Preprint of

Segers, K., J. Dessen, P. Develtere, S. Hagberg, Girmay Haylemariam, Mitiku Haile & J. Deckers 2010. 'The role of farmers and informal institutions in microcredit programs in Tigray, northern Ethiopia', *Perspectives on Global Development and Technology* 9, 3-4: 520-44.

DOI:10.1163/156914910X499804

Corresponding author:

Kaatje Segers

Department of Earth and Environmental Sciences, Katholieke Universiteit Leuven

Celestijnenlaan 200E box 2411

B-3001 Heverlee

Belgium

Tel. +32-16-32.97.34 - Fax +32-16-32.97.60

E-mail kaatje.segers@ees.kuleuven.be and kaatjesegers@scarlet.be

Copyright to the article has been transferred to Elsevier. However, the authors reserve all proprietary rights other than copyright and the right to use all or part of this article in future works of their own, such as books and lectures.

The [Attribution-Noncommercial-Share Alike 2.0 Belgium License](https://creativecommons.org/licenses/by-nc-sa/2.0/) applies to this work.

THE ROLE OF FARMERS AND INFORMAL INSTITUTIONS IN MICROCREDIT PROGRAMS IN TIGRAY, NORTHERN ETHIOPIA*

Kaatje Segers (corresponding author)

Department of Earth and Environmental Sciences, Katholieke Universiteit Leuven, Celestijnenlaan 200 E box 2411, B-3001 Heverlee, Belgium

Tel. +32-16-32.97.34 - Fax +32-16-32.97.60 - E-mail kaatje.segers@ees.kuleuven.be and kaatjesegers@scarlet.be

Joost Dessein

Institute for Agricultural and Fisheries Research (ILVO), Social Sciences Unit, Burg. Van Gansberghelaan 115 box 2, B-9820 Merelbeke, Belgium

Patrick Develtere

Higher Institute of Labour Studies (HIVA), Katholieke Universiteit Leuven, Parkstraat 47 box 5300, B-3000 Leuven, Belgium

Sten Hagberg

Department of Cultural Anthropology and Ethnology, Uppsala University, P.O. box 631, SE-75126 Uppsala, Sweden

Girmay Haylemariam

Degua Temben District Bureau of Capacity Building, Hagere Selam, Tigray, Ethiopia

Mitiku Haile

Department of Land Resources Management and Environmental Protection, Mekelle University, P.O. box 231, Mekelle, Ethiopia

Jozef Deckers

Department of Earth and Environmental Sciences, Katholieke Universiteit Leuven, Celestijnenlaan 200 E, B-3001 Heverlee, Belgium

Short title: Microcredit, farmers and informal institutions in Tigray

Word Count: 10,572 words

Key words: microfinance, development anthropology, institutional change, rural development, Ethiopia

* Corresponding author: Kaatje Segers, Department of Earth and Environmental Sciences, KULeuven, Celestijnenlaan 200 E box 2411, B-3001 Heverlee, Belgium - E-mail: kaatje.segers@ees.kuleuven.be and kaatjesegers@scarlet.be. The authors acknowledge the assistance of Jan Nyssen and Zaid Negash and they would like to thank two anonymous reviewers for their insightful comments. They are grateful to the Flemish Interuniversity Council (VLIR) for funding Kaatje Segers' PhD research and to Mekelle University (MU) and the VLIR MU Institutional Cooperation Programme for hosting it. They are greatly indebted to all informants in Degua Temben. Special thanks are due to Yikunoamlak Teklebirhan.

THE ROLE OF FARMERS AND INFORMAL INSTITUTIONS IN MICROCREDIT PROGRAMS IN TIGRAY, NORTHERN ETHIOPIA

Abstract

Based on ethnographic research and from an actor-oriented approach, this paper investigates the outcomes in terms of social and institutional change of the introduction of microcredit in Tigray (Ethiopia). It shows how farmers' appropriation of microcredit programs causes informal credit, land and social security institutions to alter in significance, function and meaning. Contrary to the intentions of microcredit programs, farmers use their loans to bridge seasonal food gaps and meet deficiencies in seed and draught power. This depresses a number of long-standing informal institutions that regulate seasonal lending and land rental between households with differential access to resources. Due to microcredit clients' immediate large cash needs to pay off their debts, short-term informal money lending and one-year land "sale" have gained importance. An informal social security institution has been adapted to take care of unlucky microcredit borrowers. On a broader level, the paper analyzes the encounter of the global paradigm of microcredit to fight poverty with local Tigrayan, historically grounded conceptions of debt, independence and wealth.

Introduction

In this paper, we investigate how farmers in Tigray (Ethiopia) have appropriated microcredit programs and how this has contributed to social and institutional change. Contrary to the programs' intentions, but in keeping with their own objectives, farmers have used microcredit to bridge seasonal food gaps and meet deficiencies in seed and draught power. This has caused a number of informal credit, land and social security institutions to alter in significance, function and meaning. The aim of this paper is not to deny that microcredit in Ethiopia has increased rural incomes, improved food security, and empowered marginalized groups (Borchgrevink et al. 2003; Borchgrevink et al. 2005; Fitsum Hagos 2003; Getaneh Gobeze and Garber 2007; Meehan 2001; Zaid Negash 2008). Rather, it is to show that there is more to be said about the consequences of microcredit on society.

In 1976, Muhammad Yunus initiated the Grameen Bank Project to help people escape from poverty through small loans for self-employment (Yunus 2003). From then on the microcredit movement has steadily gathered momentum, culminating in the UN adoption of 2005 as the International Year of Microcredit¹ and the awarding of the 2006 Nobel Peace Prize to Yunus and the Grameen Bank.² Born in a Bangladeshi village, over a few decades microcredit has grown into a mainstream poverty reduction strategy. By the end of 2006, 3,316 microfinance institutions reached over 133 million borrowers, mainly

¹ <http://www.yearofmicrocredit.org/> (accessed on February 25th, 2009).

² <http://nobelprize.org/> (accessed on February 25th, 2009).

women, worldwide (Daley-Harris 2007).³

Yet microcredit's achievements in terms of poverty reduction have not gone unquestioned. Recent comparative research, for example, concludes that there is no consensus on whether microcredit reduces poverty (Armendáriz de Aghion and Morduch 2005; Brau and Woller 2004; Develtere and Huybrechts 2005; Sharma and Buchenrieder 2002; Weiss and Montgomery 2005). Other subjects of considerable research, and indeed debate, include issues of differential impact according to borrowers' poverty levels (Coleman 2006; Islam 2007; Khandker 2005; Mosley and Hulme 1998) and the reconcilability of the economic viability of microfinance programs' with their objective of alleviating poverty (Copestake 2007; Morduch 2000; Rahman 2004; Woller and Woodworth 2001; Woolcock 2006). As the goals of development have been broadened, research attention has turned toward the social and political impacts of microcredit (Develtere and Huybrechts 2005; Hulme 2000). In particular its potential to empower women has been much discussed. Evidence remains inconclusive (see also Develtere and Huybrechts (2005)), as some authors conclude microcredit empowers women (Hashemi et al. 1996; Lakwo 2006), whereas others find it produces or reproduces women's social and economic vulnerability (Ehlers and Main 1998; Goetz and Gupta 1996; Rahman 1999), and still others argue the empowerment discourse is reductionist (Parmar 2003; Selinger 2008).

