cameroon have adopted the neoliberal free trade policies supported and diffused by the IMF and the World Bank. In doing so, many of the previous support-mechanisms for farmers were removed. This leaves the farmers at a double disadvantage. They are forced to compete with agricultural commodities coming from Northern countries that receive widespread subsidies and support, pushing the prices on the world market down. However, the Cameroonian government have not been able or willing to offer the same kind of support to their farmers, leaving poor small-scale farmers unable to create sustainable livelihoods, no matter how much resources they put into their farms. Credit might enable them to increase their profits somewhat by intensifying production and using more high yielding inputs, but as a producer of a primary commodity, there is an inherent vulnerability context. Ultimately, if the price squeeze on the world market sustains, institutional arrangements must offer some kind of security for farmers if they are to stand a chance at obtaining sustainable livelihoods.

6 POLICIES, INSTITUTIONS AND PROCESSES

> "States can and must achieve a reorientation of their agricultural systems towards modes of production that are highly productive, highly sustainable and that contribute to the progressive realization of the human right to adequate food." De Schutter (2010:1)

This thesis uses aspects of the Sustainable Livelihoods Approach (SLA) to investigate how global trends and national eco-political factors in Cameroon impact the vulnerability and livelihood opportunities of small-scale farmers in three villages in the M'mouck area, in the highlands of Cameroon. These global and national forces produce and reproduce policies, institutions, and processes that constitute the particular context for smallholders in M'muock and ultimately prevent them from making a decent living from their occupation. The Sustainable Livelihoods Framework, a key component of SLAs, is used here as a tool of analysis to identify constraints to livelihood opportunities and aspirations.

> "There is a widespread perception that much of the "added value" of the SLA lies in the linkages it makes between the livelihoods of the poor and the policies and institutions that either support or hinder them in achieving successful livelihood outcomes." (Hamilton-Peach and Townsley 2004:1-2)

Effective policies, institutions and processes are essential in sustaining livelihoods, as they form the context in which individuals and households create and adjust livelihood strategies (DFID 2001). They determine which options are available to poor people through the prevalent institutions and policies.

The following chapter will first try to discern how national and international institutions and policies influence the specific vulnerability context for small-scale farmers in M'muock presented in chapter 3. I will then discuss how these institutions and policies determine the available livelihood assets and strategies presented in chapter 4. This will help enable future development interventions to identify effective entry points.

6.1 VULNERABILITY

Policies, institution and processes directly impact the available livelihood opportunities for farmers in M'muock by determining their environmental and economic vulnerability context.

6.1.1 Environmental vulnerability

Current global and national institutions and policies are contributing to environmental shocks and trends. Institutions and policies have a major impact on both systemic and cumulative aspects of global environmental change. Climate change is an example of a systemic change with extensive challenges, caused by capitalist institutions. The capitalist global economic system systematically exploits the natural environment because it is driven by profit-making and continued economic expansion (Baer 2012). The growing consensus on human induced climate change among researchers, governments and people has so far not lead to any significant reforms or policy changes to reduce emissions of GHGs. As discussed earlier, agriculture contributes to a large part of the global GHGs, and sustainable farming practices needs be included in future policies in order to reduce risk (Dalby 2009). Sustainable food system can also increase resilience by retaining important nutrients in the soil, thereby limiting soil erosion and land slides. According to the farmers in M'muock, climate change was already taking its toll on their livelihoods. Due to recent changes in weather patterns, many farmers were no longer able to plan seeding because of an unpredictable rainy season. Moreover, increased strength and length of the rainy season was causing soil erosion and landslides.

Ultimately, there is a dire need to optimise agricultural output without compromising the stock of natural resources and ecosystem services (Sage 2012). When shocks occur, poor people are likely to suffer the most due to lack of assets. This includes the obvious financial and physical assets. However, findings from the research indicate that human and social assets can be key when strategies for adaption and coping are created. Skills and knowledge, and the sharing of this knowledge, did indeed increase resilience among some of the farmers in M'muock. The lack of public safety nets was also to some extent compensated by social assets and family groups. To help increase the resilience of smallholders, national social policies need to be directed towards sectors and people who are the most vulnerable.

