Agriculture Knowledge, Learning, Documentation and Policy (AKLDP) Project
Field Notes
June 2016

El Niño and Indebtedness in Ethiopia

Impacts of drought on household debts in Tigray National Regional State

Introduction

In Ethiopia in 2015 and 2016 a major drought affected the country, caused by failed spring *belg* rains in 2015, followed by erratic and poor summer *kiremt* rains associated with El Niño the same year. AKLDP Field Notes described the early impacts of the drought on rain-fed smallholder farming communities including in South Tigray Zone, Tigray National Regional State.[i] There were substantial declines in crop production, including arable crop losses of between 50% and 90%[ii], and rising cereal prices, steep declines in livestock prices, and reduced opportunities for seasonal on-farm labor. The Field Notes also described local coping strategies such as the rising importance of emergency assistance and out-migration, including to the Middle East, and informants prioritized short and medium-term emergency assistance and recovery interventions.

In these Field Notes the AKLDP explores the impact of the 2015 El Niño episode on household indebtedness in two drought-affected areas of Tigray in northern Ethiopia.

Methodology

The issue of rural household indebtedness in Ethiopia is not new and it is well known that borrowing from family, friends and other sources is one of the main household coping strategies during drought.[iii] A rapid field study was conducted to quantify any changes in household indebtedness resulting from the severe 2015 El Niño episode. In Ethiopia there is a large-scale social protection program called the Productive Safety Net Programme (PSNP), which includes capacity to provide additional support to households affected by crises through food or cash transfers. Therefore, the study also assessed indebtedness in PSNP and non-PSNP households.

The study was conducted in two severely drought affected *woredas* – Raya Alamata in South Tigray Zone and Klite Awlaelo in Eastern Tigray Zone – in May 2016. The fieldwork included visits to drought affected communities and used:

- focus group discussions – 6 with non-PSNP householdsa and 6 with PSNP households
- individual interviews using a questionnaire – 74 non-PSNP households and 66 PSNP households
- interviews with *kebele* and *woreda* officials in each location.

Study Findings

1. Rural livelihoods

Most rural households were dependent on rainfed farming although informants reported an increasing number of landless households, and households with access to seasonal irrigation. Off-farm seasonal employment was an important supplementary income source, in particular for poorer households who were not able to produce enough from agriculture to meet their food and income needs. There were also a small but increasing number of households who had diversified their income sources to include livestock and seasonal trading.

In a normal year, cereal crop comprising sorghum, wheat, maize or teff is typically divided at the point of harvest, with a portion stored for household food consumption for the following year and a portion that is sold in local markets.

The cash generated from crop sales is used for a various purposes – schooling, health care, livestock purchase, household improvements, farm inputs and technology, ceremonies and to pay off household debts.

Most smallholder farmers also kept livestock including breeding stock, plough oxen and animals for fattening and sale. Typically, livestock were grazed on communal pastures, and arable stubbles after harvest. As these feed sources become depleted through the year, livestock were increasingly fed crop residues that households also harvest and stack in the homestead. Fattened animals are usually sold ahead of seasonal festivals when prices are highest. In drought years – including 2015 – livestock were sold and the income used to purchase cereals and legumes to fill the household food gap. Therefore, livestock numbers fluctuate, rising in good years and falling in drought years, or when households suffer other crises. Household livestock ownership and sales are useful proxy indicators of household well-being.

2. The 2015 El Niño and erosion of household purchasing power

In normal years, cereal and legume prices fall after the onset of the September harvest and continue to decline to February or March the following year, after which prices tend to stabilize through to May and June, before peaking in August. In contrast, the 2015 El Niño triggered month-on-month cereal and legume price increases from August 2015 through to May 2016 with average nominal price increases of 5.7%, 16%, and 15% for maize, sorghum and teff respectively, and a 22.5% aggregate price increase for pulses. However, in the same period wheat prices fell by 10.5% due to significant government imports.[iv]

In marked contrast to rising cereal and pulse prices, from November 2014 to 2015 informants reported that falling livestock prices, by up to 25% for plough oxen, 54% for cows, and 38% for sheep and goats.[v] Interviews confirmed that 90% of those interviewed had sold livestock in the period September 2015 to May 2016, including many who had sold more than one animal.