However, research on the outcomes of microcredit is arguably limited in scope. Literature

³ As reported to the Microcredit Summit Campaign.

research has revealed that the wider consequences of microcredit on society are poorly studied and understood (Develtere and Huybrechts 2005; Perry 2002). Research on the longer-term effects of microcredit is in its infancy (Ahlin and Jiang 2008; Khandker 2005; Moll 2005). Perry (2002:32) summarizes that “‘impact’ studies reign over ‘institutional’ studies that examine broader social and economic changes”. Related to this is the observation that little ethnographic research on consequences to microcredit users has been carried out (Brett 2006). Qualitative approaches have been recognized as in a privileged position to unravel and interpret the processes at play in microcredit interventions (Hulme 2000; Rahman 1999). Still, to date microcredit has received limited sociological and anthropological attention (recent exceptions include Brett (2006), Lont and Hospes (2004) and Perry (2002)). These methodological and thematic research gaps are more pronounced in the Ethiopian context, where little is known about the impact of microcredit programs (Borchgrevink et al. 2003; Getachew Teka and Yishak Mengesha 2006; Getaneh Gobezie and Garber 2007; Sebstad 2003).

This paper attempts to address these knowledge deficits by presenting an ethnographic account of how microcredit programs have induced and influenced social and institutional change in a rural community in the Tigray region of Ethiopia. The research for this paper followed an actor-oriented approach, with intervention viewed as “an ongoing, socially constructed and negotiated process, not simply the execution of an already-specified plan of action with expected outcomes” (Long 2001:31; Long and van der Ploeg 1989:228). Going beyond the question of intended benefits for borrowers, the article analyzes how farmers in the study area appropriate microcredit programs through

selective adoption and sidetracking (Olivier de Sardan 2005). It then shows how such appropriation has affected informal institutions, defined as “regularized patterns of behavior between individuals and groups in society” (Leach et al. 1999:225).

After a short description of the study area and methodology, we first give an overview of the microcredit programs running in the area. We then proceed with a reconstruction of informal lending practices before the introduction of these microcredit programs. Based on this, we go on to examine farmers’ appropriation of the programs and the resulting social dynamics.

Research area and methodology

Our research area is the Degua Temben *wereda* or district in Tigray, the most northern and third-poorest region of Ethiopia (World Bank 2005). Degua Temben is situated in the highlands west of the regional capital Mekelle and covers just over 1,100 km². Hagere Selam is the district’s main, and in fact only, town. Degua Temben has a population of around 120,000,⁴ over 90 percent of whom are smallholder subsistence farmers. Their main economic activity is integrated rainfed crop and livestock production, in which oxen provide draught power for plowing. The seasonal rain pattern, with over 80 percent of total rainfall between June and September (Nyssen et al. 2005), allows one harvest of cereals and pulses per year. Livestock complements farming incomes and is the main form of savings. Degua Temben consists of 18 *tabyas* or sub-districts, the sub-district being the lowest formal administrative level. Our research is concentrated on one sub-

⁴ The 2006 number according to the Degua Temben district administration.

district with about 1,050 households,⁵ spread over three *qushets* or villages.

Empirical data for this paper were gathered as part of a larger anthropological study on rural development processes in Tigray. We collected the main body of data through participant observation and interviews (Bernard 2006; de Certeau 1984; Olivier de Sardan 1995) with farmers in the case-study sub-district. Through successive interviews and, when available, with the help of their microcredit account books, we recorded the credit histories of 25 households in detail. At the same time we conducted interviews with district and sub-district administrators and staff members of the Bureau of Agriculture and Rural Development and the Dedebit Credit and Savings Institution (DECSI). Moreover, we studied relevant microcredit program documents. Fieldwork was spread over two periods, the first from March 2005 until February 2006 and the second from August 2006 until May 2007. Existing ethnographic sources served as a baseline to compare with informants' memories of the pre-microcredit era.

Microcredit in Degua Temben

The main microcredit provider in Tigray is the Dedebit Credit and Savings Institution (DECSI). To comply with microfinance legislation, DECSI developed in 1997 from the Rural Credit Scheme in Tigray, which the regional NGO Relief Society of Tigray (REST) had launched three years before (Belay Assefa 2001; Borchgrevink et al. 2003). With over 392,000 active clients at the end of 2006, DECSI is one of Africa's largest microfinance institutions (Daley-Harris 2007; Microfinance Information Exchange 2007).

⁵ The 2006 number according to our own census.

At present three DECSI sub-branches are operational in Degua Temben. Credit-granting is DECSI's major activity in the district; so-called regular loans and agricultural package loans are the main products.⁶ Regular loans were the first to be introduced. They are based on social collateral and are granted to groups of three to seven jointly liable borrowers.⁷ They may be used for all kinds of productive purposes. Loan terms and amounts vary, with a usual loan term of one year and a ceiling of 5,000 ETB.⁸ Regular loans are to be repaid in monthly installments and have a yearly interest rate of 15 percent⁹.

In 2003 DECSI extended its credit services to include agricultural package loans. Package loans are a cornerstone of the Ethiopian government's Food Security Program and its companion agricultural extension approach. Hence, the household package program in Tigray is a collaboration between DECSI and different government agencies. Package loans are guaranteed by the Tigray regional government and are given without

⁶ The so-called "city package" and "off-farm package" loans that were recently introduced for the financing of micro and small scale enterprises are excluded from our analysis. Hence, "package loan" is used as shorthand for "agricultural package loan" in the remainder of the paper.

⁷ The minimum was reduced from five to three in 2003. In general, DECSI's regular and agricultural package loans are under quasi-constant review. We have therefore chosen to further limit ourselves to a description of the terms and conditions that applied in the Hagere Selam sub-branch, which serves the sub-district under study, in the beginning of 2007. However, the basic principles of the two microcredit programs have remained unchanged since their inception.

⁸ Increased from 5,000 to 10,000 ETB in 2007. 1 ETB = 0.118 USD in January 2007.

⁹ Reduced from 15 to 12 percent in 2007.

collateral to individual farming households.¹⁰ Households are to increase and diversify their assets and income sources through investment in a “package” of specific agricultural inputs and activities, differing according to agro-ecological zones. Concretely, package loans in Degua Temben are earmarked to a combination of one or more of the following components: irrigated horticulture, high-yielding seed varieties and mineral fertilizers, goat or sheep breeding, goat or sheep fattening, cattle fattening, dairy production, poultry, “traditional” beekeeping, and “modern” beekeeping. Each component corresponds to a predetermined loan amount, estimated on the basis of local market prices.¹¹ Depending on the composition of the package, the loan term is either one, two or four years.¹² Package loans are repayable in annual installments and the interest rate is nine percent per year. Borrowers in Degua Temben receive part of the credit for modern beekeeping (i.e. the beehive) as well as credit for horticulture and agricultural inputs in kind through the district Bureau of Agriculture and Rural Development.¹³ The latter also takes responsibility to train the package program participants in the relevant agricultural activities.

¹⁰ Package loans amounting to 5,000 ETB are collateral-free. All package loans in the sub-district are well below this ceiling.

¹¹ For instance, the goat or sheep fattening component corresponds to the estimated purchase price of three goats or sheep, i.e. 600 ETB in 2007.

¹² The loan term is one year if the package only includes poultry and/or agricultural inputs and four year if it includes modern beekeeping or dairy production. A two-year loan term applies to all other combinations.

¹³ Previously credit for poultry was given in kind as well.

Agricultural package loans constitute 70 percent of DECSI's current loan portfolio (Atakilt Kiros 2007). In their Tigray-wide survey studies, Borchgrevink et al. (2005) and Zaid Negash (2008) find that regular loan borrowers tend to switch to the package loan program. The authors mainly attribute this shift to the widespread preference for the individual-based credit approach over the group-based one, which is arguably connected with the individualistic nature of Tigray society (Bauer 1976). This is consistent with our observations in Degua Temben, where the package loan has rapidly ousted the regular loan. In fact, in rural Degua Temben microcredit did not start to boom until the introduction of the package loan. In the last five years, DECSI granted almost 17,000 package loans to a total of 27,000 households in the district.¹⁴ Taking into account the recentness of the program in combination with the loan terms and the prohibition on simultaneous loans, these numbers indicate that a significant part of the farming population has participated in the program. Besides, its outreach is expected to grow, as the regional government has recently set new target numbers of beneficiary households (BoFED 2007) and local governments and the Bureau of Agriculture and Rural Development are promoting the package program on the ground.¹⁵

¹⁴ 26,862 households is the 2006 official number available in the district, but that might be an overestimation. The official number of households in the sub-district under study, for instance, is an overestimation of over 40 percent of the actual number of households living in the sub-district according to our own census.