> "(…) the contexts in which disasters happen are not just natural events but the enfolding of social and economic factors during and especially in the aftermath of the physical event. The disruption of the environment may be of much less consequence than the aftermath where people's ability to cope is shaped by social factors." (Dalby 2009:109-110)

The integration of the Cameroonian economy into world markets has manifested itself through over-cropping and lack of soil preservation practices. When prices for agricultural commodities are pushed down by subsidized sectors in developed countries, farmers in developing countries are forced to apply unsustainable practices to survive.

> "Yet for many farmers today, soil is simply a utilitarian medium in which to grow profitable crops and a material that can be manipulated and reengineered to reduce costs and increase yields." (Sage 2012:94)

Land is however, as noted by Polanyi (1944), an inherently different commodity than other commodities sold and purchased on the world market. If over-exploited, it has implications not only for the livelihoods of farmers, but also for national food security. According to IFAD (2011), this is now increasingly being recognized and a new agenda is emerging:

> "These include using an agro-ecological perspective and with more selective recourse to external inputs, striving to maximize synergies within the farm cycle, and seeking adaptation to climate change. The practices typically aim at improving soil fertility, structure and water-retaining capacity using a combination of organic, biological and mineral resources, and at using water more sparingly and efficiently. All complement, rather than represent an alternative to external input-driven intensification, and none of them – individually or collectively – constitutes a blueprint."

The farmers in M'muock seemed well aware of the damage they were doing to the soil by not practicing soil preservation, yet, they seemed to have no other choice than to apply short-term survival strategies.

6.1.2 Economic vulnerability - Return of the state?

In the decades following the implementation of neoliberal policies, the effects of decreased government support and intervention, have become evident. While many have been able to benefit from privatization and free trade, others have not been so fortunate. A well-known slogan for neoliberalism is: "a rising tide lifts all boats". While the intention of the economic reforms might have been good, they have also produced great inequalities. The rolling back of the state has removed much needed social support and budget allocations for the poor, and many are now realizing the important role of the state in poverty reduction.

> "A study by the ILO has suggested that if governments would return to earlier social policies, world poverty in terms of people living under $1 per day would decline by a third from 1,2 billion to 0,8 billion. In fact, the Bretton Woods institutions have since the mid-1990s increasingly incorporated social safety nets into their recommended macro-economic packages." (Scholte 2009:293)

> "Emphasis is placed on the crucial role that policies, investments and good governance can play in reducing risk and helping poor rural people to better manage them as a way of opening up opportunities. However, new forms of collaboration between state and society also need to be cultivated, involving rural people and their organizations, the business sector and a variety of civil society actors. These are crucial for the development of effective tools for risk management and mitigation." (IFAD 2011:15-16)

Government policies aimed at developing the agricultural sector in Cameroon has a long history of focusing on export of agricultural commodities to generate foreign capital (Bamou and Masters 2007). This shows how the government is operating within a structure that encourages development through the global market, and how international institutions are contributing to the reality of farmers in M'muock. However, as noted by Castree (2005), national policies influence directly the extent to which neoliberal policies are implemented:

> "(…) even international policies (neoliberal or otherwise) do not operate uniformly across the territories to which they apply. Even if only for contingent reasons, these policies can be amended ignored, unenforced or only partially adhered to at the national or sub-national scales." (p. 544)

