# Livelihood Adaptation, Risks and Vulnerability in Rural Wolaita, Ethiopia

Ayele Tessema Jufare

## PhD Thesis

## **Environment and Development Studies**

Department of International Environment and Development Studies, Noragric Norwegian University of Life Sciences, UMB

Dissertation No. 2008: 46

Ås, Norway

Institutt for internasjonale miljø- og utviklingsstudier, Noragric Universitetet for miljø- og biovitenskap, UMB

Avhandling nr 2008: 46

ISSN: 1503 -1667 ISBN: 978 - 82 - 575 - 0849 - 4

In memory of my father, Tessema Jufare Waqayo

### Summary

This thesis investigates the living conditions of farm households in rural Wolaita, Ethiopia, their adaptation and diversification activities and limits, as well as responses to risks and uncertainty. It shows how some farm household coping strategies can also exacerbate their susceptibility to risks and vulnerability. The thesis also highlights the need to ensure land tenure rights to promote rural livelihoods and economic growth in Ethiopia.

Paper I examines factors constraining livelihoods, the adaptation and diversification activities of households, and the relative contributions of different activities to household income in rural Wolaita. Findings indicate that rainfall variability, declining farm size, shortage of draught power and institutional deficiencies in input and credit delivery were the main constraints to livelihood endeavours. Rainfall was highly erratic and there was an apparent lack of public investment in infrastructure to reduce the risk of rainfed agriculture. The majority of households faced critical food shortages for about five months in the year and dependence on food aid was very high. The contribution of non-farm sources to household income in the Wolaita zone was quite low and adaptation and diversification activities were limited by asset poverty, poor access to credit and input supplies, and lack of opportunities. Frequent production losses and coping with seasonal food shortages through asset sales, renting out agricultural land, and borrowing were found to perpetuate food insecurity and poverty.

Paper II analyses the effects of the costs of funeral and wedding ceremonies on livelihoods and the significance of assistance from risk sharing networks in rural Wolaita. Both funeral and wedding costs were very high and participation in risk sharing and resource pooling were highly appreciated. Investment in social relations and conforming to local norms were the main reasons why households spent excessively on wedding and funeral ceremonies. Good social relation were sought in order to secure support and cooperation in livelihood endeavours, and also in cases of accidents and property losses. Nearly all the households who held funeral and wedding ceremonies ended up having critical food shortage. Evidence suggests that as much as investment in social relations helps to cope with risks and shocks, it may also increase household susceptibility to them. Paper III assesses fertility and fertility behaviour in rural Wolaita in the light of the assumptions and objectives of the national population policy of Ethiopia. Fertility levels remained high and unchanged since 1993 in the study area, more than a decade after the launching of the national population policy. The reasons for this lay not in a lack of awareness about family planning and its usefulness but in factors that reinforced parental preference for 'many' children and in religious beliefs and the widespread perception that contraceptives would be harmful to women's health. The study concludes that fertility is closely linked to poverty and livelihood insecurity as well as other wider development issues, and cannot be adequately addressed using family planning alone. To achieve significant fertility decline it is essential to coordinate the provision of family planning services with comprehensive reforms directed at addressing rural poverty and livelihood insecurity, improvement in the conditions for women, the provision of basic infrastructure, and the creation of alternative opportunities.

Paper IV investigates the possibility of accommodating growth and equity issues in a land tenure system in Ethiopia. It identifies factors in a tenure system that are essential for growth and equity goals. Both equity and growth issues are critical in Ethiopia because of the importance of agriculture to the livelihoods of about 85% of the population and to the national economy. The current state ownership of rural land provides better equity in land distribution but fails to provide tenure security, which is considered an important component for growth and better land management. Ambiguity of tenure rights; the conditions, restrictions and obligations attached to user rights; the practice of land redistribution or the threat of it; and undue official interference in land-related issues are factors identified as causing tenure insecurity. Providing clearly defined long-term and transferable use rights that are effectively protected and enforced by law could qualitatively improve tenure security. The fulfilment of these conditions would enable state ownership of land to serve both equity and growth goals. The paper also highlights the need to complement tenure rights with compatible institutional arrangements that enable farmers to access credit, inputs and marketing channels, as well as the need to make substantial investments in rural infrastructure and the development of nonfarm opportunities.

### Acknowledgements

This study was funded by the NORAD-supported institutional collaboration programme between Hawassa University and the Norwegian University of Life Sciences (UMB). I am very grateful to NORAD for covering my study expenses and to Hawassa University for giving me leave of absence and providing me with logistic support during my field work. I want to express my thanks to Dr Stein Moe and Dr Admassu Tsegaye, NORAD project coordinators at UMB and Hawassa University respectively, for their kind support and understanding. I am very grateful to the Department of International Environment and Development Studies (Noragric) at UMB for hosting my education and providing me with an affable environment. In this connection I want to thank Professor Ruth Haug, Liv Ellingsen, Ingeborg Brandtzaeg, Joanna Boddens-Hosang, Torunn Lindstad, Dr Kjell Esser, Peter Bjørn Nielsen, Kjersti Thorkildsen, Aslaug Gotehus, Frode Sundnes, Josie Tuerlings, Lars Øimoen, Anne-Marthe Leinebø, Rebekka Øvstegård, and Anders Dysvik.

This thesis would not have been possible without the expert guidance, support and patience of my supervisor, Professor Nadarajah Shanmugaratnam. I want to express my gratitude for his following up, encouragement and constructive comments, which have contributed to my academic development. I also want to thank Dr Darley Kjosavik, Dr Tor Arve Benjaminsen, Dr Espen Sjaastad, Dr Poul Wisborg, Dr Knut Nustad, Professor Gufu Oba, Dr Randi Kaarhus, and Dr Ingrid Nyborg for their useful comments and encouragement. Dr Ayana Angassa and Dr Abraham W. Michael supported me with data processing and interpretation for which I am very grateful.

I am indebted to friends and colleagues at Noragric who supported me in various ways when I accidentally broke my foot in August 2007. My thanks go to Dr Worku Tessema, Dr Ayana Angassa, Melesse Eshetu and Alemwork Berhane, Dr Trygve Berg, Dr Darley Kjosavik, Professor Shanmugaratnam, Alganesh Mihret and family, Aster Abebe, Dr Fetein Abay, Million Tadesse and family, Dr Minale Kassie and family, Habtamu Alem and family, and Gutu Olana and family.

I want to extend my thanks to fellow PhD students Boku Tache Dida, Hassan Guyo Roba, Zeinabu Khalifa, Bed Mani Dahal, Eirin Honglo, Hussein Jemma, Frode Sundnes, Ambachew Demessie, Berhanu Abate, Etana Debela, Ajebu Nurfeta, Waktole Tiki, Solomon Eyob and others for providing me with friendly company and helping me in one way or the other.

I am grateful to all the farmers in the study area who gave their precious time and supplied the information I needed. I want to thank my field assistants Ato Petros Daniel, Ato Wondwossen Worku, Ato Admasu Adane, W/t Tigist Zemedkun, Ato Temam Lale, Ato Tesfaye Tema, Ato Worku Anjulo and Ato Estifanos Honja. Ato Daniel Petros supplied me with the rainfall data at Abela Faracho station and I am grateful for that. My thanks also go to the drivers Yonas, Abnet, Mesele and others. I am grateful to the staff of the Wolaita Zonal Bureau of Agriculture, especially Ato Fiqadesilassie (Soddo Zuria), Ato Luqas and Yeshaq Baffa (Boditi), Ato Tefera, Ato Taye and Ato Fasil (Humbo). My thanks also go to Ato Abebe Mengesha and Ato Aregawi Tesfay of the Bureau of Finance and Economic Development (BoFED) of Southern Nations and Nationalities at Hawassa who provided me with the map of Wolaita.

My deepest gratitude goes to my friend Dr Abraham W.Michael for taking care of my personal matters and providing back-up support to my family during my absence. I am also grateful to my friends and neighbours Dr Admasu Tsegaye and family, Dr Abera Melesse and family, Weyzero Tsehaydikash Mihret and family, Ato Tesfaye Sima and family and Ato Mogues Worku for supporting me and my family and myself in various ways.

Finally, I am grateful to my wife Enkuanhonech Baye and my sons Benyam and Gebriel for their unreserved support, love and understanding.

Ayele Tessema Jufare Ås, October 2008

# **Table of contents**

Summary	
Acknowledgements	iii
Table of contents	v
List of papers	vi
1. General Introduction	1
1.1 Introduction	1
1.2 Theoretical considerations	2
2. The Study Area	
3. Objectives of the study	
4. Research method	
5. Summary of main findings	
6. Conclusion and policy implications	
6.1 Conclusion	
6.2 Some policy implications	
6.2.1 Promoting water harvesting and small-scale irrigation	
6.2.2 Increasing access to agricultural technologies	
6.2.3 Support for diversification and adaptation activities	
6.2.4 Land reform	
6.2.5 Skills development	
6.2.6 Empowerment of women	
6.2.7 Family planning program	
References	
Paper I	
Paper II	61
Paper III	
Paper IV	121

### List of papers

This thesis is based on the following four papers referred to by their Roman numerals.

- Paper I: Ayele Tessema and N. Shanmugaratnam, 2008: Fighting a Losing Battle? Livelihood Adaptation and Diversification in Wolaita, Ethiopia (submitted to Human Ecology)
- Paper II: Ayele Tessema, 2008: Risk sharing, ceremonies and livelihoods: Funeral and wedding costs in Wolaita, Ethiopia (submitted to The Journal of Development Studies).
- Paper III. Ayele Tessema and N. Shanmugaratnam, 2008: Policy assumptions and empirical realities of fertility behaviour in Wolaita, Ethiopia.
- Paper IV. Ayele Tessema, 2008: The land question in Ethiopia: Tenure security as a vehicle for growth and equity.

### **1. General Introduction**

### **1.1 Introduction**

The Wolaita zone represents one of the major food deficit and famine-prone parts of Ethiopia. Food insecurity, poverty and vulnerability to livelihood crises have increased in the zone since the drought years of the middle 1980s and early 1990s (Rahmato 1992; Eshete 1995; FEDD 2003). A review of food aid recipients in the different districts of the zone shows that the number of households that depend on seasonal food assistance has increased from year to year in contrast to reports of bumper harvests at the national level in recent years (FAO/WFP 2007). Obviously, Wolaita is not among those areas that are showing agricultural growth and technological change in the country. Rather, Wolaita's agrarian conditions represent continuity more than change, as demonstrated by its inability to meet the food requirements of the zone's rapidly growing population. This thesis attempts to explain some of the major factors behind these unfavourable developments and how farm households respond to them.

The Wolaita zone also represents one of the most densely populated parts of the country, with a high population growth rate (Table 1). In 2006, rural density varied from 167 persons per square kilometre in the Humbo District in the lowlands, to 746 persons per square kilometre in the Damot Gale District in the highlands (CSA 1998, 2006). These densities exceeded the national density by 2.5 and 11 times respectively in the same year. From 1998 to 2006 alone, density increased by 79 more persons per square kilometre in the zone. This has increased pressure on agricultural land, in a situation in which there is little or no growth in non-farm income opportunities. For instance, the average farm size decreased from 1.59 hectares in 1990/91 (Eshete 1995) to 1.41 hectares in 2006 (own field work).

This thesis investigates the key factors constraining livelihoods in the zone, the adaptation and diversification activities of households and their limits, as well as the contribution of different activities to household income. It analyses the challenges to livelihood endeavours posed by biophysical, socio-economic and institutional factors and how farm households respond to these challenges. The thesis also investigates the significance of risk sharing and resource pooling, and why investing in social relations (social capital) is necessary to cope with risks and shocks, and the costs and benefits involved in such investments. In particular the study assesses the effect on livelihoods of investment in social relations, in terms of the costs of funeral and wedding ceremonies. As rapid population growth in the zone is putting increasing pressure on agricultural land, which is the major source of livelihoods for rural households,

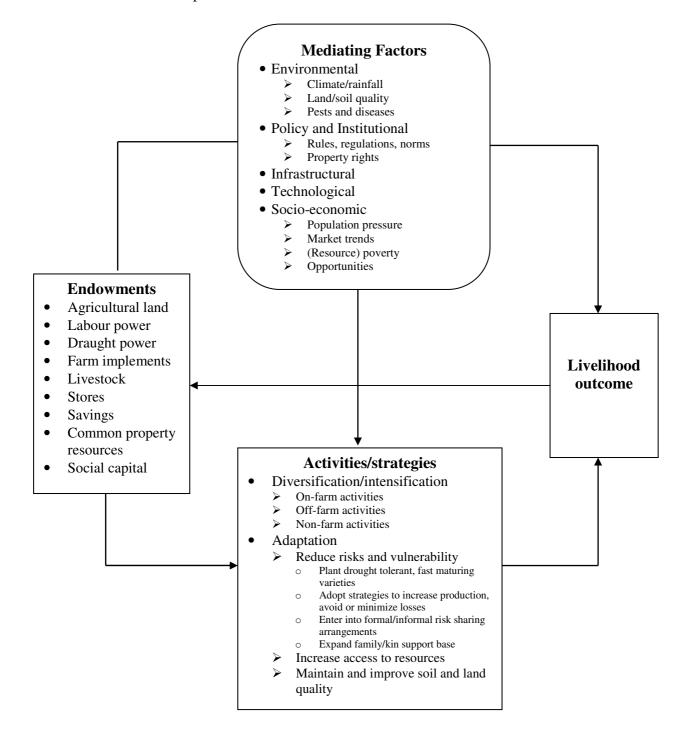
the thesis analyses the underlying causes of high fertility and the preference for large numbers of children. This is considered within the wider framework of household strategies to cope with poverty and livelihood insecurity.

Agriculture and agricultural land are extremely important to millions of rural farm households, as well as to the national economy. Agriculture is the only source of livelihood for most people in rural areas and access to agricultural land is of great economic significance. Although the current system of state ownership of land is credited with promoting equity in land distribution, it fails to ensure tenure security to the holders, which is considered essential for growth and better land management. For this reason, the land question remains at the centre of the debate on agricultural development and poverty reduction in Ethiopia. This thesis uses a literature review to identify the key weaknesses of the current state tenure system. It explores the prospects for a land tenure system that can serve growth and equity goals at the same time. The discussion is limited to agricultural land and does not include land in tribal and pastoral areas, for which other types of property regimes could be more appropriate. Yet it is important to note that the boundary between the two types of land (agricultural and pastoral land) is fluid, and with agricultural development and expansion, the livelihoods of millions of pastoral households are under threat.

### **1.2 Theoretical considerations**

The study uses a livelihood framework to conceptualise and understand the livelihood processes in the study area (Figure 1). Livelihood frameworks are often used by researchers to document and analyse the processes by which individuals and households utilise their resources and opportunities to make a living in particular socio-economic and biophysical contexts (Scoones 1998; Carney 1998; Ellis 2000; Shanmugaratnam 2008; Haan and Zoomers 2005). A livelihood is defined as comprising 'the assets (natural, physical, human, financial and social capital), the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household' (Ellis 2000:10). Put simply, a livelihood is a living gained using endowments (assets), activities and opportunities. Individuals and households, using their endowments, engage in different activities within the bounds of the opportunity structures presented by a particular set of mediating factors (environmental, institutional, infrastructural, technological and socio-economic) as depicted in Figure 1 for the study area. The mediating factors may facilitate or inhibit the livelihood process thereby influencing the nature of the livelihood outcome

(Shanmugaratnam 2008; Haan and Zoomers 2005). Hence, one's endowments and the mediating factors determine the kind of livelihood obtained by the individual or the household. It is also important to note that a livelihood outcome impacts directly on endowments. A successful livelihood outcome may help to strengthen endowments, while failure could lead to depletion or loss of endowments.





Access to and ownership of assets (endowments) is fundamental to livelihoods (IFAD 2001). In a farming community such as rural Wolaita, agricultural land constitutes the principal resource base. However, rapid population growth, in the absence of opportunities for intensification and development of non-farm pull factors, could lead to declining farm size and increasing landlessness. The Boserupian thesis (Boserup 1965; 1981) - that increasing population densities impel a corresponding autonomous shift to greater agricultural production and more intensive use of land through the development of market forces – is questioned based on the evidence from several Sub-Saharan African countries (Lele and Stone 1989). In these countries, high and rising population densities, together with other worsening conditions such as declining rainfall, fragile soils and the wide inequality gap between the mass of smallholders and the privileged few, have constrained intensification (Lele and Stone 1989). Evidence from Ethiopia indicates that intensification can also be hindered by diminutive holdings, production for subsistence, insecure land rights and archaic institutional arrangements (Nega, Adenew and Gebre Sellasie 2003). Analysts agree that intensification under such conditions has more to do with changes in the policy and institutional environment, rather than dependence on the market (Lele and Stone 1989; Cuffaro 1997; Nega et al. 2003).

Other important assets in farming communities are labour power, livestock, stores, farm implements, common property resources, and social networks and associations, including community and wider social claims. In a small-scale peasant production cultivation is basically done using oxen and hence oxen ownership is fundamental in gaining livelihoods. Production and other household activities in farm households are based mainly on family labour. Moreover, household labour can be an important source of income or a means to access resources. As a result, the number of working members, their health, physical strength, education and skill are important in determining livelihood activities and outcomes. Dependence on family labour, children's contribution to household income, old age security and the need to expand the family and kin support base in the face of risks and vulnerability, may encourage high fertility and large household size, which in turn puts pressure on household and community resources. High fertility could be reinforced by traditional patriarchal norms, in which women are assigned low status and major household decisions, including with regard to fertility, are made by men (Dasgupta 1995; Short and Kiros 2002; Hogan, Berhanu and Hailemariam 1999).

Access to land, security of tenure and the capacity to use land productively, are among the key factors in gaining livelihood security in developing countries (World Bank 2002; Deininger 2003). In these countries large numbers of the poor live in farming households and depend on the land and its productive use for their livelihoods and food security (DFID, 2002). Agriculture makes a major contribution to the GDP, employment and livelihoods of most people, making land the most valued asset. Equitable and secure access to land is therefore critical for the poor people who live in rural areas and depend on agriculture for their living. Access to land and security of tenure reduce vulnerability of the rural poor and strongly influence the extent to which they are prepared to invest in productivity improving technologies, better land management and adoption of new technologies and innovations (World Bank 2002; Deininger 2003).

There is a direct link between access to land and tenure security, and farmers' capacity to access financial services and to take advantage of market opportunities (Deininger and Jin 2006: Feder, Onchan, Chalamwong and Hongladarom 1988; Feder and Feeny 1993). Economic growth is expected to be higher and more broadly shared when people have equitable and secure access to land (Deininger, 2003). Hence, land reform can be used to address rural poverty and stimulate economic growth (Juul and Lund 2002). The key issue is ensuring security of tenure (Banerjee 1999; Ostuka and Place 2001; Adal 2001). This can be achieved by providing clearly defined and transferable land rights with effective mechanisms for their protection and enforcement. The link between institutions that provide dependable property rights and economic growth has been highlighted by several analysts (North 1990; Eggertson 1990; Platteau 2000; Rodrik 2003). However, providing secure land rights alone may not be a sufficient condition for growth and equity (Migot-Adholla et al 1991; Place and Migot-Adhola 1998; Angelsen and Fjeldstad 1995). This is because most farmers in developing countries lack resources to productively use their land. Furthermore, markets and financial infrastructure in most rural areas of these countries are either absent or underdeveloped.

It is essential, therefore, to support tenure rights with compatible institutional arrangements that provide farmers with access to credit, agricultural technologies, irrigation water, marketing channels, basic infrastructure (education, health, potable water, rural roads) and non-farm opportunities (IFAD 2001). Institutional compatibility in this regard refers to creating agreements or complementarities among the different rural policy components so that

the resulting positive synergies facilitate livelihood endeavours, thus resulting in the improvement in the living conditions of the people. For instance, since land may not serve as collateral under state ownership of land, other methods of making credit accessible to farmers have to be sought.

In the pursuit of livelihoods, households diversify their income sources, while simultaneously adopting strategies that increase production, avoid or minimise harvest loss, and increase their access to key resources. Farm activities comprise crop and livestock production and the income derived therefrom. Farmers often diversify on-farm activities (in terms of croplivestock mix and crop diversity) to spread risks (mainly against climate hazards and price changes) and to meet their consumption and marketing needs. Widening income sources by engaging in diverse off-farm and non-farm activities is essential as farming alone fails to provide an adequate means of survival (Ellis 2000). Off-farm income includes wages or payment in kind obtained by working on other farms and income from the sale of natural resources, while non-farm income includes income from non-agricultural sources such as petty trade, rural non-farm employment, handicrafts, public support and remittances (Ellis 2000:11-12). It is important to note that farm, off-farm and non-farm activities complement each other. Farm income can provide the capital needed to initiate and expand non-farm activities, while off-farm and non-farm activities can contribute to farm productivity by providing finance for farm input purchases and investment (Reardon, Crawford and Kelly 1994). Similarly, failure in one category of activity will have a negative impact on the other types of activities.

Besides diversification, households also engage in adaptation activities in order to enhance existing security and wealth, or to reduce vulnerability and poverty (Davies and Hossain 1997:5). This involves promoting land and soil quality, adopting drought tolerant and fast maturing varieties, spreading risks by diversifying income sources, increasing access to resources, entering into formal and informal risk sharing arrangements, and building family and kin support bases. Nevertheless, it is important to note that the capacity to adapt and diversify is differential, varying from household to household; it depends on asset ownership, access to credit and inputs, infrastructure development, availability of alternative opportunities, and the right to migrate to seek employment without losing one's (land) holding rights.

Rural livelihoods are often vulnerable to risks and shocks. Climate variability, human and livestock diseases, pests, flooding, unfavourable market trends, institutional deficiencies, etc. can present risks and inhibit livelihood endeavours. Vulnerability refers to both exposures to unfavourable developments like rainfall failure, or livestock loss that would cause considerable harm to one's livelihood; as well as the lack of means to cope with the loss without losing the household's livelihood base (Chambers 2006). Various studies have shown that risks and shocks can perpetuate poverty and aggravate vulnerability to livelihood failure by inducing asset sales, and through lost income (Dercon 2004; Dercon 2005a; Dercon 2005b). In particular, climate variability is known to cause severe impacts on livelihoods that are sensitive to climate change, such as rain-fed agriculture (Adger et al 2003; Vogel 2005; Yamin, Rahman and Huq 2005). Farmers are known to practise different adaptive strategies to minimize the effect of climate variability and to enhance and maintain the quality of their land, but such endeavours are dependent on access to resources (Mortimore and Adams 2001; Adger and Vincent 2005).

Risk sharing and resource pooling, in addition to being important means of coping with risks and uncertainty, also help households to access resources such as labour, land, oxen, agricultural implements, credit, etc. The importance of social capital as a means through which people widen their options to access assets and social support is well recognised (Bebbington 1999). Individuals and households, using different activities and by observing social norms, construct social relations (social capital), which enable them to obtain support and cooperation from others when the need arises. However, investment in social relations is often costly, for instance inviting large numbers of guests to a wedding feast, which may lead to later food shortages and asset depletion because the food reserves and other household resources are used for such purposes.

### 2. The Study Area

Wolaita zone, with a total land area of 4537.5 square kilometres, is located between 6°4 N to 7°1 N and 37°4 E to 38°2 E and inhabited by the Wolita speaking people (Figure 2). Wolaita was formally incorporated into the old Ethiopian empire in 1894 (Dea 1998). At present, Wolaita forms one of the zonal administrations in the Southern Nations, Nationalities and Peoples Regional state (SNNPR). The altitude in the zone varies between 900 and 2600 metres above sea level. Wolaita is roughly divided into two altitudinal zones: the lowlands

with hot and semi-dry conditions and the highlands with relatively cooler and sub-humid conditions. Altitude exerts significant influence on human settlement, temperature and rainfall distribution - the last two having direct effects on farming practices. Rainfall occurs in two distinct rainy seasons: the main rains (called 'kremt' rains) occur in summer (roughly June, July and August) and a shorter rainy season (called the 'belg' rains) occurs in spring (roughly from mid-February to mid-May). Kremt is the main production season, but the occurrence of rain during the *belg* season is equally important, as it has significant implications on the food security of households. Average annual rainfall varies between 803 mm at Abela Faracho in the lowlands and 1189 mm at Soddo in the highlands. However, the rainfall regime shows high variability, especially in its distribution in all areas over the growing seasons. The major soil types found in the zone are Nitosols, haplic Yermosols, eutric Cambisols, orthic Andisols and calcaric Fluvisols (ONCCP/RPOSE 1985). Declining soil fertility due to continuous use, organic matter removal and poor soil management practices, is one of the key problems constraining agricultural production in both the highlands and the lowlands (Pound and Jonfa 2005). Crop production is the major means of livelihood, but livestock is also kept as a source of food, cash income, draught power and insurance against uncertainty. In the highlands, cereals, root crops and perennials are widely grown, while the hot and semi-dry conditions in the lowlands allow the cultivation of only limited types of crops.

A World Bank supported project, the Wolaita Agricultural Development Unit (WADU), operated in the zone from 1970 to 1982. The main objectives of the WADU were to improve agricultural production by promoting the use of external inputs, improving farming practices, conserving the natural resource base, and providing basic services. WADU is credited with promoting the use of modern inputs, conservation initiatives and road building; however production remained low (Dea 1998). Presently, Wolaita is one of the major food deficit and famine-prone areas in Ethiopia (Rahmato 1992; Eshete 1995; FEDD 2003). According to a World Bank regional characterisation of the growth potential of Ethiopia, Wolaita is located in the high risk–medium growth highlands and lowlands, an area called 'Ethiopia Three' (Milas and Aynaoui 2004). The document notes that 'Ethiopia Three' has possibilities for growth in agriculture, livestock and off-farm employment, with drought, malaria and tsetse fly being the major sources of risk in some of the zones, such as Wolaita. The other regions are: 'Ethiopia One', the high risk–low potential eastern highlands; 'Ethiopia Two', the low

risk-medium potential western highlands, Arsi and North Shewa; and 'Ethiopia Four', the high risk-high potential regions including the western, southern and south-eastern lowlands.

Wolaita also represents one of the most densely populated parts of the country. In 2006 average population density for the zone was 380 persons per square kilometre which varied from 167 persons per square kilometre in Humbo district in the lowlands to 746 persons per square kilometre in Damot Gale district in the highlands. This is in contrast to the national density of 68 persons per square kilometre during the same year. Density in the zone increased by 79 more persons per square kilometre between 1998 and 2006 alone (Table 1). Rapid population growth, coupled with the absence of non-farm employment opportunities, has led to diminishing farm size and increasing landlessness. For instance, the average farm size decreased from 1.59 hectares in 1990/91 (Eshete 1995) to 1.41 hectares in 2005 in the zone (own field work).

Table 1 Wolaita: Population growth 1998-2006 (Total land area: 4537.6 km<sup>2</sup>)

Population growth and pressure on land 1998-2006								
1998		2000		2004		2006		increase
Total		Total		Total		Total		p/sq. km
population	Density	population	Density	population	Density	population	Density	1998-2006
1,363,555	301	1,439,269	317	1,628,789	359	1,722,279	380	79

Source: Compiled from CSA statistical abstracts 1998, 2000, 2004 and 2006

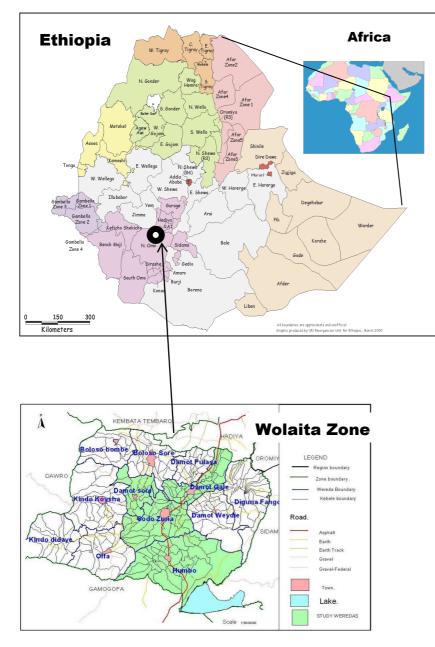


Figure 2 Location of the study area

## 3. Objectives of the study

The overall objective of the study is to understand the major factors constraining livelihoods in rural Wolaita, the adaptation and diversification activities of farm households and their limits as well as their responses to risks and uncertainty. The specific objectives are the following.

1. To investigate factors constraining livelihoods in rural Wolaita, the adaptation and diversification activities of farm households and the contribution of different sources to household income (Paper I)

- to evaluate the effects of funeral and wedding costs on household livelihoods in rural Wolaita and the contribution of informal risk sharing arrangements in covering the costs as well as local perception on risk sharing and resource pooling (Paper II)
- To analyse fertility and factors influencing fertility behaviour in rural Wolaita in light of the objectives and assumption of the national population policy of Ethiopia (Paper III)
- 4. To identify factors essential for economic growth and equity in land distribution in a land tenure system in light of the land question in Ethiopia (Paper IV)

### 4. Research method

The study was conducted in 6 Kebele Administrations (KAs)<sup>1</sup>, four KAs in the highland and two KAs in the lowland parts of Wolaita. The four KAs in the highlands were selected by taking infrastructure, population settlement and physical variations into consideration. As there is no significant variation in physical conditions and human activities over much of the lowlands, the two selected KAs are taken to be representative of conditions in the lowlands. Two hundred sample households were randomly selected from KA registers, 100 households each from the lowlands and the highlands. Individual interviews were conducted using a semi-structured questionnaire. In addition, focus groups and key informants were used to obtain complementary information in each of the KAs.

Prior to the commencement of data collection, I carried a letter from my institution, Hawassa University, to the Wolaita zonal administration at Soddo, requesting permission to allow me conduct interviews and collect information from various sources in the zone. The zonal administration then wrote letters in my favour to different district administrations, which did the same to the kebele administrations in their jurisdiction. This was done in July and August 2004, during which time I collected preliminary field data that served as a basis for my fieldwork. Data was collected from June to December 2005, and again from January to March 2007.

<sup>&</sup>lt;sup>1</sup> A *kebele* administration is the lowest, community-level administrative organ consisting of a number of villages.

I employed a total of eight research assistants to help me with data collection at different periods and altitudinal zones. I used different research assistants in the highlands and the lowlands because of my preference for locally based assistants who had better knowledge of places and understanding of local situations. Accordingly, I used three research assistants each in the highlands and the lowlands for survey work and one interpreter in each region for focus group discussions. All the research assistants spoke the Wolaita language and had previous experience in research data collection. I provided training on how to conduct the interview, including how to behave in the interaction with the interviewees and the need to observe local culture. In an attempt to reach common understanding in the interpretation of the questionnaire, I held a one-day interview practice session with my enumerators, in which I asked the questions and the enumerators took turns to interpret both the questions and the responses. Interviews were conducted on the respondent's field or near his/her residence. Individual interviews were conducted under my close supervision, during which I regularly moved from one interviewee to the next, checking and explaining things. Completed questionnaires were checked every evening and corrections, if any, were made on the following day by visiting the interviewee(s) again. In the case of focus groups I personally led all the discussions, assisted by an interpreter.

The research strategy employed in this study combined the collection of quantitative and qualitative data. This was necessary because the objectives of the study required the acquisition of both numerical data and local perceptions and preferences in terms of different issues. The complementary nature of quantitative and qualitative methods in understanding the living conditions of people and the environment in which they operate is widely acknowledged (Kanbur 2001; White 2002; Ellis and Freeman 2004). Qualitative interviews are less structured and aim at grasping the interviewee's point of view, while quantitative interviews are designed to answer a specified set of research questions that reflect the researcher's concerns (Bryman 2001). Using the two methods side by side enables to obtain more information about certain socio-economic issues in a given community. However, as our field experience shows, the two methods may sometimes yield varying outcomes on certain issues. For instance, for the quest for male children as one of the reasons for having a large number of children received quite low prominence according to the individual interviews, while it was a very strong reason according to the focus groups. The response in the focus groups was the outcome of a process that involved discussions, debates, reasoning and eventually reaching consensus on the issue among members, which was not the case in the

individual interviews. The focus group method is thought to offer a more balanced and 'argued-upon' view on certain issues than can be provided by individual interviews (Bryman 2001).

Paper I (Fighting a losing battle? Livelihood adaptation and diversification in Wolaita, Ethiopia) and Paper III (Policy assumptions and empirical realities of fertility behaviour in Wolaita, Ethiopia) are based on the data collected from the 200 sample households mentioned above. A semi-structured questionnaire was used to collect data on household demographic characteristics, assets, activities, income, expenditure, constraints, family planning practices, perceptions, preferences and reasons for preferences. This data was complemented by information collected from the respective localities using focus groups, key informants and personal observation which were used to generate information on certain key issues such as local perceptions, norms and constraints. Separate male and female focus groups, whose size varied from 5 to 7 members, were held in each sample KA. The members of the focus groups were selected based on their reported knowledge and experience, as recommended by locals and development agents. Key problems encountered during focus group discussions were organising the meetings, failure to come to the meetings on time, requests to be excused before the discussions were over, and absence from the meetings.

For Paper II (Risk sharing, ceremonies and livelihoods: Funeral and wedding costs in Wolaita) data was collected from 16 households: 8 households who had recently lost members through death and 8 households who had recently held weddings. The data collected from the households included detailed information on funeral and wedding costs, reasons for spending on funeral and wedding ceremonies, the contribution of informal support, and the effect of the costs on their livelihoods. This data was also complemented by information collected through focus groups and key informants. Paper IV (The land question in Ethiopia: Tenure security as a vehicle for growth and equity) is based wholly on a literature review.

### 5. Summary of main findings

The four papers treat closely related issues connected to rural livelihoods in Wolaita, southcentral Ethiopia. This section provides summaries of the papers, highlighting their objectives, the methods used to acquire data and the major findings. For the full treatment of the issues, the reader is referred to the individual papers.

# Paper I: Fighting a losing battle? Livelihood adaptation and diversification in Wolaita, Ethiopia

This paper examines factors constraining livelihoods, the adaptation and diversification activities of households and their limits, and the contribution of different livelihood activities to household income in rural Wolaita. The study was motivated by the desire to understand the causes of persistent rural poverty and food insecurity in Wolaita and how households respond to these challenges. Individual interviews, focus groups, key informants and personal observation were used to gather data. The study covered sample sites in both the lowlands and the highlands to see if the subjects of investigation showed significant variations by altitude. A total of 200 households, 100 households each from the lowlands and the highlands were randomly selected from the registers of respective Kebele Administrations for an individual interview.

