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The differential impact of microcredit on rural livelihoods: Case study from Ethiopia

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Abstract

This paper examines the differential impact of credit on rural Ethiopian households. Though credit is generally expected to have a positive impact on household livelihoods, this paper argues that credit affects households differently depending on wealth. Results show that credit failed to enable poor households to move out of poverty and food insecurity, whereas better-off and labour rich households used credit to improve their livelihoods. For poor households, rather than achieving long-term livelihood improvements, access to credit only means short-term consumption smoothing with a risk of being trapped into a cycle of indebtedness. Participation in a safety net programme could, to some extent, break through this cycle, because such participation enhanced the credit-worthiness of poor households. The paper is based on ethnographic research, including a survey of 106 households, and a series of monthly in-depth interviews with a group of 15 households in the district of Ebinat, northern Ethiopia, over an 18-month period, from February 2009 to July 2010.

Keywords: Microcredit, Livelihoods, Food security, Safety nets, Ethiopia

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1. Introduction

Since its introduction in the mid-1970s, microcredit has been considered a major tool for development and poverty reduction (Fisher and Sriram, 2002). By the end of 2007, microcredit programmes reached over 154 million clients worldwide, notably women in developing countries (Daley-Harris, 2007; 2009). Proponents of microcredit claim that it helps poor people to reduce risk, raise productivity, obtain high returns on investment, increase income, and improve the quality of their lives and that of their dependants (Robinson, 2001; Goldberg, 2005). It is further believed that microcredit can play a major role in assisting the poor to move out of poverty by providing start-up capital which they have been unable to access historically because financial markets are undeveloped in poor economies (Getaneh, 2004). In Ethiopia, government and non-governmental organisations (NGOs) consider microcredit as a prime policy instrument in fighting poverty and increasing the productivity of the poor (Wolday, 2001; 2003).

However, there is so far no consensus among academics about the actual impact of microcredit on poverty reduction and household food security (Banerjee et al., 2009, Fisher and Sriram, 2002; Weiss and Montgomery, 2005; Develtere and Huybrechts, 2005; Segers et al., 2010; Armendáriz de Aghion and Morduch, 2010). Karlan and Zinman (2010: 433) argue that, despite claims about the role of microcredit in lifting the poor out of poverty, there is little agreement as to whether credit does borrowers more good than harm.

In recent microcredit literature, the differential impact of credit on different types of household has become a major discussion point (Khandker, 2005; Coleman, 2006; Islam, 2007; Segers et al., 2010). So far, there has been little empirical research on this topic. Moreover, most of the existing microcredit studies are conducted by employing quantitative research methods and they tend to ignore the voices of beneficiary communities and individuals (Cons and Paprocki, 2008). In the Ethiopian context, very little is known about the role of microcredit in household food security and its impact on wider rural livelihoods (Segers et al., 2010; Getachew and Yishak, 2006; Getaneh and Garber, 2007; Pankhurst, 2009).

This paper aims to contribute to the debate on the differential impact of credit in Ethiopia. Evidence will be put forward to support the view that there is a differential impact of credit on the livelihoods and food security of different types of households in the drought-prone, chronically food-insecure district of Ebinat in the northern highlands of Ethiopia. Results show that credit failed to enable poor households to move out of poverty and food insecurity, whereas better-off and labour-rich households used credit to improve their livelihoods. For poor households, rather than achieving long-term livelihood improvements, access to credit only meant short-term consumption smoothing with the risk of being trapped into cycles of indebtedness. Poor households get into cycles of poverty and destitution mainly because of the very strict microcredit repayment regimes and their socio-economic status which forces them to divert most of the loan for consumption smoothing. Better-off and labour-rich households, on the other hand, use credit better than poor households to improve their livelihoods. Small food gaps and the availability of large amounts of household labour enable better-off households to invest most of their credit in improving their livelihoods. By focusing on the differential impact of microcredit on rural households, the paper aims to contribute to the wider debate on the relevance of microcredit in taking poor households out of poverty and food insecurity in Ethiopia in particular, and in developing countries in general.

In addition, the paper will shed light on the impact of safety-net programming on the ways in which credit works. Our research on credit took place within the framework of research into the Productive Safety Net Programme (PSNP). The PSNP supports millions of Ethiopian households annually to enable them to break through their poverty. We found that those poor households participating in a safety net programme could, to some extent, break away from the cycle of indebtedness associated with microcredit because participation enhanced their creditworthiness. This helped poor households to use credit for livelihood enhancing investments. This finding is a useful contribution to the discussion on ways in which poor people can better profit from microcredit.