In the aftermath of the world food crisis and subsequent riots in Cameroon, the government has presented several new plans to increase national food production and to secure stable food prices. This has included the creation of a specialized farmers' bank to provide cheap loans, a body to buy and regulate basic food imports, and a tractor assembly plant. Moreover, subsidies for fertilizers and pesticides would be given, rewarding high productivity. The new agricultural policies were inspired by the World Banks "World Development Report 2008", which promotes agriculture for overall growth and poverty reduction. Cameroon's current development policy is outlined in the PRSP, the main objectives of which are inspired by the Millennium Development Goals. Efforts to combat poverty centre on the agricultural sector, and the government has therefore developed a rural sector development strategy (RSDS). Key aspects include modernizing the production apparatus, giving priority to food security and modernizing traditional family farming, achieving sustainable development of natural resources, and promoting research on market opportunities for agricultural products. The influence of international organizations and institutions on Cameroonian agricultural policies is striking. While these plans for developing the agricultural sector could improve the livelihoods of small-scale farmers in Cameroon in general and M'muock in particular, non of the claimed plans have so far been put into practice. However, there is clearly a change in rhetoric about the role of the state in agriculture and poverty reduction, also within the government of Cameroon, imitating the new international institutions.

> "Also, the role of the state in agriculture and rural poverty reduction is being reassessed, and there is new interest in thinking through the role that public policies and investment can play in mitigating market volatility and assuring national food security." (IFAD 2011:15)

Access to market

Economic institutions can restrict access to markets, a key factor in obtaining sustainable livelihoods from farming. This is a common problem for rural African agriculture, making it impossible for farmers to reach potential customers with their produce. Market access for M'muock farmers is however not a reflection of typical rural Africa. Most farming households sell their products either at the local market, or to local intermediaries who organize transport to national and international markets. This enables many of the local farmers to benefit from price fluctuations. This is quite rare for a remote area like M'muock, located eight hours from the capital Yaoundé, and where the last hour drive is off the main road and onto community roads that are not tarmacked. The lack of investment in roads does however have economic implications when preventing produce from reaching destined national markets in time, or when different vehicles must be used, pushing the price for transport over feasible threshold for the poorest farmers.

6.2 INTERNATIONAL

While it is important to assess national agricultural policies and their effect on the livelihoods of small-scale farmers in M'muock, Dewbre and de Battisti (2008) also emphasize the impact that international trading terms have on national production policies. Cameroon is a member of The Economic and Monetary Community of Central Africa (CEMAC), enabling them to obtain beneficial trading terms with neighbouring countries. In the case of M'muock, they are able to benefit from this agreement by exporting potatoes to Gabon and the Central African Republic with reduced tariffs. However, most of Cameroons exports are destined for countries within the European Union, where they still have to pay high tariffs.

International institutions can have comprehensive implications for the M'muock farmers when national policies enforce international laws and agreements. Formal institutions constitute the rules and agreements that are applied by the government, while informal

institutions such as political affinities can impact the level of co-operation. In addition, historical links between countries can also result in favourable trading relationships (DFID).

6.2.1 The World Trade Organization

In 1995, the World Trade Organization (WTO) was launched, replacing the previous General Agreements on Tariffs and Trade (GATT). The new organization inherited the agreements from GATT, and added new domains including intellectual property rights, textiles and agriculture. The inclusion of agriculture in the WTO has had a critical impact upon farmers, most notably in developing countries (Patel 2007:97):

> "As the negotiations approached collapse in November 1992, the US and EU drew up an agreement which the rest of the world would sign. Through some tough negotiating, and some elaborate statistical footwork, the EU and US were able through their bilateral 'Blair House' agreement to develop a system of agricultural supports that, in essence, let them continue to subsidize their farmers, while countries in the Global South signed away precisely that right."

Indeed, the international trade rules enforced by the WTO are formal institutions that allow cheap subsidized food to flood national markets in Cameroon, while at the same time preventing the Cameroonian government from giving support to their farmers. One farmer explains how this has affected him:

> "I have been a farmer for over 30 years. In the past, inputs were cheap and subsidized by the government. Now, there is no support available for us. It makes it difficult to be a farmer."

Harvey (2003) argues that a few powerful states are using their influence to promote the spread of globalization through these international institutions, and that 'globalization' is just a political neutral word for new-imperialism. In any case, findings from M'muock show that these international agreements are producing distinct winners and losers in the world food system.

6.2.2 The Washington Consensus

Since the time of the Washington Consensus, the IMF and the World Bank have through their institutions, been able to dictate government institutions and policies in developing countries.