Rainfall variability, declining farm size, lack of draught power and institutional deficiencies in credit and input delivery were the major constraints to livelihood endeavours. Rainfall variability in rural Wolaita was by far the key source of risk and vulnerability. In the lowlands, the rainfall regime was characterised by frequent failures, inadequate amounts, and poor distribution over the growing seasons. Even though the highlands received relatively higher rainfall, irregularity of occurrence, poor distribution over the growing seasons and frequent downpours were key problems. Although policy support for water harvesting and other minor irrigation projects in areas facing moisture stress were proposed in the Agricultural Development-Led Industrialisation (ADLI) strategy of the government, there was an evident lack of public investment in infrastructure to reduce the risk of rainfed agriculture. In both locations, farmers identified five 'bad years' from 1998 to 2007 in which productions were wholly or partially lost due to rainfall variability. Analysis of rainfall data also showed a high coefficient of variation for the growing months over several years, for both altitudinal zones. Oxen ownership was low: about 21% of the total sample households owned no ox and 46% owned only a single ox. Access to agricultural land has become a critical problem, especially in the highlands, where the average holding has declined to 0.73 hectare.

A significant proportion of the sample households faced food shortages for seven months in the lowlands and five months in the highlands. The March-June period was the time of the most hunger in the study area, in which 7 out of 10 households were gravely affected by food shortages. Furthermore, the period marks an important part of the growing season when

farmers have to work hard in the fields. About 93% of the households in the lowlands and 68% in the highlands received food assistance, but this was insufficient to prevent them from having to sell and rent out valuable assets in order to cope with the shortages. As a result asset formation and retention have become difficult for most households. Low non-farm income, frequent production losses, and coping with seasonal food shortages through asset sales have pushed households into perpetual food insecurity and poverty.

Yet most households were found to diversify and adapt in order to cope with livelihood challenges. This included diversifying income sources by engaging in different non-farm and off-farm activities in addition to farming. Petty trade was an important source of off-farm income, and rural non-farm employment and seasonal wage labour have also made important contributions to the economy of some households. A few households were engaged in handicrafts, and income from the sale of firewood, charcoal and other natural resources was important to some households in the lowlands. The contribution of sources other than farming to household income was, however, quite low: 22% in the lowlands and 24% in the highlands.

Besides diversification, households have also adopted different adaptation strategies to increase or sustain production, as well as to improve the quality of agricultural land. This involved the use of yield increasing and soil fertility enhancing inputs (chemical fertilizers and compost), improved seeds, increased annual cropping frequency, extension of area under cultivation, and the use of different cropping patterns. In the lowlands, farmers used drought resistant and fast-maturing seeds. Nevertheless, high temperature, rainfall shortage and the problem of access to compost and improved seeds were found to limit the effectiveness of these adaptations.

Similarly, farmers in the highlands strove to increase production by using chemical fertilizers and compost, and through increased annual cropping frequency. They also expanded the area under crop cover by renting in more agricultural land and through share cropping arrangements. Compared to the lowlands, environmental conditions in the highlands allow crop diversity, and farmers used different cropping patterns to meet household goals while retaining the quality of the land. However, production remained low and most households suffered from food shortages for a significant part of the year. The fertilizer application rate was low and input supply was generally inhibited by late delivery. In general, the diversification and adaptation endeavours of the households were constrained by, among other things, asset poverty, poor access to inputs and credit service, lack of opportunities and poor infrastructure.

# Paper II: Risk sharing, ceremonies and livelihoods: Funeral and wedding costs in Wolaita

This paper assesses the effects of funeral and wedding costs on livelihoods, the contributions of informal networks in covering the costs, and local perceptions about risk sharing in rural Wolaita. The study was motivated by a desire to understand the rather high household expenditure on funeral and wedding ceremonies in the zone, and the effect of these costs on livelihoods. Data was collected from households who had recently lost members through death, and those who had held weddings for their children. Questions were posed about the detailed costs, support received from informal networks and the effects of the costs on livelihoods. This data was complemented by information gathered using focus groups and key informants. Both funeral and wedding costs were very high, resulting in household food shortage and depletion of vital assets. Households were found to use their food reserves and savings, sell or slaughter livestock, take loans and lease out agricultural land, in order to cover the cost of these ceremonies.

Burial societies or *iddirs* assisted member households during a funeral by providing material and labour support and cash payouts to cover some of the costs. In addition, near relatives also provided cash and grain gifts to the mourning households. However, costs to the mourning households remained very high in spite of the support received. This was due to the practice of providing food and other services to large number of guests who continued to visit the mourning households for a long time. The mourning households widely used their grain store, borrowed in kind and in cash and sold livestock to cover the costs. Support by *iddirs* and relatives covered on average 40% of funeral costs, while the rest (60%) was covered by the households themselves. The average funeral cost was 4069 Birr (1 US dollar was about 8.70 Birr in 2005) which was nearly twice the average annual household income of 2163 Birr in the study area. Seven out of eight households who had funeral ceremonies reported facing critical food shortages following the conclusion of the mourning period.

Wedding costs were even higher compared to funeral costs. At the same time, the contribution of informal support was also less: cash gifts on average covered only about 20% of the total costs. Large numbers of guests were invited to wedding feasts and parents were expected to

provide the newly married couples with materials such as homes, household goods, oxen, and a piece of agricultural land after the wedding. The average wedding costs over 7 households was 4853 Birr. This is very expensive, given the annual income of the households, mentioned above. All the 7 households reported having faced critical food shortages after the weddings. In addition, their most productive activities were hampered, as they had sold or slaughtered their oxen or rented out agricultural land, or had debts to settle.

The main reasons for having expensive weddings were investment in social relations, the desire to maintain or enhance household image, social pressure, competition with other households, and the anticipation of receiving generous gifts. Investment in social relations and the observance of social norms are seen as a means of obtaining support and cooperation from others in routine livelihood activities, as well as in case of accidents or property loss. Despite the importance of gift exchange in helping households to cope with risks, this practice is considered burdensome due to expected reciprocity with increased value, particularly in periods of economic stress. The study in rural Wolaita suggests that gift exchange not only helps to cope with risks and vulnerability, but also increases susceptibility to the very same threats.

## Paper III: Policy assumptions and empirical realities of fertility behaviour in Wolaita, Ethiopia

This paper investigates factors influencing fertility behaviour in rural Wolaita. The study was motivated by the observation that Wolaita is experiencing rapid population growth and that this has led to increasing pressure on agricultural land and other household resources. In 1993 Ethiopia launched a national population policy, which aimed at reducing the average number of children per woman to 4 by 2015. This is to be achieved principally by providing improved family planning services, and through awareness creation, education and training. The paper analyses fertility conditions and behaviour in rural Wolaita in the light of the assumptions and goals of the national population policy. The study used individual interviews, focus groups and key informants to understand factors influencing fertility behaviour and the adoption of birth control measures.

The study finds wide disparities between the assumptions of the national population policy on the one hand, and fertility performance and behaviour in rural Wolaita on the other hand. The average number of children per woman for the study population in 2007, more than a decade after the launch of the policy, was 7.07 children. A combination of factors has led to high fertility in rural Wolaita. Some of the factors were found to promote fertility directly, such as the desire to meet household labour supply, the need to diversify the household support base, old age insecurity, social pressure, and the desire to enlarge the kin support base. Other factors were found to discourage contraceptive use, such as religious belief and culture, fear of the effects of contraceptive use on the health of women, fear of child loss due to poor health conditions, and the need to have more children. The findings from individual interviews as well as the discussions in focus groups demonstrate that the critical issue in the study area was not lack of awareness about family planning or access to contraceptives. It was rather the parental need for 'many' children, women's status as subordinate to men, and the other factors that discourage women from using contraceptives, such as religious beliefs and the widespread perception that contraception is harmful to women's health. The paper concludes that fertility is closely linked to poverty and livelihood insecurity and cannot be adequately addressed using family planning alone. To achieve fast fertility decline it is fundamental to coordinate family planning services with comprehensive reforms directed at addressing rural poverty and livelihood insecurity, women's empowerment (through measures such as education, employment and credit support), the provision of basic infrastructure (education, health, potable water, etc) and the development of alternative livelihood opportunities.

# Paper IV: The land question in Ethiopia: Tenure security as a vehicle for growth and equity

This paper identifies factors essential for economic growth and equity in land distribution in a land tenure system in relation to the land question in Ethiopia. It considers the prospect of making agriculture growth oriented, without sacrificing equity. The analysis refers to agricultural land and does not include land in tribal and pastoral areas, for which other property regimes might be more appropriate. It is widely debated as to whether the current state ownership of rural land can serve the goals of economic growth and poverty reduction. The debate is largely motivated by the poor performance of the agricultural sector coupled with the ever-increasing problem of rural poverty and food insecurity in the country over the last 40 years.

Economic growth and poverty reduction are key development issues in Ethiopia, and agriculture and agricultural land are central in achieving these goals. Agriculture contributes

about 50% to the GDP and provides livelihoods to more than 85% of the country's population. Using literature (both theoretical and from empirical studies), this paper identifies the strength and weaknesses of the current state ownership system and proposes a way forward. Empirical evidence suggests that the majority of farmers favour the state ownership system because it offers better access to land for most households. However, evidence also shows that farmers feel insecure about their holdings, despite the fact that the constitution provides protection against eviction. The practice of land redistribution and its likelihood in the face of increasing rural populations and the absence of non-farm pull factors has remained part of rural life since the 1980s. This situation has been a major source of tenure insecurity, together with the conditions put on the continuity of holding rights, as well as undue official interference in land and related issues. In 1997 a land regulation and administration act was passed with the objective of improving tenure security by issuing farmers with certificates of holdings and allowing limited transfer rights. It was believed that this would motivate growth and induce better land management. Nevertheless, the land administration act has done little to enhance tenure security, since it does not provide holders with rights of any more significance than what they previously had. Land redistribution is still not ruled out (except in Oromiya), and access to land and holding rights are subject to conditions, restrictions and obligations. Moreover, there is no independent judicial system to handle land disputes.

In the present constitution and the land regulation and administration act, user rights are not clearly defined and no appropriate mechanisms are in place to protect and enforce such rights. Land ownership is given an ambiguous status as belonging to the 'state' and the 'public' at the same time. This has enabled the government and its agents to act and make 'legitimate' decisions as 'owners' of the land as well as 'custodians' of public interest, often at the expense of individual holders. Corruption, nepotism and partisanship in handling land-related issues are widely reported. Evidence indicates that state/public ownership in its present form is used for political and economic control by the dominant political power that runs the state.

On the other hand, the fact that the majority of farmers favour state ownership indicates that the problem is not with the ownership system as such, but that tenure insecurity is caused by the various conditions, restrictions and obligations attached to the use rights, including unwarranted interference by the government and its agents. This paper concludes that providing long-term, secure and transferable rights, with effective arrangements for the protection and enforcement of these rights, could qualitatively improve tenure security, thus enabling the state tenure system to serve both growth and equity goals. This entails clear definition of property rights, curtailment of undue official intervention in land and related issues, as well as the presence of an independent judicial system to handle disputes. Equally significant for growth and equity are the availability of institutional arrangements for the provision of credit, technology generation and diffusion, skills development, infrastructure expansion, and the creation of alternative employment opportunities.

### 6. Conclusion and policy implications

### **6.1 Conclusion**

This thesis provides empirical evidence on various aspects of rural livelihoods in Wolaita. It examines the different adaptation and diversification activities of farm households and their limits and coping strategies in the face of risks and vulnerability. The study found that rural livelihoods in Wolaita are caught up in a vicious cycle of poverty and food insecurity. The majority of households have faced critical food shortages for more than 5 months in a year and dependence on food aid is very high. Asset ownership is low, household size is very large, and farm size is declining rapidly as a result of the rapidly growing rural population. Rainfall variability is the most critical source of risk and vulnerability, with an apparent lack of public investment in infrastructure to reduce the risk of rainfed agriculture. Frequent production losses and coping with seasonal food shortages through asset sales and drawing on future income have depleted farm household resources. Production, adaptation and diversification activities are constrained by asset poverty, poor access to input and credit services, poor infrastructure development, lack of opportunities and a land tenure system that discourages outmigration.

The case of rural Wolaita shows how production failures, which occur frequently due to rainfall variability, set the stage for descent into poverty and food insecurity, from which escape becomes very difficult. As crops fail, households are forced to sell or rent out valued assets such as oxen and agricultural land, and take loans to cope with food shortages. This in time depletes household assets, limits the capacity to diversify and adapt, and impacts negatively on subsequent production activities. Asset poverty and food insecurity reinforce each other: food shortage leads to asset sales, and asset poverty and poor access to inputs and credit on their part limit production, adaptation and diversification activities. Moreover, some farm household measures designed to cope with poverty, food insecurity, risk and

vulnerability, may in fact exacerbate susceptibility to them. For instance, investment in social relations, though meant to advance informal support in livelihood activities and during accidents and property losses, may expose households to food insecurity and poverty. Likewise, the practice of having large numbers of children in order to enhance the household labour force, income, old age security and the household and kin support base, can also exacerbate poverty by increasing pressure on household and community resources.

### 6.2 Some policy implications

Barring some recent initiatives, rural policies in Ethiopia since imperial times have focussed more on extracting surpluses from the rural population in various forms, rather than making any significant reinvestment in rural infrastructure, agricultural research and human resource development. Moreover, the last 40 years have been a period of political instability and civil wars, in which governments with opposing political agendas came to power through violent means. As a result, vital resources were often assigned to war efforts and political consolidation, instead of to development. Rural policies have an ad hoc character and lack focus and continuity. In certain instances, such as the provision of agricultural technologies, rural policies are characterised by a top-down, one-size-fits-all approach, in a country of large ecological diversity and varied regional needs. In most cases, rural interventions are influenced by political considerations and development work is often discontinued when projects are phased out or governments change. Rural institutions and the supply of inputs and credit services are often used by the state to control and contain the rural population, rather than for the purpose of rural transformation. As a result, poverty, food insecurity and susceptibility to livelihood crises have remained part of rural life, as this study demonstrates.

As suggested above, these problems have their roots and reasons for persistence in the political history of the country, and its institutional and technological backwardness. Institutional and technological changes in the context of a stable political setting and continuous government practices may offer an avenue out of poverty and food insecurity. In this regard, it is vital to provide a land tenure system that ensures tenure security, and to support it with compatible rural institutions that enable farmers to access intensification technologies, credit, irrigation water, and marketing channels. Moreover, it is vital to expand the rural infrastructure (in particular education, human and livestock health, potable water and

rural roads), and to create alternative livelihood opportunities. The following are some key areas requiring policy attention.

#### 6.2.1 Promoting water harvesting and small-scale irrigation

In Wolaita, erratic rainfall poses the principal constraint to production, especially in the lowlands. Promoting water harvesting and land management techniques that retain moisture in soil or minimise its loss, could be the principal areas of attention, as the prospect for small-scale irrigation using rivers is limited. This includes catching rainwater and other surface flows in ponds, promoting contour ploughing, constructing structures that reduce runoff, and keeping land under vegetation cover. Even though the government, in its Agricultural Development-Led Industrialisation (ADLI) strategy, gives attention to water harvesting and small-scale irrigation projects to areas facing moisture stress, this is not realised in Wolaita. We observed a very limited number of water collection ponds or wells during our fieldwork, but even those that were dug for this purpose were not in use. There are indications that the wells are not popular among farmers: some said that children and livestock may fall into them and that the wells can serve as breeding grounds for mosquitoes. More research is needed on this subject in order to understand people's attitudes and to identify appropriate ways of addressing the water problem. Given the rainfall irregularity, water harvesting is vital in the study area and needs to be promoted.

### 6.2.2 Increasing access to agricultural technologies

Poverty reduction, food security and economic growth entail raising agricultural production and productivity. One of the key factors in achieving these goals is to increase the access of small producers to yield-increasing inputs, such as chemical fertilizers and improved seeds. However, input use in the zone (and in the country) is significantly hindered by supply-related problems and high prices. It is vital, therefore, to reform the input delivery system by focussing on its efficiency, and to make chemical fertilizers and high yielding varieties available to farm households at affordable prices and favourable terms of repayment. It is important to promote the use of improved seeds that are fast maturing and resistant to diseases and pests. Fast-maturing and drought-resistant varieties are needed particularly in the lowlands.

Alongside intensifying production, it is essential to encourage agro-forestry which is already practised on a low scale in the highlands, by supplying new varieties and technical training.

This is important because farm sizes are very small and agro-forestry enables households to grow a mixture of annuals and perennials in the same field. This presents an opportunity to harvest at different times and offer households a variety of diet and income sources, while at the same time conserving the soil.

It is well known that most farm households keep some livestock, besides farming. It is necessary, therefore, to promote improved livestock breeds and to nurture them by the introduction of improved forage species and better livestock health. This will present households with diversified sources of food and income.

### 6.2.3 Support for diversification and adaptation activities

The findings show that farm households are engaged in different diversification and adaptation strategies, but their activities are limited by poverty and poor access to credit and input delivery. Access to credit would help farm households to use their human and material potential to improve their wellbeing. Many farm households reported that lack of capital is the main obstacle for not engaging or expanding their income generating activities. Hence, it is essential to expand rural micro-credit facilities and make them accessible to farm households at favourable terms. Removing obstacles to population movement implicit in the land policy, expanding rural infrastructure and creating rural employment opportunities will offer farm households opportunities to engage in different income-generating activities.

### 6.2.4 Land reform

The present state ownership of land, although providing the majority of farmers with access to agricultural land, fails to provide them with tenure security. There is a need for land reform that provides secure, long-term and transferable rights to the holders. As most farmers lack resources to productively use their holdings, there is a need to support tenure rights with compatible institutional arrangements that ensure farmers' access to intensification technologies, credit, irrigation water and marketing channels. This would have a motivating effect on rural economic growth and result in better land management.

#### 6.2.5 Skills development

Training farmers in new and diverse skills would increase their options to engage in different activities and earn income from various sources such as weaving, basketry, woodwork, metalwork, carpentry, masonry, etc. Furthermore, it is necessary to help farmers to upgrade

already acquired skills to allow them to be more competitive. For instance, the Wolaita people are known for their fine weaving skills, amongst others. It would be beneficial to thousands of households if they were taught to refine their products using better technology, thus and making them more attractive to the market.

### 6.2.6 Empowerment of women

Poverty reduction, food insecurity and the problem of high fertility in rural Wolaita cannot be addressed without improving the condition of women. Economic dependence, which is further enhanced by cultural and religious factors, makes women completely subordinate to their husbands. They face a heavy work burden, both in and outside the home, in addition to meeting the task of bearing many children. In the study area, women in the household were the most exposed to hunger and ill health. In order to improve the condition of women, it is crucial to find ways of making resources available to them, and to improve their economic independence. As petty trade is handled principally by women in the study area, increasing access to credit for small businesses will increase their status by putting resources at their disposal. Furthermore, it is important to promote female education, support their employment in income generating activities and improve maternal health.

### 6.2.7 Family planning program

Fertility reduction is recommended for several reasons and local access to family planning services is essential for those who need them. However, it is argued in this thesis that fertility reduction cannot be achieved by family planning alone. It must be coordinated with public endeavours to address poverty and livelihood insecurity, improve the condition of women through education and employment in productive activities, enhance access to basic services (health, education, water, etc.), and expand alternative employment opportunities.

### References

- Adal, Y. 2001. 'Some queries about the debate on land tenure in Ethiopia.' In: M. Demeke and T. Woldehanna (eds.) *Proceedings of the Tenth annual Conference on the Ethiopian Economy*, 'Explaining Economic growth and Development in Ethiopia' held Nov. 3-5, 2000 at Nazreth, Ethiopia: Ethiopian Economic Association (EEA): 51-68.
- Adger, W. N., S. Huq, K. Brown, D. Conway & M. Hulme 2003. 'Adaptation to climate change in the developing world.' *Progress in Development studies* 3 (3) 179-195.
- Adger, W. N. and K. Vincent 2005. 'Uncertainty in adaptive capacity.' C. R. Geoscience 337 (2005) 399-410.
- Angelsen, A. & Odd-Helge Fjeldstad 1995. 'Land reforms and land degradation in Tanzania: alternative economic approaches' Working Paper, Christian Michelsen Institute, Development Studies and Human Rights, Bergen, Norway.
- Banerjee, A. V. 1999. 'Land reforms: prospects and strategies' Conference paper, Annual World Bank Conference on Development Economics, Washington D.C.: and MIT Department of Economics Working Paper No. 99-24.
- Bebbington, A. 1999. 'Capitals and capabilities: a framework for analyzing peasant viability, rural livelihoods and poverty.' *World Development* 27(12) 2021-2044.
- Boserup, E. 1965. The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure. London: George Allen and Unwin Ltd.
- \_\_\_\_\_ 1981. Population and Technology Change. Chicago: University of Chicago Press
- Bryman, Alan 2001. Social Research Methods. Oxford: Oxford University Press.
- Carney, D. (ed.) 1998. *Sustainable rural livelihoods: what contributions can we make?* London: Department for International Development.
- CSA (Central Statistical Authority) 1998. *Ethiopia: Statistical Abstracts 1998*. Addis Ababa. \_\_\_\_\_\_2006. *Statistical Abstracts 2006*. Addis Ababa.
- Chambers, Robert 2006. 'Vulnerability, coping and policy.' IDS Bulletin 37(4) 33-40.
- Cuffaro, Nadia 1997. 'Population growth and agriculture in poor countries: a review of theoretical issues and empirical evidence.' *World Development* 25(7) 1151-1163.
- Davies, S. & N. Hossain 1997. 'Livelihood adaptation, public action and civil society: a review of the literature.' *IDS working paper* No.57, Brighton: Institute of Development Studies.
- Dasgupta, P. 1995. 'The population problem: theory and evidence.' *Journal of Economic Literature* XXXIII (December, 1995) 1879-1902.
- Dea 1998. 'Soil fertility management in its social context: a study of social perceptions and practices in Wolaita, southern Ethiopia.' *Managing African Soils* No. 1 (1998) 1-31.

- Deininger, K., 2003. *Land Policies for Growth and Poverty Reduction*. World Bank Policy Research Report: World Bank, Washington.
- Deininger, K. & S. Jin 2006. 'Tenure security and land-related investment: Evidence from Ethiopia.' *European Economic Review* 50 (5) 1245-1277.
- Dercon, S. 2005a. 'Vulnerability: a micro perspective.' Paper presented at the ABCDE Europe Conference, Amsterdam, May 2005.
- \_\_\_\_\_ 2005b. 'Risk, poverty and vulnerability in Africa.' *Journal of African Economies* 14(4) 483-488.
- \_\_\_\_\_ 2004. 'Growth and shocks: evidence from Ethiopia.' *Journal of Development Economics* 74 (2004) 309-329.
- DFID (Department for International Development) 2002. 'Better livelihoods for poor people: The role of agriculture.' DFID Issues Paper, Consultation Document, August 2002.
- Eggertsson, T. 1990. *Economic behaviour and institutions*. Cambridge: Cambridge University Press.
- Ellis, F. 2000. *Rural Livelihoods and Diversity in Developing Countries*. Oxford: Oxford University Press
- Ellis, F. & H. A. Freeman 2004. 'Rural livelihood and poverty reduction strategies in four African Countries.' *The Journal of Development Studies* 40(4) 1-30.
- Eshete, D. 1995. 'Food shortage and household coping strategies by income groups: A case study of Wolaita district in southern Ethiopia.' In: D. Aredo and M. Demeke (eds.) *Proceedings of the Fourth Annual Conference on the Ethiopian*, 'Economy Ethiopian Agriculture: Problems of Transformation.' Addis Ababa University Printing Press: pp. 87-109.
- FAO/WFP 2007. Special Report. FAO/WFP Crop and food supply assessment mission to Ethiopia, 23 February 2007.
- FEDD (Finance & Economic Development main Department) 2003: Socio-Economic Profile of Wolaita Zone. July 2003, Wolaita Soddo.
- Feder, G. & D. Feeny 1993. 'The theory of land tenure and property rights.' In *The economics of Rural Organization: Theory, Practice, and Policy.* K. Hoff, A. Braverman & J. E. Stiglitz (eds.) World Bank: Oxford University Press: 231-239.
- Feder, G., T. Onchan, Y. Chalamwong & C. Hongladarom 1988. Land Policies and Farm Productivity in Thailand. Baltimore and London: The John Hopkins University Press.
- Haan, L. & A. Zoomers 2005. 'Exploring the livelihood research.' *Development and Change* 36(1) 27-47.

- Hogan, D. P., B. Berhanu & A. Hailemariam 1999. 'Household organization, women's autonomy, and contraceptive behavior in Southern Ethiopia.' *Studies in Family Planning* 30(4) 302-314.
- IFAD (International Fund for Agricultural Development) 2001. *Rural Poverty Report2001: The Challenge of Ending Rural Poverty*. Oxford: Oxford University Press.
- Juul, K. & C. Lund 2002. Negotiating Property in Africa. Portsmouth, NH: Heinemann.
- Kanbur, R. (ed.) 2001. 'Qualitative and quantitative poverty appraisal: complementarities, tensions, and the way forward.' *Working Paper No.200-05*, Department of Applied Economics and Management, Cornell University.
- Lele, U. & S. W. Stone 1989. Population Pressure, the Environment, and Agricultural Intensification: Variations on the Boserup Hypothesis. MADIA Discussion Paper 4, Washington, D. C., the World Bank.
- Migot-Adholla, S., P. Hazell, B. Blarel & F. Place 1991. 'Indigenous land rights systems in Sub-Saharan Africa: A constraint on productivity?' *The World Bank Economic Review* 5(1) 155-175.
- Milas, S. & K. El Aynaoui 2004. Four Ethiopias: A Regional characterization, Assessing Ethiopia's Growth Potential and Development Obstacles. The World Bank.
- Mortimore, M. J. & W. M. Adams 2001. 'Farmer adaptation, change and 'crisis' in the Sahel.' *Global Environmental Change*, 11 (2001) 49-57.
- Nega, B., B. Adenew & S. Gebre Sellasie 2003. 'Current land policy issues in Ethiopia.' In *land reform 2003/3 special edition*, World Bank/FAO.
- North, D. C. 1990. *Institutions, Institutional change and Economic Performance*. Cambridge: Cambridge University Press.
- ONCCP/RPOSE (Office of the National Committee for Central Planning/Regional Planning Office for Southern Ethiopia) 1985. A Regional Atlas of Southern Ethiopia. RPOSE/Awassa.
- Ostuka, K. & F. Place 2001. 'Toward new paradigms of land and tree resource management.' In Land Tenure and Natural resource Management: a Comparative Study of Agrarian Communities in Asia and Africa. K. Ostuka and F. Place (eds.) Baltimore and London: The John Hopkins University: 359-378.

- Place, F. & S.E. Migot-Adholla 1998. 'The economic effects of land registration in smallholder farms in Kenya: evidence from Nyeri and Kakamega Districts.' *Land Economics* 74(3) 360-73.
- Plattteau, Jean-Filippe 2000. Institutions, Social Norms, and Economic development. Amsterdam: Harwood Academic publishers.
- Pound, B. & E. Jonfa 2005. 'Soil fertility practices in Wolaita Zone, Southern Ethiopia: Learning from Farmers.' *Policy and Research Series 2*, FARM Africa.
- Rahmato, D. 1992. *The Dynamics of Rural Poverty; Case Studies from a District in Southern Ethiopia*. Monograph Series 2/92, CODESRIA.
- Reardon, T., E. Crawford, & V. Kelly 1994. 'Links between nonfarm income and farm investment in African households: adding the capital market perspective.' American Journal of Agricultural Economics 76 (December 1994) 1172-1176.
- Rodrik, D. 2003. *Analytic Narratives on Economic Growth*. Princeton and Oxford: Princeton University Press:
- Scoones, I. 1998. 'Sustainable Rural Livelihoods: A Framework for Analysis'. *IDS Working Paper 72.*
- Shanmugaratnam, N. 2008. *Between War & Peace in Sudan & Sri Lanka*. Oxford: James Currey and African Academic Press.
- Short, E. S. & G. E. Kiros 2002. 'Husbands, wives, sons, and daughters: fertility preferences and the demand for contraception in Ethiopia.' *Population Research and Policy Review* 21:377-402.
- Vogel, C. 2005. "Seven fat years and seven lean years"? Climate change and agriculture in Africa.' *IDS Bulletin* 36 (2) 30-35.
- White, H. 2002. 'Combining qualitative and quantitative approaches in poverty analysis.' *World Development* 30 (3) 511-522.
- Yamin, F., A. Rahman & S. Huq 2005. 'Vulnerability, adaptation and climate disasters: a conceptual overview.' *IDS Bulletin* 36 (2) 1-14
- World Bank 2002. World Development Report 2002: Building Institution for Markets. Published for the World Bank: Washington, D. C.: Oxford University Press

# Paper I

# **Fighting a losing battle? Livelihood adaptation and diversification in Wolaita, Ethiopia**

Ayele Tessema<sup>1</sup> and N. Shanmugaratnam<sup>2</sup>

<sup>1, 2</sup> Department of International Environment and Development Studies, Noragric Norwegian University of Life Sciences, UMB P.O. Box 5003, N-1432 Ås Norway

<sup>1</sup> Department of Agricultural Resource Economics and Management Hawassa University
P.O. Box 5
Hawassa, Ethiopia
Corresponding author: E-mail: <u>ayeletessemaj@yahoo.com</u>

#### Abstract

This paper examines factors constraining livelihoods, the adaptation and diversification activities of farm households and the relative contribution of different sources to household income in rural Wolaita. A household survey, focus groups and individual informants were used to collect data. The findings suggest that despite recent reports of bumper harvests in the country, Wolaita's agrarian conditions represent dismal stagnation and regression, rather than progressive change. Rainfall variability was the principal vulnerability factor, both in the lowlands and the highlands, with an apparent lack of public investment in infrastructure to reduce the risk of rainfed agriculture. Adaptation and diversification were further constrained by institutional deficiencies pertaining to credit and input delivery and insignificant development of non-farm employment opportunities. The majority of households faced food shortages for several months in a year, during which time most of them depended on food assistance. Low non-farm income, frequent production losses and coping with seasonal food shortages through asset sales have pushed households into perpetual food insecurity and poverty.

#### Key words

Livelihoods, vulnerability, diversification, adaptation, poverty, Wolaita, Ethiopia

# Introduction

Vulnerability to livelihood crisis persists in rural Wolaita, Ethiopia, despite the policy attention paid to agriculture in recent years. This paper investigates the key factors behind this vulnerability, as well as the adaptation and diversification strategies of households, and their limits.

Inspired by the UN Millennium Development Goals<sup>2</sup>, Ethiopia has launched two successive programmes since the beginning of the new millennium: the Sustainable Development and Poverty Reduction Programme (SDPRP) (MoFED 2002) and the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (MoFED 2006). A principal component of both of these interventions is the Agricultural Development-Led Industrialisation (ADLI) strategy, in which investment in agriculture is regarded as the main means of reducing rural poverty and eliminating famine, while contributing to national economic growth. ADLI was expected to benefit from a number of market-oriented reforms, such as grain market liberalisation and administrative decentralisation, which were implemented following the 1991 change in government. The focus on agricultural development is understandable, since agriculture remains the main, if not the sole source of livelihood for 85% of the population and the vast majority of the country's poor live in rural areas. Furthermore, agriculture had been in a state of stagnation and decline for over three decades, as shown by the downward trend in per capita food production and the instances of hunger and famine in rural areas (Devereux and Sharp 2006; Demeke, Guta and Ferede 2006; Feleke and Zegeye 2006; World Bank 2007).

The ADLI strategy addresses some of the long-term structural problems of Ethiopia's agricultural sector, which remains largely rain-fed. For decades the imperial and post-imperial states extracted surpluses in various forms, without any significant investment in rural infrastructure, agricultural research and extension, or human resource development. The strategy envisages the development of this sector by enhancing smallholders' access to yield increasing inputs, such as fertilizers, improved seeds and water, and by improving and expanding the transport infrastructure. Smallholders' access to water is to be enhanced by investments in water harvesting and small-scale irrigation projects. The other key elements of the strategy include investment in agricultural research, education, health care, and capacity building.

<sup>&</sup>lt;sup>2</sup> See UN General Assembly resolution 55/2 of 8 September 2000.

So far there has been no comprehensive evaluation of the implementation of the ADLI strategy. However, a recent 'Crop and Food Supply Assessment Mission' of the FAO and World Food Programme (FAO-WFP 2007) reports that aggregate cereal and pulse production have been increasing for the third year since 2004-2005. According to the Mission's report, the factors behind this trend were well-distributed rainfall, increased use of fertilizer and improved seeds, low incidence of pest attacks and diseases, and expansion of cultivated areas. Notably, cereal prices have remained stable or moved upward during the same period. The report shows that some progress has been achieved in the use of fertilizers and improved seeds, which could well be an indication of the early impact of the ADLI strategy. On the other hand, the report also highlights the geographically uneven pattern of growth in food output, and the vulnerability of the vast majority of the nine million smallholders to livelihood failure and food insecurity, due to the unreliability of rainfall. In other words, the uncertainty of rain-fed agriculture remains a major problem in Ethiopia, as only one per cent of its 14 million hectares of farmed area is irrigated (FAO-WFP 2007).

Even though policy makers identified the lack of irrigation facilities as a major constraint to agricultural modernisation, which the ADLI strategy is expected to deal with, there seem to be no significant advances in the implementation of water harvesting and small scale irrigation projects. This, however, is only a part of a more complex picture of vulnerability and poverty of rural households, which may be obscured by the past three years of growth in aggregate output of cereals and pulses. Critics of the land and agricultural policies of the current regime have argued that the old institutional and technological constraints that have trapped the peasantry in poverty persist, and that there has not been any fundamental change in the role of the state which continues to use public ownership of land to dominate the countryside (Rahmato 2004; Abegaz 2004).