After elaborating the study area and the methodology, the paper will provide an overview of the types and nature of credit available in the area and how clients use the available credit programmes. The paper then discusses the impact of credit on rural livelihoods including asset creation, agricultural productivity and household food security. Finally, the findings about the effect of the PSNP on credit patterns are presented.

2. Study area

The study was undertaken in two food insecure villages in Ebinat district, South Gondar Administrative Zone of Amhara Region. Ebinat is one of the chronically food insecure districts in the region. Food insecurity is the norm, affecting more than one third of the rural population. About 94% of the District's 221,000 population live in rural areas of which about 37% (around 76,000 people) have been supported by the government's Productive Safety Net Program (PSNP) since 2005. The PSNP is one of the main components of the Ethiopian Government Food Security Programme which, together with Other Food Security Programmes (OFSP) are designed to achieve household food security. The PSNP programme provides six months of food and/or cash annually to chronically food insecure households with the aim of smoothing household consumption (MoARD, 2006). By providing a predictable, guaranteed and timely transfer, it also aims to prevent the poor from depleting their assets and becoming destitute (Bishop and Hilhorst, 2010: 189). At the same time it creates assets in the community. The OFSP programme, on the other hand, provides asset building support by linking up beneficiary households to credit and other development programmes. It aims to lift households out of poverty and food insecurity and take them into successful 'graduation' - a term used to describe 'the movement of households out of dependence on safety net support' (Devereux et al., 2006; MoARD, 2009; Siyoum et al., forthcoming).

The district is predominantly agricultural and 96% of the population practices mixed farming. Agricultural labouring is another, very limited, source of cash. Agriculture in the area is predominantly rainfed and is very vulnerable because the distribution of rainfall is uneven and is characterised by late onset and early cessation. Average land size is often very small and insufficient to support an average family of five people. Opportunities for off-farm activities are also very limited. As a result, large numbers of households are vulnerable to chronic food insecurity and depend on government support to cover their food shortages. Large numbers of poor households depend on credit for consumption smoothing purposes, especially in the hungry season when households have already consumed their produce. Out of the total households who have

access to credit, about 81% have diverted some credit for unintended purposes: consumption smoothing takes most of the diverted credit.

3. Methodology

This paper results from 18 months of ethnographic fieldwork by the first author which took place from February 2009 to July 2010. Ethnography aims to study social processes in everyday settings by depicting the activities and perspectives of the actors in that setting (Hammersley and Atkinson, 1983: 23-24). 'Participant observation' is a key working method in ethnography along with its use of 'thick descriptions'. It can also incorporate a range of data gathering techniques (Geertz, 1983).

For this research, in addition to participant observation, we conducted a survey among all the 106 households in two selected research villages in Ebinat District that had accepted credit. They represented 65% of the total population of the 163 households in the selected villages. In order to classify the households into poor and better-off, livestock ownership, land size and labour availability were used as the main criteria as these were found to be the key distinguishing wealth features in the study area. The actual ranking of the households was done by wealth ranking by a group of representatives of the community and validated on the basis of the initial survey data. From the 106 households, 55 were classified as poor and 51 as relatively better-off.

A total of 15 (8 poor and 7 better-off) of the households were selected to be part of a group involved in indepth interviews. Over a period of one year, the same group of households was interviewed in a systematic way by revisiting them every month to get more in-depth understanding of the role of credit in their livelihoods. The recurring interviews allowed us to observe closely the use of credit throughout the year. We were able to build trust over the year. This was important because people usually do not like to talk openly about money matters and are disinclined to reveal the full picture. With the growing level of trust, the full picture could slowly be developed for these 15 families. We also discussed the purpose of the research with respondents and assured all informants of complete confidentiality. While the group research deepened findings from the survey, survey findings were used to validate findings from the group research.

Finally, we also conducted nine interviews with key informants, including representatives of community elders, local cooperatives, Amhara Credit and Saving Institute (ACSI) field staff, development agents (DAs), ACSI district representatives, and the head of the District Agricultural Office. Official reports and other relevant documents were also used as sources of secondary data. The combination of qualitative and quantitative data coupled with the everyday presence of the researcher sharing people's lives for prolonged periods of time, provided a unique opportunity to understand the complexity of people's lives and the role of credit in their livelihoods.