¹⁵ Segers et al. (2009) and Segers et al. (2008) elaborate on local actors' strategies to increase the numbers of farmers participating in development programs.

Apart from DECSI, REST and local farmer cooperatives supply in-kind agricultural input loans to Degua Temben farmers. The cooperatives are specialized in high-yielding seed varieties and mineral fertilizers. REST provides, among other things, beehives and irrigation equipment. REST loans are of the same order as DECSI loans, but the number of beneficiaries is limited. Farmers commonly buy fertilizers and seeds on seasonal credit from the local cooperative, but loan amounts are comparatively small. Whereas repayment rates for DECSI microloans in Degua Temben fluctuate around 98 percent (comparable to Borchgrevink et al. (2003) and Sebstad (2003)), loan default and rescheduling are common in the cases of REST and the farmer cooperatives. The latter institutions' repayment management is lax in comparison with that of DECSI, where the Bureau of Agriculture and Rural Development, the local governments, and DECSI assume joint responsibility for loan recovery. As we will see, these latter three enforce repayment irrespective of borrowers' financial means. Besides, REST not only allows for long loan terms, but also seems to fail to specify the repayment period to its clients. Due to these characteristics and differences, the microcredit programs of REST and the farmer cooperatives play a minor role in the observed processes of social and institutional change, as will become clear from the analysis below.

Lending practices in the pre-microcredit era

Before microcredit programs entered this field in the late 1990s, credit in Degua Temben was a matter of informal arrangements between households. Most arrangements at that time belonged to three broad categories of credit institutions: trade loans, "friendly" loans, and seasonal loans, which we will discuss in turn. The different informal credit

institutions not only served different purposes, but also involve different degrees of reciprocity and dependence between creditor and debtor. We found they have been differently influenced by the introduction of microcredit. For analytical clarity, we discuss the pre-microcredit situation in this section. In the following sections we describe how each informal credit institution has altered or not since microcredit became available. In addition to informants' memories, this part of the paper relies heavily on Bauer's (1973) ethnographic research in a neighboring district to Degua Temben during the late imperial period and Hendrie's (1999) anthropological study of revolutionary reform in another sub-district of Degua Temben in the first half of the 1990s.

a. High-risk short-term trade loans

A first type of informal credit institution, which was rather rare, operated on a more or less market-driven basis. Before microcredit programs were initiated, rich households provided cash loans for commercial purposes, mainly for financing cattle trade. Farmers who engaged in cattle trade typically appealed to credit if they saw the opportunity for a lucrative transaction for which they lacked the necessary capital.¹⁶ Loan periods normally varied from a few days to some weeks and interest rates ranged from a few percent to around 20 percent per month, reflecting the high risk for the moneylender.

b. "Friendly" loans

A second and more widespread type of informal credit were grain and cash loans between farmers who maintained reciprocal relationships, such as close relatives, friends or

¹⁶ Bauer (1973) describes this in more detail.

neighbors.¹⁷ These loans were usually small, interest-free and flexible with regard to repayment.¹⁸ They normally did not bring obligations to the debtor, other than the obligation of mutual support, upon which the two parties' relationship was typically built. At the beginning of the harvesting season, for instance, farmers with early-harvested crops, such as maize, used to lend a portion of their harvest to neighbors with late-harvested crops, such as wheat, in expectation of the latter's own harvests shortly after. These loans thus were returned within a few weeks of them being given. Due to crop rotation, the successive growing of different crops on the same land, lenders and borrowers switched roles from year to year. Other common reasons for a "friendly" loan in cash or in grain were when a household experienced a shock, such as the need for acute medical treatment of a household member, or when it had expenses for the celebration of, for instance, a baptism or a marriage. Also, grain traders and grocers in Hagere Selam improved customer relations by allowing deferred payment in these latter cases.

c. Seasonal loans and the relation between lending and land

At the other side of the reciprocity spectrum, and most relevant for the present study, were seasonal loans from what informants straightforwardly call a rich (*haftam*) to a poor (*dcha*) household. In Tigray rural society, wealth largely depends on, and is defined in

¹⁷ This is not to deny the existence, especially in pre-revolutionary times, of highly asymmetrical relationships between kin or neighbors. We refer to Bauer (1973) for an in-depth discussion of the normative and transactional symmetry of social relationships between households during the imperial era.

¹⁸ This is much the same as what Hendrie (1999) observed.

terms of, access to agricultural resources, principally oxen and land.¹⁹ That is because, regardless of the intrinsic unpredictability of agriculture, a household's access to oxen and land to a great extent determines whether it can produce sufficient grain to support itself. Before the introduction of microcredit, it was common for Degua Temben farmers who faced seasonal seed and food shortages to borrow grain from surplus producers. Selling livestock, reducing consumption or doing wage-labor, sometimes in combination with temporary migration or land rental, were other widespread coping strategies.²⁰

During imperial times, until the mid-1970s, agricultural land in the research area was concentrated in the hands of a small number of secular and religious landlords.²¹ On the other hand, the farmland of the majority of the households was too small to be viable. Oxen ownership too was unequal and partly correlated with the control over land, though better-off land-poor households did own oxen and expanded their cultivated area through land rental. This structural inequality formed the basis of asymmetrical relations of debt-dependence, in which large numbers of capital-poor households depended for their

¹⁹ See Bauer (1973), Hendrie (1999) and McCann (1995) for a detailed analysis of the role of oxen and land. In the research area access to oxen and land can be realized through ownership of oxen or use rights for land as well as through a set of informal institutions that regulate exchanges between households, such as oxen rental, oxen pooling, and land rental.

²⁰ Hendrie (1999) elaborates on Degua Temben farmers' coping strategies.

²¹ A more complete description of land tenure systems during imperial times can be found in Asmelash Woldemariam (2006), Bauer (1973), Crummey (2000), Dessalegn Rahmato (1984), Hendrie (1999) and Hoben (1973).

survival upon grain loans from a few capital-rich ones.²² In fact, such loans were usually part of a web of highly entangled clientelistic exchanges between a rich and a poor household. The poor household among other things provided unpaid labor and political support, whereas the rich household, in addition to grain loans, offered paid employment and the use of its oxen for plowing and threshing.

After the fall of the empire, successive land reforms by the Derg regime and the Tigray People's Liberation Front (TPLF) put an end to the unequal distribution of land.²³ Consequently, not only did wealth inequalities diminish, but also the vertical dyadic relationships of dependence were largely undermined.²⁴ Farmers gained direct access to farm land and control over its cultivation and produce through use rights. As a consequence, grain loans decreased in magnitude and frequency. Still, in the densely populated highland areas, households' production on their post-reform land properties did not always suffice. Even in years with a good harvest, distress grain sale to cover expenses associated with illness or high grain consumption in social events (baptisms, marriages, funerals, or death commemorations) could result in a grain deficit before the next season's harvest. The steady rising of food aid in the course of the 1980s and 1990s

²² Bauer (1973) notes that 57 percent of the households in a neighboring district were debt-dependent on the richest eight percent.

²³ The number, timing and implementation of revolutionary land redistributions in Tigray vary with location. For a discussion of Derg and TPLF land reforms, see Asmelash Woldemariam (2006), Bruce et al. (1994), Dessalegn Rahmato (1984) and Hendrie (1999).