When Cameroon implemented the neoliberal economic reforms in the 1980s and 1990s, the consequences for small-scale farmers were comprehensive. Neoliberalism then, as a form of capitalism, is an institution that has produced the policy environment in Cameroon. However, as noted by Castree (2005), it is still national policies that determine the influence of international institutions.

> "In meeting the needs of the poor, national institutions remain dominant. International institutions are both accommodating and constraining, though are largely mediated through national institutions." (Hendriks in De Haan 2012:)

This is particularly true after the replacement of the SAPs with PRSPs. While some claim that the PRSPs are merely SAPs with a 'human face', there is a critical difference in the extent of conditionalities. In other words, while the SAP reforms were a prerequisite to get loans, the PRSPs are supposed to be formulated by national governments themselves. As discussed in the previous section, there seems to be a change in rhetoric concerning the role of the state in development and poverty reduction in the Global South. If sustainable livelihoods for the farmers in M'muock are to be feasible, new policies need to manifest through budget allocations towards reforms directed at helping the most vulnerable groups, including small-scale farmers.

6.3 LIVELIHOOD RESOURCES AND STRATEGIES

Livelihood assets and strategies are determined not only by their vulnerability context, as discussed in chapter 3, but also by policies and institutions such as culture or norms.

6.3.1 Political organization and governance

Cameroon has been ruled under the firm hand of president Paul Biya since 1982. While the political stability has had its advantages, it is also a reflection of a non-democratic political system. Biya has stated that he wishes to be remembered for bringing democracy to Cameroon, ending the one-party system in 1992. The reality of the Cameroonian political system is however quite different. In 2011, Biya was re-elected for another seven-year term under an election termed 'deeply flawed' with widespread irregularities by international election observers. The 2011 election took place in October during my fieldwork and I got

first hand insight in the event. On our way from Yaoundé to M'muock, we had to stay two days in the city of Bamenda because of the heavy rains. On our arrival, we were met with large crowds of people on the roads caused by the presence of the Anglophone opposition leader who had just held a speech. The excitement and support for the opposition in Anglophone Bamenda was obvious, however, as I spoke to the locals about the election, most of them told me that they were boycotting the election because they believed that the results were already set. Many of them were politically involved, but saw no other option than to refuse participation in the election.

The house where we stayed in M'muock had a television and the locals we shared house with closely watched the unfolding of the election day, as well as the announcement of the election results two weeks later. Some of the reported irregularities included electricity being turned off in the biggest Anglophone cities, polling stations were only open from 7-8 am in the same cities and that voting lists created opportunities for multiple voting. It was quite absurd to witness the unfolding of the election and the complete lack of democratic rights given to Cameroonian citizens. One can only imagine how frustrating it must be not to have a voice when it comes to the future of yourself, and your country. In essence, the Anglophone part of Cameroon is both socially and politically marginalized, critically limiting their possibility of increasing livelihood opportunities and reach their aspirations.

6.3.2 Social relations

Cameroon was divided into two provinces in the colonial period, where the South-West province was administrated by England and the rest of the country was under French rule. This divide had persisted to this day, even if the provinces merged in 1961 after independence. The president and government belong to the French area, as does the capital Yaoundé. The British area is much smaller, both in land and population size, and this is where Leteh and Fosimondi are situated. As discussed in previous chapters, there is a very limited amount of land left for cultivation in these two villages, while the French area has more land to cultivate. However, because there exists such a divide between these two groups, a person from the Anglophone area will not be able to buy or rent land in the French area. This is a serious constraint to the livelihood opportunities in Leteh and Fosimondi, as the farmers there are refused the possibility of expanding their landholdings outside of their

villages. Moreover, many of the people in the Anglophone area explained that they were discriminated against, and received less overall support from the government.