In explaining the persistence of rural poverty in Ethiopia, analysts have pointed to the public ownership of land and the lack of public investment in physical infrastructure as the main causes. According to this view, public ownership of land and the underlying policy of asset equalisation have not only prevented wealth accumulation, but have also failed to help reduce poverty, as they inhibit the functioning of social arrangements through which poor households traditionally accessed key resources such as oxen, land and labour. Critics argue that privatisation of land and increased public investment in infrastructure are necessary conditions to enable agricultural growth and poverty reduction (Dercon 2003; Carter et al 2004; Abegaz 2004; Devereux, Teshome and Sabates-Wheeler 2005; Little et al. 2006; Diao and Pratt 2007). Devereux et al. (2005) contend that 'some degree of inequality' is necessary to achieve growth and poverty reduction as it provides the incentive for investment and promotes entrepreneurship in rural areas. However, the same authors have also conceded that it is difficult for people whose endowments are below a minimum asset threshold to move out of poverty.

Other studies, while sharing the above views, have mentioned the need for policy interventions to pay adequate attention to the variations in the socio-economic and ecological conditions in the country (Milas and Aynaoui 2004; Pender, Place and Ehui 2006; World Bank 2007). Another key issue raised in the literature is that of risk, its effect on farm household decision-making, and the implications thereof for growth and poverty reduction. In the face of risk, such as the heavy dependence of farming on highly variable rainfall and the inadequacy of physical infrastructure and supportive institutions, farm households tend to choose low-risk production techniques and show reluctance to adopt new technologies or to take advantage of new economic opportunities (Morduch 1995; Dercon 2005a).

In this study we took the public ownership of land as a given institutional condition and examined other factors perceived as crucial by farmers in Wolaita. We do, however, comment on how the present land tenure system discourages farmers from migrating to other areas for seasonal employment. Our principal focus is on households' adaptive and coping mechanisms and their limits. Diversification is known to be pervasive in southern Ethiopia (Carswell 2002), but there is a lack of knowledge on the relative importance of the different activities to household livelihoods as a whole. Furthermore, previous studies have tended to concentrate more on livelihood diversification while rural survival strategies most often involve both adaptation and diversification.

# Livelihood adaptation and diversification: A conceptual note

Frameworks based on the concept of livelihood are widely used by researchers to document and analyse the processes by which individuals and households utilise the resources and the opportunities they have to make a living in particular socio-economic and bio-physical contexts (Scoones 1998; Carney 1998; Ellis 2000; Shanmugaratnam 2008). In most farm households, livelihood activities often include off-farm and non-farm activities in addition to farming, as income from the latter alone is insufficient to make ends meet. Besides, farming and off-farm and non-farm activities complement each other. Farm income can provide the capital needed to initiate and expand off-farm and non-farm income sources, while off-farm and non-farm income can contribute to farm productivity by providing finance for farm input purchases and investment (Reardon, Crawford and Kelly 1994). Following Ellis (2000), the different income categories are defined as follows: 'on-farm income' includes income obtained from crops, livestock and livestock products. 'Off-farm income' includes wages or returns of exchange labour on other farms and income from the sale of natural resources, while 'non-farm income' includes income from non-agricultural sources (such as non-farm employment, petty trade, transfers and remittances).

Diversification and adaptation are complementary components of livelihood strategies. Diversification is "the process by which rural households construct an increasingly diverse portfolio of activities and assets in order to survive and to improve their standard of living" (Ellis 2000:15), while adaptation is the continuous process of "changes to livelihoods which either enhance existing security and wealth or try to reduce vulnerability and poverty" (Davies and Hossain 1997:5). In the struggle to secure livelihoods, households may simultaneously be involved in different adaptation and diversification strategies. The two are related and are complementary to each other, though not exactly synonymous (Ellis 1998).

In the pursuit of livelihoods, households diversify their income sources while simultaneously adopting strategies that increase production, avoid or minimise harvest loss and increase access to key resources. This process, however, varies among households due to variations in resource endowments and the differential impact of conditioning factors. For the purpose of the present study, the key household resources and the external factors that enable or constrain livelihood strategies in rural areas are shown in Table 1. Ownership of and access to assets facilitate diversification and adaptation, while both strategies in turn help to consolidate

the asset bases of households (Ellis 2000). However, this mutually reinforcing relationship can be severely affected by climate variability. Crop failure caused by drastic variations in climatic factors often forces households to sell assets to meet consumption needs, thereby undermining the capacity to diversify and adapt as well as to retain and expand assets. Empirical studies indicate that climate variability has severe impacts on livelihoods that are sensitive to climate change such as rain-fed agriculture (Adger et al. 2003; Vogel 2005; Yamin, Rahman and Huq 2005). While farmers are known to practice different adaptive strategies to minimise the effect of climate variability (Mortimore and Adams 2001), such endeavours are dependent on access to resources (Adger and Vincent 2005).

Major household				
resources/endowments	Conditioning/mediating factors	Livelihood strategies		
<ul> <li>Agricultural land</li> </ul>	Climate especially rainfall condition	Livelihood adaptation:		
Labour power	• Institutional and organisational factors	Use of		
• Draught power (oxen)	(governing access to key assets, inputs,	• Farm management practices:		
Livestock	credit services, technical support)	soil and water conservation;		
• Farm implements	Population growth	use of improved seeds,		
• Common property	• Infrastructure (road, market, irrigation	organic, inorganic fertilizers,		
resources	water)	pest control and other yield-		
Social capital	• Non-farm opportunities	increasing techniques		
• Stores (seeds, food crops,	• Market signals: input/output prices	• Crop choice and mix		
other reserves)	• Human and livestock health	T ' 1'1 1 1' 'C' /'		
	• Pests and diseases	<ul><li>Livelihood diversification:</li><li>On-farm activities</li></ul>		
	• Socio-cultural factors (norms, values)			
		Off-farm activities		
	• Human security, law and order	• Non-farm sources		

Table 1 Household resources, conditioning factors and livelihood strategies in the study area

Besides climate variability, farm households also face risks and shocks emanating from human and livestock diseases, pests, unfavourable market trends and political and social instabilities. Such risks and shocks perpetuate poverty and aggravate vulnerability to livelihood failure by inducing asset sales, and through lost incomes (Dercon 2004; Dercon 2005a; Dercon 2005b; Dercon, Hoddinott and Woldehanna 2005). Empirical evidence also suggests that risks and shocks have long-term effects on the well-being of individuals and households in Sub-Saharan Africa. The food shortages of the 1990s in Ethiopia, for instance, were closely related to the extended effects of the 1984/5 drought (Dercon 2004), and civil war and drought shocks have drastically affected the physical and intellectual development of children in Zimbabwe (Hoddinott and Kinsey 2001; Alderman, Hoddinott and Kinsey 2004).

#### The study area

The study was conducted in the Wolaita zone, located about 400 km south of Addis Ababa. Wolaita is roughly divided in two distinct altitudinal zones, the highlands (land between 1700-2600masl) and the lowlands (land between 900-1700masl) (EMA 1988). Altitude has significant influence on human settlement, temperature and rainfall distribution - the last two having direct effects on farming practices. The average annual rainfall is 1189 mm at Sodo in the highlands and 803 mm at Abela Faracho in the lowlands. The lowlands have one long growing season that extends from March to August, while the highlands have two distinct growing seasons, one in summer and the other in spring. Crop production is the most important means of livelihood, but livestock is also kept as a source of food, cash income, draught power and insurance against uncertainty. Wolaita represents one of the most densely populated parts of the country and, as Table 2 demonstrates, density has increased significantly in all parts of the zone in recent years, especially in the highlands. On average, there were 79 more people per square kilometre in the zone in 2006 than there were in 1998.

		Popula	tion dens	ity (perso	ons/km <sup>2</sup> )	
District	Altitudinal					Density increase
	zone(general)	1998	2000	2004	2006	per km <sup>2</sup> 1998-2006
Sodo Zuria*	Highland	494	528	600	638	144
Damot Gale*	Highland	592	629	706	746	154
Boloso Sore	Highland	461	491	551	583	122
Damot Woyde	Lowland	222	236	264	278	56
Kindo Koysha	Lowland	211	224	250	264	53
Offa	Lowland	220	234	262	270	50
Humbo*	Lowland	133	141	158	167	34
Wolaita Zone		301	317	359	380	79

Table 2 Wolaita: Population density 1998-2006

Source: compiled from CSA statistical abstracts 1998, 2000, 2004 and 2006 \*Sample districts

In 2006, density varied from 167 persons per square kilometre in the Humbo District, which is mainly lowland, to 746 persons per square kilometre in the Damot Gale District in the highlands (CSA 2006). In the same year, density was 68 persons per square kilometre at the national level and 136 persons per square kilometre in the Southern Nations and Nationalities Region, where Wolaita is located. The average household size for the study population was very high, about 9.1 persons in 2005 (own field work). Farm size is decreasing over the years as a result of the intergenerational subdivision of agricultural land. The findings of this study and that of by Eshete (1995), who also conducted a survey in both highland and lowland Wolaita in 1990/91, indicate that average farm size has declined from 1.59 hectares to 1.41

hectares, i.e. by about 0.18 hectares over the 15 years from 1990/91 to 2005. Infrastructure is poorly developed and the availability of non-farm employment opportunities is insignificant. In both lowland and highland Wolaita, malaria presents a major health risk and children are the most affected (FEDD 2003).

# Method

The study covers a total of six *Kebele* Administrations (KAs)<sup>3</sup>, 2 KAs in the lowlands and 4 KAs in the highlands. The choice of the sample KAs was purposive, which took physical conditions and human activities as the main criteria of representation of conditions in the respective altitudinal zones. The 2 KAs in the lowlands, Abela Faracho and Abela Longena are located in the lowland parts of the Humbo District with prevailing hot and semi-dry conditions. In the lowlands, physical conditions and human activities are fairly similar and, therefore, conditions in the two KAs are taken to be representative of conditions in the lowlands. The remaining four KAs were selected from the moist sub-humid and densely populated parts of the Sodo Zuria (Waraza Gerera and Shiamba Kilina KAs) and the Damot Gale (Hagaza Doge and Shakisho Shone KAs) districts. These four KAs were chosen to represent the ecological, demographic and infrastructural attributes prevailing in highland Wolaita.

Two hundred sample households, 100 from each altitudinal zone, were randomly selected from the registers of respective KAs for an individual interview. Data on household characteristics, economic activities, and farming and land management practices were collected using a survey questionnaire, while an interview guide was used to obtain local perceptions through focus groups and individual informants from each KA. Though data was collected from six KAs, the information obtained was finally aggregated under lowlands and highlands to enable comparisons of coping strategies and livelihood conditions by altitude. Secondary information was collected from public records, statistical bulletins, policy documents and research reports and publications.

<sup>&</sup>lt;sup>3</sup> A *kebele* administration is the lowest, community-level administrative organ consisting of a number of villages.

# **Findings and discussion**

# Key factors constraining livelihoods in rural Wolaita

Table 3 presents farmers' perception of the principal constraints to livelihoods in rural Wolaita, of which erratic rainfall was the single highest source of risk and vulnerability for more than 80% of the households in both zones. The shortage of agricultural land is the second most serious constraint in the highlands. Other factors such as access to improved seeds and fertilizers, lack or shortage of draught power, lack of capital, and pest infestation are also significant problems for substantial numbers of households. In fact, most farm households operated under the combined impacts of most of these constraints. The table also shows that there were differences between the two zones in farmers' perceptions of the constraints. A more detailed discussion of the findings follows.

	Percentage of households facing the constraint						
Types of constraints faced	Lowlands (N=100)	Highlands (N=100)	Region (N=200)				
Erratic rainfall	83	81	82				
Shortage of agricultural land	36	69	52.5				
Lack of improved seeds and fertilizers	39	61	50				
Lack or shortage of oxen	33	48	40.5				
Lack of capital	17	48	32.5				
Pest infestation	8	25	16.5				
Large family size	7	4	5.5				
Others*	14	15	14.5				

\* Lack of farm implements, shortage of farm labour, price fluctuation of outputs, poor health, declining soil fertility

#### **Climate variability**

Table 3 indicates that rainfall variability was the principal constraint to livelihoods in both the lowlands and the highlands. Farmers characterised the rainfall in the area as highly irregular, inadequate, showing poor seasonal distribution, or a combination thereof. In the highlands, there was the additional problem of crops being damaged by occasional downpours. In both zones, farmers identified five 'bad years' out of the nine years from 1998 to 2007, in which whole or part of their production was lost due to rainfall related problems (Tables 4 and 5). However, irregularity in the arrival of the first rains, inadequacy in the amount received, and failure in the middle of the growing season were more pronounced in the lowlands where moisture loss was also high due to evapo-transpiration caused by high temperatures. On the other hand, crop loss due to occasional heavy downpours, pests and diseases were more common in the highlands.

The farmers' description of recent rainfall history (Tables 4 and 5), as well as rainfall records for different locations, indicate significant temporal variability, a fact that is supported by the high coefficient of variation for the growing months over several years for both zones (Appendices 1-4). A comment by a participant in one of the discussion groups in the lowlands sums up the decisiveness of rainfall as a constraint on production in the study area: "One can cultivate using borrowed oxen; or obtain land by renting in or through sharecropping arrangements; also, you can buy or borrow seeds; what can you do if rain does not come or fails in the middle of the season?" The risk of unsatisfactory harvests or harvest loss due to rainfall failure is high, and it has actually occurred every other year on the average as farmers' accounts show. As production failed, households were forced to sell valuable assets, borrow in cash or in kind, or lease out agricultural land to meet consumption needs. This significantly affected the capacity of households to meet subsequent consumption needs and retain and improve their asset bases. The struggle to cope with recurrent food shortages and to settle previous debts has kept most households in the area in a poverty trap.

	Average annual				
Production			rainfall for the		
year	Rainfall conditions	Effects	area (in mm)		
1998/99	Adequate; good distribution	Adequate harvest	Data not available		
1999/2000	Inadequate; poor distribution	Inadequate harvest; food shortage	589		
2000/2001	Inadequate due to very poor				
	distribution, drought	Crop failure; Famine	870		
2001/2002	Adequate, good distribution	Adequate harvest	955		
2002/2003	Adequate, good distribution	Adequate harvest	834		
2003/2004	Inadequate, drought	Inadequate harvest; food shortage	582		
2004/2005	Adequate, good distribution	Adequate harvest	987		
2005/2006	Late, those who sowed early	Inadequate harvest/crop failure;	Data not available		
	lost	food shortage			
2006/2007	Poor distribution. Crop	Inadequate harvest; food shortage.	Data not available		
	damage by late heavy rain	-			

Table 4 Farmers' description of rainfall and livelihood conditions in the lowlands (1998/99-2006/07)

In lowland Wolaita, one observes a rising sense of despair and dependence on food handouts. Development agents in the area complained that food aid had damaged the value people traditionally attached to hard work and tended to discourage the poor recipients from dealing with livelihood challenges on their own. We regard this as a superficial view of a complex situation in which the farmers' agency is severely constrained by structural factors that both generate and reinforce the inherent risks of rain-fed agriculture and limit the opportunities for adaptation and diversification of livelihoods.

	Farmers description of rainfall condition and its effects						
Production			rainfall for the				
year	Rainfall conditions	Effects	area (in mm)				
1998/99	Heavy, damage to crops	Inadequate harvest; food shortage	1344				
1999/2000	Inadequate due to poor distribution	Famine	938				
2000/2001	Adequate; good distribution	Adequate harvest	1362				
2001/2002	Heavy, hailstorms followed by armyworm	Inadequate harvest; food shortage	1512				
2002/2003	Adequate; good distribution	Adequate harvest	1022				
2003/2004	Adequate; good distribution	Adequate harvest	1255				
2004/2005	Heavy, Damage to crops	Inadequate harvest; food shortage	1309				
2005/2006	Adequate; good distribution	Adequate harvest	Data not available				
2006/2007	Inadequate	Inadequate harvest; food shortage	Data not available				

Table 5 Farmers' description of rainfall and livelihood conditions in the highlands (1998/99-2006/07)

Sources of irrigation in the form of ponds or collector wells to overcome the effects of moisture stress on crops due to lack of rain, are totally absent in the study area. The support for water harvesting and other minor irrigation projects proposed in the ADLI strategy at a national level had not been effectively implemented in Wolaita in 2007. It can be discerned from Tables 4 and 5 that the harvest depends not only on the total annual rainfall, but also on its distribution. For instance, Table 4 indicates that what is perceived by farmers as 'adequate harvest' (begi mirt in Amharic) requires a total rainfall of over 800 mm, which is timely and well distributed across the cropping season. Such rain was perceived as 'adequate rain' (begi *zinab* in Amharic). This is illustrated by the difference between 2000/01, which was a time of famine in spite of a rainfall of 870 mm, and 2002/03, which had an 'adequate harvest' with 834 mm rainfall. The 'adequate harvest' happened in only four out of the nine seasons between 1998/99 and 2006/07. It is also important to note that the impact of crop failure in one season extends over a longer time. A study by Dercon (2004) on rural communities in Ethiopia shows that rainfall shocks affect not only current consumption, but the effect lingers on for many years, thereby impeding the capacity of the households to attain food security and escape poverty.

#### **Agricultural land**

Access to agricultural land, its size and quality are indispensable for maintaining livelihoods in rural Wolaita. This is indicated by the strong positive relationship between farm size on one hand and total production and household income on the other (Table 6). However, 69% of farm households in the highlands and 36% in the lowlands said that their holdings were not adequate to meet their cultivation requirements. The overall average holding size for the study

area was 1.41 ha; 0.73 ha in the highlands and 2.1 ha in the lowlands. Eshete (1995) found that in 1990/91 the average holding was 1.59 ha. Comparison of the two findings suggests that average holdings have decreased by about 0.18 ha over 15 or so years. It is important to note that access to agricultural land for family forming male children is mainly through sharing the land cultivated by the parents. This fact, and the periodic adjustments to accommodate the landless have resulted in the progressive decline in the size of holdings. Hence the intergenerational sub-division of farmland and the problems of access to intensification technologies and credit have compounded the land constraints in Wolaita. Furthermore, scarcity of non-farm employment opportunities and the risk of loss of holding rights constrain population movement out of agriculture, thereby again increasing pressure on land.

	Lowland	ls	Highlands		
Variables to be related	r	р	r	р	
Farm size vs. farm income	0.62	<. 0001	0.51	<. 0001	
Farm size vs. total production	0.63	<. 0001	0.50	<. 0001	
Oxen ownership vs. total production	0.40	<. 0001	0.69	<. 0001	
Oxen ownership vs. household income	0.41	<. 0001	0.74	<. 0001	
Fertilizer use vs. total production	-	-	0.10	0.3255	
Maize production vs. income	0.77	<. 0001	0.66	<. 0001	
Teff production vs. income	0.61	<. 0001	0.51	<. 0001	
Sweet potato production vs. income	-	-	0.65	<. 0001	
Cotton production vs. income	0.75	<. 0001	-	-	
Pepper production vs. income	0.77	<. 0001	-	-	
Sorghum production vs. income	0.73	<. 0001	-	-	

 Table 6 Pearson correlation between key variables by altitude

Despite Article 8 of the regional land legislation (SNNPRS 2004) ensuring holders' rights even if they change their residence, farmers said that they fear their holding rights might be taken from them if they change their residence or leave their holdings uncultivated. The insecurity arises from the subsequent provisions in the legislation, which attach conditions (Article 9) for continued holding (one of which states that holding rights could be lost if the holder leaves the land unused for a period of time), and the possibility of land redistribution (Article 12). Researchers have been told by *Kebeles* officials in different parts of the country that land reallocation will take place if an individual has abandoned his holding or has an

alternative means of livelihood (ARD 2004; Rahmato 2004). It is to be noted that pressure on land is felt far more acutely in the highlands than in the lowlands, where the average farm size of 2.1 ha is three times larger than that in the highlands (see also Table 2).

#### Access to improved seeds and fertilizers

The demand for both improved seeds and fertilizers was high in the highlands, while it was largely limited to improved seeds in the lowlands. Farmers applied little or no fertilizers in the lowlands as they are not effective due to the high temperatures and sandy conditions of the soil. Improved seeds were preferred because they are more resistant to moisture stress and also mature fast. According to local informants, seeds of drought resistant indigenous varieties were no longer available as these varieties have been lost. Furthermore, many households had to look for externally supplied seeds as they had used their seed stock for consumption. Other constraints reported by 61% of the farm households in the highlands and 39% in the lowlands were that supplies of improved seeds and fertilizers arrived late and that their prices were high and increased from time to time (Table 3). The delays in the supplies were due largely to inefficiencies of bureaucratised procedures and poor transport facilities. Inputs were supplied on credit by parastatals and companies that had connection to the government (see also Demeke et al 2006). A farmer who wants to buy these inputs has to apply to the *Kebele* office which checks the creditworthiness of all the applicants, collects a fixed deposit from each credit worthy applicant, and calculates the total quantities of the two items required for the Kebele. Each Kebele office forwards this information to the district office, which in turn forwards the aggregate district requirement to the supplying agency. This process is quite time consuming. The delivery by the supplying agency depends on the availability of stocks and transport.

Farmers mentioned that there were instances when the supplies arrived after sowing time. They also said that factors such as political and social connections influenced applications for creditworthiness. Furthermore, some farmers did not want to purchase inputs on credit as they feared that they might have to sell their oxen, food store or other assets to repay the debt in the event of partial or complete crop failure (see also Pender et al 2006). Uncertainty of rainfed farming, rising prices of the inputs, lack of cash, fear of the consequences of defaulting on credit repayment, and the deficiencies of the delivery system discouraged these farmers from using yield increasing inputs. The same factors also influenced farmers' decisions regarding the quantities of the inputs applied. This was confirmed by a zonal report (FEDD 2003). Thus

the availability of credit alone may not be sufficient for some farmers to make up their minds to borrow in order to buy inputs (see also Croppenstedt, Demeke and Meschi 2003; Feleke and Zegeye 2006).

#### **Draught power constraints**

Tillage is principally done using draught power except in small garden plots where hand tools are used. Land preparation involves tilling the soil more than once and it has to be timely to make the best use of the early rains and sow the seeds when the soil is moist enough to enable germination. Hence, the ownership of oxen is crucial for successful production. This is demonstrated by a strong positive association between oxen ownership and total production, and oxen ownership and household income in both altitudinal zones (Table 6). Households with more oxen produced more and generated more income. But most households in the area lacked oxen for timely land preparation (Table 7). Average ownership for the zone was one ox per household, while 20% of the households in the lowlands and 21% in the highlands did not own an ox. These households rented out their land or entered into share cropping arrangements with others who owned oxen. Some of them also accessed draught power through labour exchange or by borrowing oxen.

Forty-two percent of the households in the lowlands and 49% in the highlands owned only a single ox. These households cultivated their holdings either by pairing oxen with other households in the same situation, or by adopting strategies similar to the households who owned no ox, as mentioned above. This means the production capacity of 62% of the households in the lowlands and 70% in the highlands was constrained to varying degrees by the lack or shortage of oxen.

Table / Oxen ownership								
	Percenta	Percentage of households owning						
Altitudinal zone	None	1	2	>2				
Lowlands (N=100)	20	42	34	4				
Highlands (N100)	21	49	29	1				
The study area (N=200)	20.5	45.5	31.5	2.5				

As is evident from Table 7, oxen ownership was very low, which severely restricted access by those who did not own any through traditional mechanisms such as labour exchange, sharecropping or kinship. Only 2.5% of the households in the overall zone owned more than two oxen.

#### Lack of financial capital

The lack of financial capital (Table 3) was felt more widely among households in the highlands (46%) than in the lowlands (17%). In both zones, those who mentioned the financial constraint said that it had prevented them from diversifying their income sources as well as increasing production through input use. They pointed out the difficulty of securing credit from micro-credit organisations since most households lacked collateral. In addition, credit organisations required group guarantees and sanction from *kebele* officials, making the borrowing process complicated and difficult to obtain credit in time. The alternative was borrowing from local lenders at higher rates, which they considered risky because repayment might force them to sell valued livestock or rent out agricultural land in case of inadequate harvest or crop failure. Raising income by seeking seasonal non-farm employment was discouraged due to fear of losing the usufruct land rights because of non-full engagement or lack of fixed residence.

The capital constraint has been worsened by the decline in livestock wealth over the years. Traditionally, livestock wealth shielded the local society from economic shocks and generated the cash needed for investment and settlement of debt. Income from milk and milk products was used to settle debt and buy food items in lean times. Livestock also provided food, draught power and manure for the fields. But at the time of the fieldwork, livestock ownership was very low, about 2.6 TLU<sup>4</sup> on average. A regional report (FEDD 2003) noted that livestock wealth has declined rapidly due to increased sales, shortage of grazing land, drought and health problems.

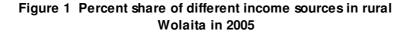
Farmers mentioned several other challenges that they faced in their livelihood activities in addition to the major constraints outlined above. Pest and disease epidemics usually followed rains. Pest occurrence and crop diseases were particularly serious in the highlands where occasional army worm and potato diseases damaged crops and forage. Human and animal health continued to be poor even though the provision of health services has shown improvement over the years. Malaria was the single highest health hazard, followed by other contagious diseases such as dysentery. It was also pointed out by informants that most people could not afford modern medication and usually remained untreated after contracting illness, with harmful consequences for household livelihoods, especially when working members

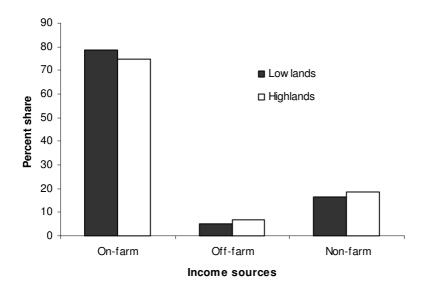
<sup>&</sup>lt;sup>4</sup> For Tropical Livestock Unit conversion rate see FAO (1987).

became ill. All households in the highlands and 88% in the lowlands complained of high land use and agricultural income taxes.

# Livelihood diversification in Wolaita

Figure 1 shows the relative contributions of different activities to household income in rural Wolaita. Ninety-four percent of the households in the lowlands and 72% in the highlands obtained income from other sources in addition to farming, implying that diversification was widespread. However, the contribution of sources other than farming to household income was only about 22% in the lowlands and 24% in the highlands. This is much lower than the corresponding average of 39% for eight West African countries reported by Reardon et al (1994). In Wolaita, diversification was hampered by poor infrastructure, lack of opportunities, and lack of assets and credit services. Road networks were underdeveloped and the commodities exchanged were dominated by local products. Non-farm employment opportunities were hardly available locally, while the risk of losing land rights has discouraged out-migration.





Comparing the two altitudinal zones, the average income from sources other than farming was relatively higher in the highlands, possibly due to its comparatively better infrastructure and other opportunities. Nevertheless the contribution of farm income was still very high in both altitudinal zones (Figure 1). This high dependence on the farm as the main source of income

made the households highly vulnerable to livelihood failure given frequent crop losses due to rainfall variability especially in the lowlands, as already shown.

Crop production is the major source of subsistence and income in Wolaita. Maize was the main cash crop in both altitudinal zones, while cotton and pepper were also key contributors to the household economy in the lowlands (Table 6). In the highlands, sweet potato and *teff* (*Eragrostis tef*) were important cash crops while several households obtained income from the sale of construction wood, coffee, *khat* (*Catha edulis*), fruits and vegetables. Farm income sources were more diversified in the highlands than in the lowlands, due to the former zone's relatively favourable climatic and soil conditions. In both altitudinal zones, chicken were kept to meet minor and immediate cash requirements, while some households obtained income from the sale of livestock and livestock products.

Petty trade was the main source of non-farm income in the study area as a whole, although assistance from the safety net programme, NGOs and relatives was also important for many households, especially in the lowlands. Some households obtained income by engaging in handicrafts, seasonal wage labour and rural non-farm employment. As Carswell (2002) noted, trade is a common diversification activity in Wolaita, practised by different income groups on different scales. Market visits were generally high, with 69% of the households in the lowlands and 78% in the highlands having visited markets 3-5 days in a month. Markets were places not only for trading but also to meet people and exchange information.

For the majority of rural households, trade was a means of coping, directed at supporting immediate household consumption needs and other requirements. This was done mainly by women who travel between different markets, buying and selling local products in small quantities for small profits. The main items of exchange were grain and root crops, fruits, vegetables, livestock and livestock products, and forest products. A few others traded in cloth, footwear, edible oil, kerosene, food, drinks and other products and services. Often items were bought in bulk and sold by retailing. The profit could be in cash or in kind, that is as grain or root crops that are left after securing back the working capital. Such products were used to feed the household. The cash profit was used to buy cheaper food items for household consumption. Such profits were critical for household survival, especially during times of food shortage. However, households were constrained by a lack of capital to sustain and expand their diversification activities.

The contribution of off-farm income to overall household income was very low, a mere 5% in the lowlands and about 7% in the highlands. Even so, the utilisation of environmental resources for economic benefit was important in the lowlands, where 21% of the households complemented their income from the sale of firewood, charcoal, grass and *bole* (mineral earth for cattle feed).

### Adaptation and its limits

Table 8 shows the different methods used in the two altitudinal zones to increase production, such as the use of yield increasing inputs, annual cropping frequency and the extension of the area cultivated. It also indicates the potential of the two environments to permit crop diversity, the use of different cropping patterns and continuous cultivation.

In the highlands, crop diversification was high and farmers used both organic and chemical fertilizers to increase production. Further, 94% of the households cultivated two seasons in a year and 48% increased the area cultivated through different arrangements, such as by renting in land or through sharecropping. However, even though 94% of the households used chemical fertilizers, the effect on total production was insignificant (Table 6). There could be several reasons for this, but two possible contributory factors were the low rates of fertilizer application and late delivery. The average fertilizer use was 76.2 kg/ha, which is far below the recommended rate of 150-200kg/ha (Diao and Pratt 2007). Policy related obstacles to intensification under conditions of high and rising population densities in regions comparable to Wolaita have been highlighted in the literature (Lele and Stone 1989; Cuffaro 1997). Moreover, intensification can also be inhibited by uneconomic micro-holdings and production for subsistence, coupled with insecure land tenure rights and archaic institutional arrangements (Nega, Adenew and Gebre Sellasie 2003).

	Percent	t of house	holds who					
	Produc	ed			Other factors			
Altitudinal	(in a ye	ear)	Used			Extended		
zone			Chemical		Improved	cultivated	Crop	Cropping
	Once	Twice	fertilizers	Compost	seeds	area	diversity	pattern
Lowlands								Less
(N=100)	93	7	0	100	24	17	Limited	complex
Highlands								
(N=100)	6	94	94	65	90	48	High	Complex

Table 8 Measures taken to increase production

In the lowlands, there is only one growing season, and due to low moisture availability and high temperatures, the types of crops grown were limited. No household used inorganic fertilizers, even though 24% used improved seeds. However, all lowland farmers used compost. In the highlands, 65% of the farmers used compost along with inorganic fertilizers. In both zones, all the farmers in the sample said that the quantity of compost used was less than what they would have liked to apply. The reasons given for this were shortage of organic matter, lack of time and the problem of transportation of larger quantities of compost to the field. Some farmers said that chemical fertilizers gave better yield compared to compost, and that crops matured more quickly when chemical fertilizers were used instead of compost.

In both locations, different types of cropping patterns were used to achieve different but complementary goals. Crop rotation, relay cropping, intercropping, and agro-forestry were widely practised, with agro-forestry being confined more to the highlands and mono-cropping to the lowlands. Farmers used these different cropping patterns to meet their domestic and market needs, minimise crop loss, maintain soil fertility and accommodate production requirements on the agricultural land available to them.

#### Food shortages, weaknesses of the safety net programme and negative adaptation

Even though most households diversified their income sources and adopted different adaptation strategies, all households in the lowlands and 91% in the highlands had faced food shortages to varying degrees of intensity (Table 9). Seventy-nine percent of the households in the lowlands and 52% in the highlands perceived the shortages they faced as being serious, since the hunger periods extended over several months. A significant number of households faced food shortages for seven months in the lowlands and five months in the highlands (Table 10). In fact, no month in the year has passed without a number of households facing food shortages, with the March-June period being the worst in the study area, during which more than seven out of 10 households were affected. The March-June period is an important part of the growing season when farmers have to work hard in the fields. But their capacity to labour was greatly affected by hunger and ill health, with adverse consequences on production. This evidence shows how current food shortages is not a short-term problem.

Altitudinal Zone	Degree of	f severity of short	Percent dependent on	
	Severe	Less severe	food aid	
Lowlands (N=100)	79	21	0	93
Highlands N=100)	52	39	9	68
Study area (N=200)	65.5	30.0	4.5	80.5

Table 9 Household description of severity of food shortage faced (N=200)

Table 10 Hungry months in the study area

Altitudinal Zone	Perce	Percent of households facing food shortage in each month										
	Sept	Oct	Nov	Dec	Jan.	Feb	March	April	May	June	July	Aug
Lowlands (N=100)	4	7	9	19	34	39	76	94	96	88	28	12
Highlands (N=100)	3	5	7	9	21	53	88	90	86	57	12	3
Region (N=200)	3.5	6.0	8.0	14.0	27.5	46.0	82.0	92.0	91.0	72.5	20.0	7.5

The analysis of farmers' responses indicates that food shortages and poverty increased from time to time, especially in the lowlands. Seventy-four percent of the households in the lowlands and 40% in the highlands said that their living conditions had deteriorated over the years.

Table 11 shows the different measures taken by households to cope with food shortages. Seeking food aid and the sale of assets to buy food were the principal coping strategies adopted by the majority of the households. Ninety-three percent of the households in the lowlands and 68% in the highlands had received cash or food assistance through the government run Productive Safety Net Programme (PSNP) or from NGOs. The PSNP targets chronically food insecure households in areas identified as being the most food insecure (MoARD 2004). Its primary objective is to assist chronically food insecure households to attain food security by providing them with cash or food assistance, which helps them to meet consumption needs while retaining their assets. However, the number of chronically food insecure households often exceeds the number the PSNP is able to cover (Sharp, Brown and Teshome 2006). The local community under the supervision of administrative bodies, which also control and allocate resources, identifies the PSNP beneficiaries. The PSNP is basically a government undertaking even though the involvement of NGOs has been increasing (Sharp et al 2006). Reports on the performance of the PSNP are generally favourable (Sharp et al 2006; Devereux et al 2006; Slater et al 2006), but our findings raise questions about its success in achieving the objective of preventing distress sales.