4. Types and nature of credit sources in Ebinat

Three types of credit operate in the study area: credit from Amhara Credit and Saving Institution (ACSI), the government food security credit provided within the framework of the OFSP programme, and informal credit.

ACSI is one of the main microcredit providers. Initially developed as a department within the Organization for Rehabilitation and Development of Amhara (ORDA), ACSI was registered and licensed as a microfinance share company institution in April 1997 (Getaneh and Garber, 2007). With over 1.4 million clients served by the end of 2009, ACSI is the largest microfinance institution in the region. It operates through its headquarters in Bahir Dar with 10 branch and 186 sub-branch offices covering all districts in the region (ACSI, 2009). ACSI provides four types of financial services to its clients: credit extension, modern savings service, fund administration and money transfer. This paper will focus on the credit programme which is the only one relevant for the study area.

4.1. ACSI loans

The main objective of ACSI's credit programme is to assist asset-poor households of the region to develop their assets. Loans are based on collateral granted to groups of five to seven people, jointly liable as borrowers. Loan amounts and terms vary depending on many factors with a maximum loan size of 5,000 ETB¹ and a maximum loan term of three years. Loans have to be paid back by the end of each loan season with an interest rate of 18%. A compulsory saving of 1% of the total loan amount must be paid on a monthly basis throughout the loan period. By the end of 2009 in the study district, ACSI had 3,842 clients with a total loan amount of 6,478,573.14 ETB and with a repayment rate of 98.7%. In the selected study Kebeles (Kebele represents the smallest administrative unit composed of groups of villages), ACSI had a total of 536 clients with total loan amount of 839,700 ETB.

ACSI's beneficiaries are selected by a Development Committee (also known as the Credit and Savings Committee) at the Kebele level. The committee consists of five people: the Kebele Administrator, Vice Administrator, the Kebele Secretary and two community members. These committee members, together with the ACSI field worker, are responsible for selecting beneficiaries among applicants based on their good conduct and determination to work. Selected households are trained for 3 to 5 days on credit objectives, use of loan money, insurance, repayment mechanisms, and the nature of the group collateral. Although the primary focus of ACSI consists of the poor, local villagers claimed that the very poor people are being excluded. This is primarily the case for poor households who do not have land or oxen and are therefore unable to form a collateral group. When this question was raised with the ACSI sub-branch coordinator, he explained that the community will be trained not to exclude hard-working poor people simply because they are poor. But he indicated that ACSI cannot force people to include any particular person as membership in a group is based on people's willingness and on trust. He explained that when they faced this kind of situation, they tried to help the poor to form a group of their own but this proved to be difficult.

4.2. Government food security loans

Food security credit is the second type of loan. This is a major component of the Ethiopian Government Food Security Programme (FSP) that also incorporates the PSNP programme. It is provided by the District

¹ 1 ETB = 0.06 USD in December 2011

Agricultural and Rural Development Office (WARDO) through farmers' cooperatives and is distributed to individual farmers without collateral. Its objective is to help farmers to move out of poverty through increasing their assets and productivity. It is usually used for one or more of the following components: crop production, livestock breeding and fattening, technological dissemination, and engagement in non-farm activities. Food security loans include two types. The first is a short-term loan which is provided for crop production purposes to help farmers increase their annual production. The second is a long-term loan provided to farmers to increase and diversify their assets and income through livestock investment and provision of technological inputs.

The loan amount depends on a business plan prepared for each household. On average the loan amount ranges from 2000 to 4000 ETB and the loan term is either one year or three years. The short-term loan has to be repaid within one year after the beneficiary farmers have harvested their crop. The long-term loan, on the other hand, is repayable in three years in annual instalments in which the borrower has to pay one-third of the loan each year with an interest rate of 7.25%. According to the WARDO Credit and Input Supply Department Head, after the introduction of the PSNP in 2005, about 29,911,241 ETB worth of food security loans were distributed through cooperatives in 32 rural Kebeles of the District. In the selected study Kebeles, a total of 2,095,595 ETB was distributed which accounts for about 7% of the total food security loans in the District.

The WARDO, the District Finance Office and the District Administration assume collective responsibility for loan recovery. However, unlike the ACSI credit system, loan default and rescheduling is common in the case of food security loans. The repayment rate is about 1.3% of the total loan amount. Farmers told the researcher that they preferred the food security loan over the ACSI loans, mainly because of the less strict enforcement of the food security loan regulations. In terms of coverage, however, ACSI has by far the largest share of clients.