²⁴ We refer to Hendrie (1999) for an excellent account of how land reform by the TPLF altered social relationships.

helped households to bridge seasonal gaps. However, as Hendrie (1999:162) notes, grain loans remained “an important strategy for poorer households”,²⁵ whereas at the same time there was a “decline in the ability of the rich to provide loans to the poor”. For reasons of comparison with the current situation, we borrow a quotation from a farmer in Hendrie (1999:162) to illustrate this point.

Today and the past are very different things. In the past there were rich people and the poor could work for them. And the rich gave them loans of grain. But now, all are poor and there is no big loan.

Before expounding upon another aspect of the relation between seasonal credit and land, it is worth noting that the land redistributions and other revolutionary reforms seem not to have fundamentally changed grain loan contracts in the research area.²⁶ As far back as informants can recall, two types of agreements were simultaneously in use. First, there was the system in which the repayment was in a higher-valued crop than the borrowed one, normally without a volume increase. A barley loan typically had to be repaid in wheat and a wheat loan in taf (*Eragrostis tef*), an endemic and easily storable staple crop. The second was a loan with *siso weled*, literally “one third interest”. Per two borrowed baskets of grain the debtor had to repay three baskets, normally of the same crop. Referring to the additional basket, informants say “*siso weled* lenders ate the grain of the

²⁵ In addition to regular small grain and food loans between households on a reciprocal basis, one third of the households Hendrie (1999) surveyed had to borrow in 1992-1993.

²⁶ This is in contrast with Hendrie's (1999) observation in another sub-district that interest payment was on a voluntary base after the TPLF had taken power.

poor”. Hence, when farmers faced shortages, they tried to obtain an “upgrading” loan first. They resorted to a *siso weled* agreement only if they had no other choice. Regardless of when a loan was granted, repayment was required after the next harvest. Depending on the lender and last year grain yields, variations existed on the standard formulas. For instance, informants remember loans in the inferior grass pea (*Lathyrus sativus*) having to be repaid in wheat and taf in times of famine. Alternatively, unpaid work in the service of the creditor could either replace the grain interest or come on top of it.²⁷ Cash *siso weled* loans were another variant. Informants report that in extreme cases poor households accepted a variant of the expensive short-term trade loans with monthly interest from a moneylender to bridge seasonal food gaps. They are united in their view that debt repayment problems used to be rare and loan enforcement was normally not an issue. They attribute this to the small average size of informal seasonal loans as compared to current microloans, the fact that repayment was due after the harvest and the many options for alternative repayment arrangements between farmers.²⁸

Besides the direct link between land distribution and households experiencing grain shortages or surpluses, land and seasonal lending in the pre-microcredit period were connected through the “competition” between grain loans and distress land rental. In short, land rental in Tigray involves the temporary transfer, normally for the duration of one agricultural season, of the use rights on a plot of land in exchange for a share of the

²⁷ Bauer (1973:163) mentions in this respect “interest-plowing” of the creditor’s land by the debtor with the latter’s own oxen. Informants denied this was common, though.

²⁸ We will come back to this point later.

grain harvest. The tenant provides all inputs - the seed is meaningfully called “credit seed” - and receives the straw in addition to his part of the harvest. Throughout history a number of informal institutions, each with a myriad of variations upon them, have regulated land rental agreements between landowners and tenants. Two of them in particular, *mwufar* and *mli* or *defena*, were common in the sub-district before the introduction of microcredit.²⁹ The main technical difference between *mwufar* and *mli* is that in the former the contract was concluded before the plowing season, whereas in the latter the landowner rented out the land after having it plowed at least once.³⁰

During imperial times large landowners used to rent out part of their land through *mwufar*, either because they owned more land than they could manage, or as part of a strategy of abandoning the cultivation of their own marginal fields to free resources (oxen, labor and seed) to deploy on fertile rented-in fields. Another important group of *mwufar*-outrenters in pre-microcredit times were poor households that did not succeed in mobilizing the necessary resources to cultivate their land themselves. The institution of *mli* merely regulated distress rental by poor households. Farmers who had managed to plow a plot were compelled to rent it out through *mli* just before the start of the sowing season if they lacked seed. In the case of chickpea and grass pea, for which a single plowing at the time of sowing is the local rule, distress land rental was regulated by *myam*. *Myam* was a cross between *mwufar* and *mli* in the sense that the deal was closed

²⁹ For an elaborate description of *mwufar*, see Hendrie (1999).

³⁰ Depending on the crop Degua Temben farmers plow their fields one to four times before sowing it.

just before sowing time but without the land having been plowed by the owner. The tenant received a larger share of the harvest than in ordinary *mwufar* or *mli* agreements.

The quotations below illustrate what we mean with the “competition” between grain loans and distress land rental by poor households.

When a farmer had plowed his land and his wife told him in June that there was not enough grain in their shrfa³¹ to sow, he had to go looking for credit. If he could find seed he sowed his land himself. If he could not he had to give it away through mli. Rich people did not easily give credit in June. They preferred to keep their grain in the hope that they could get additional land [to rent].

Some rich people wanted to lend grain in June to sow, but most did not. There were rich men who had two, three pairs of oxen and a surplus of two, three shrfa of grain in their house. They became rich by cultivating other people's land. If you asked them for seed, they said they could not give you. But they asked for nothing better than renting your land through mli. For that they had grain enough.

Hence, rich households' preference for land rental over grain lending as a wealth accumulation strategy made seed credit scarce. As we mentioned before, during imperial times landlords sought to enrich their land portfolio with highly productive land. In addition, land-poor farmers with oxen depended on land rental to enlarge their farm area,

³¹ Large basket to store grain in. There is a taboo on men checking a household's grain reserves.

which had the advantage over lending that it allowed the efficient use of their oxen and yielded straw. With the abolishment of landlordism, only poor households remained as potential *mwufar*-outrenters, while the demand for land to rent increased.³² To summarize: in the decades before the introduction of microcredit, farmers with oxen or seed shortages faced growing difficulties to obtain loans from rich farmers, who instead had their eye on the poor farmers' land. From a poor farmer's perspective, having to take out a loan means a serious loss of independence, which Tigray people hold as one of the highest ideals.³³ Having to enter into a land rental agreement, though, has the added disadvantage of loss of control over agricultural self-employment and production and mortgages the chance of quick recovery.

How farmers appropriate the microcredit programs

It is against this background that DECSI launched its regular and package loan programs and that REST and local cooperatives started supplying agricultural input loans in Degua Temben. Together with these microcredit programs, the idea of borrowing to invest in enlarging one's productive asset and activity portfolio began. A basic tenet of the microcredit approach, this idea was at odds with prevailing informal lending practices. First, farmers, who used livestock saving to protect against debt, had to become acquainted with the notion of borrowing to accumulate livestock and other capital assets. Second, borrowing above all was associated with shortage of grain, failure to sustain a

³² Explained in detail in Hendrie (1999).

³³ Bauer (1973) discusses the overriding importance of independence, including the categorical divide between "first" (independent) and "second" (dependent) households.

household's independence, and poverty in general. Although negative connotations remain, extension and evidence of successful microcredit clients have certainly done their job in this regard. Indeed, nowadays it is common for households across the entire wealth spectrum to take out a microloan and, fully or otherwise, invest it in agricultural inputs and stock breeding among other things. The following quotations from farmers illustrate how different things were a little over a decade ago.

It used to be only the poor people who took loans. A rich man did not ask for credit from another rich man, unless maybe if he wanted to do business. If he would have done so, the lender would have said: "why in God's name do you need a loan, with so much richness in your house?" [...] Nowadays everybody takes credit. The rich do so because they want to become richer and the poor to survive and escape from poverty.