In the Abela Faracho *Kebele* where 399 out of a total of 555 households were beneficiaries, 70% of the households that were interviewed had sold assets to buy food; 76% of the

households in the lowlands and 71% in the highlands had sold livestock and other household properties while also renting out their land, in order to buy food. This shows that the amount of support received was not enough to prevent households from selling assets. Carter et al. (2004) called such practices 'destructive coping strategies' which actually aggravate vulnerability and perpetuate poverty. People sold whatever assets they owned, starting with the least valuable and then the more valuable as they passed through the shortage period.

According to informants, asset sales usually start with chicken, sheep or goats and then extend to young bulls or heifers, and ultimately to the renting out of agricultural land or the sale of cows or oxen. Seed reserves might be used for food, leading to seed shortage during the sowing period. In desperate situations households might be forced to sell dwellings or household utilities. The sale of oxen, leasing out of agricultural land and consuming seed reserves have severe consequences to the household economy. Such measures reduce the capacity of households to produce, thereby increasing their vulnerability to subsequent food shortages. In the same manner, the sale of cows leads to the loss of milk and milk products that can be used for household consumption or sold to buy food. It also means the loss of the asset through which households may obtain future oxen and cows. Another common coping mechanism, but with long-term adverse consequences for household livelihoods, was borrowing in cash and in kind. The debt was paid back using the next harvest or by selling assets if crops failed. Hence, even though useful to meet current consumption needs, the practice of borrowing was one of the factors that exposed households to further food shortages and poverty by depleting their asset bases and future incomes.

Our findings also show that there were problems regarding the implementation of the PSNP. Out of the 399 poor farmers that were included in the safety net program at the Abela Faracho KA, 50 were later excluded for 'misusing' the support they received for unintended purposes, such as consumption of the improved seeds supplied, selling or renting of the plastic sheeting provided for water collection, avoidance of the public work assigned, and misuse of the cash payment. These excluded households were among the most vulnerable to livelihood failure, and their exclusion from the official safety net contradicts its aim. Furthermore, the timing of public works was found to disrupt other activities of the households, and women beneficiaries were often assigned heavy tasks (see also Sharp et al. 2006).

	Percent of households who took the measure	
Measure taken to overcome food shortage	Lowlands (N=100	Highlands (N=100)
Food aid	93	68
Asset sale, renting out agricultural land	76	71
Petty trade, handicrafts, non-farm employment	16	30
Sale of forest resources	21	4
Borrowing in cash and kind	6	11
Sale of wood from own plantation	-	15
Use of enset <sup>5</sup>	-	31

Table 11 Main measures taken by households to cope with food shortages

As Table 11 indicates, a sizable number of households were engaged in petty trade, handicrafts and non-farm employment in their attempts to cope with food shortages. Engagement in these types of activities may help households to avoid distress asset sales, renting out agricultural land, or borrowing for coping purposes and, should therefore be supported by provision of credit, infrastructure development, human resource development as well as expansion of non-farm employment opportunities. In the highlands, where climatic and other factors are relatively favourable, households grew *enset* (*Ensete ventricosum*) to use for food during shortfalls. Studies show the significance of *enset* to food and livelihood security in southern and south-western Ethiopia (Negash and Niehof 2004). In addition, small plots of coffee, *khat* (*Catha edulis*), fruit and eucalyptus trees were managed in the backyard of each household for the purpose of raising cash to buy food in case of shortages. In both altitudinal zones some households also used wild plants for food, especially a crop plant known locally as *shiferaw* (M. stenopetala). In the lowlands, 21% of the households had bought food, using the income from the sale of natural resources such as firewood, charcoal, construction wood, grass and *bole*.

### Conclusion

This study explored the different factors constraining livelihoods in rural Wolaita. It assessed the adaptation and diversification strategies of farm households and the relative contributions of different sources to their income. The findings show that Wolaita is not among those areas in Ethiopia that display a high potential for agricultural growth and technological change. On the contrary, the findings suggest rather strongly that Wolaita's agrarian conditions are more representative of continuity than change. High population density and diminishing farm size have induced some efforts at intensification and diversification, particularly in the highlands.

<sup>&</sup>lt;sup>5</sup> Drought resistant root crop that forms part of the staple food in the densely populated south and southwestern parts of Ethiopia.

These efforts, however, were severely constrained by lack of public investment in infrastructure to reduce the risks of rain-fed farming, and by institutional deficiencies pertaining to credit and input delivery. Rainfall variability was the principal vulnerability factor, both in the lowlands and the highlands, with the former being more severely affected. Wolaita has yet to see any public investment under the ADLI strategy.

In the lowlands, crop diversification and continuous cultivation were limited by physical factors. Crop losses were frequent in Wolaita in recent years due to erratic rainfall, pests and diseases. In both zones, the majority of the households in the sample faced food shortages for several months. Nearly all the households in the lowlands and more than two-thirds of those in the highlands depended on food assistance during these months. In order to meet current consumption needs, asset sales and using seeds and cash meant for production were very high, despite the food assistance. Such mechanisms for coping with seasonal food shortages have pushed households into perpetual food insecurity and poverty. The present system of land tenure discourages farmers from migrating to other areas to find employment, as it requires them to reside permanently in their village. This is a serious structural constraint in an area with a high population density, with major obstacles to intensification, and without growth in non-farm employment opportunities.

The provision of credit for small businesses and handicrafts can strengthen the coping endeavours of poor households, while simultaneously improving their asset retention capacity. As it is mostly the women who handle small businesses, improving access to credit may also enhance the status of women and promote household well-being and human resource development. The literature indicates that in cases where women have access to income, they spend more of it on food and health for their families, than men do with their income (FAO 1997; Kennedy and Oniang'o 1990).

# Acknowledgements

We are grateful to the Norwegian Agency for Development Cooperation (NORAD) for providing fund for the research and stipend for Ayele Tessema. We want to thank Dr Poul Wisborg, Dr Darley Kjosavik and Dr Tor Benjaminsen for their valuable comments and suggestions.

# References

- Abegaz, B. 2004. 'Escaping Ethiopia's poverty trap: the case for a second agrarian reform.' Journal of Modern African Studies 42 (3) 313-342.
- Adger, W. N. & K. Vincent 2005. 'Uncertainty in adaptive capacity.' C. R. Geoscience 337 (2005) 399-410.
- Adger, W. N., S. Huq, K. Brown, D. Conway & M. Hulme 2003. 'Adaptation to climate change in the developing world.' *Progress in Development studies* 3, 3 (2003) 179-195.
- Alderman, H., J.Hoddinott & B. Kinsey 2004. Long-term consequences of early childhood Malnutrition. Washington DC: International Food Policy Research Institute.
- ARD (Associates in Rural Development) 2004. Ethiopia Land Policy and Administration Assessment, Report submitted to USAID, Ethiopia, Addis Ababa.
- Carney, D. (ed.) 1998. *Sustainable rural livelihoods: what contributions can we make?* London: Department for International Development.
- Carswell, G. 2002. 'Livelihood diversification: increasing in importance or increasingly recognized? Evidence from Southern Ethiopia.' *Journal of International Development* 14 (2002) 789-804.
- Carter, M. R., P. D. Little, T. Mogues & W. Negatu 2004. Shocks, sensitivity and resilience: tracking the economic impacts of environmental disaster on assets in Ethiopia and Honduras. The World Bank and US Agency for International Development (USAID).
- Croppenstedt, A., M. Demeke & M. M. Meschi 2003. 'Technology adoption in the presence of constraints: the case of fertilizer demand in Ethiopia.' *Review of Development Economics* 7 (2003) 58-70.
- CSA (Central Statistical Authority) 2006. Statistical Abstract 2006, Addis Ababa.
- Cuffaro, N. 1997. 'Population growth and agriculture in poor countries: a review of theoretical issues and empirical evidence.' *World Development* 25 (7) 1151-1163.

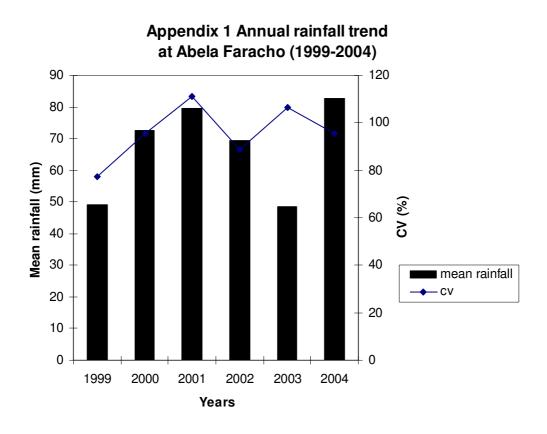
- Davies, S. and N. Hossain 1997. 'Livelihood adaptation, public action and civil society: a review of the literature.' *IDS working paper* No.57, Brighton: Institute of Development Studies.
- Demeke. M., F. Guta and T. Ferede 2006. 'Agricultural development and food security in Sub-Saharan Africa (SSA). Building a case for more public support: The Case of Ethiopia.' *Policy Assistance Series Working Paper* No. 02, FAO, Rome.
- Dercon, S. 2003. 'The microeconomics of poverty and inequality: the equity-efficiency tradeoffs revisited.' *Proceedings of the AFD-EUDN Conference*, 2003 'Poverty, Inequality and Growth.' Paris: Agence Française de Dévelopment.
- \_\_\_\_\_ 2004. 'Growth and shocks: evidence from Ethiopia.' *Journal of Development Economics* 74 (2004) 309-329.
- \_\_\_\_\_ 2005a. 'Vulnerability: a micro perspective.' Paper presented at the ABCDE Europe Conference, Amsterdam, May 2005.
- \_\_\_\_\_ 2005b. 'Risk, poverty and vulnerability in Africa.' *Journal of African Economies* 14 (4) 483-488.
- Dercon, S., J. Hoddinott & T. Woldehanna 2005. 'Shocks and consumption in 15 Ethiopian Villages, 1999-2004.' *Journal of African Economies* 14 (4) 559-585.
- Devereux, S., A. Teshome & R. Sabates-Wheeler 2005. 'Too much inequality or too little? Inequality and stagnation in Ethiopian agriculture.' *IDS Bulletin* 36 (2) 121-126.
- Devereux, S., R. Sabates-Wheeler, M. Tefera & H. Taye 2006. 'Trends in PSNP transfers within targeted households.' Final report, IDS and Indak International, Sussex and Addis Ababa.
- Devereux, S. & K. Sharp 2006. 'Trends in poverty and destitution in Wollo, Ethiopia.' Journal of Development Studies 42 (4) 592-610.
- Diao, X. & A. N. Pratt 2007. 'Growth options and poverty reduction in Ethiopia an economic-wide model analysis.' *Food Policy* 32 (2007) 205-228.
- Ellis, F. 2000. *Rural Livelihoods and Diversity in Developing Countries*. New York: Oxford University Press.
- \_\_\_\_\_ 1998. 'Household strategies and rural livelihood diversification.' *Journal of Development Studies* 35 (1) 1-38.
- EMA (Ethiopian Mapping Authority) 1988: National Atlas of Ethiopia.
- Eshete, D. 1995. 'Food shortage and household coping strategies by income groups: A case study of Wolaita district in southern Ethiopia.' In: D. Aredo and M. Demeke (eds.) *Proceedings of the Fourth Annual Conference on the Ethiopian*, 'Economy Ethiopian

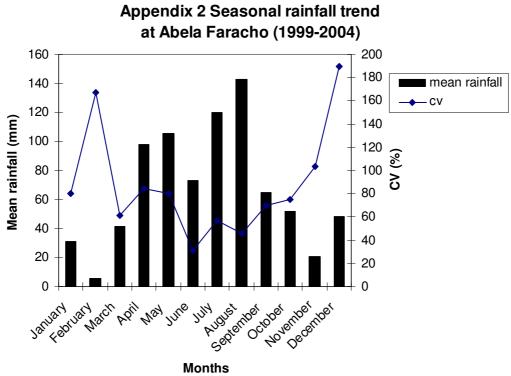
Agriculture: Problems of Transformation.' Addis Ababa University Printing Press: pp. 87-109.

- FAO-WFP 2007. Special Report. FAO/WFP Crop and food supply assessment mission to Ethiopia, 23 February.
- FAO 1997. Women's participation in national forest programmes, Rome 1997. \_\_\_\_\_1987. ICS-Data, Statistical Division, FAO, Rome.
- FEDD (Finance and Economic Development main Department) 2003. Socio-Economic Profile of Wolayta Zone, July 2003, Wolayta Soddo.
- Feleke, S. & T. Zegeye 2006. 'Adoption of improved maize varieties in Southern Ethiopia: Factors and strategy options.' *Food Policy* 31 (2006) 442-457.
- Hoddinott, J. and B. Kinsey 2001. 'Child growth in the time of drought.' Oxford Bulletin of Economics and Statistics, 63 (3) 409-36.
- Kennedy, E & R. Oniang'o 1990. 'Health and nutrition effects of sugarcane production in south-western Kenya.' *Food and Nutrition Bulletin* 12(4) 262-67.
- Lele, U. & S. W. Stone 1989. *Population Pressure, the Environment, and Agricultural Intensification: Variations on the Boserup Hypothesis.* MADIA Discussion Paper 4, Washington, D. C., the World Bank.
- Little, P. D., M. P. Stone, T. Mogues, A. P. Castro & W. Negatu 2006. "Moving in place': drought and poverty dynamics in South Wollo, Ethiopia.' *Journal of Development Studies* 42 (2) 200-225.
- Milas, S. and K. El Aynaoui 2004. Four Ethiopias: A Regional characterization. Assessing Ethiopia's Growth Potential and Development Obstacles. World Bank, 2004.
- MoARD (Ministry of Agriculture and Rural Development) 2004. Safety Net Program Implementation Programme (in *Amharic*), Ministry of Agriculture and Rural development, August 2004, Addis Ababa.
- MoFED (Ministry of Finance and Economic Development) 2002. Ethiopia: Sustainable Development and Poverty Reduction Program (SDPRP): Addis Ababa, July 2002.
- \_\_\_\_\_ 2006: Ethiopia: Building on Progress. A Plan for Accelerated and Sustained Development to End Poverty (PASDEP): Addis Ababa, September 2006.
- Morduch, J. 1995. 'Income smoothing and consumption smoothing.' *Journal of Economic Perspectives* 9 (3) 103-114.
- Mortimore, M. J. & W. M. Adams 2001. 'Farmer adaptation, change and 'crisis' in the Sahel.' *Global Environmental Change* 11 (2001) 49-57.

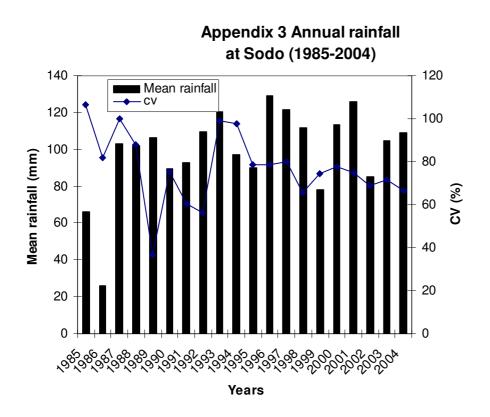
- Nega, B., B. Adenew & S. Gebre Sellasie 2003. 'Current land policy issues in Ethiopia.' In *land reform 2003/3 special edition*: World Bank/FAO.
- Negash, A. and A. Niehof 2004. 'The significance of enset culture and biodiversity for rural household food and livelihood security in south-western Ethiopia.' *Agriculture and Human Values* 21 (1) 61-71.
- Pender, J., F. Place and S. Ehui (eds.) 2006. Strategies for Sustainable Land Management in the East African Highlands. Washington, D. C, International Food Policy Research Institute.
- Rahmato, D. 2004. 'Searching for tenure security? The land system and new policy initiatives in Ethiopia.' *FSS Discussion Paper* No. 12. Forum for Social Studies, Addis Ababa.
- Reardon, T., E. Crawford & V. Kelly 1994. 'Links between nonfarm income and farm investment in African households: adding the capital market perspective.' *American Journal of Agricultural Economics* 76 (1994) 1172-1176.
- Scoones, I. 1998. 'Sustainable Rural Livelihoods: A framework for analysis.' *IDS Working Paper* 72, June 1998.
- Shanmugaratnam, N. 2008. 'The Dynamics of Livelihoods in a War Zone: Mapping Socio-Economic Change in Eastern Sri Lanka.' In *Between War and Peace in Sudan and Sri Lanka*. N. Shanmugaratnam (ed.) Oxford: James Currey: 117-148.
- Sharp, K., T. Brown & A. Teshome 2006. Targeting Ethiopia's Productivity Safety Net Programme (PSNP).
- Slater, R., S. Ashley, M. Tefera, M. Buta & D. Esubalew 2006. Ethiopia Productivity Safety Net Programme (PSNP): PSNP Policy, Programme and Institutional Linkages. Final report.
- SNNPRS (Southern Nations, Nationalities and Peoples State) 2004: Proclamation to Define Rural Land Administration and Use in SNNPRS (in Amharic), Final Draft, Awassa.
- Vogel, C. 2005. 'Seven fat years and seven lean years? Climate change and agriculture in Africa.' *IDS Bulletin* 36 (2) 30-35.
- Yamin, F., A. Rahman and S. Huq 2005. 'Vulnerability, adaptation and climate disasters: a conceptual overview.' *IDS Bulletin* 36(2) 1-14.
- World Bank 2007: Ethiopia: Accelerating Equitable Growth Country Economic Memorandum, Part I: Overview, Report No. 38662-ET.

# Appendices

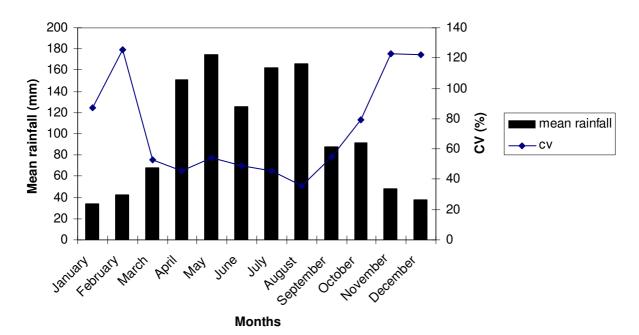




Months



Appendix 4 Seasonal rainfall trend at Sodo (1985-2004)



# Paper II

# **Risk sharing, ceremonies and livelihoods: Funeral and wedding costs in Wolaita, Ethiopia**

#### Ayele Tessema

Department of International Environment and Development Studies, Noragric Norwegian University of Life Sciences, UMB P.O. Box 5003, N-1432 Ås Norway

Home institution: Department of Agricultural Resource Economics and Management Hawassa University P. O. Box 5 Hawassa, Ethiopia E-mail: ayeletessemaj@yahoo.com

#### Abstract

This paper assesses the effect of funeral and wedding costs on livelihoods and the significance of assistance from risk sharing networks in rural Wolaita, Ethiopia. Individual and focus groups and key informants were used to gather data. The study finds that both funeral and wedding costs were very high, causing household food shortages and asset depletion. Households were found to make extensive use of their food reserves, valuable assets, savings and future incomes, in order to finance the ceremonies. Key factors influencing household spending on ceremonies were investment in social relations, the desire to maintain or enhance household image, social pressure, competition with other households, and the anticipation of receiving generous gifts. Good social relations were sought in order to secure support and cooperation in livelihood endeavours, and also in cases of accidents and property losses. Participation in risk sharing arrangements, such as burial societies or *iddirs*, and respect for social norms were highly regarded. Despite the evident importance in coping with risks, the exchange of gifts was considered to be burdensome, due to the expected increased value of reciprocity, under conditions of economic stress.

Key words: funeral and wedding costs, risk sharing, vulnerability, livelihoods, Wolaita, Ethiopia

#### Introduction

In Wolaita, funeral and wedding ceremonies are important social events and, are therefore well attended. Marriage is a major means of creating and cementing social relationships in the zone (Dea 1998; Rahmato 1992). Holding a wedding for one's offspring is an important occasion in the life cycle of a household and large numbers of people are invited to the ceremony for a feast. Similarly, funeral attendance is high as it is customary to attend burials and pay repeated visits to the grieving households to show sympathy. The mourning period lasts for several days, during which guests are provided with food and other services. It is common practice for people to take time and sit with the mourning household more than once. Likewise, people are expected to express their happiness in person when marriage takes place in a household that is connected with them in some ways. Such public displays of concern and solidarity with others generate respect and recognition from community members. Furthermore, these occasions present occasions to create links and obtain information. By participating in such occasions, individuals and households not only ensure similar support for themselves in the future, but also build their image in the eyes of the community. This enables them to obtain other services such as loans, labour support, draught power, agricultural land or emergency support in the event of unexpected loss (Rahmato 1992). Nevertheless, funeral and wedding ceremonies involve costs, and there is lack of information on the extent and the effects of these costs on household livelihoods.

Several studies have reported high expenditures for funerals in eastern and southern Africa (Dercon et al. 2006; Bold 2003; Cohen and Sebstad 2003; Coetzee and Cross 2002; Roth 2002), and for weddings and festivals elsewhere (Rao 2001a, 2001b; Werbner 1990; Bloch, Rao and Desai 2004). Most of these studies focus on the value of these social events in advancing informal networks, in view of coping with risks and poverty (Rao 2001a, 2001b). However, issues regarding the impact of the costs of such events on subsequent household livelihoods, the extent of the contribution of informal networks in covering the costs, and local perceptions on risk sharing arrangements, have attracted less attention from researchers.

This study examines the above-mentioned issues in connection with funeral and wedding costs in rural Wolaita. The paper is organised as follows. First, a review of theory and empirical evidence on informal risk sharing arrangements, with particular reference to funeral

and wedding costs is presented. After a short overview of the research methods that was employed, the findings are presented, first in terms of funeral costs and then for wedding costs. The last section concludes by highlighting the major issues highlighted by the findings.

#### Risk and informal risk sharing networks in developing countries

Households in rural areas of low-income countries face various risks and shocks in the form of crop loss due to bad weather, pests and diseases; loss of human life and livestock; and accidental loss of property due to fire, flooding, robbery and other causes. In the face of such risks and in the absence of formal insurance and credit, households respond by engaging in various coping mechanisms that include self-insurance and informal risk sharing arrangements (Alderman and Paxson 1992; Morduch 1995; Townsend 1994, 1995; Dercon 2002). Risks and shocks can be covariant, affecting the whole population of an area, or specific to individual households, in which case they are known as idiosyncratic shocks. Risk sharing and resource pooling occur for idiosyncratic shocks, but such arrangements provide only partial or limited protection (Townsend 1994, 1995; Udry 1994; Grimard 1997; Dercon 2002).

The amount of support received depends on the extent of the social connections one has established in the society. Landless and small farmers, who unfortunately are more vulnerable to risk, are found to get less informal support because they are less connected (Townsend 1994). Empirical evidence shows that the exchange of gifts and informal credit are important means of risk sharing, and that rural households often use these mechanisms to smooth their consumption requirements (Townsend 1994; Platteau and Abraham 1987; Fafchamps 1998; Udry 1994; Fafchamps and Lund 2003). Risk sharing usually occurs among members of extended families, some ethnic groups, neighbourhood members or religious groups (Alderman and Paxson 1992; Bloch, Genicot and Ray 2007). But it can also be formed based on work place, occupation, region of hailing, friendship and gender. Some writers attach importance to family transfers in smoothing consumption and the significance of family and kinship relations to bond members against risk (Rosenzweig 1988; Rosenzweig and Stark 1989; Foster and Rosenzweig 2001).

Most researchers agree that risk sharing is based on self-interest and voluntary participation. Assistance is given in anticipation of receiving support in the future (Thomas and Worrall 2002; Coate and Ravallion 1993). Accordingly, reciprocal exchange is a key feature of risk sharing; and bounded size, individual and social relationships, and geographical proximity are central for its stability (Coate and Ravallion 1993; Genicot and Ray 2003; Fafchamps 1998). Reciprocity is enforced by social norms, fear of exclusion and the desire to maintain relationships (Thomas and Worrall 2002; Dercon et al. 2006; Bloch et al. 2007; Fafchamps 1998). As a result, some argue that it is not entirely voluntary. Failure to reciprocate is punished by loss of future assistance and cooperation. The extent of the punishment could potentially be stronger, as more people would avoid dealing with the defector based on the information passing around about his/her (the defector's) misbehaviour (Bloch et al. 2007). However, as much as social norms discourage defection, they are not rigid. Repayment of a loan is often flexible and can be brought forward or extended, depending on the economic circumstances of both the borrower and the lender (Fafchamps 1998; Udry 1994). Furthermore, no explicit link is made between the kind of assistance or gift given and the way it is paid back (Fafchamps 1998). For example, one can repay the use of a pair of oxen obtained from a neighbour by participating in any work party that the neighbour may call in the future.

Several studies have reported the importance of organised, informal, risk sharing groups for conducting funerals in Ethiopia (Dercon et al. 2006; Hoddinot, Dercon and Krishnan 2005; Bold 2003; Mariam 2003; Pankhurst and Mariam 2000), East Africa (Cohen and Sebstad 2002; Dercon et al. 2006) and South Africa (Coetzee and Cross 2002; Roth 2002). The formation of burial groups or *iddirs*, as they are called in Amharic in Ethiopia, is motivated by very high funeral costs (Dercon et al. 2006). For example, Bold (2003) found that funeral expenses varied between 500 Birr and 1000 Birr, reaching 5000 Birr for better-off households, in a country where the average monthly income was 120 Birr.

*Iddirs* can be formed based on place of residence and other socio-economic and cultural identities. Membership to a locality-based *iddir* is open to all residents. Such a group is called the principal *iddir* (*tiliqu* (the big) or *enat* (mother) *iddir* in Amharic). People can at the same time belong to other smaller groups, based on family, religion, social class, region of hailing, ethnicity, gender, work place, etc. Even though membership is basically voluntary, non-membership of an *iddir* is regarded as strange and irresponsible, because death and other problems can occur anytime to anybody, and no one is able to handle them alone (Pankhurst and Mariam 2000). *Iddirs* maintain documents on their activities and their functions are guided by clearly defined rules and regulations. Most *iddirs* collect regular contributions from

members while others collect contributions upon the death of a member or his/her family member (Mariam 2003). *Iddirs* provide payouts upon the death of members or their family members based on specific bylaws. They also provide labour service, logistics and organisational support during funeral ceremonies and on other occasions.

Members are expected to pay their contributions and perform other assignments. Compliance with the expected obligations associated with belonging to an *iddir* is enforced by social norms and failure to meet an obligation is strictly punishable by cash fines, work assignments, or expulsion from the *iddir* for repeated offences (Dercon et al. 2006). Membership of *iddirs* is high. Hoddinot et al. (2005) found that 90% of the households belonged to *iddirs* and that some belonged to more than one *iddir* simultaneously in order to increase coverage, as none of the groups offered full coverage (see also Dercon et al 2006). Such membership is in addition to a large network of ties with relatives, friends, neighbourhood members and others. In Kenya, Uganda and Tanzania, payouts from the burial societies were insufficient to cover funeral costs (Cohen and Sebstad 2002) and in South Africa households spent 15 times their monthly income on funeral expenses (Roth 2002). According to Roth (2002), households used all their savings, sold assets and used credit to cover funeral costs very expensive in these countries is the fact that funeral ceremonies involve the provision of food and other services to guests who continue to visit the mourning household for an extended period of time.

Literature is not available on wedding expenses and the social importance attached to wedding ceremonies in Ethiopia. However, there are interesting observations on the subject in India, Pakistan and elsewhere (Rao 2001a, 2001b; Bloch et al 2004; Werbner 1990), some of which are relevant to conditions in Ethiopia. Expenses for a daughters marriage and village festivals are very high both in India and Pakistan. Households spend about 7 times their annual income on a daughter's marriage and 15% on village festivals in south India (Rao 2001a, 2001b). Wedding parties are lavish to which large numbers of people are invited, and they last several days (Rao 2001a; Bloch et al 2004; Werbner 1990). To finance the ceremonies households may enter into debt at very high interest rates, which may ultimately force them into destitution and bonded labour (Bloch et al 2004). The rationale for such behaviour is based on the desire to strengthen the capacity to cope with risk and poverty by building and maintaining social relations and networks (Rao 2001a). Hence, households prepare expensive wedding ceremonies and festivals in order to build their reputation and

enhance their status in the community (Rao 2001b; Bloch et al 2004; Werbner 1990). Observing social norms and customs is important in promoting a household's image, and decisions are taken in view of what others will say and how the household will be viewed by others (Bloch et al 2004; Rao 2001b).

#### Methods

The study was conducted in four *Kebele* administrations in the Wolaita zone, namely the Abela Faracho, Abela Longena, Wareza Gerera and Shiamba Kilina *kebele* administrations. Data was collected from three different sources in each location. First, focus groups were used to obtain local perceptions on informal risk sharing arrangements and the norms that govern them. Elders, community leaders and long-term members of *iddirs* were included in the focus groups. Second, households who had lost members through death and those who had recently held weddings for their children were interviewed. This included eight individual interviews on funerals and eight individual interviews on weddings. The objectives of the individual interviews were: (a) to assess the extent of the expenditure involved and the effect on the livelihoods of the respective households, (b) to assess the relative contributions of own resources and informal risk sharing arrangements from those who had recently benefited from them directly.

The third method was that 40 household heads, 20 in the lowlands and 20 in the highlands, were interviewed on issues relating to the cost of participation in informal risk sharing arrangements, social expectations, and how households manage to cover funeral and wedding expenses. The household heads were selected based on their knowledge of local conditions and active social participation in their respective communities, as recommended by their communities. Some issues were repeatedly treated in more than one data collection method, for the purpose of counter-checking and to get clarification on the issue(s). Information on how *iddirs* or burial societies function was collected from *iddir* leaders.

#### **Funeral expenses in Wolaita**

Funeral expenses comprise burial costs (costs of coffin, burial cloth, officiating and others) and the cost of providing food, coffee and other services to a large number of guests for 15 to 30 days. The resources used to cover the expenses usually come from three different sources,

namely, burial societies or *iddirs*, material and cash gifts by relatives and friends, and own resources.

*Iddirs* are widespread in Wolaita and have basically similar objectives and functions as their counterparts in other parts of the country (see Dercon et al 2006; Hoddinot et al 2005; Mariam 2003; Bold 2003; Pankhurst and Mariam 2000). However, *iddirs* in the study area do not collect contributions from members on a regular basis. Some of them tend to focus more on handling burial activities and managing guests. Because *iddirs* do not collect contributions on a regular basis, they cannot provide direct cash payouts to members when death occurs, but instead provide short-term loans from their cash reserves. These are used for burial and other expenses until contributions are collected from members based on specific bylaws. The request for a loan for burial expenses is considered in the light of the economic condition of a member. A member has the right to borrow an amount at least equivalent to the cash that he/she is entitled to receive according to the bylaw. In some *iddirs*, members contribute coffee and other consumables instead of cash.

In general, iddirs in the area seem to focus more on the provision of logistics, food and labour services, rather than providing cash payouts. They handle burials, accommodate guests, provide food, utilities and labour services for at least 3-4 days. Following the report of a death in a family, a tent, benches, cooking utensils, plates, cups and other utilities are taken to the deceased's home. During this time different groups of members are assigned on a rotational basis, to provide different services such as fetching water and firewood, cooking, cleaning and serving the guests. During the same period each day, other members are assigned to bring prepared meals to be served to the guests and the mourning household at lunch and dinner times. *Iddirs* also offer labour services to the mourning household depending on its priority of needs at that particular time. If the dwelling place of the mourning household is not in good condition and needs maintenance, members are requested to fetch wood, grass for thatching and other materials and help to rebuild it. If fencing or preparing the land or sowing or weeding or harvesting is required, members are requested to do that work. In certain cases *iddirs* mediate the distribution of the properties of the deceased among the inheritors.

Besides handling burial matters, which is their primary function, *iddirs* also provide other services to members at other times when they are in need of support. Most *iddirs* provide loans for medical treatment, transport the sick to health services, provide support by asking

members to contribute in cases of major accidents such as livestock loss, fire and flooding; and lend utilities during wedding and other celebrations. If a member loses his/her home due to fire, *iddir* members bring construction wood and thatching grass and rebuild it. If robbery takes place, *iddirs* help in investigating the crime. *Iddirs* also mediate conflicts and help to safeguard law and order.

Coming back to funeral expenses, the assistance provided by *iddirs* is not adequate to cover all the costs, as it is limited in time and in kind. *Iddirs* provide assistance for a limited number of days, while the mourning period may last 15-30 days, during which time food and other services continue to be offered to the guests. These costs have to be covered using gifts from relatives and friends, and most importantly, from the family's own stores and resources. It is customary for relatives and friends to offer gifts of grain crops and cash to mourning households. In particular, near relatives are expected to provide gifts of 50 to100 kilograms of maize as well as 10 to 15 Birr. They go to the mourning household with the gift of maize on donkey backs, accompanied by their neighbours. If they do not have ready money or maize in store at the time, they have to borrow money from moneylenders or sell domestic animals to meet the expectation.

As Table 1 shows, gifts from relatives and friends make an important contribution in covering funeral expenses. This was widely acknowledged in focus group discussions; however, it was also noted that the practice of offering gifts during funerals puts pressure on household livelihoods, as death occurs unexpectedly and households are often short on resources. In such situations households sell assets or borrow in cash or in kind to offer gifts to the mourning household. Those households who have benefited by receiving gifts, have to reciprocate when other households experience a similar need. Out of the 40 household heads who were asked to divulge their annual expenses in the form of cash gifts to mourning households, 85% said they spend more than 200 Birr.

Despite the assistance from *iddirs* and relatives and friends, the expenditure of mourning households on funeral ceremonies remains very high (Table 1). Household food stores are used to feed the guests and are also sold to cover costs. The amount of food reserves that each household used for such a ceremony, about 7 quintals on average, was very high compared to the average annual grain crop production of 11 quintals for the study area during the same period. In addition, savings were used, domestic animals sold and large sums of money

borrowed to raise the cash needed to cover the expenses (Appendices 1-4). Nearly all the households that were interviewed said they ended up with food shortages and economic problems after having funeral ceremonies.