4.3. Informal loans

The third type of loan is the informal loan within the community. Before the introduction of formal credit in the area, credit was a matter of informal arrangements between households or individuals, usually involving grain and/or cash between households which maintained reciprocal relationships.

Informal loans can be divided into two: informal loans that take place between close neighbours, friends or relatives and informal loans between two households or individuals who are not related and have had no prior relationship. According to members of the community, the first type of loan is small in amount and most of the time they are interest free. These take place when neighbours or relatives are in need of help due to problems that cannot be covered by the households' resources alone. Most of the time there is no fixed repayment time for this type of loan but conventionally it is after the next harvest season. The second type of loan is a seasonal grain or cash loan between better-off and poor households: grain loans are the most usual. In times of shortage, large numbers of poor households depend on grain loans from better-off households for their survival or when they face seed shortage. Even in good years, poor households' own production is not always enough to meet their needs due to small land holdings and other problems. Credit is, therefore, an important element in the coping strategy. For this type of loan, regardless of when a loan was made, repayment is usually required after the next harvest. With respect to cash, poor households often depend on loans from private money lenders who charge high interest. This kind of loan is mainly used to meet urgent cash needs for different purposes. The loan period varies from a few days to a few weeks or months and interest rates range from a small percentage to around 50 per cent monthly.

According to community elders, debt repayment problems are very rare in informal credit systems, regardless of the type of loan. This is mainly because of the small size of informal loans and strong social relations that exist among community members. These days, however, informal grain and cash loans are decreasing in magnitude and frequency. This kind of informal loan arrangement is now limited to only small circles of close neighbours and family members. During focus group discussions, community members indicated that there are two major reasons for this. The first is the introduction of formal credit institutions that undermine the traditional lending practices. People prefer to take loans from the government than from individual lenders mainly because of the possibilities of taking larger loans with smaller interest rates. This could actually be seen as an endorsement of the micro-credit system which aims to bring down interest rates and to provide alternatives to the 'loan-sharks'. The second reason is the inability of better-off people to provide loans to the poor. During focus group discussion, informants indicated that poverty is deepening and there are very few people who can lend. This reason signals a worrying trend, namely that the community as a whole is becoming less resilient. They argue that most people don't have enough grain or cash to satisfy their own needs let alone to lend to others. An elderly man explained this as follows:

'Previously if you had grain shortages it was easy to ask neighbours and get what you needed. Now it is very difficult to ask. Those people who were rich are now poor and they do not have much to lend to others. Even if there are a few rich people, they are not willing to give loans to others because they fear that they will not get it back'.

Informal lending practices, however, are not only limited to individual lending. There are also other kinds of grain and cash loans reported by community members including credits available from the Church, funereal associations (*Iddir*) and from other religious associations (*Mahibers*). Sometimes, when in need of both cash and grain, a household resorts to these institutions. The amount of credit provided by these institutions varies but in general it is small compared to individual or formal credit. A grain loan is usually repaid after the next harvest. The repayment time for cash loans, however, is flexible. It depends on the borrowers' repayment capacity. Interest rates are also different. For cash loans, interest rates are between 10 and 20 per cent. For grain loans, on the other hand, interest rates depend on the arrangements between the individual and the institution but usually the interest is one-third of the total amount of the loan to be paid immediately after the household has collected the harvest. The amounts of such loans, however, are usually very small and their contribution to household wellbeing and food security is insignificant compared with other types of loan.

5. Households' utilisation of credit

While informal credit is often extended to bridge a household consumption gap, formal credit is usually provided for specific purposes, namely, to help poor farmers to improve their livelihoods and move out of poverty. Our findings show, however, that the majority of households divert formal credit which raises questions about the amount of the loan diverted and for what purpose.

In the study area, most people tend to divert credit to meet needs which are incompatible with the intended objective. As agriculture in the area is vulnerable to drought, most poor farmers face substantial grain deficits that cannot be covered by their own production. This, together with the absence of income from wage labour and other off-farm activities, forces farmers to divert large amounts of credit to meet food costs or other household needs such as seed, school fees, clothes, religious and social celebrations, medical expenses, house repairs or paying off debts. Survey results show that, of the total credit beneficiary households in the study area, 81% reported a certain amount of loan diversion. The extent of loan diversion, however, was not uniform across households. About 93% of the poor have diverted a certain amount of the loan to meet other needs compared to 68% of better-off households (Table 1).