In the past, rich people did not take credit. It would have been a shame for the rich man if people would have heard that he borrowed and if they would have gossiped that he was not rich anymore because he needed a loan. Thanks to the government people now think differently. If somebody asks you why you take a loan, you may simply answer: "because I want to get a better life, because I want to do business, because I want to buy cattle...". Nowadays borrowing has nothing to do with poverty.³⁴

³⁴ For a clear understanding of the latter and a number of the following quotations we note that Degua Temben farmers usually do not differentiate between the government and non-governmental development

Contrary to the microfinance institution's intentions, though, poorer households have used DECSI microloans above all to counter the double problem of seasonal grain shortages and scarcity of informal credit to meet them. Since the regular and package loans were introduced, farmers have started partly diverting them towards buying seed and food. By doing so, a household avoids having to enter into an unequal relationship of debt-dependence with another household or, worse, to rent its land. Currently, it is common practice for households that face a substantial grain deficit, which mostly cannot readily be met by "friendly" loans or income from wage-labor or other off-farm activities, to contract a package loan.³⁵ Some households short of seed choose in-kind input loans from the local farmer cooperative as an alternative. However, this is not very common as poor farmers in general are averse to the risks associated with the use of improved seed and the mineral fertilizers it comes with. In addition, these households rarely resort to microcredit for the single purpose of seed. Instead, they tend to allocate a smaller or larger portion of their DECSI credit to food or other consumables. Households without

actors. They use "*mengsti*" (government) as an umbrella term. This is arguably a symptom of the nexus between government, or ruling TPLF party to be precise, and development, which Segers et al. (2009) examine.

³⁵ Recent large scale research has shown that among very poor and poor households in Tigray, which together account for 50% of the population, the household's own crop production and purchases have comparable shares in food consumption, whereas food aid has a smaller share. Hence, on average food aid far from fully covers these households' grain deficits. As households become richer, the share of own crop production increases at the expense of the shares of both food aid and purchases (Livelihoods Integration Unit 2008).

oxen, moreover, often spend a part of their microloan on renting oxen for plowing. A farmer explains his situation as follows.

[Two years ago] I applied for a cow [package loan], but I did not intend to buy a cow, so I did not. At that time I needed money for three things: I had a seed problem, a food problem and an oxen problem. With the package money that was left after buying grain and renting oxen, I bought three goats.

Like the informant above, most “emergency borrowers” invest the remainder of their package loan in livestock, of the type DECSI earmarked the credit to or otherwise. In the first case, the farmer buys either young or inferior quality animals or fewer animals than the credit is meant to. This is because the remaining budget is but a fraction of the loan, and hence of the DECSI-estimated cost of investment. This strategy has the advantage that the farmer can relatively easily hide from development agents, DECSI staff, and local administrators that he or she has partly diverted the package loan. Another common strategy to conceal loan diversion is to contract a package loan that includes a component one already owns. For example, a farmer may take out a microloan to buy a bee colony while actually he already captured a wild one. In any case, strategies of sidetracking, selectively adopting, or somehow accommodating the microcredit programs to individual needs are numerous, and their use is widespread among all types of borrowers in the research area. For instance, farmers commonly try to “optimize” the amount and repayment terms of their package loan by juggling with package components at application. DECSI field staff and development agents are, to some extent at least, aware

of offences. Rarely do they take action unless there are problems of default, though. Another sign of their willingness to tolerate loan diversion is that they have responded to farmers' seasonal demand for credit by distributing microloans in two to three quickly subsequent rounds in the spring, when grain and oxen shortages are most acute, rather than evenly spreading these rounds over the year, which would be better manageable as well as ensure more continuous access to credit.³⁶

In general, farmers' changeover to microcredit to bridge seasonal food gaps and meet deficiencies in seed and draught power has been made possible because DECSI has proven to be a reliable source of credit, in contrast with land-seeking rich farmers. Due to high ambitions in terms of coverage, DECSI does not normally reject loan applications in spite of formal targeting criteria and screening.³⁷ The following quotations indicate how Degua Temben farmers have gradually attributed the role of "sympathetic new rich" to "the government".

Like the government currently gives credit in April and May, that means before the start of the rainy season, in the past too some lenders gave credit before June.

³⁶ In principle the DECSI Hagere Selam sub-branch office offers loans all year round, but for organizational reasons DECSI field staff and development agents normally bundle the credit applications of all candidates in the sub-district before transferring them to the office.

³⁷ Only those candidates who have outstanding DECSI loans or who seriously defaulted on a previous loan are refused.

Loans of grain have disappeared. Who is still rich today? All are poor, only the government is still rich. Today people look to the government when they are in need.

Institutional change: credit, land and social security

The introduction and rapid expansion of microcredit programs in the research area and their appropriation by the rural population have induced and influenced local processes of social and institutional change. While some informal institutions have clearly altered over the past decade, others have started to experience change more recently. Since new processes of institutional change, microcredit-driven or otherwise, will emerge and blend with current practices, the following discussion is obviously not exhaustive or definite. Instead it should be read as an empirical account of how wide a range of consequences microcredit programs have in rural Tigray.

A marked change is in the field of informal lending. As apparent from the previous section, microcredit programs have replaced rich farmers as sources of seasonal credit. Currently, grain lending in the sub-district is confined to the domain of reciprocal exchange between neighbors, friends and relatives; that is, to what we have called the category of “friendly” loans. In addition to their availability, informants commend package loans’ business-like, impersonal character, low interest rate, and long repayment period as compared to former informal grain loans from the rich. A woman farmer describes the current unimportance of informal seasonal lending as follows.

Since the government offers package [loans] and selected seed, grain lending is almost non-existent. Money lending still occurs, but grain lending has remained for very small amounts only: one small basket, two... It is different than before, when people had to queue to borrow grain as they have to queue in the mill today [to have their grain ground].

On the other hand, we did not find evidence that the two other informal credit institutions have either gained or lost importance since microcredit was introduced. Hence, the descriptions of high-risk short-term trade loans and of “friendly” lending practices in the pre-microcredit era remain valid today.³⁸ A survey in four districts in Tigray showed that in 2005 and 2006 respectively seven and four percent of the rural households obtained an informal loan (Fredu Nega 2008). These numbers give an idea of the current importance of cattle trade loans and “friendly” loans, though they probably also include informal bridging credit to package borrowers, which we discuss below.

Second, since farmers appeal to microcredit in cases of seed shortage, land rental through *mli* and *myam* is no longer significant. The following rhetorical question from a farmer illustrates microcredit’s role in the disappearance of these land exchange institutions: “Why would you choose *mli* if you can get credit from the government?”

³⁸ We recorded a maximum monthly interest rate of ten percent for short-term cattle trade loans, which corresponds to the observations of Bezabih Emana et al. (2005) in other areas of Tigray. This is below the reported maximum of 20 percent in pre-microcredit times, but evidence is too weak to conclude causality. Bezabih Emana et al. (2005) discuss credit from relatives, friends, traders and shopkeepers as well.

Another example in place is the case of an informant who rented a field through *mli* in 2006. Upon discovering this, his neighbors, surprised as they were, openly offended him, saying that “*mli* does not exist anymore” and “today only fools practice *mli*”. For *mwufar* the picture is more complicated. From the testimonies of farmers, we have evidence that access to microcredit has depressed the institution of *mwufar*. However, in some cases a household’s decision to rent its land through *mwufar* is not, or not only, dictated by shortages of seed and oxen, and thus might not be influenced by the availability of microcredit. For instance, when a household lacks male labor to plow, the balance may tip in favor of *mwufar*; certainly this is so in light of ongoing increase in landlessness, and with it changes in land rental prices. We will not go into detail on the many factors currently altering *mwufar* as an institution.³⁹ But, we trust this example has made clear that the contribution of microcredit programs to this process is not straightforward to interpret.