Table 1 shows the total expenses, as well as the relative contributions of *iddirs*, relatives and friends, and own resources to funeral expenditure for 8 households who recently had funeral ceremonies. Some of the services provided by the *iddirs*, such as logistics and labour services, were difficult to assign a value to, and are therefore not accounted for, thereby underestimating the actual contribution of *iddirs* to funeral expenses. On average, about 60% of funeral expenses are covered from the resources of the mourning households themselves, while *iddirs* and relatives and friends contributed about 20% each. Total funeral expenses varied from 578 Birr to 7279 Birr for the sample households. Average expenditure was 4069 Birr, which is high compared to the average annual household income of 2163 Birr for the study area during the same period. While the majority of the households rated the support received from their corresponding *iddirs* as most crucial in covering funeral costs, analysis of the overall expenses shows that the greatest part of the cost was borne by the households themselves, tomeselves, confirming the proposition that support by risk sharing arrangements is limited or partial (Townsend 1994; Udry 1994; Girmard 1997; Dercon 2002).

		Who covere	Total		
Head of	Relation to		expense		
household	the	Iddir	and friends	Self	(Birr)
	deceased				
Kidane B.	Daughter	1150	675	598	2423
Milkyas K.	Daughter	827	1435	1985	4247
Ayele O.	Son	1229	385	1198	2812
Bassa J.	Son	384	920	2858	4162
Merkin M.	Father	370	1600	4328	6298
Garedew T.	Father	476	700	6103	7279
Feltessa B.	Wife	430	575	3755	4760
Asnakech T.	Daughter	(suspended)	120	458	578
Average contribution		695*	801	2660	4069
Percent contribution		20*	20	60	100

Table 1 Contributions to cover funeral expenses by source of origin

\* Excludes the last household which was suspended from the *iddir* and therefore did not receive support

One other interesting aspect of funeral ceremonies in Wolaita is that all activities are halted in the locality during a mourning period. This is normally three days if the deceased is a female and four days if a male. For the family of the deceased and close relatives and friends, the period of mourning may last up to 30 days. People make repeated visits, spending long hours with the mourning household, with the objective of consoling them. But the practice affects farm and other activities of households, and the effect becomes even more damaging economically if the event coincides with a peak production period such as sowing or harvesting. More than 77% of the households interviewed said that they spent more than 30 working days in a year attending funeral ceremonies. The proportion of households that rated the financial, material and production time lost to them in attending funeral ceremonies as very high, was 92.5%.

#### Local views on *iddirs* and the need for social cooperation

Participants in focus groups and households who had recently held funeral ceremonies said that *iddirs* are essential and difficult to do without. This is because death happens unexpectedly and individual households lack adequate resources to handle burial ceremonies by themselves. Funeral costs are high mainly because of the need to provide food and other services to large number of guests who visit the mourning household for a number of days. On such occasions, households often lack money that is needed immediately for burial expenses, food for guests and the different utilities required to manage the situation. *Iddirs* assist members in these matters and also provide assistance when they face other unexpected losses and accidents. As a result, the *iddir* is regarded as a source of security and insurance in the society. *Iddirs* also serve as a medium where people meet and get to know each other better. Consequently, new residents and newly married people are often advised by community members to apply and become *iddir* members as soon as possible.

Focus group discussions also showed that individuals and households are expected to act and behave in certain ways in the community. It was pointed out that it is important to provide support when other people need it, pay visits and express sympathy to mourning households or households who have lost properties due to accidents, participate in risk sharing arrangements, and reciprocate gifts and favours. Furthermore, in order to obtain assistance from others, one has to be supportive of others. Not showing sympathy, not offering support when other people need it, non-participation in social affairs, and failure to reciprocate are viewed as odd, abnormal and harsh by the local community. If a person does not cooperate with others in the community, neighbours, friends and others note it, talk about it, and try to help the person so to fit into social life. He will be advised by elders about the importance of cooperating with others and the need to respect social values and obligations. The respondents

said that if, in spite of advice, a person continues to fail to cooperate, he would be isolated; people will no longer involve him in their further dealings. He will not be provided with any support if he encounters problems. Such a person is regarded as socially unfit, irresponsible, and regarded with disrespect. He is not taken seriously and is seen as being devoid of the capacity to carry out social responsibilities. Nevertheless, if death occurs in his household, local people will participate in the burial, as it is a social and religious norm to do so.

#### Wedding expenses in Wolaita

Wedding costs comprise the costs of providing food and drinks to invited guests, as well as expenses incurred in buying new clothes and jewellery for the bride. The expenses also include the cost of establishing the couple. It is customary to invite a large number of people to a wedding party. Relatives, friends, neighbours and other people that are important in some way to the concerned household, are all invited to the wedding party. Following the wedding and depending on their economic situation, parents have the responsibility of establishing the newly married couple by providing them with a new home, household and kitchen goods, an ox or oxen, other livestock and agricultural land (by means of sharing from their holding).

Table 2 shows the costs for eight weddings and the effect of the expenditure on the livelihoods of the households concerned, as reported by the households themselves (see also Appendices 5-8). The average wedding expenditure was 4853 Birr, which is more than double the average annual income of 2163 Birr for farm households in the area during the same period. In Table 2, the expenses are divided into three categories. The first group comprises expenses incurred by the households in providing food and drinks for the feasts on the wedding days, as well as on minor feasts thereafter. The second group refers to expenditure incurred on clothes and ornaments mainly for bride, while the third group represents the cost of establishing the new couple. The third group of cost items represents an investment in the couple and accounted for 20% of the total wedding costs. This is in contrast to the first two cost items that were spent on consumables (food, drinks, and cloth), which accounted for 80% of the total costs. This might appear to be a loss from the economics point of view. However, again it is important to note that wedding ceremonies are often used to enhance a household's image and strengthen its relations with other households and individuals, in order to advance livelihood endeavours. Moreover, there is competition within the society, and one has to pay attention to social norms, previous practices and expectations. This is indicated by some of the reasons given by households in response to the question as to why they held wedding ceremonies that were costly to them, for example: 'I wanted to keep my good name', 'because that is what people expect of me', and 'I do not want to act against social norms'.

All the households that were interviewed used all the means available to them to finance the wedding ceremonies (Appendices 5-8). Food stores were used for food preparation for the feasts, as well as being sold to raise cash that was needed for other expenses. On the average, households used more than 6 quintals of grain crops for food preparation for the feasts alone. This is more than half the average annual household production in the area during the same period. Besides this consumption, households used their savings and sold valuable assets.

	Relationship	Number	Exp	enses incurre	ed (Birr)	Total	Cash gif	t from guests	
Head of	to person	of people	Food &	Cloth &	Investment	costs		Percent to	Effects on livelihoods
household	married	invited	others	others	in couples	(Birr)	Birr	total cost	
									Not severe because of cash
Yelota A.	son	1000	5360	12970	27000	45330	17000	38	support from abroad.
Chelba C.	Son	500	3985	1500	550	6035	3100	51	Facing food shortage; children taken out of school; problem of draugh power.
Eyasu M.	Own marriage	1000	3498	2640	1750	7888	3400	43	Facing food shortage; small business bankrupt; shortage of farmland.
Burko S.	Son	1000	2853	1800	3480	8133	960	12	Facing critical food shortage; shortage of farmland and draught power.
Jorge M.	Daughter	1000	810	300	300	1410	200	14	Facing critical food shortage; problem of draught power; debt repayment problem.
Toma C.	Daughter	1000	2937	1400	0	4337	270	6	Facing critical food shortage; problem of draught power; debt repayment problem.
Belaynesh E.	Son	600	2079	1110	700	3889	300	8	Critical food shortage; problem of debt repaymen and no milk cow.
Bekele B.	Son	800	1240	980	60	2280	1380	61	Facing food shortage: problem of draught power debt repayment problem.
Average Total by exp	enditure categor	842 y	2486 3	1390 876	977 977	4853	1373	28	
Percent of of investment	conspicuous cons	sumption to		80	20	100	-		

Table 2 Summary of wedding costs for 8 households and their effects

NB. The first household was excluded from the computation as it received a large remittance from abroad which enabled it to cover the costs without significantly affecting its resources.

Domestic animals, including oxen, were sold or slaughtered and loans were taken both in cash and in kind, at high interest rates. Some households rented out agricultural land in order to raise cash for wedding expenses. All the households noted that, as a result of the costs of the ceremonies, their livelihoods were adversely affected. Seven out of the eight households claimed that they faced serious food shortages immediately after the event because they used all their food stores for the wedding feasts. Most feared that their living conditions would deteriorate because they had sold or slaughtered their oxen, or rented out part or all of their holdings, which would greatly reduce their productive activities. One household withdrew its children from school because it could no longer afford to buy exercise books, pens and pencils for them.

Information obtained in the focus groups confirms the above conclusion that most households who hold wedding ceremonies generally face food shortages following the event. There was full agreement in the focus group discussions that people in the area generally spend excessively and beyond their means on weddings. Several reasons were given for this phenomenon. Firstly, there is competition with other households, and a feeling that one has to match what others have done before, even if it means selling and using the scarce vital assets one possesses, or borrowing money at high interest rates. This is called keman anishe in Amharic, which literally means 'I am not inferior to others' (by not doing something). Secondly, households want to maintain and improve their image in the society. The question 'what would other people say about me if I do not do what people expect me to do', called *yilugnita* in Amharic, is important. Thirdly, in a close-knit community where most people know each other, and are related or connected in some way, it is difficult and socially detrimental to invite certain people and exclude others from a wedding party. Being left out could be interpreted in future dealings as being unwanted or unimportant. It could be taken as an offending gesture, in a similar way to when an invited person does not appear at the occasion, on grounds that are unsatisfactory. A fourth reason for inviting large numbers of people is that there is strong social pressure on parents, that forces them to hold large and expensive wedding feasts. Relatives and friends influence the decision on whom to invite, and the scale and content of the feasts. Fifthly, there is the expectation of receiving generous amounts of cash gifts from guests, as pointed out by households who held weddings, hence large numbers of guests are usually invited to wedding parties (Table 2).

Moreover, households want to create, reinforce and widen their relations with community members by inviting as many of them as possible to the feasts. Similar behaviour was observed by researchers in India, Pakistan and West Africa (Rao 2001a, 2001b; Werbner

1990; Bloch et al 2004). The more social connections one has built, the more support one may expect or claim in case of accidents and other problems, and conversely (Townsend 1994).

All the above reasons show that multiple considerations compel households in the study area to spend extensively for their children's weddings. Most of the reasons for holding expensive weddings, however, amount to the desire of the households to invest in social relations. This practice is believed to be essential for obtaining support and cooperation from others in their day to day livelihood activities, or in cases of accidents or property losses. It is difficult to actually quantify the potential benefits that the households might obtain by investing in social relations. The benefits may come in different forms under different circumstances and over time (Table 3).

Costs	Expected benefits			
Include:	Having good social relations helps to marshal			
• food crops, livestock and savings	support and cooperation from others:			
used for the feasts	• to access vital resources essential to attain			
• food crops and livestock sold, and	livelihood goals, such as labour,			
agricultural land rented out to raise	agricultural implements, draught power,			
cash to cover expenses	seeds, credit, guarantor/backer, grazing			
• loans taken in cash and kind	land, etc.			
Resulting in	• to obtain labour and other support in case			
• food shortages	of failed health or loss of key working			
• depletion of household resources	members			
• poverty	• to obtain support in case of accidents and			
	unexpected property losses due to fire,			
	flooding, livestock deaths, etc.			

Table 3 Costs and benefits of investment in social relations by means of wedding ceremonies

Gift exchange is an accepted norm in Wolaita. When inviting a person to a wedding party, it is customary to specifically mention the type or value of gift an invitee is expected to bring with him or her. The extent of the gift depends on many factors, such as the degree of closeness of the relationship between the host and the guest, the economic position of the guest, and the value and type of gift the host has given to the guest in the past. Gifts can be in cash, household goods, cultural or other types of clothes, but most hosts prefer to receive cash gifts.

Table 2 shows the extent of cash gifts that households received at the wedding ceremonies they held recently, in relation to the total wedding costs they incurred. On average, households received 1373 Birr in the form of cash gifts, for the average wedding expenditure of 4853 Birr. Seven out of the eight households were of the opinion that the gifts they received were very small compared to their overall costs. This is surprising given that they retrieved on average about 28 percent of the total costs they had incurred (Table 2). For some individual households the extent of cash gifts they obtained from guests was significant compared to the total expenses they incurred (for example, 61% and 51% of costs incurred). The overall dissatisfaction at the amount of cash gifts received reflects the fact mentioned above that households expected large amounts of income by way of gifts, which was one of the reasons that prompted them to prepare expensive wedding celebrations. This implies that a wedding feast is used as another kind of 'investment' from which households expect some 'quick return' in addition to the long-term returns mentioned above. Most of the individual interviewees used the term keserku, (the Amharic term for 'I lost') in explaining the overall outcome of the wedding ceremony they had held, indicating that they received far less in terms of cash gifts than they had anticipated.

In general, gift exchange was viewed as a burden both by the households who held weddings for their children, as well as by the participants in the focus groups. The reason given was that the practice put pressure both on the recipients (because they are expected to reciprocate in the foreseeable future) and the givers. An invitation to a wedding party may come at a time when households are short of cash, a state in which nearly all households find themselves almost throughout the year. More importantly, in Wolaita, gifts are reciprocated by increasing or doubling the original cash amount received. Participants in the focus groups considered that giving cash, grain or other gifts has become like lending. It is expected to provide a return with interest. In the words of one participant: 'giving or receiving gifts of money or grain during weddings and burials is another type of business now'. They said that the practice forces households to sell food crops or livestock, or to commit themselves to debt.

It was agreed that as much as giving gifts to others puts pressure on households, gift exchange was found to be helpful for households in covering or recouping some of the funeral and wedding costs (Table 2). There is no doubt about the importance of gift sharing in coping with risks. However, the fact that it is expected that gifts should be reciprocated with

increased value, and that gifts are given in an environment in which households are mostly short of resources, could be some of the reasons for viewing gift exchange as a burden in Wolaita. It is clear that not only does gift exchange help to cope with risks and vulnerability, but it may also increase susceptibility to such risks.

#### Conclusion

This study assessed funeral and wedding costs and their effects on household livelihoods in rural Wolaita. The significance of assistance provided by informal networks for funeral and wedding ceremonies, and local views on informal risk sharing arrangements were analysed. The study found that both funeral and wedding costs were very high, leading to household food shortages and asset depletion. Savings, food reserves, vital assets, and future incomes were widely used to fund such ceremonies. Nearly all households that held wedding or funeral ceremonies reported facing food shortages immediately after the events. Moreover, households were left with heavy debts to settle and, especially in the case of households who held wedding ceremonies, production activities were constrained because oxen were either slaughtered or sold, and agricultural land was rented out or shared with the newly married couple. Wedding costs were particularly very high as more resources were spent on feasts, clothes and jewellery for the bride, as well as for the establishment of the couple.

The main reasons why households spent expensively included investment in social relations, the desire to maintain and improve household image, social pressure, competition with other households, and the anticipation of receiving generous gifts. Establishing good social relations helps to marshal support and cooperation from others in the various livelihood activities of the households, such as accessing labour, draught power, agricultural implements, seed, credit, grazing land, and also support in case of accidents or property losses.

*Iddirs* or burial societies are much appreciated because of the various services they provide to their members during funerals and at other times. Nevertheless, despite the assistance from *iddirs* and relatives, the costs of funeral ceremonies have a crippling effect on the livelihood of the mourning household. This is because food and other services are provided to large numbers of guests who continue to visit the mourning households for an extended period of time to express their sympathy and consolation. Even though gift exchange is widely

practised, it is considered burdensome by most households because of the expectation to reciprocate in terms of increased value, together with the fact that households live under conditions of constant economic strain, which makes it difficult for them to reciprocate.

This study has shown that it is mainly the desire to create and strengthen social relations with the view of coping with risks and livelihood vulnerability that pushes households to spend extensively on wedding and funeral ceremonies, with resulting unfavourable effects on their food supply. The findings imply the need for public policy attention to support the livelihood endeavours of rural households. This includes providing basic training in different skills, increasing access to credit services, expanding opportunities, as well as developing basic infrastructure, especially health and education facilities, roads and access to water.

#### Acknowledgements

I am grateful to the Norwegian Agency for Development Cooperation (NORAD) for providing me with the fund for my education and field work. My profound thanks go to Professor N. Shanmugratnatm for his all round assistance, valuable comments and suggestions. I also want to thank Dr Espen Sjaastad and Dr Darley Kjosavik for their comments and suggestions.

#### References

- Alderman, H. and C. H. Paxson. 1992. 'Do the poor insure? A synthesis of the literature on risk and consumption in Developing Countries.' *Policy Research Working Paper* No. 1008, The World Bank.
- Bloch, F., G. Genicot and D. Ray. 2007. 'Informal insurance in social networks.' *BREAD Working Paper* No. 145, Bureau for Research and Economic Analysis of Development, March 2007.
- Bloch, F., V. Rao and S. Desai. 2004. 'Wedding celebrations as conspicuous consumption.' *The Journal of Human Resources* 39 (3) 675-695.
- Bold, T. 2003. 'Group formation in informal insurance arrangement.' Mimeo, Nuffield College, Oxford.
- Coate, S. and M. Ravallion 1993. 'Reciprocity without commitment: Characterization and performance of informal insurance arrangements.' *Journal of Development Economics* 40 (1993) 1-24, North-Holland.
- Coetzee, G. and C. Cross 2002. 'Group approaches to financial service provision in rural South Africa.' *Working Paper 2002-10.* Department of Agricultural Economics, Extension and Rural Development, University of Pretoria.
- Cohen, M. and J. Sebstad 2003. 'Reducing vulnerability. The demand for microinsurance.' MicroSave-Africa, Nairobi, Kenya.
- Dea, D. 1998. 'Soil fertility management in its social context: A study of local perceptions and practices in Wolaita, Southern Ethiopia.' *Managing African Soils* No. 1(1998) 1-31.
- Dercon, S. 2002. 'Income risk, coping strategies, and safety nets.' *The World Bank Research Observer* 17 (2) 141-166.
- Dercon, S., J. de Weerdt, T. Bold and A. Pankhurst 2006. 'Group-based funeral insurance in Ethiopia and Tanzania.' *World Development* 34 (4) 685-703.

- Fafchamps, M. 1998. 'Risk sharing and quasi-credit.' Mimeo, Department of Economics, Stanford University.
- Fafchamps, M. and S. Lund 2003. 'Risk sharing networks in rural Philippines.' *Journal of Development Economics* 7 (2003) 261-287.
- Foster, A. D. and M. R. Rosenzweig 2001. 'Imperfect commitment, altruism, and the family: evidence from transfer behaviour in low-income rural areas.' *The Review of Economics and Statistics* 83 (3) 389-407.
- Genicot, G. and D. Ray 2003. 'Group formation in risk-sharing arrangements.' *Review of Economic Studies* 70 (2003) 87-113.
- Grimard, F. 1997. 'Household consumption smoothing through ethnic ties: evidence from Cote d'Ivoire.' *Journal of Development Economics* 53 (1997) 391-422.
- Hoddinot, J., S. Dercon and P. Krishnan. 2005. 'Networks and informal mutual support in 15 Ethiopian Villages.' International Food Policy Research Institute. Washington DC.
- Mariam, D. H. 2003. 'Indigenous social insurance as an alternative financing mechanism for health care in Ethiopia (the case of *edders*).' *Social Science & Medicine*, 56 (2003) 1719-1726.
- Morduch, J. 1995. 'Income smoothing and consumption smoothing.' *Journal of Economic Perspectives* 9 (3) 103-114.
- Pankhurst, A. and D. H. Mariam 2000. 'The *Iddirs* in Ethiopia: historical development, social function, and potential role in HIV/AIDS prevention and control.' *Northeast African Studies* 7 (2) 35-58.
- Platteau, J. P. and A. Abraham 1987. 'An inquiry into quasi-credit contracts: the role of reciprocal credit and interlinked deals in small-scale fishing communities.' *Journal of Development Studies* 23(4) 461-490.
- Rahmato, D. 1992. The Dynamics of Rural Poverty: Case Studies from a District in Southern Ethiopia. CODESRIA Monograph Series 2/92, Institute of Development Research, Addis Ababa University, Addis Ababa.
- Rao, V. 2001a. 'Poverty and public celebrations in rural India.' Annals of the American academy of Political and Social Science 573 (1) 85-104.
  - 2001b. 'Celebration as social investment: festival expenditures, unit price variation and social status in rural India.' *The Journal of Development Studies* 38 (1) 71-97.
- Rosenzweig, M. R. 1988. 'Risk, implicit contracts and the family in rural areas of low-income countries.' *The Economic Journal* 98 (1988) 1148-1170.

- Rosenzweig, M. R. and O. Stark 1989. 'Consumption smoothing, migration, and marriage: evidence from rural India.' *Journal of Political Economy* 97 (4) 905-926.
- Roth, J. 2002. 'Informal micro-finance schemes: the case of funeral insurance in South Africa.' *Working Paper No.* 22, ILO, Geneva.
- Thomas, J. and T. Worrall 2002. 'Gift-giving, quasi-credit and reciprocity.' CESifo Working Paper Series No. 687.
- Townsend, R. M. 1994. 'Risk and insurance in village India.' *Econometrica* 62 (3) 539-591.
  - \_\_\_\_\_1995. 'Consumption insurance: an evaluation of risk-bearing systems in low-income economies.' *Journal of Economic Perspectives* 9 (3) 83-102.
- Udry, C. 1994. 'Risk and insurance in a rural credit market: an empirical investigation in Northern Nigeria.' *Review of Economic Studies* 6 (1994) 495-526.
- Werbner, P. 1990. 'Economic rationality and hierarchical gift economies: value and ranking among British Pakistanis.' *Man, New Series* 25 (2) 266-285.

## Appendices

## Appendix 1 Funeral ceremonies: Detailed financial and material costs and contribution by sources of origin

Head of household	Relation of	Sources of funeral expenditure					
(location)	dead person	Provided by <i>Iddir</i> Relatives/friends gave Own store and means					
Kidane Daughter Belachew (Abela Faracho)		<ul> <li>150 Birr in cash collected from members</li> <li>4 quintals of grain crops</li> <li>20 kg coffee, tea and 8 kg sugar</li> <li>Logistic service, utilities and utensils</li> <li>Meal service at lunch and dinner times for 6 days</li> <li>Labour services</li> </ul>	<ul> <li>350 Birr</li> <li>175 kg of grain crop</li> </ul>	<ul><li>150 kg of grain</li><li>Cost of coffee</li><li>400 Birr</li></ul>			
Milkyas Kussa (Abela Faracho)	Daughter	<ul> <li>Provided loan service for immediate use</li> <li>123 Birr from members</li> <li>Members contributed food and coffee on funeral day</li> <li>Labour service</li> <li>Accommodation and other utensils</li> </ul>	<ul> <li>450 birr in cash</li> <li>10 quintals of grain crops</li> <li>100 kg of potato</li> <li>50 kg taro</li> </ul>	<ul> <li>1500 Birr in cash</li> <li>2½ quintal of grain crops for food</li> </ul>			
Ayele Onke (Abela Longena)	Son	<ul> <li>Loan service for immediate use (in cash and food crop)</li> <li>Meal service by members for 7 days at lunch and dinner</li> <li>Logistic service, utilities and utensils</li> <li>Labour service by members</li> </ul>	<ul> <li>2 quintals of maize (200 Birr)</li> <li>Unspecified amount of <i>enset</i> (<i>Ensete</i> <i>ventricosum</i>)<sup>6</sup></li> </ul>	<ul> <li>3 quintals of maize for food</li> <li>50 kg haricot beans for food</li> <li>150 kg of taro for food</li> <li>Sold 3 quintals of maize</li> <li>Sold a goat</li> <li>770 Birr borrowed</li> </ul>			
Bassa Jorge (Abela Longena)	Son	<ul> <li>Provided loan (cash and food crop) for immediate use</li> <li>Logistic service, utilities and utensils</li> <li>Meal service by members for 4 days (lunch and dinner)</li> <li>Labour services</li> </ul>	<ul> <li>200 Birr in cash</li> <li>6 quintals of maize</li> </ul>	<ul> <li>600 Birr in cash</li> <li>Used 6 quintals of grain crops for food</li> <li>Sold 4 quintal of maize sold</li> <li>Sold 4 quintals of cotton</li> </ul>			
Merkin Megula (Shiamba Kilina)	Father	<ul> <li>82 Birr from members</li> <li>Logistic service, utilities and utensils</li> <li>Meal service for 6 days by members (lunch and dinner)</li> <li>Labour services</li> </ul>	600 Birr in cash     10 quintals of maize     (1000 Birr)	<ul> <li>3050 Birr in cash</li> <li>6 quintals of grain crops for food</li> <li>sold 6 quintals of grain crops</li> </ul>			
Garedew Teka (Shiamba Kilina)	Father	<ul> <li>Provided loan for immediate use</li> <li>200 Birr in cash</li> <li>Logistic service, utilities and utensils</li> <li>Meals service by members for 2 days (lunch and dinner)</li> <li>Labour service</li> </ul>	<ul> <li>400 Birr in cash</li> <li>A quintal of maize</li> </ul>	<ul> <li>4200 Birr in cash</li> <li>8½ quintals for food</li> <li>Sold 2 quintals of maize</li> </ul>			
Feltessa Bete (Waraza Gerera)	Wife	<ul> <li>Provided loan for immediate use</li> <li>70 Birr in cash</li> <li>Logistic service, utilities and utensils</li> <li>Meal service for 3 days (lunch and dinner)</li> </ul>	<ul> <li>75 Birr in cash</li> <li>5 quintals of crops (500 Birr)</li> <li>Labour support</li> </ul>	<ul> <li>400 Birr in cash</li> <li>1100 Birr borrowed</li> <li>7 quintals of crops used for food</li> <li>Home produced coffee used</li> <li>Sold an ox</li> </ul>			
Asnakech Teqa (Waraza Gerera)	Daughter	<ul> <li>No support from her <i>iddir</i> (suspended)</li> <li>Got logistics support from her father's <i>iddir</i></li> </ul>	<ul> <li>70 Birr in cash</li> <li>50 kg of maize</li> <li>Provided meals</li> <li>Labour service</li> </ul>	<ul> <li>Used her harvest for food</li> <li>Borrowed 400 Birr for the expense</li> </ul>			

<sup>&</sup>lt;sup>6</sup> Root crop that forms part of the staple food in the densely populated south and southwestern parts of Ethiopia.

#### **Appendix 2 Funeral costs: the case of Ayele Onke**

My name is Ayele Onke and I live in the Abela Longena Kebele, Humbo District. I have been a member of *iddir* for the last 14 years. In September 2006 I lost my son through death. The mourning period took 15 days. I belong to 2 *iddirs*, one based on residence and the other on religion. Put together the two *iddirs* lent me 600 Birr for the burial expenses and 125 kilogram of maize to be used for food on the burial day. This was critical to me because I did not have any money that was immediately needed for the burial expenses. The main *iddir* supplied me with a tent, benches, cooking and other utilities. Assigned members fetched water and firewood. Others helped in cooking, cleaning, serving and coordinating. For 7 days, 6 assigned members brought prepared food each day, four *injeras* each, to be served at lunch and dinner times. I was also given 40 Birr and 50 kilogram of maize that were collected from members. *Iddir* played a key role for me to manage the ceremony.

My relatives and friends brought a total of 2 quintals of maize and some quantity of *enset*, which was used to feed the guests. In addition 3½ quintals of grain crop and 150 kilogram of taro was used from my own store for the same purpose. I also sold 3 quintals of maize and a goat and borrowed 700 Birr to cover some of the expenses. As a result my family is facing food shortage. I believe that cooperation is necessary especially in funeral, because individual households lack resources, organisation and readiness to handle emergencies such as death.

#### Appendix 3 Funeral cost: the case of Garedew Teka

My name is Garedw Teka and I live in the Shiamba Kilina Kebele, Sodo Zuria District. I am a member of *iddir* for 15 years. I lost my father through death in April 2006. The mourning period took 15 days. At the time when my father died I did not have ready money to use for burial expenses, so my *iddir* lent me 200 Birr for the purpose. Later the *iddir* collected 2 Birr from each member and gave me 164 Birr. *Iddir* helped me also in several ways. It supplied me with a tent, benches, cooking and other utensils to manage the ceremony. It assigned 14 members each day for 2 days to offer prepared food, 4 *injeras* by each assigned member, to be served at lunch and diner times. Other assigned members fetched water and firewood while others helped in cooking, cleaning, serving and coordinating the event. While most of the cost was covered from my own resources, the support given to me by *iddir* was vital to me. I think that *iddir* has the experience and organisational capacity to handle funerals. It helps the mourning household to come out of sorrow. My relatives and friends also contributed 400

Birr and 1 quintal of maize. From my own resources, I used 8½ quintal of grain crop to feed the guests and sold also 2½ quintals of maize to raise cash. I used my saving of 2000 Birr and also borrowed 2200 Birr for the expense. Because of this my family is facing food shortage.

#### Appendix 4 Funeral cost: the case of Milkyas Kussa

My name is Milkyas Kussa and I live in the Abela Faracho Kebele, Humbo District. I am a member of *iddir* for the last 15 years. My daughter died in August 2006. The mourning lasted for 15 days. Following the death of my daughter, *iddir* lent me 123 Birr so that I can use it for the burial expenses. This was critical for me because I did not have any other source to get the money. Later I settled the debt using contributions from members. *Iddir* also provided me with a tent, benches and different utilities to be used in accommodating and serving the guests. Members contributed food items and coffee. The *iddir* assigned members to provide different services during the mourning period. Some fetched water and firewood while others helped in cooking, cleaning, serving and coordinating the event. While the support I received from *iddir* was crucial to handle the funeral ceremony, relatives and friends also gave me 450 Birr in cash and 110½ kg of maize. In addition to this, 2½ quintals of grain crops from my own food store was used to feed the guests. I also borrowed 1500 Birr to cover the costs. This has put pressure on my livelihoods.

### Appendix 5 Wedding costs: Details of financial and material costs, and consequences on

## household livelihoods for 8 households

Head of	Relation		Resources used f	for the party			
Household	of person	Number	Animals			Cash and	Effect on
(Location)	married	of guests	Food crops	slaughtered	Cash Expenses (Birr)	other gifts	livelihoods
Yelota Ajiso (Abela Farach)	son	1000	12 quintals of crops plus spices	2 oxen 1 goat 4 chicken	51,000 Birr From saving and also borrowed	17,000 Birr Clothes Household goods	Not severe because of cash support from abroad.
Chelba Chelebo (Abela Farach)	Son	500	7 quintals plus spices	1 ox 1 goat	2000 Birr Sold cotton and pepper harvest	3100 Birr	Facing food shortage; children taken out of school; facing problem of draught power.
Eyasu Mega (Abela Longena)	Own marriage	2000	8 quintals		4390 Birr Sold car load of maize & leased ½ ha of land	2700 Birr Clothes Kitchen items	Facing food shortage; small business bankrupt; shortage of farmland.
Burko Sorsa (Abela Longena)	Son	1000	6½ quintals of grain	1 ox 1 goat 9 chicken	5280 Birr Sold 8 quintals of grain, 5 quintals of cotton and 6 quintals of pepper Sold 1 cow, 1 sheep and 1 goat Leased ½ ha of land	1800 Birr Clothes Kitchen items	Facing critical food shortage; facing shortage of farmland and draught power.
Jorge Mena (Shiamba Kilina)	Daughter	1000	3 quintals of grain plus spices		1000 Birr Sold 1 ox, harvest of coffee, 1 <sup>1</sup> / <sub>2</sub> quintals of crop, borrowed 200 Birr	Clothes Bedding Kitchen items	Facing critical food shortage; facing problem of draught power; debt repayment problem.
Toma Churko (Shiamba Kilina)	Daughter	1000	7 quintals of grain plus spices and meet	4 chicken	1400 Birr Sold 2 quintals of maize, a lorry load of sweet potato, 1 ox & 1 heifer	270 Birr Clothes Household & kitchen items	Facing critical Food shortage; facing problem of draught power; debt repayment problem.
Belaynesh Emana (Waraza Gerera)	Son	600	5 quintals of grain plus spices		1810 Birr Sold 1 heifer & coffee harvest, borrowed cash	300 Birr	Critical food shortage; problem of debt repayment and no milk cow.
Bekele Babore (Waraza Gerera)	Son	800	4 quintals of grain plus spices		980 Birr Sold 1 <sup>1</sup> / <sub>2</sub> quintals of grain, 1 ox, and construction wood	1380 Birr	Facing food shortage: facing problem of draught power; debt repayment problem.

#### Appendix 6 Wedding Costs: the case of Bekele Babore

My name is Bekele Babore and I live in the Waraza Gerera Kebele, Sodo Zuria District. I held a wedding party for my son in December 2006. I invited 800 guests to the party. I used four quintals of grain from last harvest. I also bought meat, spices and other ingredients. I borrowed 980 Birr to buy clothes and jewellery for the bride. I sold one ox, 1½ quintals of maize and construction wood. I received 1380 Birr from guests as gifts, which I used to settle some of the debts. My family ran into food shortage immediately after the conclusion of the wedding party. I knew beforehand that the ceremony would cause problems to my household and resisted not to spend much, but my son, through elders and family members forced me into it. I expect the food problem will get worse because I am not in a position to cultivate enough as I have sold one of my oxen to cover the wedding cost. In addition, I have to pay back the debt and reciprocate the gifts I received from guests. I am against expensive wedding parties and the practice of giving and receiving gifts. But it is difficult to stop because of the local norms.

#### Appendix 7 Wedding costs: the case of Toma Churko

My name is Toma Churko and I live in the Shiamba Kilina Kebele, Sodo Zuria District. I held a wedding ceremony for my daughter in December 2006. I invited about 1000 people to the party, hoping to get large cash gifts. But I got only 270 Birr. Most guests brought different types of clothes, bedding, and household and kitchen goods. Seven quintals of grain crops were used for the party. In addition I bought spices, meat and other ingredients and slaughtered 4 chickens. I spent 1400 Birr on clothing and jewellery for the bride. I sold 2 quintals of maize, a lorry load of sweet potato, an ox and a heifer. I ran into food problems immediately after the wedding and fear that it may get worse in the future as I have sold my ox. I will not be able to cultivate as before. Furthermore, I have to pay back the debt and reciprocate the gifts. I am expected to return the gifts by increasing its amount or quality. I do not believe gift exchange in connection with wedding is useful. It puts people into debt and forces them to sell assets. It contributes to poverty. However, I will continue to give and receive gifts because it is part of the local culture. I do not want to isolate myself from others.