Type of HHs	Loan diversion cases	Total households	Percentage	
Poor	51	55	92.7	
Better -off	35	51	68.6	
Total	86	106	81	

Table 1. Extent of loan diversion by type of household

Source: Field Survey, February 2010

The amount of diversion varies significantly between households. Better-off households diverted about one quarter of the loan amount. Since they have better income to cover other household needs, they invest the largest part of the loan in the intended business activities. But 60% of poor households diverted more than half of their loan. The proportion of loan diversion, therefore, can be seen as an indicator of the level of poverty.

People diverted credit for different purposes. When asked about the purpose of loan diversion, households revealed that consumption smoothing is the dominant use of loan diversion followed by seed purchase and debt repayment (Table 2).

Use of the money	No. of HHs	Percentage	
Consumption smoothing	76	88.3	
Purchase of seed and other farm inputs	31	36	
Pay-off debt	17	19.8	
Religious and social celebrations	14	16.3	
Medical expenses	11	12.8	
House repairs	8	9.3	

Table 2. Households by purpose of	f loan	diversion
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Source: Field Survey, February 2010

An analysis of the purpose of loan diversion also revealed some differences between poor and better-off households. For poor households consumption smoothing, religious and social celebration and debt repayment are the dominant use of loan diversion whereas seed purchase, house repair, medical expense, and debt repayment are the main use of loan diversion for better-off households.

Interviews with credit beneficiary households revealed that loan diversion has important advantages. First, loan diversion enables them to survive, given the unavailability of other sources of income including wage labour. Secondly, people appreciate that loan diversion protects them from entering into high interest loan arrangements with private lenders. However, in the study area, there are still 29% of poor households that have taken loans from private lenders with high interest rates to pay off their debts (Table 3). Shetty (2010) similarly found in Chennai, India that people depend on local money lenders to pay off debts despite the unaffordable interest rates. In addition, interview results also showed that farmers divert part of their loan as a risk aversion strategy: farmers do not want to take risks by investing all the loan for one purpose. A farmer described an example of this diversion of loans:

'We took credit for livestock breeding. But we did not use all the money to buy livestock because we were afraid that if something happens to it we would lose all our money and be forced to sell our ox to pay the debt. Therefore, we used half of the money to buy grain and bought three goats. Unfortunately two of our goats died within 9 months but we were able to pay back the loan after we sold our crops. We are happy at least we have used half of the money for grain. If we had used all the money on livestock we could have been in more serious trouble.'

From these considerations, it shows that loan diversion is important for people's livelihood strategies. They divert loans to survive, and to prevent the sale of livestock. Some farmers who faced seed shortage also argued that if it had not been for loan diversion, it would have been difficult for them to plough their own land. The use of loan diversion to spread investments means that farmers may use loans in unintended ways, but nevertheless they invest it in their livelihoods according to their own risk aversion logic.

Activities	Number	Percentage
Sale of livestock	27	49
Sale of crops and others	21	38
Loan from different sources	16	29

Table 3. Nature of poor household loan repayments

Source: Field Survey, March 2010

6. The impact of credit on asset creation

One of the main objectives of credit is to enable households to acquire and develop household assets. Various studies (Pitt and Khandker, 1998; Mosley and Hulme, 1998; Zaman, 1998) indicate that microcredit has a positive impact on building household assets. However, in the study area, we found that microcredit has a limited impact on household assets and the impact is not the same for all types of household. Results show that credit has a relatively greater positive impact on better-off households than on poor households in terms of asset creation. By comparing poor households with better-off households in an in-depth interview, one farmer described how better-off households use credit to build household assets:

'Now everyone is taking credit from the government. The rich people are taking credit because they want to increase their assets and become richer. However, the poor are taking credit to cover their food shortages. The poor use credit mainly to buy grains for consumption whereas the rich use credit to buy additional livestock.'

Livestock purchase is a common use of credit in the area. According to survey results, of the total credit beneficiary households, about 79% bought at least one animal. Livestock purchase, however, is not the same for all categories of household. About 90% of better-off households bought livestock compared with 69% of poor households (Table 4). Focus group discussions revealed that the type of livestock bought is also different. The poor acquired small livestock like sheep and goats whereas the better-off invest their money in large livestock, notably cows and oxen.