Due to increasing food prices and declining livestock prices, informants confirmed they had been forced to sell more animals to secure the equivalent amount of grain, relative to the previous year. Overall, the El Niño drought had led to a severe decline in livestock-cereals terms-of-trade, and so severely compromised household purchasing power.

3. Food security programs

Local officials confirmed that in normal years Raya Alamata and Klite Awlaelo *woredas* were 'chronically food insecure', with many rural households unable to produce enough food to meet their basic dietary and income needs. This situation was attributed to: small farm sizes, due to repeated division and sub-division of land; poor soils and soil erosion due to long-term deforestation; and variable and erratic seasonal rainfall and periodic drought. As a result, these *woredas* were included in the PSNP (Box 1) and in 2016, there were 31,980 people (29% of total population) enrolled in the program in Raya Alamata, and 42,627 people (33% of total population) in Klite Awlaelo.

PSNP informants (n=66) reported that in contrast to previous PSNP phases, there was a delay in the onset of the first cash and food transfers, and then the monthly payments were not made on time. This led to extreme hardship, especially for the most vulnerable households. Informants also noted that full-family targeting had been discontinued under PSNP4, following the introduction of a capping of household support measure at five members per household. Based on disaggregated household information from 66 PSNP households, it was learned that PSNP4 was providing support to 67% of PSNP household members (Figure 1).

Box 1: Productive Safety Net Programme (PSNP)

In 2002–2003 an El Niño drought resulted in widespread food shortages in the Horn of Africa, and affected an estimated 15 million people in Ethiopia.[vi]In response, the government launched the PSNP in 2005 with the support of international development partners. The main purpose of the PSNP was to improve household food insecurity and build household assets. The program provides households with monthly cash and food transfers in exchange for public works. In January 2016, the fourth-phase of the program – PSNP4 – was launched with a total caseload of 8 million people, including 1 million in Tigray National Regional State.[vii]

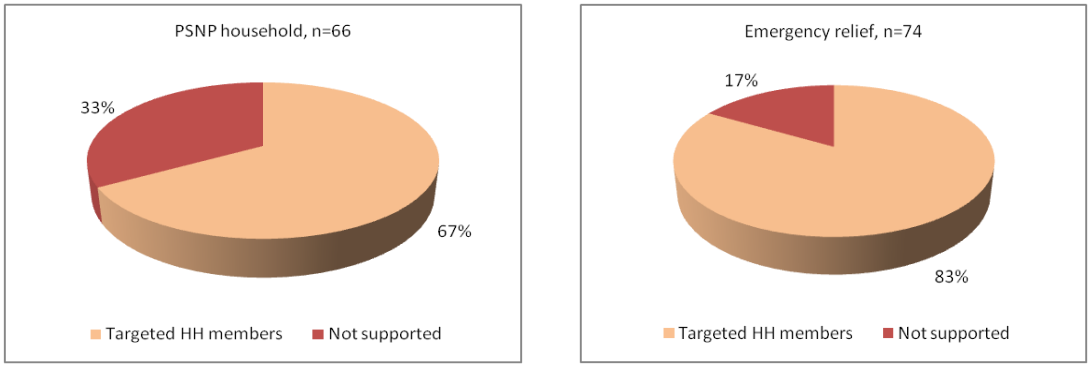
4. Emergency assistance

Each year the government and international development partners issue a Joint Government and Humanitarian Partners' Document (HRD) that outlines humanitarian requirements for the following year. The 2016 HRD confirmed the impact of the 2015 El Niño drought e.g. "… *a government- multi-agency assessment on the impact of agriculture yield and livestock concluded that 4.5 million people were in need of emergency food assistance in August"* and *"… the government led a pre-harvest, multi-agency rapid assessment*

in early October that concluded the number of people requiring emergency food assistance had increased to 8.2 million, following which an addendum to the 2015 Humanitarian Requirements Document was released". Following the government-led multi-agency assessment of October and November 2015, the number of people requiring emergency food assistance was revised to 10.2 million, including 1.2 million in Tigray National Regional State.[viii] The number of people receiving emergency assistance in Raya Alamata and Klite Awlaelo was 55,210 and 56,159 respectively, and in addition to households receiving PSNP transfers.[ix]

Non-PSNP focus groups confirmed that they had benefited from food assistance distributions in early 2016, although it was later confirmed by key informants that the distributions in January and February 2016 were in fact delayed 2015 food assistance transfers and that emergency assistance transfers for 2016 typically started in early March 2016. Household data collected from74 non-PSNP households confirms that emergency food assistance reach more than 80% of family members (Figure 1).