#### Appendix 8 Wedding costs: the case of Chelba Chelebo

My name is Chelba Chelebo and I live in the Abela Faracho Kebele, Humbo District. I held a wedding party for my son in December 2006. I invited about 500 people to the party. More

than 7 quintals of food crops were used for the party. I also bought different spices and other ingredients. I slaughtered one of the two oxen I owned and a goat. I spent 2000 Birr to buy clothes and jewellery for the bride. I sold all of my pepper and cotton harvests and also borrowed 3000 Birr to cover the costs. I received 3100 Birr from the guests as gifts which I used to pay back some of the debt. At present there is serious food shortage in my home. I withdrew my children from school because I could not buy exercise books, pens and pencils for them. I knew beforehand that I could run into problems by spending on the wedding party, but I wanted to keep my good name. I am as yet to establish the couple by providing them with new home, household goods and other necessities. Furthermore, I have to pay back the gifts when invited to weddings. My farming capacity is highly reduced because I have now only one ox. I am worried that this will put significant burden on my livelihoods. I think that expensive weddings and giving and taking gifts are not good practices. They force people to sell assets and food crops and then get them into problems. However I will continue to give and accept gifts even though I know that it impacts negatively on my livelihood because I do not want to go against the wish of the society.

## Paper III

# Policy assumptions and empirical realities of fertility behaviour in Wolaita, Ethiopia

Ayele Tessema<sup>1</sup> and N. Shanmugaratnam<sup>2</sup>

<sup>1,2</sup> Department of International Environment and Development Studies, Noragric Norwegian University of Life Sciences, UMB
P.O. Box 5003, N-1432 Ås
Norway

<sup>1</sup> Department of Agricultural Resource Economics and Management Hawassa University
P. O. Box 5
Hawassa, Ethiopia

Corresponding author: E-mail: ayeletessemaj@yahoo.com

#### Abstract

This article examines the gap between the assumptions, premises and the goal of the Ethiopian National Population Policy on the one hand, and fertility behaviour in rural Wolaita, which is one of the highly densely populated parts of Ethiopia, on the other. Data was collected from six localities using individual interviews and focus groups. We found that fertility levels in the study area remain high and unchanged since 1993, more than a decade after the launch of the national population policy. The reasons for this phenomenon lie not in a lack of awareness about family planning and its usefulness, but in factors that reinforce parental preferences for 'many' children, in religious beliefs, and the widespread perception that contraceptives could be harmful to women's health. The study concludes that family planning awareness and availability of contraceptives alone are not adequate to bring about a decline in fertility. It is important to address poverty and livelihood insecurity, and empower women, particularly through access to education and employment in income earning activities.

Key words: Population policy, birth control, fertility, development, Wolaita, Ethiopia

#### Introduction

Ethiopia launched a national population policy in 1993 with the goal of harmonising the country's population growth rate with that of the economy. The policy aims to reduce the total fertility rate (TFR) from 7.7 children per woman in 1993 to 4.0 children by 2015. This is to be achieved largely by improving and expanding family planning service delivery, and through awareness creation, training and research (TGE 1993). The key methods chosen to attain the intended goals imply two contentious assumptions. First, it was assumed that people have large numbers of children because they do not fully realise the problems involved in bringing them up. As a result it was taken for granted that mass awareness creation, training and research could play decisive roles in changing fertility behaviour. Second, it was assumed that rapid fertility decline could be achieved in a short period of time using efficient family planning services, regardless of the demographic, socio-economic and cultural conditions prevailing in the country.

Ethiopia has a population of more than 80 million whose age and sex distribution favours high fertility. Over 71% of the population is aged less than 30 years and nearly 46% of the female population of the country are in the reproductive age group (15-49 years). The median age for the total population is 17.5 years while the mean age at marriage for females is 17.1 years (UNFPA 2005). As with populations in most developing countries that are passing through a demographic transition, the death rate in Ethiopia is declining faster than the birth rate, due to improving health and other conditions. The relative decline in mortality, high fertility and the large proportion of the female population in the childbearing age create the momentum for continued population growth. These demographic realities need to be viewed in the context of the socio-economic and cultural factors that favour high fertility, especially in rural areas where more than 85% of the population lives.

The dominant view in Ethiopia, however, is that rapid population growth is due basically to a lack of awareness on the part of parents and the unavailability or shortage of family planning services. This view portrays rapid population growth as a major source of socio-economic and environmental problems in the country, and maintains fertility decline as a crucial precondition for development and the environmental improvement goals to succeed (MoFED 2006; Assefa 2003; Malmberg and Sommestad 2003; Mamo 1995; Wood 1990). The failure

to meet targets in terms of national development plans, and environmental degradation are often attributed to rapid population growth. According to some, population growth is "...the culprit behind drought and widespread starvation..." and the cause behind "...environmental problems such as land degradation and deforestation" in the country (Malmberg and Sommestad 2003:257-258; Wood 1990:191). These statements echo the Malthusian postulate about the "tension between the powers of production and reproduction in traditional societies" (Wrigley 1986:61) and lead to Malthus's deductive proposition that since "we could not proportion food to the population, our next attempt should naturally be to proportion the population to the food" (Malthus, (1803) 2004: 128). Indeed, Ethiopia's national population policy is based on assumptions and assertions that conform to the Malthusian/neo-Malthusian view of population-development relations and the rationale provided for family planning.

This study assesses fertility behaviour in Ethiopia's rural Wolaita Zone and identifies the factors that either motivate parents to have more children, or discourage them from using contraceptives. Based on a review of relevant literature and a field study in Wolaita, which has recorded rapid population growth in recent years, we contend that the national policy has failed to take into consideration the socio-economic conditions and the subjective factors behind parents' preference for larger families. We argue that substantial fertility decline requires more than raising awareness about family planning and improving access to such services. We also argue that fertility rates are not likely to decline without changes in the socio-economic conditions of rural households for the better, in terms of fundamental issues such as livelihood security and women's empowerment.

The rest of the paper is organised as follows. We begin with a critical examination of the neo-Malthusian approach to family planning and proceed to review some empirical studies with a view to stressing the complex interaction between different factors in reproductive decisionmaking in developing countries, including Ethiopia. This is followed by a brief introduction to the study area and population, and the research method, before presenting the findings and analysis thereof. We conclude by highlighting the major factors that have influenced fertility behaviour in Wolaita.

# Family Planning: from Malthus's pessimism to Neo-Malthusian prescription

In many developing countries rapid population growth occurs in conjunction with poverty, food insecurity, unemployment, and environmental deterioration. This seems to present a real-world image of Malthus's pessimistic projection of rapid population growth among the 'lower classes' causing overall economic decline and the resulting situation of large and miserably poor families. Even though Malthus acknowledged that exercising moral restraint in terms of reproduction could reduce birth rates, he doubted if the poor possessed such prudence and self-restraint. He believed that positive checks such as wars, famine and other forms of misery were nature's ways of regulating population by raising the death rate. The crude methods of contraception that existed in his day were not acceptable to him on moral grounds (Appleman 2004). In the revised version of Malthus's essay, he did, however, consider education and the improvement of the conditions of the 'labouring classes' as possible means of mitigating the inevitable 'evils' arising from the natural law-like 'principle of population' (Malthus (1803), 2004:133).

In the second half of the 20<sup>th</sup> century, during the Cold War era, Neo-Malthusians took the argument further by explicitly advocating contraception as a means of restricting population growth and formulating a systematic approach to family planning, with the aid of newly developed technical devices and advisory services for developing countries (Gordon 1977). Rapid population growth in the South and the high levels of per capita consumption and waste in the North came to be seen as causes of both resource scarcity and serious damage to the environment's capacity to perform its vital sink functions. Various studies called for urgent action to prevent irreversible damage to the global environment, and more specifically to stem the rapid population growth in developing countries as a necessary step in dealing with their food insecurity, poverty and resource degradation (Meadows et al. 1972; Ehrlich 1972; Hardin 1998; Adams 2001). Moreover, the politics of the Cold War and foreign aid played a major role in the institutionalisation of family planning programmes in the South (Gordon, 1977; Hewitt and Smyth, 2000). Gordon (1977) writes that from the 1950s family planning became an important part of American foreign policy, in the sense that a population control component became a requirement for developing countries to secure US foreign aid. Consequently, large financial and human resources have been directed to family planning programmes through the United States Agency for International Development (USAID), and the Population Council and the United Nations Fund for Population Activities (UNFPA) (Hewitt and Smyth 2000). Forced sterilisation and material incentives for accepting vasectomies and intrauterine devices (IUDs) were used by some governments in their drive to defuse the 'population bomb' (Gordon 1977; Sen 1999). The Neo-Malthusian defence of family planning was reinforced by the report of the World Commission on Environment and Development, *Our Common Future* (WCED 1987; Adams 2001).

However, the Neo-Malthusian approach has been criticised for trying to use the movement for birth control for the purpose of population control, and to provide legitimacy and protection to western interests as well as so-called stability to national governments in developing countries, at the cost of disregarding the socio-economic and cultural factors that influence parental demand for children (Michaelson 1981; Gordon 1977; Rao 2005). The 'population problem' has also been used as a cover-up for the failure to address key issues of development. Based on empirical work, economic demographers have argued that poverty is a root cause of high fertility rates rather than the other way around (Dasgupta, 1995). In a similar but more radical vein, several authors have contended that "overpopulation is not a matter of too many people, but of unequal distribution of resources" and hence the "fundamental issue is not population control, but control over resources, and the very existence of life itself" (Michaelson 1981:13; see also Ross 1998).

The universal historical association between socio-economic advancement and fertility decline, especially the link between women's status and fertility rates, has also been highlighted by several sources (Sen 1999). This approach does not imply an outright rejection of family planning by the critics. Family planning, in their view, is justified and becomes a right when it assists the users to make the decision of their choice regarding their fertility, but becomes a violation of individuals' rights when it is used for the goal of population control by issuing birth quotas (as recommended by Fung 1998) or limiting fertility at all costs (Hewitt and Smyth 2000). The availability of safe contraceptives is helpful to parents who voluntarily choose to avoid pregnancy. It can enable women to exercise control over their fertility. However, in many situations, wives do not have the freedom to choose contraception due to their husbands' domination in decisions regarding pregnancy. In this regard, the enhancement of the agency role of women through education and social mobility, has been shown to be of crucial importance in their empowerment (Sen 1999).

The 1994 Cairo Conference on Population and Development sponsored by the United Nations (UN 1994) adopted an alternative approach to the Neo-Malthusian prescription to family planning. The cornerstone of the UN approach to family planning is the regulation of fertility based on informed free choice, as opposed to an enforced policy of birth control. The emphasis is on the need to assist women in avoiding unwanted pregnancies and achieving their fertility goals safely, by providing information and access to better contraceptives and health services, thus leaving the choice of controlling childbearing to the users themselves. This approach represents a significant shift from the Neo-Malthusian preoccupation with population control, to helping parents to meet their reproductive goals in safer, freer and responsible ways. It has, however, been pointed out that the 'Cairo reforms' are being undermined by the continuing influence of the neo-Malthusian ideology of population control on the policies and practices of international and national family planning agencies (Hartman 1999).

# Fertility behaviour in Ethiopia and other developing countries – a review of some empirical studies

Ethiopia has registered a very slow or insignificant fertility decline since 1990. The total fertility rate (TFR) for the country decreased from 6.4 children per woman in 1990 to 5.5 children in 2000, and then to a mere 5.4 children in 2005 (CSA 2005). Fertility declined moderately for the ten years from 1990 to 2000 and showed no measurable change for the five years from 2000 to 2005. This phenomenon, which has also been observed in most Sub-Saharan African countries, is attributed to poor economic performance and the low attention given to family planning by the countries concerned (Bongaarts 2008). However, fertility declined markedly in urban areas in Ethiopia, to the extent that it fell below replacement for the city of Addis Ababa (Kinfu 2000; Lindstrom and Woubalem 2003; Sibanda et al. 2003). Moreover, the difference between fertility levels in rural and urban areas was substantial. In 2005, the national TFR was 6.0 children in rural areas and 2.4 children in urban areas, showing that rural women have 3.6 more children on average than their urban counterparts. The rapid fall in fertility in urban areas was attributed to changing socio-economic conditions that have induced the emergence of new developments and phenomena, such as delaying marriage, an increasing proportion of unmarried women, rising costs of caring for children, growing female literacy and wage employment, as well as, to a certain extent, the increased use of contraceptives (Kinfu 2000; Lindstrom and Woubalem 2003; Sibanda et al. 2003). Conditions in rural areas, where 85% of the population lives, however, present a different picture.

In southern Ethiopia, where Wolaita is located, the TFR was higher by 1.3 more children than the national figure. The 1997 Southern Nations, Nationalities, and People's Regional State Community and Family Survey reported a TFR of 6.8 births for the region, and 7.03 births for North Omo (which includes Wolaita), at a time when the national TFR was about 5.5 births per woman (DTRC/PSTC 1998). Hogan, Berhanu and Hailemariam (1999) also reported a TFR of more than 7 children per woman for the region. Several factors were identified in causing high fertility performance in southern Ethiopia, especially in rural areas. According to the Community and Family Survey (DTRC/PSTC 1998), the very low level of women's autonomy in decision-making was the principal factor for their high fertility. The survey noted that discussion about family planning between couples was rare, and that husbands often desired more children. Most women did not see fertility as an issue that could be controlled, and viewed having a child as something that has to do with God, and not for humans to intervene in (DTRC/PSTC 1998; Hogan et al. 1999).

The above studies found that most women in rural areas did not use contraceptives because they wanted more children. But this has to be seen in the context that in developing countries, decisions regarding fertility, like all other major household decisions, are in effect, made by men (Dasgupta 1995). Other factors preventing the adoption of family planning in southern Ethiopia were early marriage, lack of knowledge of how to use contraceptives, religious reasons, thinking not to be fertile, and difficulty in accessing contraceptives. Kiros and Kertzer (2000) found that fertility enhanced the status of women in the region, and that failure to conceive was one of the main reasons for divorce. Both boys and girls were desired because they provided different services to the household, but boys were favoured, as men were traditionally seen as protectors of the family and the kin. Kiros and Kertzer (2000) further observed that the status of a woman was, to a certain extent, dependent on the number of sons she bore. Fertility was also found to be related to health conditions in society. The 2005 Demographic and Health Survey found a close relationship between the fertility behaviour of couples and the number of living children they had (CSA 2005). It has been reported that the chances of conception were high following the death of a child (Lindstrom and Kiros 2007). Kiros and Kertzer (2000) attributed the high TFR in Wolaita partly to the high infant and child mortality rates there.

Research on the subject of fertility in other developing countries has identified similar or related factors that enhance the parental preference for more children, or social practices and norms that encourage fertility. Dasgupta (1995) relates the fertility condition in a society mainly to the status of women. According to him, women's economic dependence on men, human nature which desires children as ends in themselves, the desire to obey the dictates of tradition and religion, viewing children as a source of income and labour, as well as old age security, are principal factors why fertility remains high in developing countries (Dasgupta 1995). In rural Mexico and the Philippines, parental fertility behaviour is influenced by the contribution of children to the household economy (Lee and Kramer 2002; Holmes and Tiefenthaler 1997). In Nigeria, family planning performance is constrained by men's dominance in fertility decision-making and the dominant culture that promotes fertility (Ademuyi and Ogunjuyigbe 2003; Dodoo, Luo and Panayotova 1997; Obono 2003; Smith 2004). In rural Malawi, husband and community expectations compel wives to bear more children (Barden-O'Fallon 2005). The same author reports that pregnancy is highly valued and its signs are closely sought, following marriage and thereafter. Moreover, infertility or failed fertility, even after having one or two children, may have dire consequences on the psychological, social and individual rights of a woman in rural Malawi (Barden-O'Fallon 2005).

Most importantly, fertility is generally linked to the status of women and the living conditions of parents. Fertility reduction, therefore, necessitates addressing the socio-economic conditions underlying the parental desire to have a large number of children (Dasgupta 1995; Pritchett 1994). Hence, fertility is a development issue that cannot be adequately addressed by family planning alone. The famous fertility decline in Bangladesh in the 1990s was the cumulative result of sustained socio-economic changes in the country over a long period of time, coupled with improved delivery of family planning services (Caldwell et al. 1999; Kabeer 2001). The below-replacement-level fertility decline in Addis Ababa was an outcome of changes in socio-economic conditions (see above) and, most interestingly, it happened without active family planning campaigns (Sibanda et al. 2003; Lindstrom and Woubalem 2003; Kinfu 2000).

# Wolaita Zone: The study population and data

The study was conducted in six Kebele Administrations (KAs)<sup>7</sup> in the Wolaita Zone, some 400km south of Addis Ababa. Data was collected from June to December 2005 and again from January to March 2007. The zone represents one of the most densely populated parts of the country. In 2006 the average population density in the zone varied from 167 persons/km<sup>2</sup> in the Humbo District in the lowlands, to 746 persons/km<sup>2</sup> in the Damot Gale District in the highlands (CSA 2006). These densities exceeded the national density by 2.5 and 11 times respectively in the same year.

Wolaita is roughly divided into two distinct altitudinal zones, the lowlands (land up to 1700 meters above sea level) and the highlands (land above 1700 meters above sea level) (EMA 1988). Altitude has a significant influence on rainfall and temperature conditions, which in turn affect population settlement and farming practices. Crop production is the most important means of livelihood but livestock is also kept as a source of food, cash income, draught power and insurance against uncertainty. Often, farming is supplemented by income from non-farm and off-farm activities. Access to agricultural land has become a major problem as a result of the rapidly growing population. The average farm size has been decreasing over the years as a result of the intergenerational subdivision of agricultural land, a situation that is exacerbated by insignificant development of non-farm pull factors. The average farm size for the zone has declined from 1.59 ha in 1990/91 (Eshete 1995) to 1.41 in 2005 (own field work). Crop failures, human and livestock diseases and pests present common hazards in the zone. The zone is known for its persistent problems of food insecurity and widespread poverty.

A total of 200 sample households, 100 from each altitudinal zone, were randomly selected from the registers of respective KAs for an individual interview. Data on household characteristics, asset ownership and economic activities were collected using a survey questionnaire. Husbands and wives were interviewed separately on issues related to awareness of family planning services, their perceptions of birth control, whether or not they practised birth control and if not, why not. In households with more than one wife, only the senior wives who were in the fertile age group (15-45) were interviewed. Focus groups were conducted to investigate local perceptions and issues affecting birth control, and factors encouraging couples to have a large number of children. Records of family planning services

<sup>&</sup>lt;sup>7</sup> A Kebele Administration is the lowest community level administrative organ consisting of a number of villages.

were not available for the study population. As a result, our analysis of the issues is based only on the information provided by couples and focus groups.

In the field, we adopted a modified version of the Central Statistical Authority (CSA) definition of a multi-person household. According to the CSA, a household consists of a person or a group of persons, related or unrelated, residing in one house or several houses located close to each other, with common cooking arrangements (CSA 1991:80). In this study members who were temporarily residing elsewhere, such as students following their education in towns, or those who were away on seasonal employment, were included as part of the household.

# **Findings and Discussion**

#### Household size and children

Household size in the study area was generally large (Table 1) with an overall average of 9.1 persons. Taken by altitude, average household sizes were 9.5 persons in the lowlands and 8.8 persons in the highlands. More than 98% of the households in the sample had five or more members, with a quarter of the households having more than ten members. On the other hand, the number of households with fewer than four members was insignificant. The average number of children was also very large, which was the major determinant of household size. About 86% of the women had five or more children (Table 2) and the proportion of women with 4 or fewer children was only 14%. There were, on average, 7.47 children per woman in the lowlands and 6.67 children in the highlands, with an overall average of 7.07 children per woman for the study population in 2005. It is interesting to note that the TFR in Wolaita was 7.03 children per woman in the period 1993-2000 (DTRC/PSTC 1998; Kiros and Kertzer 2000), indicating that the fertility rate remained unchanged in the zone between 1993 and 2005. This shows that the government's priority for family planning since the launch of the 1993 population policy, has had no effect on fertility in the zone during the period under discussion.

	Number of	Total number		
Altitudinal zone	$\leq 4$	5-10	> 10	of households
Lowlands	1	68	31	100
Highlands	2	80	18	100
Study area	3	148	49	200
Percent	1.5	74.0	24.5	100

#### **Table 1 Household size**

#### Table 2 Number of children per woman

								Average number					
Altitudinal	2	3	4	5	6	7	8	9	10	11	12	13	of children born
zone													to a woman
Lowlands													
(N=99)	1	3	6	15	14	17	16	5	8	6	4	4	7.47
Highlands													
(N=100)	0	7	11	20	15	16	14	5	6	2	3	1	6.67
Study area													
(N=199)	1	10	17	35	29	33	30	10	14	8	7	5	7.07

Considered across altitudinal zones, both household size and average number of children per woman were slightly larger in the lowlands than in the highlands. The reason for this difference is difficult to ascertain, although it might appear to be related to factors such as the far smaller farm size and the slightly higher rate of adoption of family planning in the highlands, as compared to the lowlands (see below). Pressure on land is much higher in the highlands than it is in the lowlands, due to the relatively better physical conditions to support farming and human settlement. In 2005, the average farm size was 0.73 hectare in the highlands and 2.14 hectare in the lowlands. Furthermore, the positive association between the number of children and farm size was stronger in the lowlands than in the highlands (Table 4). It was also mentioned in the focus groups that 'some parents' have lately been concerned about household size in view of the shrinking farm size and other factors such as the rising cost of living. However, the evidence gathered for the present study clearly shows that the majority of the parents in both zones have chosen not to adopt birth control for various reasons (see below).

Table 2 shows that 89 percent of the households in the lowlands and 82 percent in the highlands had 5 or more children, which is considered 'large' even according to local

perceptions. Respondents gave several reasons for having a large number of children (Table 3), with household labour supply being the primary reason in both altitudinal zones. Analysis of the responses obtained from parents and in the focus groups on the subject show that children in the study area participate in different household livelihood activities from an early age, and that their contributions to the household economy increase as they grow up. This is critical because most households cannot hire labour. Children take care of their younger siblings and the livestock belonging to the household, while also participating in the collection of firewood, water and cattle feed. They help in the cultivation, weeding and harvesting of crops. They participate in labour exchange and bring cash to the household through wage employment. In general girls participate in household chores while boys assist in farming.

	Percent of households					
Reasons	Lowlands	Highlands	Study area			
	(N=89)	(N=82)	(N=171)			
To augment household labour force	59.6	42.7	51.4			
To enhance family and kin support base	25.8	32.9	29.2			
For old age security	21.3	23.2	22.2			
Security /Protection	21.3	19.5	20.5			
To get children with different capacities	7.9	11	9.4			
Fear of loss due to child mortality	10.1	4.9	7.6			
To get more male children	4.5	3.7	4.1			

Table 3 Reasons for preferring a large number of children

The importance of children's contribution to the household economy is shown by the positive and significant correlations between the number of children with variables such as total production and the number of cattle owned (Table 4). This observation is consistent with the results of an earlier study in Wolaita, which found significant positive correlations between household size and variables such as farmland, livestock and farm implements owned, and household income (Eshete 1995). Indeed, a positive correlation between household size and farm size is predictable, as the former was taken into consideration in terms of land distribution by the state. Increasing family and kinship support base was another key reason why couples preferred to have a large number of children. According to respondents, a large family or kinship group is desirable for several reasons. It can be helpful in accessing and pooling resources and in supporting each other in times of adversity. Coming from a large family or kinship group bestows respect on an individual and enables him/her to earn cooperation from others, while also being better able to face threats from outsiders. In social and other interactions with other people, individuals are often evaluated, seen and treated based on the size and influence of their kin group. Issues between individuals may easily assume wider dimensions involving corresponding kin groups. For this reason, local culture and norm promote fertility and most parents comply with it, even if they may be inclined to limit fertility for other reasons.

	Lowlands		Hig	hlands
Variables	r	р	r	р
Number of wives vs. Number of children	0.31	0.002	0.39	<.0001
Number of children vs. Farm size	0.31	0.002	0.23	0.021
Farm size vs. Household size	0.32	0.001	0.26	0.01
Number of children vs. Total cattle owned	0.25	0.01	0.35	<.0003
Number of children vs. Total production	0.37	0.0001	0.33	0.001
Number of children vs. On-farm income	0.32	<.0001	0.40	<.0001

Table 4 Pearson correlations between different variables by location

As children get married, the kinship network expands and new social connections develop, which may enhance the possibilities for mobilising extra labour and financial resources, and accessing key resources, such as grazing lands, in times of need. Labour exchange, sharing resources such as grazing land and livestock, and support to families in distress are common among relatives in Wolaita.

Focus group members often mentioned that more children meant less poverty referring to the income that could be obtained through their employment elsewhere. Moreover, household size also mattered as an official criterion for entitlements, such as the extent of state land allotted to the head of a household, or public support in case of food shortage.

The concern for old age security was another reason why households opted to have large numbers of children. Low asset ownership and a production system that is vulnerable to frequent rainfall failures mean that most, if not all, parents have little or no savings to use during their old age. As a result, most parents depend on their children when they get old or sick in later years. Having more children enables parents to widen their support base within the family. They argue that different children have different capabilities and life chances and that not all children succeed in life. Out of the many children, some may succeed and be a source of support to parents and their siblings (see Appendix). Some respondents mentioned high infant mortality, which was 154 per 1000 births in Wolaita compared to the national average of 114.7 (UNFPA, 2005), as a reason for preferring more child births, in the hope that some may survive.

The desire to have more male children as one of the causes for having a large number of children received different emphases between the individual interviews and the focus groups. In the individual interviews, only 4.5 percent of respondents in the lowlands and 3.7 percent in the highlands said that they ended up having a large number of children while trying for more male children (Table 3). However, in the various focus group discussions it was emphasised that the desire to have more male children was among the main reasons why couples had large numbers of children (see Appendix). The focus group response was the outcome of discussions that often involved debate among group members, which was not the case in the individual interviews. The former might therefore reflect a more realistic view about how male children are perceived in the area. Bryman (2001) notes that focus group discussions offer argued-upon and balanced accounts of issues in certain situations, as opposed to individual interviews which usually go unchallenged. In the female focus groups, it was emphasised that fathers tend to value sons more than daughters because of their contribution to farm labour. Furthermore, male children are regarded as providers of physical protection to the family and the kin group, and they continue family traditions, whereas daughters leave the family upon marriage. According to local custom, male children increase the kinship base through their children, while the children of the daughters are considered outsiders, belonging instead to their paternal kin line.

The practices of early marriage and polygamy in the study area also contribute to having large numbers of children. Early marriage is the common local tradition for girls (see also Kiros and Kertzer 2000), and a woman who is not married before the age of 20 loses respect in the community. Moreover, a wife's fertility needs to be demonstrated early, within a couple of years after marriage, and afterwards through bearing more male than female children (Kiros

and Kertzer 2000). Children, in the words of an informant, cement the marriage. It is not uncommon for a husband to take a second wife if he has only daughters with his first wife.

From among the 176 male household heads that were interviewed, 19.3% had more than one wife (Table 5). Polygamy in the zone can be even higher – a study by Hogan et al. (1999) reported that it was 29% in the lowlands and 33% in the highlands. Polygamous men gave several reasons for having more than one wife, the most important of which were to have more children and to gain access to agricultural land. It was also mentioned in the focus groups that a married man with a larger holding of land might find a second wife to avoid any takeover of part of the land by the state for redistribution (the state is the owner of the land). By taking a second wife, he can divide the land and set up another home. Furthermore, the new wife becomes part of the family labour force, or may engage in an income generating activity, such as petty trade. A man may also choose to marry again if the woman to whom he is married is in poor health. The first wife has no choice but to continue with the marriage for the sake of her children and/or due to the negative social perception towards divorced women.

	Number of wives					
Altitudinal zone	One wife	Two wives	Three wives			
Number of male heads in the						
Lowlands (N=85)	72	13	0			
Number of male heads in the						
Highlands (N=91)	70	20	1			
Total number of male heads (N=176)	142	33	1			
Percent	80.7	18.7	0.6			

#### Table 5: Monogamy and Polygamy (N=176)

#### **Family Planning Awareness**

Awareness about family planning was high in Wolaita and equal among both husbands and wives. Male household heads (176) and their wives were asked separately whether they were aware of family planning and its uses (Table 6). There was no variation between the responses of husbands and wives. A likely explanation could be because both husbands and wives attended family planning discussions that were organised by local family planning contact persons (local women with some family planning training) who visit the couples occasionally in their homes. As Table 6 shows, 79 percent of the couples had some degree of awareness

about family planning and its uses. Health workers, in conjunction with kebele administrations, were the main facilitators of family planning information dissemination and awareness creation. In addition, each kebele administration had resident development agents, a primary school, a health station and a rural fair, all of which facilitated the flow of information in various ways. The development agents and health personnel played an active role in awareness creation. Nevertheless, it is to be noted that 75% of the interviewed women were not able to read and write, and women in general live in an environment dominated by men. Of the couples interviewed, 21% (Table 6) reported that they did not have sufficient understanding of family planning and its uses.

Are you aware of family planning and its uses?						
Ye	es	No				
Husband	Wife	Husband	Wife			
67	67	18	18			
72	72	19	19			
139	139	37	37			
79	79	21	21			
	Ye           Husband           67           72           139	Yes           Husband         Wife           67         67           72         72           139         139	Yes         N           Husband         Wife         Husband           67         67         18           72         72         19           139         139         37			

Table 6 Couples' awareness about family planning and its uses

#### High Awareness, Low Adoption

Although awareness of family planning and its uses were high in the study area, the adoption rate was low (cf. Table 6 with Table 7). Only 23% of those who had family planning awareness or about 18.2% of the total sample of women have ever used contraceptives. This included women who had used contraceptives in the past but not at the time of the interview. The actual proportion of regular users, therefore, was lower than 18.2%. The reasons mentioned in individual female interviews and female focus groups for not practising birth control, or for discontinuing its use, were related to religion and culture (social norms), perceived health risks of contraceptive use (particularly the use of pills and injections), the risk of child loss due to poor health conditions, and the desire to have more children. It may be recalled that household heads had earlier explained their preference for larger numbers of children in terms of economic and social needs of the household, without any explicit reference to religion and culture (Table 3). However, religion and culture assumed greater importance in the explanation of the low adoption of birth control. We present more details of

the responses given, while commenting on the apparent difference in the emphasis on religion and culture.

	Do you use contraceptives?			
Altitudinal zone	Yes	No		
Lowlands (85 women)	14	71		
Highlands (91 women)	18	73		
Study population (176 women)	32	144		
Percent	18.2	81.8		

### Table 7 Use of Contraceptives

Lack of access to contraceptives was not a constraint leading to non-adoption, as the issue was not highlighted either in the individual or female focus groups. Religious beliefs and compliance with local culture were the most widely mentioned reasons for non-adoption, both in the highlands and the lowlands (Table 8). Many women in the focus groups argued that it is against their belief to control births. According to them, children are gifts from God and controlling birth is against His will. Other women mentioned that local culture and the kin group put pressure on them to have more children. According to local tradition, a wife is expected to submit to the wishes of her husband. Hence, the pressure was on the wife to give birth to as many children as possible so that her husband would not 'look to the outside', in the words of a key informant. Her friends and relatives would tell her that the best way to keep her husband to herself and discourage him from taking a second wife, was to be able to present him with children until he was satisfied.

Indeed the religious beliefs and cultural norms reinforce the power men wield over women in the local community. The norms themselves are products of a patriarchal society in which men are in control of the political, social, economic and cultural institutions. In rural Wolaita, men exercised tremendous control over the reproductive lives of their wives by direct and indirect means, as evidenced by the above observations. They might even perceive that birth control could reduce their power over their wives, as it could help women to gain some degree of independent control over their own fertility.

Perceived reasons for not	Percent of respondent women				
using contraceptives	Lowlands	Highlands	Study area		
	(N=67)	(N=70)	(N=137)		
Religious and cultural reasons	43.3	42.9	43.1		
Fear of health effects of birth control medicines	26.7	27.1	26.9		
Need more children	22.4	21.4	21.9		
Fear of loss of children	3.0	4.3	3.7		

**Table 8 Reasons for not using contraceptives** 

Another factor in the study area is the perception regarding the use of pills and injectables in terms of health effects. More than a quarter of the respondents said that pills and injectables were not good for their health. This view was repeated in the different female focus groups, in which participants stated that there was a general feeling in the community that contraceptives were harmful to health. The women mentioned many cases in the locality in support of this view. They also mentioned that women in the area were too weak (due to exhaustion, hunger and ill-health) to withstand the side effects of birth control pills. As a result, most of them just threw away all the pills they received from the family planning services, or stopped taking the pill at the first sign of any discomfort or feeling of weakness. One woman in a group said that she decided to stop taking the pill because she felt sick and lost her balance whenever she took it. Some of the women feared that the use of injectables would lead to sterility. The women's association of some of their health problems with contraceptive measures, needs to be investigated. There may or may not be a causal link, but it does not seem fair to dismiss the concerns expressed by the women as unfounded.

#### **Concluding remarks**

This study investigated the question of why the population continues to grow rapidly in rural Wolaita, in spite of a major national policy intervention since 1993 that aims at a marked reduction in total fertility through family planning. The study found that on average, a woman had 7.07 children in the Wolaita Zone, which confirms that the TFR in the area has remained unchanged since 1993. This means that the national population policy has not had any major impact on demographic trends in rural Wolaita. The findings clearly show that a combination

of factors continues to favour high levels of fertility, even though a large majority of the parents are aware that family planning and contraceptives are freely available. These factors are rooted in the local socio-economic structures that are characterised by livelihood insecurity, poverty, and subordination of women.

Augmentation of the household labour force, expansion of the kinship network, and old age security were the main reasons provided by parents in support of their preference for large numbers of children. However, religion and culture, and health concerns were the most widely mentioned reasons when it came to explaining the low adoption of family planning, in spite of the high level of awareness about it. These two apparently diverging sets of reasons are actually interrelated aspects of the local socio-economic structures in a rural area that has not been a site of dynamic change in terms of enhanced livelihood security, human development, empowerment of women and social mobility. In such a context, it is not surprising that religious beliefs and cultural norms influence people's attitude towards contraception. As shown by our review of the literature, a remarkable decline in fertility rates has occurred in parts of Ethiopia and other countries, in places where socio-economic conditions have improved, particularly with regard to the status of women. However, areas like rural Wolaita lack the dynamic conditions for change that would contribute to fertility decline, through voluntary choice of birth control and other factors, such as a higher average age at marriage.