We also found that the impact of credit on asset creation depends on the source of the credit. The household survey shows that about 69% of the poor took credit from the informal market compared with 33% of better-off households (Table 5). Informal loans are smaller than formal loans: and therefore have limited impact on asset creation even without loan diversion. About 53% of better-off households took relatively large loans from the food security credit system whereas only 16% of the poor took these loans - mainly because the former are considered more credit worthy than the latter. Access to relatively large loans, therefore, helped better-off households to invest larger amounts of money in asset creation but nevertheless the impact generally falls short of expectations. Improvements in asset holding have been recorded for better-off households but the gains were not sufficient to ensure sustainable household food security. This

was one major reason why the rate of safety net graduation was very low in the study area (Siyoum et al., forthcoming).

Category of HHs	HHs who bought livestock	Total number of HHs	Percentage	
Poor	38	55	69	
Better-off	46	51	91.2	
Total	84	106	79.2	

Table 4. Livestock purchase by types of household categories

Source: Field Survey, March 2010

	Type of household							
Type of credit	Poor Households				Better-off Households			
No. To		Total households	Percentage	No.	No. Total households Per			
Informal	38	55	69.1	17	51	33.3		
ACSI	40	55	72.7	38	51	74.5		
Food Security	9	55	16.4	27	51	52.9		

Table 5. Access to credit by type of households

Source: Field Survey, March 2010

According to some poor households, credit not only has limited impact in household asset creation but also has a negative impact on poor households' asset holdings through forcing households to sell their livestock to pay back their loans. This drives most poor households further into poverty. Most of the poor farmers argued that they failed to repay their loans mainly because of lack of income from loan financed business activities and poor crop performance caused by drought, pests and insufficient land holdings. Survey results show that 49% of the poor were forced to sell the livestock that they had bought with a loan or that they had owned before the loan in order to pay the loan back (see Table 3). These households explained that they sold their livestock because they had no other way of paying back their loan. One interviewed farmer explained this as follows:

'Last year I got credit from ACSI that I have used to buy an ox. However, due to drought I was not able to get sufficient crops to pay back my loan. Now I am going to sell my ox so that I can pay back my loan. If I don't sell my ox and pay my debt I will be sent to jail and I cannot get credit for next year'. Another interviewed farmer also described his situation as follows:

'Last year we took about 1500 birr credit from ACSI for livestock investment. But we used half of the loan to purchase grains as we did not have enough to eat. We used the remaining half of the loan to buy 3 goats. We hoped to pay back the credit from the money that we will get from goat breeding. But we were not lucky. Two of the goats died from a disease and we sold our ox to pay back our loan so that we can get a loan next time'.

Inability to pay back loans, therefore, forces households to dispose of their assets at the risk of increasing their vulnerability. Sale of livestock to pay back loans, especially the sale of ploughing oxen, means that poor households may be obliged to rent out their land to another farmer only to get from one quarter to half of the products as rent. This puts poor households further into poverty.

7. The impact of credit on agricultural productivity and household food security

Another aspect of credit is its impact on agricultural productivity and household food security. Microcredit programmes aim to help rural households invest in improved agricultural inputs, as well as enabling them to use their time effectively on their farms by reducing time spent on income-generating non-farm activities. The aim is to improve agricultural production and thus improve their household food security (Nosiru, 2010; Asmelash, 2003).

Households were asked, therefore, if credit had enabled them to improve their agricultural productivity and household food security. A similar result was reported as for asset creation: that access to credit did not enable poor households to increase their agricultural productivity and household food security. The majority of the poor invested most of their loan in immediate consumption needs and, therefore, credit had no impact on increasing agricultural productivity. Credit simply helped poor households to cover seasonal food shortages with no impact on long-term productivity and household food security. Poor households are risk averse and this prevents them from using their loans to invest in agricultural productivity to improve their food security. Large numbers of better-off households, on the other hand, reported positively compared to the poor households. Credit enabled better-off households to buy additional oxen, seed, and fertiliser which helped them to increase their productivity. One interviewed household explained this as follows:

'Last year we took a food security loan from the government and bought an ox. The ox helped us to plough additional land that we have rented from another farmer. We have got a good harvest so that we paid back our loan by selling the crops that we harvested. Therefore, credit helped us to plough additional land and increase our production'.