On the other hand, microcredit and informal institutions interact on the repayment side too. Importantly, repaying a microloan in many respects differs from paying off a debt to an informal lender. In short, most of the former grain loan agreements were flexible in that they left room for loan rescheduling, repayment in labor, or even debt discharge in exchange for a *mwufar* deal in the next season. The current microloan contracts do not have such degrees of freedom. This is especially true for the DECSI package loans, with their strict repayment requirement of two capital installments in subsequent years. In

³⁹ We investigate changes in the institution of *mwufar* and the implications for the debate on Ethiopian informal rural land markets in their own right in a parallel paper.

addition, today's package loans are mostly larger than grain loans used to be. Furthermore, package loan repayment is due in the run-up to the sowing season instead of in the post-harvest period. As a result of these loan characteristics, and because not all households succeed in profitably managing their microloans for many reasons, package loan repayment problems are considerable. The following farmer's story well illustrates how such problems may arise.

We took a package [loan] because our grain was finished and because we hoped to benefit from goat breeding. We spent half of the money on grain and half of it on goats. We were out of luck because they died. We were compelled to sell our cow to pay back the loan.

In general, farmers try to observe the DECSI microloan repayment schedule at any cost. First, timely repayment is a prerequisite to obtain credit in the future. Moreover, DECSI takes quick and firm action against defaulters, hereby supported by co-responsible local government officials. Among other things, punishments include fines, prison sentences, denunciation at village meetings, and exclusion from employment in the public work component of the government's Productive Safety Net Program, the only and popular food-for-work scheme.⁴⁰ Hence, regardless of what the microloan has brought in, borrowers receive strong economic and moral-political incentives to repay it on time.

⁴⁰ See Segers et al. (2009) and Segers et al. (2008) for a comprehensive account of the role of measures like the latter two in convincing farmers to take part in development programs in the study area.

In response to this relatively new phenomenon of farmers with immediate large cash needs to repay their microloans, three shifts have begun to occur in informal institutional practices. First, in the last few years a number of households in the sub-district have started to provide short-term credit for microcredit clients to repay their loans on time. In a first scenario, the informal loan allows the borrower to defer the sale of an animal until he or she obtains a good price. Alternatively, as timely repayment is a precondition to receive a new microloan from DECSI, the borrower after paying off the microloan immediately applies for a new one. Hence, the supply of informal bridging credit creates room for borrowers to get around DECSI's prohibition on loan accumulation, which aims to prevent such credit recycling.⁴¹ Loan periods are in weeks and current interest rates fluctuate between three and ten percent per month, as with the long-practiced credit-granting to traders. In fact, some of the moneylenders who finance package loan repayment also finance cattle trade. Hence, DECSI borrowers compete with cattle traders for the same cash resources. Ironically, some moneylenders finance their business with a package loan.⁴² As a consequence of the still limited credit supply, the competition between traders and microcredit clients and the fact that the latter's cash needs in practice are clustered in spring, this type of short-term informal borrowing has not, or not yet, developed into a reliable solution for microcredit repayment problems. The following story of a farmer illustrates this.

⁴¹ Borchgrevink et al. (2003) and Woldeab Teshome (2003) also observed this type of money lending in Tigray. Rahman (1999) and Sinha and Matin (1998) describe similar practices in Bangladesh.

⁴² Similarly, Perry (2002) found that female microcredit clients act as moneylenders in rural Senegal.

Two people had promised to lend me money as soon as they would get their package money, so we could pay off our package debt and register again. But when the time had come, both withdrew. Hence, we were forced to sell the cow and her calf.

Secondly, informal land “sale” by microcredit borrowers has recently gained importance in the sub-district.⁴³ What Degua Temben farmers call land sale is actually the one-year lease of a field in exchange for a lump sum at the start of the agreement. Depending on the situation, the microcredit client may use the income from a land sale agreement to repay DECSI or the moneylender with whom he or she had previously been involved. As a farmer explains:

Only people with insurmountable problems sell their land. They sell it for one or two years and move. It has become more common in the last five years, since some people cannot repay their [regular] loans or packages. These people try to get a loan but if they do not manage or if they cannot pay it back, land is often the only wealth they still have. And then they sell it.

As the quotation suggests, land sale used to be highly exceptional.⁴⁴ From a local perspective it is associated with deep poverty and dependence. Indeed, having to sell

⁴³ In this regard Borchgrevink et al. (2003) report the subset of forced abstention of land to informal creditors.

⁴⁴ Bruce et al. (1994) confirm this.

farm land is considered a worse misfortune than having to rent it. Besides, in view of Ethiopia's constitutional injunction against land "sale or [...] other means of exchange",⁴⁵ it is risky for a farmer to decide to sell land. At the end of the fieldwork period, a number of land sale cases by package defaulters had come to the attention of the sub-district administration. The resulting negotiations on eventual punishments caused village-wide commotion.

Whereas the two previous changes have not yet settled down, a third process of institutional change has progressed further, which concerns the social security institution of *rtban*. Traditionally, *rtban* has been a money collection in favor of a household that has experienced a shock seen as requiring outside help. Typical emergencies that legitimize holding *rtban* are the flooding or collapse of a house, serious loss or theft of cattle or money, complete harvest failure, or a damages claim against a household member who committed a crime. The stricken household itself takes the initiative for *rtban*. Concretely, the household members invite their relatives, neighbors, friends and acquaintances to their home and serve them some home-brewed beer and simple food. Guests then contribute cash according to their means and depending on their closeness to the victims. Contributions on average are high for local standards. Due to the exceptionality of such emergency situations, *rtban* was a relatively rare phenomenon. That is, until recently, as a woman farmer quips: "In the past we used to dance at marriages and baptisms, and we made a contribution to the hosts. But there was no *rtban*."

⁴⁵ Excerpt from article 40.3 of the constitution of the Federal Democratic Republic of Ethiopia.

Soon after the introduction of microcredit, borrowers who encountered bad luck in the run-up to repayment day began to hold *rtban*. Through the years, the incidence of these new *rtban* cases has gradually increased. In the meantime, the unspoken rules on how big an adversity a microcredit borrower should meet with to justifiably resort to *rtban*, have loosened. By now, households with package loan repayment problems have become, by a large margin, the major group of *rtban* hosts. Motivations for organizing *rtban* range from being widowed with debt, to the death of an animal bought with a package loan, and on to sickness in an animal that was to be sold to repay such a loan.

Surely, reservations exist about the legitimacy of certain calls for *rtban*. However, informants recognize that being summoned by “the government” to repay a microloan for a household can create situations that are as desperate as other emergencies. Hence, as a rule, farmers accept such *rtban* invitations and contribute generously. Together with the functional expansion of *rtban*, interpretations of the institution have shifted. More than as an insurance institution, *rtban* is now seen as an institution of mutual support. The following quotation from a woman farmer clearly illustrates this: “Nowadays *rtban* is like *lfnti*.⁴⁶ People think: ‘I have helped so many people, now it is my turn’. It has become a way of doing business. Now everybody holds *rtban*.”

Conclusions

⁴⁶ *Lfnti* is an informal institution that regulates oxen and labor pooling among two households.

According to a recent survey, 61 percent of DECSI package borrowers and 65 percent of regular loan borrowers in rural areas use at least part of their loan for other than the intended purposes (Zaid Negash 2008). This confirms earlier less systematic estimates that loan diversion “is probably higher than 50%” (Borchgrevink et al. 2003:30). This paper has analyzed how Tigrayan farmers practice loan diversion as a deliberate and “vital strategy” (Hulme 2000:85, see also Borchgrevink et al. (2003)). It has shown how farmers counter seasonal food, seed and oxen shortages with microloans. By doing so, they no longer depend on the sympathy of rich grain lenders and keep control over crop production on their land. This evidence challenges the assumption, shared by Zaid Negash (2008) among others, that microloan diversion would negatively affect returns. As little as high loan fungibility rates imply a microcredit program is failing, high loan repayment rates imply the program is reaching its poverty reduction goal. The assumption that “[c]lient payback = client perception of value = client satisfaction = positive impact”, which underlies much of impact assessment (Cheston and Reed 1999), is invalid. The paper has described how unlucky microcredit borrowers, to observe repayment deadlines, either have to depend on moneylenders - thus paying off debt with new credit - or on rich land “buyers” - hence sacrificing productive assets and self-employment to repay. The reinvented *rtban*, taking on characteristics of a rotating savings association, might have the potential to break debt spirals.