Ethiopia's population policy makers seem to have ignored the conditions that enable fertility decline and focussed on creating awareness about family planning and supplying contraceptives. The case of Wolaita shows that this approach has failed, particularly in areas where fertility rates have been and continue to be very high.

## Acknowledgements

We are grateful to the Norwegian Agency for Development Cooperation (NORAD) for providing fund for the research and stipend for Ayele Tessema. We want to thank Dr Darley Kjosavik for her valuable comments and suggestions.

#### References

- Adams, W. M. 2001. *Green Development: Environment and sustainability in the Third World.* 2<sup>nd</sup> ed. London and New York: Routledge Taylor and Francis Group.
- Ademuyi, Alfred & Peter Ogunjuyigbe 2003. 'The role of men in family planning: an examination of men's knowledge and attitude to contraceptive use among the Yurubas.' *African Population Studies* 18(1) 35-49.
- Appleman, P. (ed.) 2004. *Thomas Robert Malthus: An Essay on the Principle of Population*.Scranton, USA: W. W. Norton & Company.
- Assefa, D. 2003. Family Planning Services: an Important Front in the Battle against Poverty in Ethiopia. Addis Ababa: Ethiopian Economic Association/Ethiopian Economic Policy Research Institute.
- Barden-O'Fallon, J. 2005. 'Unmet fertility expectations and the perception of fertility problems in a Malawian village.' *African Journal of Reproductive Health* 9(2) 14-25.
- Bongaarts, J. 2008. 'Fertility transitions in developing countries: progress or stagnation?' *Working Paper No. 7, 2008.* New York: Population Council.
- Bryman, Alan 2001. Social Research Methods. Oxford: Oxford University Press.
- Caldwell, J. C., Barkat-e-Khuda, B. Caldwell, I. P. & P. Caldwell. 1999. 'The Bangladesh fertility decline: an interpretation.' *Population and Development Review* 25(1) 67-84.
- CSA (Central Statistical Authority) 1991. The 1984 Population and Housing Census of Ethiopian: Analytical Report at National Level. Addis Ababa.
- 2005. Ethiopia: Demographic and Health Survey 2005, Preliminary Report.
- \_\_\_\_\_ 2006. Ethiopia: Statistical Abstracts 2006, Addis Ababa.
- Dasgupta, P. 1995. 'The population problem: theory and evidence.' *Journal of Economic Literature* 33 (4) 1879-1902.
- DTRC/PSTC 1998. Southern Nations, Nationalities, and People's Region Community and Family Survey 1997. Demographic Training and Research Center, Addis Ababa University, and Population Studies and Training Center, Brown University.

- Dodoo, E. N., Y. Luo & E. Panayotova 1997. 'Do male reproductive preferences really point to a need to refocus fertility policy?' *Population Research and Policy Review* 16 (1997) 447- 455.
- Ehrlich, Paul R. 1972. *The Population Bomb*. Revised edition. New York: A Sierra Club/Ballantine Book.
- EMA (Ethiopian Mapping Authority) 1988. National Atlas of Ethiopia. Addis Ababa.
- Eshete, D. 1995. 'Food shortage and household coping strategies by income groups: A case study of Wolaita district in southern Ethiopia.' In: D. Aredo and M. Demeke (eds.) *Proceedings of the Fourth Annual Conference on the Ethiopian*, 'Economy Ethiopian Agriculture: Problems of Transformation.' Addis Ababa University Printing Press: pp. 87-109.
- Fung, K. K. 1998. 'How Many Children? Fixing total annual births as a population control policy.' *Population Research and Policy Review* 17(1998) 403-419.
- Gordon, Linda. 1977: Women's Body, Women's Right: A History of Birth Control in America. Penguin Books.
- Hardin, Garrett. 1998. *The Ostrich Factor: Our Population Myopia*. New York Oxford: Oxford University Press.
- Hartman, B. 1999. Cross Dressing Malthus. <u>http://zmag.org/ZSustainers/ZDaily/1999-</u>09/23hartman.htm
- Hewitt, T. & I. Smyth (eds.) 2000. 'Is the world overpopulated?' In: *Poverty and Development into the 21<sup>st</sup> Century*, Oxford: The Open University with Oxford University Press. pp 125-140.
- Hogan, D. P., B. Berhanu & A. Hailemariam 1999. 'Household organization, women's autonomy, and contraceptive behavior in Southern Ethiopia.' *Studies in Family Planning* 30 (4) 302-314.
- Holmes, J. & J. Tiefenthaler 1997. 'Cheaper by the dozen? The marginal time cost of children in the Philippines.' *Population Research and Policy Review* 16(1997) 561-578.
- Kabeer, N. 2001. 'Ideas, economics and the "sociology of supply": explanations for fertility decline in Bangladesh.' *The Journal of Development Studies* 38(1) 29-70.
- Kinfu, Y. 2000. 'Below-replacement fertility in tropical Africa? Some evidence from Addis Ababa.' *Journal of Population Research* 17(1) 63-82.

- Kiros, G. E. and D. Kertzer 2000. 'The impact of postmarital residence, early childhood mortality, and child health in southern Ethiopia.' *Journal of Comparative Fertility Studies* 31 (4) 503-518
- Lee, R. D. & K. L. Kramer 2002. 'Children's economic roles in the Maya family Life cycle: Cain, Caldwell, and Chayanov Revisited.' *Population and Development Review* 28(3) 475-499.
- Lindstrom, D. P. & Z. Woubalem 2003. 'The demographic components of fertility decline in Addis Ababa: a decomposition analysis.' GENUS, LIX (No. 3-4):147-158.
- Lindstrom, D. P. & G. E. Kiros 2007. 'The impact of infant and child death on subsequent fertility in Ethiopia.' *Population Research and Policy Review* 26(1) pp. 31-49.
- Malmberg, B. & L. Sommestad 2003. 'Population growth and socio-economic development: effect analysis models and Swedish case studies.' in: A. Seyoum et al (eds.) *Proceedings of the First International Conference on the Ethiopian Economy*. Held January 3-5 at in Addis Ababa: Ethiopian Economic Association (EEA): 257-279.
- Malthus, T. R. 1803. An Essay on the Principle of Population From the revised edition, inP. Appleman (ed.) 2004. Scranton, USA: W. W. Norton & Company
- Mamo, Abbi. 1995. 'Environment, population and agricultural development in Ethiopia.' In: Ethiopian Agriculture: Problems of Transformation, Proceedings of the Fourth Annual Conference on the Ethiopian Economy, Addis Ababa, 1995, pp. 65-86.
- Meadows, D. H., D. L. Meadows, J. Randers & W. W. Behrens III 1972. *The Limits to Growth: A report for the Club of Rome's project on the predicament of mankind.* London: Potomac Associates Earth Island Limited.
- Michaelson, K. L. 1981. And the Poor Get Children Radical Perspectives On Population Dynamics. New York and London: Monthly Review Press.
- MoFED (Ministry of Finance and Economic Development) 2006. Ethiopia: Building on Progress – A Plan for Accelerated and Sustained Development to End Poverty (PASDEP), September 2006, Addis Ababa.
- Obono, Oka. 2003. 'Cultural diversity and population policy in Nigeria.' *Population and Development Review* 29(1) 103-111.
- Pritchett, L. H. 1994. 'Desired fertility and the impact of population policies.' *Population and Development Review*. 20(1) 1-56.
- Rao. Mohan 2005. From Population Control to Reproductive Health: Malthusian Arithmetic. New Delhi: Sage Publications.

- Ross, Eric B. 1998. The Malthus Factor: Poverty, Politics and Population in Capitalist Development. A major critique of the way Malthusian thinking has influenced modern development policy. London & New York: Zed books.
- Sibanda, A., Z. Woubalem, D. P. Hogan, & D. P. Lindstrom 2003. 'The proximate determinants of the decline to below-replacement fertility in Addis Ababa.' *Studies in Family Planning* 34(1) 1-7.
- Sen, A. 1999. Development as freedom. Oxford: Oxford University Press.
- Smith, D. J. 2004. 'Contradictions in Nigeria's fertility transition: the burdens and Benefits of Having People. *Population and Development Review* 30(2):221-238.
- TGE (Transitional Government of Ethiopia, Office of the Prime Minister) 1993. National Population Policy of Ethiopia, Addis Ababa.
- UN (United Nations) 1994. International conference on Population and development (ICPD).5-13 September 1994. Cairo, Egypt. (<u>http://www.iisd.ca/Cairo.html</u>)
- UNFPA (United Nations Fund for Population Activities) 2005. Country Profile for Population and Reproductive Health: Policy Development and Indicators 2005. <u>http://www.unfpa.org/profiles</u>
- WCED (World Commission on Environment and Development) 1989. *Our Common Future*. Oxford: Oxford University Press.
- Wolaita Zone Department of Finance & Economic Development. 2003: Socio-Economic Profile of Wolayta Zone, July 2003, Wolayta Soddo.
- Wood, Adrian. 1990. 'Natural resource management and rural development.' In: S.Pausewang et al (eds.) *Ethiopia: Rural Development Options*. London and New Jersey: Zed Books Ltd: 187-198.
- Wrigley, E. A. 1986: 'Elegance and Experience: Malthus at the Bar History.' In: D. Coleman & R. Schofield (eds.) *The State of Population Theory*. Oxford: Basil Blackwell

# Appendix

Quotes from focus group discussions on why couples in rural Wolaita prefer more children or choose not to take birth control measures.

1. Quotes taken from female focus group discussions

Why couples prefer to have more children:

"People would like to have as many blood relations as possible. This is called *kota keita* in Wolaita. It means to enlarge the number of people with blood relations, which can support each other in all spheres of life. No one attacks a person if he has large relations. You can count on your blood relations and they will not desert you whatever the problem you are in. People do not like to be exposed. If you have many relations you will not be exposed (to problems). Hence people want to have as many children as possible and do not worry much about how they could feed them or meet other requirements. What really matters to them is contributing to the social support base by having more children." (Abela Faracho Kebele Administration)

"Because farm work is based on family labour, more children are required for the purpose. Those who have more working children do their farm work on time." (Abela Faracho Kebele Administration)

"Children have different life opportunities. It is good to have many children because some of them might succeed in life and be the source of support to others." (Wareza Gerera Kebele Administration)

### Social pressure to have more children:

"Relatives and friends advise a wife, if you do not continue having children your husband will be tempted to have another wife. He will look to the outside" (Wareza Gerera Kebele Administration)

Lack of support from husbands to practise birth control:

Almaz Takiso and Almaz Wolde, locals who assisted in family planning education in the Abela Longena Kebele Administration, said that in most of the discussions they had with couples, husbands openly disagreed with the idea that their wives practise birth control, because they wanted more children.

Doubts on the safety of birth control medicines:

"Most women survive on poor diet. Others suffer from poor health. To take the pills and injections one has to be physically strong. Many women think that the pills and injections are not good for their health." (Shiamba Kilina Kebele Administration)

A group member said: "I used to take pills. But I got sick whenever I took the pills. I could not keep my balance. So I stopped taking it." (Wareza Gerera Kebele Administration)

Expectation on newly married women:

"Following marriage a child is expected of a woman. She is expected to provide many children in her married life. If some time passes without her showing any sign of pregnancy, people start to talk about her. People start to question her capacity to get pregnant. If more than two years passes without her giving any child, then the husband marries another woman in addition to her. She has no option but accepts her circumstance, as there is nothing she can do about it." (Shiamba Kilina Kebele Administration)

2. Quotes taken from male focus group discussions

Why couples prefer to have more children:

"People want to widen their social support base. Those with large number of kin group (*wegen* in Amharic) can support each other both in good and bad times. One would not be easily exposed to external infringements or advances. Even thieves do not dare to go to a person's place with large kin base. People say his relatives are everywhere. He is not alone even if he runs into serious difficulties. The kin group will give him cover. As a result relatives encourage each other to have more children." (Abela Faracho Kebele Administration)

"By having more children people want to increase the number of relatives who help and stand by each other when situations require. A person is respected and admired if large number of relatives turns out at his place during a wedding or a burial or if any other accident happens to him or his family. This is taken as a measure of the level of support he has and a reminder not to do him any harm by outsiders." (Shiamba Kilina Kebele Administration)

"Work is done on time if you have a large number of working children. Land preparation, sowing and harvesting will be done on time. Children bring income from off-farm employment. Children support parents when they become old." (Abela Longena Kebele Administration)

"Different children have different potentials and future. One could be good at something while the rest in other areas. So they can help the parents and each other by engaging in different activities. Out of many children some may succeed in life and, therefore, can be the source of support." (Wareza Gerera Kebele Administration)

Why male children are preferred:

"Male children, unlike female children who leave upon marriage, settle in the vicinity of their parents. They remain close and support the parents. They increase the future social support base of the kin group through their children. The female children together with their children will be considered outsiders belonging to other groups." (Abela Faracho Kebele Administration)

"Male children are needed for farm work and protection. Unlike female children who leave the family after marriage, male children remain in the same area and would be a constant source of support." (Abela Longena Kebele Administration)

"Male children inherit parental properties and carry on family traditions. Female children leave after marriage and become members of other kin groups. Female children did not have the right to inherit parental properties in the past." (Wareza Gerera Kebele Administration)

Safety of birth control medicines:

"Women could not take the pills because they are weak due to hunger and disease. Usually they do not finish the pills they take from the health service." (Wareza Gerera Kebele Administration)

# Paper IV

# The land question in Ethiopia: Tenure security as a vehicle for growth and equity

By Ayele Tessema

Department of International Environment and Development Studies, Noragric Norwegian University of Life Sciences, UMB P.O. Box 5003, N-1432 Ås

Norway

Home institution:

Department of Agricultural Resource Economics and Management Hawassa University P. O. Box 5 Hawassa, Ethiopia

E-mail: ayeletessemaj@yahoo.com

#### Abstract

This paper investigates the possibility of accommodating growth and equity issues in a land tenure system in Ethiopia. Using a literature review, factors are identified that can motivate economic growth in a land tenure system that also aims to address equity in land distribution. The current state land ownership system in Ethiopia is favoured by most farmers for its equity aspect, but fails to provide them with tenure security, which is considered vital for enhancing production and land management. Use rights are not properly defined and mechanisms for protection and enforcement of rights are not in place. Providing long-term and transferable user rights, with credible arrangements for the protection and enforcement of such rights, may qualitatively improve tenure security, thus enabling the current state tenure system to serve both growth and equity goals.

The paper also highlights the need to complement tenure rights with compatible institutional arrangements that provide farmers with access to credit, inputs and marketing channels, as well as making substantial investments in rural infrastructure and the expansion of non-farm opportunities.

Key words: land reform, property rights, tenure security, growth, equity, Ethiopia

# Introduction

A tenure system that can motivate economic growth and at the same time ensure equity in land distribution is central to poverty reduction and agricultural development in Ethiopia. Most often, proponents give more emphasis to one or the other of these key development questions. But in view of the national objectives to enhance economic growth and poverty reduction, it is essential that both growth enhancing factors and access to land are well considered and made primary components of a prospective land tenure system. Agriculture is extremely important to the national economy as well as being the source of livelihood for more than 85% of the population. The sector contributes about 50% to the Gross Domestic Product (GDP), supplies raw materials for national industries and, together with the rural population, provides an important market for industrial products and service sectors. Given the low level of development and contribution of the other sectors to the national economy and employment creation, the importance of agriculture is likely to continue into the foreseeable future. It is, therefore, crucial to search for a land tenure system that encourages agricultural growth without sacrificing equity in land distribution.

The land question remains a subject of debate in Ethiopia, in spite of the famous 1975 land reform that made all land state property, an act that is retained by the current government and enshrined in the constitution. The 1975 land reform abolished feudal relationships in rural Ethiopia by confiscating all land and redistributing it to those who were engaged or wished to engage in farming. The reform provided usufruct rights and prohibited private ownership of land, its transfer through sale, mortgage or other means. Though credited with providing farmers with better access to land and making them sole beneficiaries of their labour, the tenure system under the military government (1975-1991) was widely criticised for causing tenure insecurity, inefficient allocation of land, diminution of holdings, and inhibiting population movement (Adal 2001; Nega, Adenew and Sellasie 2003; Rahmato 1992). Furthermore, the system gave the state ultimate power over land, to the extent that access to land depended on relations with the state-manipulated peasant associations, compliance with state directives, and the provision of corvée labour. Non-compliance with these directives often resulted in evictions.

In 1991 a new government came to power, and despite its stated policy of establishing a market economy, it retained the land policy of its predecessor and maintained the status quo in rural areas (TGE 1991). In other words, the property rights regime in terms of land and state-peasant relationships continued as they were under the former government. In 1997 the government introduced land documentation and certification programmes in a bid to improve tenure security, enhance production and motivate better land management (FDRE 1997). The government aimed to achieve these goals by issuing certificates of holdings and allowing limited transferability of use rights in the form of bequest to one's heirs, short-term subleasing, rentals and sharecropping. But land reallocation is not still ruled out, even if farmers were issued with certificates of holdings, and various conditions, restrictions and obligations are put on the continuity of use rights. As a result, tenure insecurity has persisted (Ali, Dercon and Gautam 2007; ARD 2004; Rahmato 2004).

Various studies show that agricultural production has lagged behind population growth and the problems of food insecurity, poverty and landlessness have increased in the country over time (Devereux and Sharp 2006; Demeke, Guta and Ferede 2006; EEA/EEPRI 2002). This has raised doubts about the appropriateness of state ownership of land to serve the goals of growth and poverty reduction, and has stimulated a land debate that has often followed the state versus private ownership divide. Recently there has been growing interest in the literature to go beyond ownership types and concentrate on other factors that can be crucial in formulating land policy. This paper is a contribution towards that end.

The objective of this paper is to identify factors that motivate economic growth in a tenure system that also aims to address equity in land distribution. It investigates whether it is ownership type or other factors that are important for growth and equity in Ethiopia, in the light of the debate on state versus private ownership of land. The paper attempts to identify the key weaknesses of the current state tenure system in Ethiopia and explore ways of making it relevant to both growth and equity issues. The discussion in this paper, however, does not include land in tribal and pastoral areas, for which other tenure arrangements (such as customary ownership) might be appropriate.

The study is based on a review of theoretical and empirical literature. The findings of various field studies in Ethiopia and elsewhere are widely used in the analysis. Of particular

importance are the findings by the Ethiopian Economic Association/Ethiopian Economic Policy Research Institute (EEA/EEPRI 2002), amongst other research outputs.

The rest of the paper is organised as follows. The next section presents a review of the theory of property rights and their defining characteristics. This is followed by a brief description of land tenure arrangements under different regimes and a short introduction to different positions regarding the land question in Ethiopia. A review follows of findings by different researchers on tenure security and farmers' perceptions on the issue. The final section concludes by highlighting the major issues regarding the land question in Ethiopia.

#### **Property and property rights: An overview**

'Property' signifies a social relation representing a claim to a benefit stream arising from a certain thing or asset (Bromley 1991). 'Property rights' refer to the right holder in relation to a specific asset, thereby defining or delimiting his/her privileges over it, vis à vis other people. Property rights also assign duties to other members of the community, in terms of observing the specific rights of the owner of the asset (Libecap 1989; Bromley 1991). This presupposes the existence of an authority system, which sanctions, protects and enforces the holder's interest, without which the exercise of the rights becomes meaningless (Bromley 1991). It is essential that property rights are recognised and protected by other members of society, in order for the holder to use and control the resource/s. The rights holder has to be in a position "... to call upon the collective to stand behind (his/her) claim to a benefit stream" (Bromley 1991:15). Moreover, the rights holder expects the society to prevent others from obstructing him/her from exercising his/her legitimate rights (Demsetz 1967; Bromley 1991). This helps the holder of the rights in obtaining the necessary sanction required in his/her dealings with others, regarding the use of his/her possession.

Having a right therefore, is not only securing government sanction, but also obtaining the agreement of the collective in the use and protection of one's interest (Bromley 1991). In other words, the holder of the rights has certain expectations with regard to what to do or not to do with his/her possession; and these expectations find expression in the laws, customs, and mores of society (Demsetz 1967; Ruttan and Hayami 1984). Property rights are, therefore, formal and informal arrangements defining the relation of agents to 'properties', and these arrangements may profoundly influence the economic behaviour and performance of the holders of the rights (Libecap 1989; Feder and Feeny 1993). Institutions reduce uncertainty by

defining and enforcing property rights (North 1990; World Bank 2002). The more dependable the property rights that institutions provide, the more crucial the role those rights may play in terms of long-term growth (Rodrik 2003).

Vital elements for effective property rights include clear definition of property rights, state sanction and protection of the rights, backing by the collective, as well as implementation and effective enforcement mechanisms. Often rights may not be realised due to incongruence among key categories of institutions, such as the constitution, institutional arrangements and social norms (Feder and Feeny 1993). For example, although Article 40.4 of the Ethiopian constitution provides farmers with protection against eviction, there are provisions in the land administration and regulations that limit the continuity of tenure. It is important to note that land rights, like all other property rights, are influenced by the socio-political aspirations of the state and the power relations in the society. Analysts point out that policy, including land policy, is an expression of political power and designed to uphold the interests of dominant group(s) in the society (Nustad and Sending 2000). Evidence indicates that land policy is traditionally used to promote political and social agendas by African states (ECA 2004; Adal 2001; Rahmato 1992, 1999). The following paragraphs discuss more details of land tenure rights.

Land tenure describes a property right in terms of land, which is either formally or informally arranged. The right can be obtained through various means and mechanisms, such as inheritance, purchase, gift, customary laws or by political decision. The development of property rights in land is connected to land scarcity and the rise in its market value (Migot-Adholla et al. 1991; Feder and Feeny 1993; Platteau 2000; Ostuka and Place 2001). Four land property regimes are recognised in the literature (Bromley 1991; Feder and Feeny 1993). These are:

- 1. The private property regime is defined mainly by exclusivity and transferability. The right holder can put his possession to any use, excluding socially harmful purposes.
- The common property regime denotes the right to use something in common with others. Bromley describes common property as 'private' property for the group (Bromley 1991:29). Exclusion of non-group members likens this regime to private property.
- 3. The state property regime refers to property deemed to be 'public', over which the state controls access or use.

4. The open access regime denotes a condition of no property claims or a state of 'non-property'.

Each tenure regime provides packages of rights that it confers upon the users. This includes use rights, income rights and transfer rights (Eggertsson 1990; Angelsen and Fjeldstad 1995). Use rights enable the holder of the rights to put his holding to any legitimate use, while income rights enable him/her to earn income from an asset by renting it out or otherwise. Transfer rights enable the rights holder to delegate, offer it as a gift, pass it to others through inheritance, rent it out, or sell his/her rights partially or wholly. The extent of these rights incorporated in a particular land right is thought to have significant influence on the market value of land, farmers' land use decisions and production. Restricted and uncertain property rights are known to assign lesser economic value to land than it could have actually fetched, had property rights been secure (Demsetz 1967; Eggertsson 1990; Feder and Feeny 1993). In the same manner, restriction and uncertainty of rights reduce the usefulness of land as collateral to obtain loans from formal and informal financial institutions, because of the risk involved.

In Table 1, we consider the packages of rights that are provided by private and state ownership regimes, as this is the centre of recent debates in Ethiopia. Private ownership grants users with full (legitimate) use rights, income rights and transfer rights. On the other hand, state ownership allows use rights and limited income and transfer rights. In Table 1 the two tenure systems are evaluated in relation to the corresponding sets of rights that they confer upon holders, equity in land distribution, security of tenure and its effect on efficiency and land management, as well as other factors. Individualised private ownership is usually associated with tenure security, while state ownership is considered to provide more equitable distribution of land. However, equity in land distributive land reform, as in the cases of Japan, Taiwan and South Korea (Griffin, Khan and Ickowitz 2002). In these countries, equity in land distribution was achieved through a process – public land and land purchased by the governments on a compulsory basis from those who had land in excess of a specified amount, was resold to tenants and landless peasants at low prices, with favourable repayment conditions (Ouchi 2007; Griffin et al. 2002; Apthorpe 1979).

T	Evaluation criteria								
Tenure		Rights			Equity (in	Efficiency/			
system	Use	Income	Transfer	Tenure	land	Land	Corruption/		
	rights	rights	rights	security	distribution)	management	Interference		
Private									
ownership	Yes	Yes	Yes	Secure	Low/high <sup>8</sup>	High	Low		
State				Less					
ownership	Yes	Limited	Limited	secure	High <sup>9</sup>	Low	High		

Table 1: Private versus state ownership of agri. land: Comparison of defining features

Tenure security and transferability of rights are considered essential components of land rights, with transferability of rights being the basis for tenure security (Hoff 1993). Tenure security and transferability of rights are usually associated with individualised private ownership of land, and are considered important in promoting efficiency in land use and investment in land improvements (Platteau 2000; Rose 1994). It is also argued that individualised private ownership of land enables farmers to use their land as collateral to secure loans which can be invested in increasing production and productivity, even though access to credit may be limited by several factors (Migot-Adholla et al. 1991; Angelsen and Fjeldstad 1995; Place and Migot-Adholla 1998; Kuhnen 1998). Furthermore, private ownership removes ambiguity in property rights, and accounts for externality (Rose 1994). As a result, it minimises resource-wasting conflicts (even though it does not rule out land disputes and litigations) and enables the land to be traded at the highest value. There is less interference by officials and the possibility of corruption in handling land-related matters is minimal. But there is the possibility that land may concentrate in few hands, thus exposing the rural poor to livelihood crises.

However, the existence of certain unfavourable conditions in developing countries is found to throw doubt on whether or not many of the assumptions that favour private ownership system can be realised. It has been observed that small-scale producers face difficulties in accessing credit for investment using land as collateral, as banks are generally reluctant to carry risks on micro holdings. Besides, the financial infrastructure is underdeveloped; market activities are limited; and some farmers show unwillingness to use land as collateral due to the possibility

<sup>&</sup>lt;sup>8</sup> Equity under the private ownership system would be low if land is allocated and regulated by market forces, as land may be concentrated in few hands, but high if land is allocated by the state through redistributive land reform as in the cases of Japan, Taiwan and South Korea.

<sup>&</sup>lt;sup>9</sup> Where the state allocates and regulates access to agricultural land with the aim of providing land with a limited ceiling to those who live by farming, granting them with use rights, while it (state) retains ownership rights, such as in Ethiopia.

of its loss and the cultural values attached to it (Migot-Adholla et al. 1991; Angelsen and Fjeldstad 1995; Place and Migot-Adholla 1998; Kuhnen 1998). Moreover, smallholders cannot afford new technologies compared to well-to-do farmers, and often use labour from their farms elsewhere in search of additional income, thus resulting in low productivity (Kuhnen 1998).

Certain findings from Sub-Saharan Africa question the purported effects of private ownership on production and investment in land improvement. A study in Kenya and Ghana did not yield conclusive evidence on the effect of land rights on land improvement, and found no relationship between land rights and production (Migot-Adholla et al. 1991). One study found no relationship between input use and tenure insecurity in southern Ethiopia (Holden and Yohannes 2002). In different parts of Sub-Saharan Africa including Ethiopia, farmers are found to invest in trees and other fixed structures under state ownership to try to obtain security (Deininger and Jin 2006; Place and Otsuka 2001; Brasselle, Gaspart and Platteau 2000; Sjaastad and Bromley 1997). All these findings indicate that ownership type and tenure security are only part of the many necessary conditions influencing production and farmers' decisions regarding investment in land improvements (Angelsen and Fjeldstad 1995). It is also important to note that empirical evidence on the effects of ownership type on production, investment in land improvement and other factors are mixed and therefore inconclusive, due to variations in measurements, country-specific characteristics and the circumstances under which reforms are implemented (Kebret 2000).

State or public ownership of land, on the other hand, is considered to provide greater equity in terms of land distribution by setting limits on the size of holdings. But critics cite that the system fails to meet the growing demand for land, causes tenure insecurity resulting in inefficiency and poor land management, and is used for political control of the rural population. Official interference is high and there is much room for corruption, favouritism and mishandling of individual rights (Kiros 2005; Rahmato 2004; Teklu 2003; Adal 2001).

The foregoing discussion has highlighted some of the strong and weak aspects of private and state ownership systems, from the point of view of economic growth and equity in land distribution. In general, private ownership of land is considered to facilitate economic growth, while state ownership provides greater equity in land distribution, though equity can also be achieved under private ownership in certain cases (see above). In countries such as Ethiopia,

the question is whether it is possible to incorporate the strong sides of the two tenure systems in a single land tenure arrangement, because of the importance of agriculture to both the national economy and millions of rural households. In other words, the challenge is whether it is possible to design a land tenure arrangement that can enhance both growth and equity goals simultaneously.

# Land tenure arrangements under different regimes in Ethiopia

The discussion on land rights in Ethiopia necessitates the division of the country's recent history into three periods. These are the pre-1975 period, the 1975–1991 period and the post-1991 period.

The pre-1975 period represents an imperial period in Ethiopian history. The period is noted for its diversity of property regimes in terms of land (EEA/EEPRI 2002). Rist/kinship, state, church, private and customary tenure systems existed side by side or in different parts of the country. The *rist* tenure system was dominant in the northern half of the country in which access to land was based on kinship relations. The system offered use rights which could be claimed by establishing proof of descent on both the father's and mother's lines. Land is neither owned nor alienated under the rist tenure system (Adal 2001). On the other hand, private ownership of land was most common in the southern half of the country. This was connected to the 19<sup>th</sup> century territorial expansion and consolidation by the old Ethiopian empire, which took place in reaction to the European colonial interest in the region. In the territories seized, most of the land was taken from the locals and given to nobles and soldiers from the north and to local chiefs and collaborators who helped with the campaigns. Land gifts to officials, the church, people with notable services, and favourites continued until the last days of the monarchy. Such state land gifts comprised either outright gifts of private ownership rights or *gult* rights over the land. In the latter case, holders were given the right to claim portions of produce and exact corvée labour from farmers, without owning the land. Land gifts were used to consolidate political power and maintain loyalty to the crown. Land evictions, tenancy and serfdom, mass poverty, tenure insecurity, and the concentration of land in few hands characterised the system. This gave rise to various peasant uprisings in different regions, especially in the south, as well as incessant student movements demanding 'land to the tiller' and overall opposition to the feudal system that culminated in its removal in 1974.

The 1975 land reform (PMAC 1975) by the military government (1974–1991) made all land public property vesting ownership in the state. Land was distributed to those who till it and the transfer of use rights in any form, as well as rural hired labour, were prohibited. The reform effectively abolished the tenant-landlord relations and enabled the peasants to enjoy the fruits of their labour. However, staring in the early years of the 1980s, the benefits of the reform started to peter out as a result of subsequent rural policies and practices of the government (Pausewang 2004). Frequent land redistributions led to increased tenure insecurity and the numerous government demands, obligations and restrictions negatively affected the economic life of farmers. These obligations and restrictions included the extraction of surplus products through a compulsory grain quota supply to a state-owned parastatal at lower fixed prices, curtailment of trade in grain and other products, numerous contributions to the war and 'development' efforts of the government, exaction of corvée labour, conscription of young farmers to the military, and preferential treatment of cooperatives and state farms in terms of input supply and fertile land, at the expense of small scale producers.

In 1991 a new government came to power, and in spite of its stated policy of free market economy, it chose to retain state ownership of land without any significant improvement to the policy (TGE 1991). State ownership of land was subsequently enshrined in the federal constitution, vesting land ownership rights exclusively in the "state and the people of Ethiopia" (FDRE 1995, Art. 40.3). Even though the constitution pledges free access to land and protection against eviction (Sub. art. 4), subsequent provisions put conditions on the continuity of holdings, which causes tenure insecurity to persist.

In 1997 the government enacted a land administration proclamation with the objectives of enhancing tenure security, motivating increased production and decentralising land administration (FDRE 1997). The act empowers regional states to pass land administration and regulation laws based on their specific situations, within the bounds of the constitutional framework. Farmers are issued with certificates of holdings which provide them with user rights and some limited transfer rights, such as the right to sublease, enter into sharecropping arrangements and make bequests to heirs. Nevertheless, the new reform does not rule out land redistribution (except in the Oromiya Region) and puts various conditions and obligations on the continuity of use rights. This is compounded by the lack of a justice system to handle and enforce rights. Furthermore, proceedings at local levels are dictated by government-controlled

peasant associations and representatives from different offices, such as the district bureau of agriculture. Hence, tenure rights remain insecure. In fact, there is continuity rather than change in the land tenure regime and state–peasant relations, despite the 1991 government change and its proclaimed free market economy. Consequently analysts argue that the land question in Ethiopia is far from settled and it is high time for the country to search and implement a tenure system that can enhance growth and poverty reduction.

#### The debate over land in Ethiopia: ownership type or security of tenure

It is apparent that the debate over land in Ethiopia takes two different forms. The first is concerned with ownership type that focuses on the private versus state ownership debate. The second position draws attention to security of tenure, regardless of ownership type. This section briefly introduces each of these positions.

#### State ownership versus private ownership of land

The proponents of state ownership of rural land emphasise the equity side of the land question and assert that the interests of society are best served if land remains under state ownership. The key concern of this position is access to land by the masses of rural people. The government in power and some scholars argue that given the significance of agriculture and agricultural land to the majority of the Ethiopian population, equity in land distribution is a key factor and state ownership is the most appropriate tenure system to ensure it (Marcus 1995; Mersha 1998; Cheru 1994). According to this position, if private ownership in land is allowed, the peasants, hard-pressed by poverty, will sell it, mortgage it heavily, or otherwise transfer their rights to others, and end up landless. Land will concentrate in few hands, leading to a chain of problems such as rural poverty, land speculation, and rural-urban migration, all of which will cause complex socio-economic problems. There would be the potential for the resurgence of the old landlord-peasant relations, condemning the majority of producers into serfdom and servitude (Mersha 1998; Cheru 1994). To demonstrate that the demand for land reform is a dead issue and to fend off further debate on it, the government has enshrined state ownership of land in the constitution (FDRE 1995: Article 40(3)). But critics note that there is hardly any evidence to support the above fears and claims, and note that there are critical socio-economic problems in rural Ethiopia that call for the urgent reconsideration of the land question (Kiros 2005; Rahmato 2004; Abegaz 2004; Teklu 2003; Adal 2001).