Gender relations in M'muock are highly patriarchal. Most families live under polygamist relations, where one man has two or more wives. While the land tenure system consists of inheritance, trusteeship and gift of land, land is also increasingly freely purchased and rented out for cash. Women can inherit land, but if she decides to divorce, the land is passed on to her husband. This inhibits livelihood sustainability for females who choose not to be under the rule of a man. One of the female informants was a widow who had been able to work her way up to becoming an intermediary after her husband died. She explains why she does not want to remarry:

> " When my husband got sick, he sold everything we owned to be able to treat his illness. If this hadn't happened, I would have inherited the farm, but I got nothing. I will never marry again because I want to be free to make my own decisions and to run my own business. Marriage is too difficult."

This particular woman was fortunate to have a family that could help her, but for most women it is not an option to live alone. My interpreter told me that most women in the area wanted to marry someone who had many wives, because this necessarily means that he has money to take care of them. The poorest men are not able to take on many wives because they lack money to take care of them and their children. Despite the evident patriarchal structure of the community, some women did have their own plots of land to cultivate in addition to the mutual plot(s) that they shared with their husbands. Those who were able to generate an income from their own plots usually were allowed to administer this money themselves. However, the money earned by the women was mainly used for school fees and equipment for their own children. Ultimately, the patriarchal culture in M'muock inhibits women from gaining the same economic security as men, consequently constraining their livelihood opportunities.

6.4 THE WAY FORWARD – PROCESS OF CHANGE

The impact of climate change is expected to increase the vulnerability of farming households. Previous research indicate that climate change impact on agriculture can be reduced through human adaptions such as adjusting sowing dates, changing cropping patterns, and improved extension service (Tingam et al. 2008). This will require an active role by the government

and a change in government practice towards the rural farming sector. Moreover, current structures are preventing sustainable income generation for farmers in M'muock. While international institutions and organizations strongly influence national policies, nation-states have the sovereignty to decide what policies to implement. The role of the state seems to be back on the development agenda.

Putting a proper appreciation of risks and shocks at the centre of a new agenda for rural growth and poverty reduction is necessary to reduce vulnerability and to improve livelihood opportunities for smallholders in M'muock. Findings from the research show that the following areas of focus should be included: 'strengthening community-level organizations and assisting them to identify new mechanisms of social solidarity; promoting the expansion and deepening of a range of financial services to poor rural people; and supporting social protection programmes that can help poor households to build their assets, and reduce risks and more easily invest in profitable income-generating activities' (IFAD 2011:18).

7 CONCLUSIONS

The aim of this thesis has been to identify the main constraints and opportunities to secure sustainable livelihoods for small-scale farmers in M'muock, Cameroon. In order to gain an understanding of the complex forces that influence the livelihoods of these farmers, I have used the Sustainable Livelihood Approach. It is a flexible and dynamic tool that facilitates analysis on all levels, from household to global.

The vulnerability context in which M'muock farmers construct their livelihood strategies has critical implications for their livelihood opportunities. The local context in M'muock is defined by land scarcity, population pressure, and soil degradation. As populations have moved ever higher up into the caldera searching for livelihood opportunities, arable land is almost completely utilized. This inhibits extensification, a common livelihood strategy for farmers. As a consequence, the cultivated land is exploited heavily in order to secure a steady income. Sustainable agricultural practices emphasize the need for fallowing and shifting cultivation to retain vital nutrients in the soil, but land scarcity and poverty prevents the M'muock farmers from implementing such practices. This directly reflects the global vulnerability context in which M'muock is couched. Aspects of neoliberalism and globalization have produced unsustainable terms of trade for agricultural commodities in developing countries. The integration of national economies into international markets has produced winners and losers. For smallholders in M'muock, still struggling with outdatet means of production, it is impossible to compete with highly developed and subsidized agricultural sectors in developing countries. As support and subsidies were removed in much of the Global South under the neoliberal structural reforms enforced by the IMF and the World Bank, farmers in M'muock are now completely lacking institutional arrangements or support. Moreover, the price squeeze constituted of the long-term trend of decreasing prices for agricultural commodities and the rising prices for inputs, has left farmers at a double disadvantage.