Historically, when a Tigray rural household encountered seasonal seed or food deficiencies it had little choice other than establishing or confirming an unequal relation of debt-dependence with a rich household, or worse, renting its land to such a household.

Hence, local notions of poverty have been built around the triad of dependence, debt, and lack of control over land and its cultivation. That poor farmers, with the help of microcredit, gain access to food, seed and oxen, and keep control over agricultural production on their land could be considered a local interpretation of the global paradigm of microcredit to fight poverty. The much-voiced claim of farmers that “borrowing from the government is easy”, suggests that being dependent on and indebted to DECSI and to a rich household are two different things. Contrary to a seasonal grain loan, a microloan contract is a business-like agreement with a naturally unequal partner and with no obligation other than repayment. The rhetorical promise of wealth that microcredit holds and its now-common use by well-off farmers allow households to borrow without having to reveal their seasonal grain shortages. What is more, being a microcredit client creates a public image of a farmer as joining in with development. On the other hand, the expansion of the institution of *rtban* to cover microcredit repayment problems indicates that farmers recognize the nonnegotiable character of microdebt collection and its potential to leave a household deprived.

At a more general level this paper corroborates earlier findings (see, among others, Bezabih Emana et al. (2005), Sinha and Matin (1998) and Tsai (2004)) that microcredit influences informal finance without substituting it. Besides, it gives insights into how local informal lending practices may inform people’s microborrowing behavior. Moreover, interactions between microcredit and informal institutions are shown not to be limited to the area of credit. The observed consequences of farmers’ appropriation of

microcredit programs on informal land exchange and social security institutions imply many other areas are possibly involved, and merit investigation.

References

Note: names of Ethiopian authors are conventionally cited in full on first name.

Ahlin, Christian, and Neville Jiang. 2008. "Can micro-credit bring development?" *Journal of Development Economics* 86:1-21.

Armendáriz de Aghion, Beatriz, and Jonathan Morduch. 2005. *The economics of microfinance*. Cambridge, MA & London: MIT Press.

Asmelash Woldemariam. 2006. "The effects of land reform on peasant social organisation: a study of village-level dynamics in Central-Tigray, 1974-1994" (Social Anthropology Dissertation 7). Department of Sociology and Social Anthropology, Addis Ababa University, Addis Ababa.

Atakilt Kiros. 2007. "The experience of DECSI in its innovative model in financing agriculture." Paper presented at the FARM and IGPDE conference on microfinance: what microfinance for developing countries' agriculture?, December 4-6, Paris.

Bauer, Dan Franz. 1973. "Land, leadership and legitimacy among the Inderta Tigray of Ethiopia." Ph.D. dissertation, Department of Anthropology, University of Rochester, Rochester, New York.

—. 1976. *Household and society in Ethiopia: an economic and social analysis of Tigray social principles and household organization* (Committee on Ethiopian Studies

- Occasional Papers Series Monograph 6, edited by John Hinnant). East Lansing, MI: African Studies Center, Michigan State University.
- Belay Assefa. 2001. "Best practices in microfinance: lessons to Ethiopia." Pp. 129-145 in *Microfinance: theory, policy and experience. Proceedings of the international workshop on the dimensions of microfinance institutions in Sub-Saharan Africa: relevance of international experience*, edited by Zaid Negash, S.L. Narayana, Wolday Amha, Assefa Abegaz, and Alem Girmay. Mekelle: Faculty of Business and Economics, Mekelle University.
- Bernard, Harvey Russell. 2006. *Research methods in anthropology: qualitative and quantitative approaches (fourth edition)*. Lanham, MD: Altamira Press.
- Bezabih Emanu, Kejela Gemtessa, Dhunfa Lemessa, and Gezahegn Ayele. 2005. "Informal finance in Ethiopia" (AEMFI Occasional Paper 13). Association of Ethiopian Microfinance Institutions, Addis Ababa.
- BoFED. 2007. "Five year (2007-2011) plan of Tigray region. In Tigrinya". Bureau of Finance and Economic Development, Mekelle.
- Borchgrevink, Axel, Jo Helle-Valle, and Tassew Woldehanna. 2003. "Credible credit: impact study of the Dede-bit Credit and Savings Institution (DECSI), Tigray, Ethiopia". Norwegian Institute of International Affairs, Oslo.
- Borchgrevink, Axel, Tassew Woldehanna, Gebrehiwot Ageba, and Woldeab Teshome. 2005. "Marginalized groups, credit and empowerment: a study of the Dede-bit Credit and Savings Institution (DECSI) of Tigray, Ethiopia." A report commissioned by Norwegian People's Aid (NPA) and the Association of Ethiopian Microfinance Institutions (AEMFI). Volume 1.

- Brau, James C., and Gary M. Woller. 2004. "Microfinance: a comprehensive review of the existing literature." *Journal of Entrepreneurial Finance and Business Ventures* 9:1-26.
- Brett, John A. 2006. "'We sacrifice and eat less': the structural complexities of microfinance participation." *Human Organization* 65:8-19.
- Bruce, John W., Allan Hoben, and Dessalegn Rahmato. 1994. "After the Derg: an assessment of rural land tenure issues in Ethiopia". Land Tenure Centre, University of Wisconsin-Madison, Madison, WI and Institute of Development Research, Addis Ababa University, Addis Ababa.
- Cheston, Susy, and Larry Reed. 1999. "Measuring transformation: assessing and improving the impact of microcredit." *Journal of Microfinance* 1:20-43.
- Coleman, Brett E. 2006. "Microfinance in northeast Thailand: who benefits and how much?" *World Development* 34:1612-1638.
- Copestake, James. 2007. "Mainstreaming microfinance: social performance management or mission drift?" *World Development* 35:1721-1738.
- Crummey, Donald. 2000. *Land and society in the Christian kingdom of Ethiopia, from the thirteenth to the twentieth century*. Addis Ababa: Addis Ababa University Press.
- Daley-Harris, Sam. 2007. "State of the Microcredit Summit Campaign report 2007". The Microcredit Summit Campaign, Washington, DC.
- de Certeau, Michel. 1984. *The practice of everyday life*. Berkeley, CA: University of California Press.
- Dessalegn Rahmato. 1984. *Agrarian reform in Ethiopia*. Uppsala: Scandinavian Institute

of African Studies.

Develtere, Patrick, and An Huybrechts. 2005. "The impact of microcredit on the poor in Bangladesh." *Alternatives* 30:165-189.

Ehlers, Tracy Bachrach, and Karen Main. 1998. "Women and the false promise of microenterprise." *Gender & Society* 12:424-440.

Fitsum Hagos. 2003. "Poverty, institutions, peasant behavior and conservation investment in northern Ethiopia." Ph.D. dissertation, Department of Economics and Social Sciences, Agricultural University of Norway, Aas.

Fredu Nega. 2008. "Poverty, asset accumulation, household livelihood and interaction with local institutions in northern Ethiopia." Ph.D. dissertation, Department of Earth and Environmental Sciences, Katholieke Universiteit Leuven, Leuven.

Getachew Teka, and Yishak Mengesha. 2006. "Integrating financial services into the poverty reduction strategy: the case of Ethiopia." Paper presented at the East Africa sub-regional workshop on integrating financial services into poverty reduction strategies, June 28 to 30, Dar es Salaam.