Some of the key weaknesses of state ownership that are cited by critics, are that the system fails to provide tenure security due to periodic land redistribution or the threat thereof, as well as the conditions and obligations attached to the use of agricultural land (Rahmato 2004; Kiros 2005). The system is said to discourage efficient land allocation, promote fragmentation, increase pressure on land by discouraging out-migration and give the state unrestricted power over the farming population (Rahmato 2004; Endeshaw 2002; Pender, Place and Ehui 1999). The claim that state ownership can guarantee free access to land to all those who want to support their living by farming (FDRE 1995, Article 40.4), is also unrealistic because agricultural land is finite and there is an ever-growing number of new land claimants every year, in a situation where there is no or little development of non-farm employment opportunities. Evidence indicates that the number of landless rural households is growing from time to time, and the majority of holdings of those who have access to land are too small to support a decent living (Rahmato 2004; Teklu 2003; EEA/EEPRI 2002). But it is also claimed that some of the opposition to state ownership of land is spurred by the desire to end state control over the farming population via its ownership of land and issues related to it (Adal 2001). Several studies provide telling accounts of close government control and manipulation of rural institutions and peasant economic and political life, by using its control over the land (Lefort 2007; Pausewang 2004; Ege 1997; Gelaye 1999; Rahmato 1994).

Those who advocate privatisation of rural land focus on the efficiency and sustainability aspects of land and contend that these goals could be achieved if private property in land is allowed, as it ensures tenure security and transferability. Here, theoretical arguments and empirical evidence are used to support the position. According to this position, individualised freehold in land grants unambiguous property rights, with unrestrained and full security of tenure that is necessary to create incentives for increased production and investment in land management (Abegaz 2004; World Bank 1992; ARD 2004). Furthermore, private ownership is said to facilitate the development of markets for easier and more efficient land transactions, it facilitates access to credit, improves efficiency in the use of land resources, and provides greater access to land for enterprising peasants. The World Bank (1992) considers the existence of a free and active land market as an essential condition for agricultural growth and rural development. However, it is important to note that in developing countries, certain conditions make many of the assumptions that favour private ownership of land difficult to realise (see above). Active policy support in the form of increased access to credit and financial institutions, expansion of infrastructure, access to agricultural technologies and

technical support, and expansion of opportunities are essential requirements for effective private land ownership.

### Alternative tenure systems to state ownership and private ownership of land

Some development thinkers and researchers propose alternative tenure arrangements which are neither private nor public. One such position recommends the use of different tenure arrangements in the country based on diversity in land use, socio-cultural and physical conditions, as well as national economic interests (EEA/EEPRI 2002; Aredo and Regassa 1995). According to this view, private ownership, state leasehold, customary ownership or limited ownership could be implemented, based on their spatial or temporal relevance. Unfortunately, the transaction costs and technical complexities that the adoption of these different arrangements might involve, seem to be enormous and forbidding.

Rahmato (1994) proposes what he calls an 'associative ownership' system, in which land would belong to the community and individual residents at the same time. In this system, individuals have use and transfer rights, while land management and regulation (both individual land and community land) would be left to the community. The sale of land would be allowed only to those who are from nearby areas and who intend to work on it themselves. In this way, land remains within the community, moving from smallholder to smallholder, and from those who "cannot use it efficiently to those in the community who have the ability to do so" through the agency of peasant associations which keep track of land transactions (Rahmato 1994:15). The community, through democratically elected peasant associations, makes sure that individual ownership rights are respected. It settles land disputes and ensures that land neither falls into the hands of outsiders nor accumulates in few hands. The author does not give details of how peasant associations would operate, in terms of their rights and obligations, the mechanisms through which they would enforce their tasks, or their relationships to other rural institutions and the state administrative structure. Moreover, the nature of the rights and obligations of individual rights holders under 'associative ownership', and how these may differ from what farmers currently have under the state ownership system, are not clearly spelt out.

Pausewang (2004), in what he calls 'the third alternative', proposes a land use system that puts land in the 'hands of the local community' where individuals are given only use rights, and the sale of land, including its use for collateral purposes, should not be allowed.

Community management of land through independent peasant associations free from state intervention makes Pausewang's position similar to that of Rahmato's 'associative ownership', while he (Pausewang) subscribes to the position of state ownership of land on the remaining grounds. Pausewang (2004) argues that any land tenure consideration should give priority to subsistence, rather than efficiency. According to him, the single most important issue confronting the land question in Ethiopia is access to agricultural land by smallholders, not economic growth. This position is highly contentious. Both food security and development issues are key concerns in Ethiopia and it is hardly possible to separate the one from the other. At the very least, farm households need to produce some surplus in order to meet other needs and commitments, in addition to food supply.

Furthermore, it is not clear how Pausewang's (2004) proposed land holding system controlled by the local community differs in practical terms from the current state ownership system in which administration is also based on locally 'elected' peasant associations. Certainly, the proposed land control by the local community does not offer any more significant package of rights than is being offered by the current state ownership system. The final decision regarding land use still lies with the 'external body', i.e. the peasant association representing the community, not with the farmer himself. It should be noted that local institutions such as peasant associations have a history of serving the government at the expense of smallholders and they are therefore generally distrusted. Moreover, the possibility is very high that peasant associations can be manipulated and misused by individuals, or for group interests.

## Tenure security as a key factor

Several writers consider the debates on land ownership types as superfluous and argue that ensuring tenure security is the key element in the land tenure question (Banerjee 1999; Deininger and May 2000; Ostuka and Place 2001; Adal 2001; Deininger 2003). Security of tenure can be achieved if land rights are respected and transferable. Security of tenure, in terms of predictability and transferability of rights is important because of the positive impact on the production behaviour of farmers, investment decisions and access to credit (World Bank 2002; Deininger 2003; Kuhnen 1998; Angelsen and Fjeldstad 1995). For example, in China, secure rights that allow land transferability were found to advance a higher level of farm investment (World Bank 2002). Other studies indicate that secure and transferable rights generate rural economic growth by enabling the functioning of rural factor markets and economic diversification (Deininger and Jin 2006; Deininger and May 2000). A study in Thailand found that granting transferable long-term lease rights that are protected and enforced by law, significantly increased the tenure security of holders. This, in turn, resulted in increased access to institutional loans (using land as collateral), appreciated land values, enhanced capital formation, and improvement of land, production and input use (Feder et al. 1988).

The experiences from China and Thailand show that secure and transferable rights can be attained under the state ownership system, thereby offering the opportunity to address both efficiency and equity goals at the same time. The key factor is to grant farmers credible tenure contracts of long-term duration over their holdings, and to make use rights transferable (Feder and Feeny 1993). This, of course, requires radical institutional changes with regard to land regulation and administration. This is not an easy task, as rural land is traditionally used by African states to promote political and social agendas (ECA 2004; Adal 2001; Rahmato 1992, 1999). For instance, in Ethiopia, land is used as a weapon by the ruling parties to garner political support or to ward off resentment or opposition, under the rule of both the military government (Rahmato 1994) and the current government (Lefort 2007). Local party operatives were found to remind farmers during both regimes that land was given to them by their respective parties and that it would be taken away if they (farmers) voted against them or acted contrary to the wishes of the ruling parties (Pausewang 2004; Ege 1997; Gelaye 1999; Rahmato 1994).

The key issue regarding the land question in Ethiopia is, therefore, not the type of land ownership, but how to ensure that the government respects property rights (Adal 2001). To improve tenure security, it is essential to respect property rights and curtail undue official interference in the affairs and day-to-day activities of farmers. There must be clear demarcation and separation between party and state realms in the government, and state property must not be taken advantage of for political ends. State ownership does not mean that natural resources such as land belong to the ruling party. The fact that land ownership is ambiguously put in the constitution (Article 40.3) as belonging to the 'state and the people of Ethiopia' enables the state agents (mainly party operatives) to act as 'owners' of land to the detriment of the population dependent on it.

# Review of empirical evidence: State land ownership, tenure security and farmers' perceptions

This section presents a summary of research findings by different authors on tenure conditions and farmers' perceptions on key land tenure questions in Ethiopia. The major work on the subject is the land tenure data set that was collected by the Ethiopian Economic Association/Ethiopian Economic Policy Research Institute (EEA/EEPRI 2002). The works by Deininger and Jin (2006), Teklu (2003), Rhamato (2004) and Associates in Rural Development (ARD 2004) also provide useful insights into the problems of the current land tenure system and are widely used in the later part of this section.

The EEA/EEPRI survey covered 8540 farm households in all regions of the country (except Gambela), with the aim of assessing the consequences of the current land tenure system on agricultural performance. Although the study covered a wide range of issues, we present in Table 2 only those findings that are relevant for the purpose of this paper.

The findings show that the majority (61%) of the sample households prefer state ownership, indicating that the concern of those who support state ownership is justified and cannot be ignored. This finding indicates that the majority of sample households appreciate the equity aspect of state ownership. Most households prefer the state ownership system, even though 84% of them know that the land does not belong to them, which is in direct contrast to the government claim that farmers think they own the land. On the other hand, the majority of the sample households feared that they may lose their holdings in the next five years, or that reallocation may take place. This shows that tenure insecurity is very high under the current state ownership system, a fact that critics of the system often underline.

The findings imply that it is security of tenure, not state ownership as such, which is the centre of concern regarding the current land tenure system in Ethiopia. This calls for radical improvement in the tenure security aspect of the current state land ownership system. Incidentally, the findings also disprove the argument that farmers will sell their land if granted private ownership titles (see also Rahmato 1994). This is because land forms the only viable source of livelihood for the majority of households. It does not mean that some farmers will not sell if given freehold rights. It is important to note that land sales take place in disguised

form even under the current framework, which forbids it, as shown by various field studies and our own observations in Wolaita.

Sr.No.	Description of measuring criteria	Percent	Remark
1	Current land tenure system (state ownership) is good	61	State ownership is preferred by the majority of households, implying the validity of the concern of those who support state ownership
2	Current land tenure is not good	38	
3	Prefer state ownership with secure rights	47	State ownership with secure rights is preferred over private ownership, which again indicates that farmers are concerned
4	Prefer private ownership	32	about access to land
5	Land belongs to government not to them	84	Greater majority of farmers know that land belongs to the state, not to them, disproving government claim that farmers (think they) own the land
6	Do not think that holding lasts over 5 years	76	Majority of farmers feel that their tenure is insecure
7	Think certain land redistribution will occur	73	
8	Can benefit if redistribution takes place	45	Holdings are so small that there is no fear of redistribution threat; rather expect benefit out of it
9	Feel uncertain or lose part of holding if redistribution takes place	55	Tenure insecurity is high (as in items 6 and 7)
10	Will not sell holding if granted ownership right	90	The argument that farmers will sell their holdings on a mass scale if given private ownership rights is questioned. Land represents the only viable source of livelihood in rural areas, so most will not want to lose it. But privatisation may facilitate sale especially if contexts change such as if non- farm opportunities become more available.
11	Landlessness	10	Growing problem of landlessness irrespective of constitutional guarantee to access agricultural land. The problem of landlessness is more serious in some parts than indicated here. See a review of literature by Rahmato (2004:15)
12	Households who own holdings that are less than the minimum area required for food production	48	Diminution of holdings as a result of population growth and lack of non-farm opportunities resulting in growing problems of food insecurity and rural poverty
L	area requirea for food production	I	or root inscently und futur poverty

Table 2: Farmers' perceptions of tenure type and tenure security in Ethiopia

Source: Constructed from information provided in the EEA/EEPRI (2002) study

The impracticability of the constitutional pledge to grant agricultural land freely to all those who wish to support their living by farming is shown by the fact that 10% of the sample households were landless, which has significant implications given the absence of alternative employment opportunities in rural areas. The study points out that farm size is closely linked to household food security and farm income. Yet according to the study, 48% of the households possessed holdings that were less than the minimum size required to meet their food security, which is 1 hectare of land. The proportion of households in the sample with holdings of 0.75 hectare and below was about 51%. Forty eight percent of the households

were found to be food insecure and 53% had an income that fell below the poverty line (taking Birr 1075 or USD 126 per annum per household as a minimum required amount (MEDaC 1999)). The EEA/EEPRI study concluded that tenure insecurity, diminutive holdings and subsistence production, all features of the current state land tenure system, are the main factors behind the poor performance of the agricultural sector in the country.

Deininger and Jin (2006) used a large data set drawn from the main agro-ecological regions of the country to investigate the link between tenure security and productivity-enhancing investments. They found that land rights were highly insecure in the country and the impact of tenure security varied across different types of investment. Insecurity of tenure encouraged investment in more visible objects (trees) rather than relatively less visible, but productivity-enhancing activities, such as terracing<sup>10</sup>. This indicates that farmers were more preoccupied with ensuring tenure security than improving or sustaining the quality of the land.

The same authors computed the potential effects of removing the risk of land redistribution, resolving conflicts with authorities over land, and providing full transferable rights on investment in land improvement and farm income, and found the following positive results. Removing the risk of land redistribution and resolving conflicts with authorities over land would increase investment in land improvements by 28%, while providing full transferable land rights would have a predicted additional 38% motivational effect on investment. The elimination of land redistribution threats and the resolution of conflict with local authorities would result in a 1.5% increase in farm income, while the provision of full transferable land rights would greatly increase the extent of benefits by an additional 4.4%. According to the study these results are significant, compared to the 3.4% average growth rate of agricultural value added experienced over the last decade of economic liberalisation. The results indicate that ensuring tenure security, allowing full transferable rights and minimising official interference would have a significant positive impact on investment and agricultural productivity. In particular, allowing transferable rights was found to have a large impact on enhancing investment in land improvement and farm income. Such reforms would greatly enhance the asset endowment of the poor.

<sup>&</sup>lt;sup>10</sup> This is in line with other findings that tree planting was used to visibly manifest land rights in southern Ethiopia (Holden and Yohannes 2002) and investments in stone terracing were associated with perceived feelings of tenure security and other factors in Tigrai (Gebremedhin and Swinton 1999).

# Land documentation and certification and tenure security

In a bid to enhance tenure security, motivate production and improve land management, as well as decentralising land administration, the government issued a rural land administration act in 1997 (FDRE 1997). The reform empowers regional states to enact laws for the administration of rural land, based on their respective specific local conditions, but within the bounds of what the federal constitution allows. The federal constitution unequivocally states that land ownership is exclusively vested in the "state and in the peoples of Ethiopia" and "shall not be subject to sale, or other means of exchange" (Federal constitution Art. 40.3). Hence the reform is expected to enhance tenure security and other goals within the existing legal and policy frameworks. To date, researchers have not observed significant variations among the different regional land administration laws (Teklu 2003; ARD 2004; Rahmato 2004). Overall, the new reform does not grant holders any benefits that are substantially different to those that they previously enjoyed. Land still cannot be sold, mortgaged or used as collateral to obtain loans. Farmers are issued with certificates of holdings that at best provide a semblance of recognition that the land belongs to them, but in reality this is nothing more than a piece of paper confirming the rights they already possessed.

The use rights are open-ended, offering very limited rights of transferability, such as the rights to sub lease in the short term, to make sharecropping arrangements, and to pass the land to one's heirs. There are restrictions on the extent of holdings that may be leased and the lease period. The majority of farmers thought that land certification was a good practice, assuming that it would stop land redistribution (ARD 2004; Rahmato 2004). However, except in the Oromiya region, land redistribution is not ruled out. It can take place under certain circumstances, such as if locals ask for it, if it is supported by research, or if a particular piece of land is needed for investment by the state for the public good. This is evidence that tenure security is not ensured, even if farmers hold user certificates. Furthermore, user rights are subject to certain conditions and obligations. Continuity of tenure is dependent on permanent residence, the ability to farm continuously, to meet dues and obligations and that farming should be the main source of income (Teklu 2003; Rahmato 2004; ARD 2004). Holders are expected to undertake soil and water conservation, plant or care for local trees, and avoid growing 'harmful' plant species on their holdings.

One study found that user certificates can be withdrawn on the ground that holders have not met one or more of the conditions and obligations (ARD 2004). Moreover, there is no clear justice system to handle land disputes, and local officials and representatives of different public offices exercise unrestrained authority over farmers. Findings by the ARD (2004) and Rhamato (2004) indicate that the land administration reform and certification programme has not brought the desired tenure security for farmers. One of the reasons is that it fails to clarify property rights (ARD 2004). The studies by the ARD (2004) and Rahmato (2004) conclude that achieving tenure security entails providing unrestrained, clearly defined, long-term and transferable use rights that are free from government intervention and manipulation by its officials. These requirements presuppose an independent justice system that can handle land disputes and effectively enforce and protect property rights. This includes farmers' right to legally challenge government decisions such as land redistributions.

## **Concluding remarks**

Economic growth and poverty reduction are key development issues in Ethiopia. Agriculture is a major contributor to the GDP and the main source of livelihood for the majority of the population. For these reasons, agricultural land is a highly valued resource, both at the national level and for millions of individual households in rural Ethiopia. It follows that the country needs a land tenure arrangement that can best serve both national and household goals.

Evidence shows that the majority of farmers favour the current state ownership system because it offers better access to land for most households. Nevertheless, the system fails to provide households with tenure security and transferability of rights, thereby constraining production and better land management. The support shown for state ownership indicates that the problem is not the ownership system as such, but tenure insecurity that is caused by the various conditions, restrictions and obligations attached to the use rights. Insecurity is further reinforced by certain official practices, such as land redistribution or the threat thereof, unrestrained interference by government agents in the life of rural people, and the lack of a free and impartial judicial system to protect and enforce land rights.

Providing clearly defined, long-term (say more than 50 years) and transferable use rights can qualitatively improve tenure security, thus enabling the current state tenure system to serve both growth and equity goals. Evidence from Asia shows that secure and transferable land

rights can generate rural economic growth, enhance diversification and advance farm investment. The pursuit of secure land rights presupposes respect for property rights, and their effective protection and enforcement, including the presence of an independent judicial system for handling land disputes. Analysts argue that the key challenge to the land question in Ethiopia is how to ensure that the government respects property rights (Adal 2001; Rahmato 2004). Farmers should have the right to legally challenge government decisions in such issues as eviction, redistribution and relocation of their holdings for investment purposes, which presently occurs without their agreement or full compensation.

It is also important to note that ensuring tenure security alone is not a sufficient condition for growth and equity. In order to realise growth and equity, it is crucial that secure land rights are accompanied by other compatible institutional arrangements that provide access to credit, inputs and marketing channels. This includes making substantial investments in infrastructure (in particular, in small-scale irrigation facilities, rural roads, education and health), agricultural technology generation and diffusion, as well as the creation of alternative employment opportunities for the people.

## Acknowledgements

I am grateful to the Norwegian Agency for Development Cooperation (NORAD) for covering the expenses for my education. My profound thanks go to Professor N. Shanmugratnatm for his all round assistance, valuable comments and suggestions.

# References

- Abegaz, B.2004. 'Escaping Ethiopia's poverty trap: the case for a second agrarian reform.' Journal of Modern African Studies 42 (3) 313-342.
- Adal, Y. 2001. 'Some queries about the debate on land tenure in Ethiopia.' In: M.
  Demeke and T. Woldehanna (eds.) *Proceedings of the Tenth Annual Conference on the Ethiopian Economy*,' Explaining Economic growth & Development in Ethiopia.' Held Nov. 3-5, 2000 at Nazreth, Ethiopia: 51-68.
- Ali, D.A., S.Dercon & M. Gautam 2007. 'Property rights in a very poor country: Tenure insecurity and investment in Ethiopia,' *Policy Research Working Paper No. 4363*. Washington, D. C.: The World Bank.
- Angelsen, A. & Odd-Helge Fjeldstad 1995. 'Land reforms and land degradation in Tanzania: alternative economic approaches.' Working Paper, Christian Michelsen Institute. Development Studies and Human Rights, Bergen, Norway.
- Apthorpe, R.1979. 'The burden of land reform in Taiwan: an Asian model land reform re-analysed.' *World Development*. 7 (1979) 519-530.
- ARD (Associates in Rural Development) 2004. Ethiopia Land Policy and Administration Assessment. Addis Ababa, Ethiopia: Report submitted to USAID.
- Aredo, D. & Teferi Regassa 1995. 'Land tenure, theory and issues in Ethiopia.' In:
  D. Aredo and M. Demeke (eds.) *Proceedings of the Fourth Annual Conference on the Ethiopian Economy*, 'Ethiopian Agriculture: Problems of Transformation.' Addis Ababa, 1995: 313-336.
- Banerjee, A. V. 1999. 'Land reforms: prospects and strategies.' Department of Economics Working Paper No.99-24. Annual World Bank Conference on Development Economics, and MIT: Washington D.C.
- Brasselle, A. S., F. Gaspart and J. P. Platteau 2002. 'Land tenure security and investment incentives: puzzling evidence from Burkina Faso.' *Journal of Development Economics* 67 (2) 373-418.

- Bromley, D. W. 1991. *Environment and economy: Property Rights and Public Policy*. Oxford and Cambridge: Blackwell,
- Cheru, F. 1994. 'Designing structural adjustment program: reconstruction, rehabilitation, and long-term transformation.' In *Ethiopia Society in Change*. A. Zegeye and S. Pausewang (eds.). British Academic Press: 128-151.
- Deininger K. and May J., 2000. 'Is there scope for growth with equity? The case for land reform in South Africa.' World Bank: Washington.
- Deininger, K. 2003. 'Land policies for growth and poverty reduction.' A World Bank Policy Research Report: World Bank and Oxford University Press.
- Deininger, K. and S. Jin 2006. 'Tenure security and land-related investment: evidence from Ethiopia.' *European Economic Review* 50 (5) 1245-1277.
- Demeke, M., F. Guta and T. Ferede 2006. Agricultural development and food security in Sub-Saharan Africa (SSA): Building a case for more support – The case of Ethiopia, FAO, Rome.
- Demsetz, H.1967. 'Toward a theory of property rights.' *American Economic Review* 57 (2) 347-359.
- Devereux, S. and K. Sharp 2006. 'Trends in poverty and destitution in Wollo Ethiopia.' Journal of Development Studies 42 (4) 592-610.
- ECA (Economic Commission for Africa) 2004. Land tenure systems and their impacts on food security and sustainable development in Africa. Addis Ababa: Economic Commission for Africa (ECA).
- Ege, S.1997. 'The promised land: the Amhara land redistribution of 1997.' Working Papers on Ethiopian Development No. 12, 1997 Dragvoll, Trondheim: Norway; Norwegian University of Science and Technology.
- Eggertsson, T.1990. *Economic behaviour and institutions*. Cambridge: Cambridge University Press.
- Endeshaw, A.2002: *Ethiopia: Perspective for Change and Renewal*. Singapore: Song Lee Press.
- EEA/EEPRI (Ethiopian Economic Association/Ethiopian Economic Policy Research Institute) 2002. A research report on land tenure and agricultural development in Ethiopia. Addis Ababa.

FDRE (Federal Democratic Republic of Ethiopia) 1995. Constitution of the Federal
 Democratic Republic of Ethiopia. Proclamation No.1/1995. Addis Ababa: Federal
 Negarit Gazeta.

\_\_\_\_\_ 1997: Proclamation No. 89/97, Federal Rural Land Administration Proclamation, In Federal Negarit Gazeta, Third Year, No.54.Addis Ababa

- Feder, G. and D. Feeny 1993. 'The theory of land tenure and property rights.' In *The* economics of Rural Organization: Theory, Practice, and Policy. K. Hoff, A.
  Braverman, and J. E. Stiglitz (eds.) World Bank, Oxford University Press: 231-239.
- Feder, G., T. Onchan, Y. Chalamwong, & C. Hongladarom 1988. Land Policies and Farm Productivity in Thailand. Baltimore and London: The John Hopkins University Press.
- Gebremedhin, B. and S. M. Swinton 1999. 'Investment in soil conservation in northern Ethiopia: the role of land tenure security and public programs.' *Agricultural Economics* 29 (1999) 69-84.
- Gelaye, G.1999. 'Peasant poetics and state discourse in Ethiopia: Amhara oral poetry as a response to the 1996-97 land redistribution policy.' *Northeast African Studies* 6 (1-2)171-206.
- Griffin, K., A. R. Khan and A. Ickowitz 2002. 'Poverty and the distribution of land.' *Journal* of Agrarian Change 2 (3) 279-330.
- Hoff, Karla 1993. 'Designing land policies: an overview.' In *The economics of Rural* Organization Theory, Practice, and Policy. K. Hoff, A. Braverman, and J. E. Stiglitz (eds.) World Bank, Oxford University Press: 231-239.
- Holden, S. and Hailu Yohannes 2002. 'Land redistribution, tenure security, and intensity of production: a study of farm household in southern Ethiopia. *Land Economics*, 78(4): 573-590.
- Kebret, H. 2000. 'Land reform: revisiting the public versus private ownership controversy. In: A. Mekonnen and D. Aredo (eds.) *Proceedings of the ninth Annual Conference on the Ethiopian Economy*, 'Institutions, Resources and Development in Ethiopia.' Held October 8-9 at Addis Ababa, Ethiopia: 47-66.
- Kiros, Fassil G. 2005. *Enough with Famines: A Clarion Call*. Addis Ababa: Commercial Printing enterprise.
- Kuhnen, F. 1998. 'Metamorphosis in man-land relations: changes in issues, priorities and viewpoints.' Paper for the Seminar on Land Policy and economic Development, Taipei, Taiwan. Nov. 16-17, 1998.

- Lefort, René 2007. 'Powers mengist and peasants in rural Ethiopia: the May 2005 Elections.' *Journal of Modern African Studies* 45 (2): 253-273.
- Libecap, G. D. 1989. *Contracting for Property Rights*. Cambridge: Cambridge University Press.
- MEDaC (Ministry of Economic Development and Cooperation) 1999. Poverty Situation in Ethiopia. Welfare monitoring unit Addis Ababa.
- Marcus, H. G. 1995. 'A breakfast meeting with Prime Minister Meles' http://www.hartford-hwp.com/archives/33/008.html
- Mersha, G. 1998. 'Privatization of rural land: to protect whose security? *Paper* presented at the Inaugural Workshop of the Forum for Social Studies, September 18, Addis Ababa.
- Migot-Adholla, S., P. Hazell, B. Blarel, & F. Place 1991. 'Indigenous land rights systems in Sub-Saharan Africa: a constraint on productivity?' *The World Bank Economic Review* 5 (1): 155-175.
- Nega, B, B. Adenew and S. G. Sellasie 2003. 'Current land policy issues in Ethiopia.' In: Land reform: land settlement and cooperatives, World Bank and FAO special edition (No.3) 103-124.
- North, D. C. 1990: Institutions, Institutional change and Economic Performance. Cambridge: Cambridge University Press.
- Nustad, K. G. & O. J. Sending 2000. 'The instrumentalisation of development knowledge.' In *Banking on Knowledge: The genesis of the Global Development Network*. Diane Stone (ed.) London & New York: Routledge.
- Ostuka, K. and F. Place 2001. 'Toward new paradigms of land and tree resource management.' In *Land Tenure and Natural Resource Management: A Comparative Study of Agrarian Communities in Asia and Africa*: K. Ostuka and F. Place (eds.) Baltimore and London: The John Hopkins University: 359-378.
- Ouchi, T. 2007. 'The Japanese land reform: its efficacy and limitations.' *The Developing Economies* 4 (2) 129-150.
- Pausewang, S. 2004. 'The need for the third alternative: the amputated debate on land tenure in Ethiopia.' *Paper presented at the XI World Congress of Rural Sociology*, held 25-30 July, 2004. Trondheim, Norway: 51-.
- Pender, J., F. Place, and S. Ehui 1999. 'Strategies for sustainable agricultural development in the East African highlands.' *EPTD Discussion Paper* No. 41, IFPRI, April 1999.

- Place, F. and S.E. Migot-Adholla 1998. 'The economic effects of land registration in smallholder farms in Kenya: evidence from Nyeri and Kakamega districts.' *Land Economics* 74(3) 360-73.
- Place, F. and K. Otsuka 2001. 'Land tenure systems and their impacts on agricultural investment and productivity in Uganda, *The Journal of Development Studies* 38 (6) 105-128.
- Platteau, Jean-Filippe 2000. Institutions, Social Norms, and Economic development. Amsterdam: Harwood Academic publishers.
- PMAC (Provision Military Administrative Council) 1975. Proclamation No. 31/75: A Proclamation to Provide for the Public Ownership of Rural Lands, Negarit Gazeta 34<sup>th</sup> Year No. 26 p. 93-101, Addis Ababa.
- Rahmato, D. 1992. 'The land question and reform policy: Issues for debate.' DIALOGUE, *Journal of Addis Ababa Teachers Association.* 3<sup>rd</sup> Series 1 (1): 43-57.
- 1994. 'Land policy in Ethiopia at the crossroads. In: D. Rahmato (ed.) *Proceedings of the Second workshop of Land Tenure Project*, 'Land tenure and Land policy in Ethiopia after the Derg.' *Working Paper on Ethiopian Development*. No. 8.
   Trondheim: The University of Trondheim, Centre or Environment and Development UNIT-SMU: 1-20.
- \_\_\_\_\_ 1999. 'Revisiting the land issue: Options for change.' *Economic Focus* 2 (4): Ethiopian Economic Association, Addis Ababa.
- \_\_\_\_\_ 2004. 'Searching for tenure security? The land system and new policy initiative in Ethiopia.' *FSS Discussion Paper* No.12. Forum for Social Studies, Addis Ababa.
- Rodrik, D. 2003. *Analytic Narratives on Economic Growth*. Princeton and Oxford: Princeton University Press
- Rose, C. M. 1994. Property and Persuasion. Essays on the History, Theory, Rhetoric of Ownership. Boulder San Francisco Oxford: Westview Press.
- Ruttan, V. W. and Y. Hayami 1984. 'Towards a theory of induced institutional innovation.' *Journal of Development Studies* 20(4):203-223.
- Sjaastad, E. and D. W. Bromley 1997. 'Indigenous land rights in Sub-Saharan Africa: appropriation, security and investment demand.' *World Development* 25 (4) 549-562.
- Teklu, T. 2003. 'Rural lands and evolving tenure arrangements in Ethiopia: Issues, Evidence and Policies.' FSS Discussion Paper No. 10, Forum for Social Studies, Addis Ababa, Ethiopia.

- TGE (Transitional Government of Ethiopia, Office of the Prime Minister) 1993. National Population Policy of Ethiopia, Addis Ababa.
- World Bank 1992. Ethiopia. Toward Poverty Alleviation and a Social Action Program. Report No. 11306-ET, November. World Bank, Washington, D. C.
- 2002. World Development Report 2002: Building Institution for Markets.Published for the World Bank: Oxford University Press.



## **AUTHORSHIP DECLARATION**

Required enclosure when requesting a thesis evaluated for a PhD degree. This declaration should describe the research contribution of both the candidate and each of the co-authors for each article constituting the thesis. For each article the declaration should be completed (capital letters if handwritten) and signed by the candidate and the co-author(s).

Article no. I Title: Tessema, A., and N. Shanmugaratnam., 'Fighting a losing battle? Livelihood adaptation and diversification in Wolaita, Ethiopia.'

Candidate: (First author) The contribution of the candidate:

I declare that I am the main researcher and author of the article

Co-author: Professor N. Shanmugaratnam Co-author's contribution: Sepervision

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

To the best of your knowledge, has this article been part of a previously evaluated doctoral degree thesis? Y/N

If yes, please elaborate: No.

Gaussin

Signature of candidate

Co-author's signatures:

Ayele Tessema

N. Shanmugaratnam

name

name

name

......

Norwegian University of Life Sciences - Degree Philosophiae Doctor (PhD) - Authorship declaration - Page 1 of 1



## **AUTHORSHIP DECLARATION**

Required enclosure when requesting a thesis evaluated for a PhD degree. This declaration should describe the research contribution of both the candidate and each of the co-authors for each article constituting the thesis. For each article the declaration should be completed (capital letters if handwritten) and signed by the candidate and the co-author(s).

Article no. II Title: Tessema, A. 'Risk sharing and livelihoods: Funeral and wedding costs in Wolaita.'

Candidate: (sole author) The contribution of the candidate:

I declare that I am the sole researcher and author of the article

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

To the best of your knowledge, has this article been part of a previously evaluated doctoral degree thesis? Y/N

If yes, please elaborate: No.

eng

..... Signature of candidate **Co-author's signatures:** Ayele Tessema ..... ..... 

name

name

name

name

Norwegian University of Life Sciences - Degree Philosophiae Doctor (PhD) - Authorship declaration - Page 1 of 1

#### **AUTHORSHIP DECLARATION**



Required enclosure when requesting a thesis evaluated for a PhD degree. This declaration should describe the research contribution of both the candidate and each of the co-authors for each article constituting the thesis. For each article the declaration should be completed (capital letters if handwritten) and signed by the candidate and the co-author(s).

Article no. III: Title: Tessema, A., and N. Shanmugaratnam., 'Policy assumptions and empirical realities of fertility behaviour in Wolaita, Ethiopia.'

Candidate: (First author) The contribution of the candidate:

I declare that I am the main researcher and author of the article

Co-author: Professor N. Shanmugaratnam Co-author's contribution: 1. From

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

To the best of your knowledge, has this article been part of a previously evaluated doctoral degree thesis? Y/N

If yes, please elaborate: No.

Signature of candidate

Ayele Tessema name

**Co-author's signatures:** 

N. Shanmugaratnam ..... name

..... name

Norwegian University of Life Sciences - Degree Philosophiae Doctor (PhD) - Authorship declaration - Page 1 of 1

name





Required enclosure when requesting a thesis evaluated for a PhD degree. This declaration should describe the research contribution of both the candidate and each of the co-authors for each article constituting the thesis. For each article the declaration should be completed (capital letters if handwritten) and signed by the candidate and the co-author(s).

Article no. IV Title: Tessema, A. 'The land question in Ethiopia: Tenure security as a vehicle for growth and equity.'

Candidate: (sole author) The contribution of the candidate:

I declare that I am the sole researcher and author of the article

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

Co-author: Co-author's contribution:

To the best of your knowledge, has this article been part of a previously evaluated doctoral degree thesis? Y/N

If yes, please elaborate: No.

Signature of candidate

Co-author's signatures:

Ayele Tessema

name

name

name

name

Norwegian University of Life Sciences - Degree Philosophiae Doctor (PhD) - Authorship declaration - Page 1 of 1