Climate change can cause both trends in the form of changing weather patterns or shocks in the form of an unpredictable rainy season or draughts. The effects of climate change were according to the farmers in M'muock already evident, challenging their adaptive capacity and contributing to increased risks. Ultimately, limiting their ability to create livelihood opportunities.

This thesis has drawn empirical data from fieldwork conducted during a one-month stay in the M'muock area in Cameroon. After having read multiple reports from developing institutions concerning the role of smallholders in development and poverty alleviation, I wanted to learn about the perceptions of smallholders themselves and what resources were available to them when applying strategies to increase their livelihoods. How viable are the proposed strategies, and are they similar to the livelihood aspiration of farmers in developing countries? The conclusions drawn from my fieldwork revealed which specific barriers farmers in M'muock are dealing with in their everyday lives, effectively constraining them from securing sustainable livelihoods. The lack of access to reliable credit institutions to invest in their farms prevented them from employing livelihood strategies for intensification, and accentuated the need for forms of credit that do not demand typical collateral. Opportunities existed for those with a strong social network, either from family or other groups. Those without network could do nothing more than to reinvest the little they eared from each harvest, leaving them in a lasting poverty trap.

Market access emerged as one of their greatest opportunities, separating them from most smallholders in remote rural areas. Agricultural produce from M'muock was able to reach markets are distant as Gabon. Moreover, their main crop Irish, still has good market potential in the region. Storing and transporting did however pose as an important constraint on their incomes as losses caused by bad infrastructure were claimed to be high.

While much of the recent literature on rural development focus on smallholder farming, the full-time farmers in M'muock all agreed that the risks inherent in farming, in combination with the hard physical labour, makes it an unsuitable occupation for their children. There is no possibility for modernization because the steep and hilly landscape that is not suitable for tractors or other modernized equipment. In essence, the farming techniques practiced are adapted to that specific environment and most improvements could only be done by improved seeds and other inputs. Animal rearing is also a strategy to diversify incomes, but the scarcity of land inhibits this strategy as well. These obstacles are well recognized and acknowledged by the farmers in M'muock, and consequently their aspirations for their children are in education, public service and even emigration. The fact that many smallholders are farmers not by choice, but rather by a lack of other opportunities, is something to be recognized by future development policies. Many farmers wish to work in

the non-farm sector, but as in the case of M'muock, this sector is often poorly developed and does not provide improved livelihood opportunities.

Current national agricultural policies in Cameroon are not supportive of smallholders. While the rhetoric of agricultural development and poverty alleviation has witnessed a change in the past few years, implementation of pro-poor policies have not yet been realized. International institutions and policies have been a determining factor in past and current policies in Cameroon, but as observed by Castree (2009) and De Haan (2010), national governments cannot disclaim liability for their implementation. Rather, these policies are often a sign of political and ideological affinities. As noted by IFAD (2011), the future for small-scale farmers is dependent upon the availability of adequate incentives and risk mitigation measures to make a shift to sustainable agricultural intensification. This will require strengthening agricultural education, research and advisory services.

Using the SLA framework when analysing the constraints for small-scale farmers in M'muock has proven to be a useful and accessible tool to understand the complexities of the processes and forces that influence their livelihoods. It does not only provide an understanding of the implications of different contextual factors on the farmers, but also how these are connected to each other and to the livelihood assets and strategies available to farmers in M'muock.

Critical theory attempts to reveal how context and ideology impact upon social structure. By including the wider global context when studying the constraints faced by small-scale farmers in M'muock, I have been able to discern how aspects of neoliberalism at the global and national level are contributing to the unsustainable livelihoods for these farmers. Moreover, the neoliberal agenda promoted by international organizations such as IMF, the World Bank and WTO, and the institutions they convey, have an all-encompassing impact on the agricultural and trade policies of the Cameroonian government. The various assets available to farmers in Cameroon have been and are still determined by the implementation of neoliberal policies by the state.