Getaneh Gobezie, and Carter Garber. 2007. "Impact assessment of microfinance in Amhara region of northern Ethiopia." Paper for the international conference on rural finance research: moving results into policies, March 19-21, Rome.

Goetz, Anne Marie, and Rina Sen Gupta. 1996. "Who takes the credit? Gender, power, and control over loan use in rural credit programs in Bangladesh." *World Development* 24:45-63.

Hashemi, Syed M., Sidney R. Schuler, and Ann P. Riley. 1996. "Rural credit programs and women's empowerment in Bangladesh." *World Development* 24:635-653.

- Hendrie, Barbara. 1999. "Now the people are like a lord: local effects of revolutionary reform in a Tigray village, northern Ethiopia." Ph.D. dissertation, Department of Anthropology, University College London, London.
- Hoben, Allan. 1973. *Land tenure among the Amhara of Ethiopia: the dynamics of cognatic descent*. Chicago, IL: The University of Chicago Press.
- Hulme, David. 2000. "Impact assessment methodologies for microfinance: theory, experience and better practice." *World Development* 28:79-98.
- Islam, Tazul. 2007. *Microcredit and poverty alleviation*. Hampshire & Burlington, VT: Ashgate.
- Khandker, Shahidur R. 2005. "Microfinance and poverty: evidence using panel data from Bangladesh." *World Bank Economic Review* 19:263-286.
- Lakwo, Alfred. 2006. "Microfinance, rural livelihoods, and women's empowerment in Uganda" (ASC Research Report 85). African Studies Centre, Leiden.
- Leach, Melissa, Robin Mearns, and Ian Scoones. 1999. "Environmental entitlements: dynamics and institutions in community-based natural resource management." *World Development* 27:225-247.
- Livelihoods Integration Unit. 2008. "Tigray region livelihood profiles: regional overview". USAID & Government of Ethiopia Disaster Prevention and Preparedness Agency, Addis Ababa.
- Long, Norman. 2001. *Development sociology: actor perspectives*. London: Routledge.
- Long, Norman, and Jan Douwe van der Ploeg. 1989. "Demythologizing planned intervention: an actor perspective." *Sociologia Ruralis* 29:226-249.
- Lont, Hotze, and Otto Hospes, eds. 2004. *Livelihood and microfinance: anthropological*

- and sociological perspectives on savings and debt.* Delft: Eburon.
- McCann, James. 1995. *People of the plow: an agricultural history of Ethiopia, 1800-1990.* Madison, WI & London: University of Wisconsin Press.
- Meehan, Fiona. 2001. "Usage and impact of micro-credit provision: a case study based on the credit operations of the Dedebit Credit and Savings Institution (DECSI)." Pp. 106-127 in *Microfinance: theory, policy and experience. Proceedings of the international workshop on the dimensions of microfinance institutions in Sub-Saharan Africa: relevance of international experience*, edited by Zaid Negash, S.L. Narayana, Wolday Amha, Assefa Abegaz, and Alem Girmay. Mekelle: Faculty of Business and Economics, Mekelle University.
- Microfinance Information Exchange. 2007. "2007 MIX global 100: rankings of microfinance institutions". Microfinance Information Exchange, Washington, DC.
- Moll, Henk A J. 2005. "Microfinance and rural development: a long-term perspective." *Journal of Microfinance* 7:13-31.
- Morduch, Jonathan. 2000. "The microfinance schism." *World Development* 28:617-629.
- Mosley, Paul, and David Hulme. 1998. "Microenterprise finance: is there a conflict between growth and poverty alleviation?" *World Development* 26:783-790.
- Nyssen, Jan, Helga Vandenreyken, Jean Poesen, Jan Moeyersons, Jozef Deckers, Mitiku Haile, Christian Salles, and Gerard Govers. 2005. "Rainfall erosivity and variability in the northern Ethiopian Highlands." *Journal of Hydrology* 311:172-187.
- Olivier de Sardan, Jean-Pierre. 1995. "La politique du terrain: sur la production des données en anthropologie." *Enquête* 1:71-109.

- . 2005. *Anthropology and development: understanding contemporary social change*. London & New York: Zed Books.
- Parmar, Aradhana. 2003. "Micro-credit, empowerment, and agency: re-evaluating the discourse." *Canadian Journal of Development Studies - Revue Canadienne d'Etudes du Développement* 24:461-476.
- Perry, Donna. 2002. "Microcredit and women moneylenders: the shifting terrain of credit in rural Senegal." *Human Organization* 61:30-40.
- Rahman, Aminur. 1999. "Micro-credit initiatives for equitable and sustainable development: who pays?" *World Development* 27:67-82.
- . 2004. "Microcredit and poverty reduction: trade-off between building institutions and reaching the poor." Pp. 27-42 in *Livelihood and microfinance: anthropological and sociological perspectives on savings and debt*, edited by Hotze Lont and Otto Hospes. Delft: Eburon.
- Sebstad, Jennefer. 2003. "Short study on microfinance: Ethiopia". SIDA, Stockholm.
- Segers, Kaatje, Joost Dessen, Sten Hagberg, Patrick Develtere, Mitiku Haile, and Jozef Deckers. 2009. "Be like bees: the politics of mobilizing farmers for development in Tigray, Ethiopia." *African Affairs* 108:91-109.
- Segers, Kaatje, Joost Dessen, Jan Nyssen, Mitiku Haile, and Jozef Deckers. 2008. "Developers and farmers intertwining interventions: the case of rainwater harvesting and food-for-work in Degua Temben, Tigray, Ethiopia." *International Journal of Agricultural Sustainability* 6:173-182.
- Selinger, Evan. 2008. "Does microcredit 'empower'? Reflections on the Grameen Bank debate." *Human Studies* 31:27-41.

- Sharma, Manohar, and Gertrud Buchenrieder. 2002. "Impact of microfinance on food security and poverty alleviation: a review and synthesis of empirical evidence." Pp. 221-240 in *The triangle of microfinance: financial sustainability, outreach, and impact*, edited by Manfred Zeller and Richard L. Meyer. Baltimore, MD: The John Hopkins University Press.
- Sinha, Saurabh, and Imran Matin. 1998. "Informal credit transactions of micro-credit borrowers in rural Bangladesh." *IDS Bulletin* 29:66-80.
- Tsai, Kellee S. 2004. "Imperfect substitutes: the local political economy of informal finance and microfinance in rural China and India." *World Development* 32:1487-1507.
- Weiss, John, and Heather Montgomery. 2005. "Great expectations: microfinance and poverty reduction in Asia and Latin America" (ADB Institute Research Paper 63). Asian Development Bank Institute, Tokyo.
- Woldeab Teshome. 2003. "Irrigation practices, state intervention and farmers' life-worlds in drought-prone Tigray, Ethiopia." Ph.D. dissertation, Wageningen University, Wageningen.
- Woller, Gary M., and Warner Woodworth. 2001. "Microcredit as a grass-roots policy for international development." *Policy Studies Journal* 29:267-282.
- Woolcock, Michael. 2006. "Microfinance." Pp. 363-365 in *The Elgar companion to development studies*, edited by David Alexander Clark. Cheltenham: Edward Elgar.
- World Bank. 2005. "Well-Being and poverty in Ethiopia: the role of agriculture and agency" (World Bank Report 29468-ET). Poverty Reduction and Economic

Management, Country Department for Ethiopia, Africa Region, World Bank, Washington, DC.

Yunus, Muhammad. 2003. *Banker to the poor: micro-lending and the battle against world poverty*. New York: PublicAffairs.

Zaid Negash. 2008. "Microfinance loan delivery, utilization and impact: with specific reference to Tigray, northern Ethiopia." Ph.D. dissertation, Department of Earth and Environmental Sciences, Katholieke Universiteit Leuven, Leuven.