According to information obtained from household interviews, there are four major factors that determine the role of credit in agricultural productivity and household food security which are the availability of land, labour, and livestock, and the extent of loan diversion. In terms of the availability of land, survey results indicate that about half of the poor own less than half a hectare of land or no land at all. It is

difficult to increase agricultural productivity with such small plots of land. Lack of enough farm land is, therefore, a major bottleneck in increasing agricultural productivity for many poor households. Availability of enough land, however, does not necessarily mean an increase in agricultural productivity. Shortages of labour and livestock also inhibit the poor from expanding their agricultural productivity. One interviewed female-headed household (FHH), for example, told us that though she has enough land, she rented out her land for only a quarter of the production as rent because of shortage of labour:

'I took credit from ACSI but I didn't use it to buy agricultural inputs. My husband died a few years ago and I don't have a son old enough to plough my land. Therefore, I have rented my land only to get a quarter of the harvest. I am hoping to get a good harvest so that I can pay back my loan. If not, I don't know what to do'.

Female-headed and households with elderly people are particularly vulnerable to labour shortage. These households do not manage to use credit for agricultural productivity. In rural Ethiopia, labour availability is an important component of agricultural production. Labour shortage is typical of poor households: it restricts the poor from using credit to maximise their productivity and household food security. Labour shortage means that poor households' ability to undertake labour intensive agricultural activities are very limited (Getaneh, 2004; Pankhurst and Bevan, 2004). Better-off households, on the other hand, have more household labour available and that enables them to increase their productivity and improve their household food security through ploughing extra farmland.

Diversion of credit is also another factor that determines the effectiveness of credit in improving agricultural productivity and household food security. Diversion of credit, for example, allows poor households to cope with short-term problems, but drives them further into long-term poverty and food insecurity. Diversion of loans also means that households have little money to rent farm lands or to buy agricultural inputs to increase their productivity.

In addition to the factors mentioned above, household shocks, especially human and livestock diseases, are other major crises that hold back agricultural productivity and drive poor farmers further into food insecurity. These crises have made large numbers of poor households in the study area worse-off after accessing credit. Lack of proper clinic and veterinary services have further aggravated the problem. The existing clinic and veterinary services are insufficient to provide effective treatment due to the absence of adequately trained staff and the lack of medical facilities and medicines.

The impact of credit on labour rich and better-off households' agricultural productivity and household food security is different. Interview results indicate that labour-rich households benefit more from credit than labour-poor households in terms of increasing agricultural productivity. Having a small food gap and large labour availability enabled better-off households to invest part of their credit in renting additional land for agriculture. The household survey showed that because of the availability of extra labour, about 60% of better-off households used credit to rent additional land to increase their productivity and improve their household food security. Better-off households divert only a small amount of their loan into consumption and

therefore they are able to invest a large amount of the loan in acquiring agricultural inputs. Ownership of large numbers of productive assets, in particular livestock, also contributes significantly.

The results of this research show that increases in agricultural productivity and improved household food security is not only determined by access to credit but also by multiple factors including access to land, livestock, and household labour.

8. The effect of PSNP on the pattern of credit utilisation

The PSNP is one of the major components of the Ethiopian Government Food Security Programme. It provides six months of cash and/or food transfer to food insecure households to cover food gaps. It aims to protect household assets and provide households an opportunity to engage in productive investments. In the study area, we found that access to the government PSNP programme has an impact in terms of access to other forms of credit and ways in which households invest their credit.

Results revealed that by providing a guaranteed transfer to cover household food gaps, PSNP enables poor beneficiary households to use credit effectively for livestock investment better than non-beneficiary households. As noted above, 69% of the poor reported livestock purchase using credit. However, purchase of livestock was not uniform within poor households. Access to the government PSNP affects households differently. Survey results indicate that, of the 69% of the poor who bought livestock, 45.4% were PSNP beneficiaries compared with 23.6% non-beneficiaries (see Table 6).

	Poor Households			Better -off Households			
Type of households	Access to PSNP		Sub Total	Access to PSNP		Sub Total	Grand Total
	PSNP	Non-PSNP	Sub Total	PSNP	Non-PSNP	Sub Total	
HHs who bought livestock	25	13	38	22	24	46	84
Total HHS	55	55	55	51	51	51	106
Percentage	45.4	23.6	69	43.1	47.1	91.2	79.2

Table 6. Livestock purchase by types of household categories and access to PSNP

Source: Field Survey, March 2010

Since beneficiary households can use PSNP transfers to cover part of their food gaps, access to PSNP increases households' opportunities to invest credit in building household assets rather than investing it for consumption smoothing. Access to PSNP has, thus, contributed to breaking the common trend whereby poor people use credit for consumption smoothing and then get trapped in a vicious circle of poverty trying to pay

back their loans. This result, therefore, indicates how targeted transfer programmes (PSNP in this case) can help poor households to invest credit in livelihood enhancing activities. Nevertheless, in the study area, such investments are very limited and are unable to have sustainable positive impact on the poverty situations of beneficiary households. Access to PSNP, however, does not have a significant difference within better-off households.