The challenge of the specific vulnerability context in M'muock does not have any easy solutions. The available livelihood strategies for the farmers are highly limited, constrained by lack of available land for extensification. If access to credit is facilitated, this

can pose as a livelihood opportunity for intensification, however the price squeeze between agricultural commodities and inputs renders this an insecure investment. Moreover, decreasing soil fertility and climate change are contributing to higher levels of uncertainty and exacerbate the vulnerability of farmers. While M'muock farmers have specific conditions to which they are subject, their context is not unique. Findings from this case are likely to be valid in other cases. As noted by Leichenko and O'Brien (2009), the double exposure of free trade and climate change has severe implications for livelihood opportunities for farmers.

While some conclusions can be drawn from the research, many questions also emerge. What is the best rural development strategy, should developing countries look to the West and make widespread structural changes to their food production systems? This will however pose serious challenges to funding. What about the millions of small-scale farmers pushed into unemployment, contributing to an urban surge? Or rather, should they develop their small-scale farming sector to increase sustainable productivity, while maintaining employment opportunities for uneducated labourers? This poses questions regarding choice, and the entrapment of poor people in an occupation that they might not want to have. In the end, no single solution will solve the problems in the small-scale agricultural sector in developing countries. My findings indicate that the best possibility may be offered by strong national policies, protecting food security and farming livelihoods.

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APPENDICES

Appendix 1: List of informants

Nr.	Name of informant	Additional income	Location
1	Market Yaoundé	-	Yaoundé
2	Paul A.	Intermediary sales	Leteh
3	Kalenta	No	Leteh
4	William	No	Leteh
5	Augustin	No	Leteh
6	Migret	No	Leteh
7	Leteh village bank	-	Leteh
8	Justine	Intermediary sales	Leteh
9	Fredrik	Intermediary sales/transport	Leteh
10	Magadline	No	Leteh
11	Maurice	Animal rearing/pigs	Leteh
12	Tendongse	No	Leteh
13	Victor	Brick laying	Leteh
14	Elvis	Intermediary sales/transport	Leteh
15	Carlosse	Intermediary transport	French village
16	Thérèse	Husband animal rearing	French village
17	Marie	No	French village
18	Herlian	No	French village
19	Martine	No	French village
20	Peter	Animal rearing	Leteh
21	Peter A.	School/Chief of works	Leteh
22	Gasparo	School/Extension service	Leteh
23	Ezekiel	School/Teacher	Leteh
24	Peter N.	Intermediary sales	Fosimondi
25	Edward	Intermediary transport	Fosimondi
26	Guime	Intermediary sales/transport	Fosimondi
27	Michael	Animal rearing	Fosimondi

28	Paul D.	No	Fosimondi

Appendix II: Interview guide

1. Introduction to research

2. General questions/information

How old are you?

How many wives and children do you have?

How does your family/household make a living?

Farming, alternative incomes.

Are you aware of other opportunities to increase your incomes?

Are there any safety net available if the crops fail or someone falls ill?

Do you and your family rely on much on buying food and do you have enough food throughout the year?

3. Farming

Which products do you grow?

Which inputs do you use?

Where do you sell your produce?

How much do you earn a year as a farmer?

Which problems do you face when growing and selling your products?

Credit, inputs, land, storage, infrastructure, market access, soil fertility, climate change, price fluctuations, property rights.

Are you aware of any institutional arrangements in place to help farmers, now or in the past?

Subsidies, credit, safety net.

What would benefit you personally the most in order to expand your production and/ or increase your income?

Inputs, land, credit, infrastructure, market access, alternative crops, new technology/small tractor, organizing in farmers union, government/institutional arrangements.

4. Intermediaries

What are your main constraints to increasing your incomes?

Have there been any changes in recent years – for better or for worse?

Are you able to communicate your problems to policy makers?

How does price fluctuations affect your business – who benefits the most when prices are high?

Are you organized in any way? Are there initiatives to get more organized among farmers and agricultural intermediaries?

What do you think is necessary for the agricultural sector to become stronger and more productive/profitable?

5. Other

How do you see the future for yourself and your children? Farming, other.