We also found that access to PSNP transfers affects households differently in terms of access to credit, especially in the informal market. Results show that PSNP beneficiary households have better access to informal credit than non-beneficiary households. Of the 69% of the poor households which had access to informal credit, 66% were PSNP beneficiaries and the non-beneficiaries accounted for the other 34%. Results from focus group discussions show that people have much greater faith in PSNP beneficiary households than in non-beneficiaries as the former have at least a guaranteed transfer which can be used to pay back their loan. This result also reveals how targeted transfer programmes like the PSNP can have a positive impact in building the credit worthiness of poor households. This indicates the importance of building poor households' capacities, through targeted transfer programmes in order to increase their access to credit.

9. Conclusion

By providing start-up capital for self-employment credit can, in theory, help poor people to move out of poverty and food insecurity. However in practice, the role of credit in poverty reduction and long-term livelihood improvement is not as beneficial as claimed by its proponents. Using an ethnographic approach, this paper has investigated a group of 106 households which took credit from both formal and informal sources and has provided a more detailed account of the role of credit in households' livelihoods which other quantitative researches are unable to provide.

The findings of this paper reveal that credit has a differential impact across households in different wealth groups, mainly due to loan diversions. The inability of poor farmers to satisfy household needs throughout the year from their own production requires them to divert credit to meet unanticipated household needs thereby limiting the amount of credit available for long-term livelihood improvement. Results show that, although credit is meant to help poor households to develop their capacities to invest in long-term livelihood improvement to ensure household food security, in reality, credit has failed to do this except by providing buffers in times of shortage. The majority of poor households lack the resources needed to cover their food gaps and are forced to divert credit to cover short-term consumption needs. Consequently these households are forced to sell their productive assets or take another loan with high interest rates to pay back their existing loans. This puts them further into poverty and indebtedness.

The paper also revealed that the low risk-taking behaviour of poor households is another major factor preventing them from investing their loans in long-term livelihood improvement and household food security. Shortages of land, labour, and livestock are also factors that inhibit the poor from benefiting from credit. However, PSNP beneficiary households are in a better position to use credit for livelihood improvement as transfers received in this programme helped to reduce household food gaps thereby reducing the extent of loan diversion for consumption purposes. The paper shows how access to external transfers plays an important role in terms of assisting poor households to invest credit for productive purposes. The paper showed that better-off and labour-rich households are the ones which used credit to improve long-term livelihoods and household food security. Having a small food gap and more labour enabled them to invest most of the credit in long-term livelihood enhancement thus enabling them to improve their socio-economic status.

The findings of this study suggest that access to credit has not resulted in a structural improvement in the livelihoods of most of the beneficiary households in the study area. For a large majority of poor households, the long-term impact of credit is very limited. Though it enabled poor households to cover short-term food gaps and helped them to survive in periods of shortage, most of them are trapped into cycles of indebtedness and poverty. Despite all the assumptions and expectations, credit did not enable poor households to break out of poverty and food insecurity. The major structural problems preventing poor households from investing their credit in livelihood improvements have not been addressed. Improving households' livelihoods in the long-term involves not only providing access to credit but also greater access to productive resources and assets such as land, labour, livestock, technology, and the opportunity to develop the necessary skills. Increasing access to these productive resources is considered to be very important for increasing productivity in subsistence farming (Liverpool and Winter-Nelson, 2010). To ensure household food security in the long-term, therefore, credit has to produce a positive change in access to these productive resources.

Instead of assisting poor households to move out of poverty and food insecurity, credit has pushed most of them further into indebtedness. This study revealed that, labour-poor and vulnerable households are less likely to benefit from credit in terms of long-term livelihood improvement and household food security. It indicates the importance of integrating credit with other targeted transfer programmes to give poor households an opportunity to engage in livelihood enhancing investments which will help them to improve their current socio-economic status. Credit, therefore, should not be considered as a 'one size fits all' kind of programme suitable for all types of households. Tailored approaches to credit are crucial so that the credit programmes fit the livelihoods of different categories of households and can have a sustainable positive impact on the livelihoods of poor households.

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