Figure 1: Estimates of family members targeted by PSNP and 2016 emergency assistance



5. *Trends in Household Indebtedness*

Levels of household indebtedness

Before the drought, most households had long-term, outstanding loans that averaged Eth 3,550 (US$169) for PSNP households and Eth birr 4,140 (US$197) for non-PSNP households. However, across all informants (n=140), 76% had taken *additional* loans in the period September 2015 to May 2016 and that the average size of these new loans was Eth birr 2,150 (US$102) for PSNP households and Eth birr 2,360 (US$112) for non-PSNP households. Therefore, at the time of the study average household indebtedness was Eth birr 5,700 (US$271) for PSNP households and Eth birr 6,500 (US$310) for non-PSNP households (Table 1).

Table 1: Average household long and short-term loans

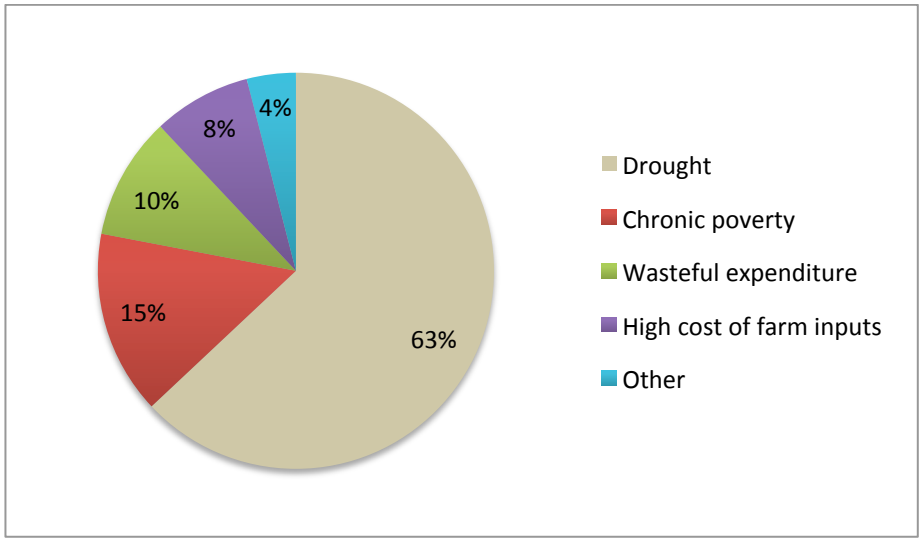
Type of loan	PSNP households (n=66)	Non-PSNP households (n=74)	Total (n=140)
Proportion of households with pre-existing loan, before El Niño	78%	74%	76%
Average pre-existing loan size (Eth birr)	3,550 (US$ 169)	4,140 (US$ 197)	3,845 (US4 183)
Average additional loan size, September 2015 to May 2016 (Eth birr)	2,150 (US$ 102)	2,360 (US$ 112)	2,255 (US$ 107)
Total loan size as of May 2016 (Eth birr)	5,700 (US$ 271)	6,500 (US$ 310)	6,100 (US$ 290)

Causes of household indebtedness

Focus groups attributed the immediate and longer-term causes of rural indebtedness in eastern Tigray to the following:

- The 2015 failed *belg* and El Niño induced poor summer *kiremt* rains and poor *meher* harvest and lost livestock production
- Steadily rising costs of agriculture inputs, especially fertilizer
- Inappropriate timing of loan repayments in the immediate post-harvest period, when farm-gate prices are the lowest in the year. Typically, those able to buy and store cereals and pulses at the point of harvest benefit from higher prices
- Religious and community festivals that coincide with the dry season that typically require household expenditure – travel, clothes and food.

Figure 2: Main causes of debt in Raya Alamata and Klite Awlaelo woredas in 2016 (source: focus group discussions, n=12)



Size of individual loans

Information on the size of loans associated with the drought is summarized in Table 2, and the size of these additional loans ranged from less than Eth birr 1,000 (US$ 48) to more than Eth birr 10,000 (US$ 480). For the highest value loans of Eth birr 10,000 and above, there were more loans issued to non-PSNP households and informants suggested that lenders recognized that poorer PSNP households had less capacity to repay loans.

Table 2: Size of loan distribution by household - September 2015 and May 2016

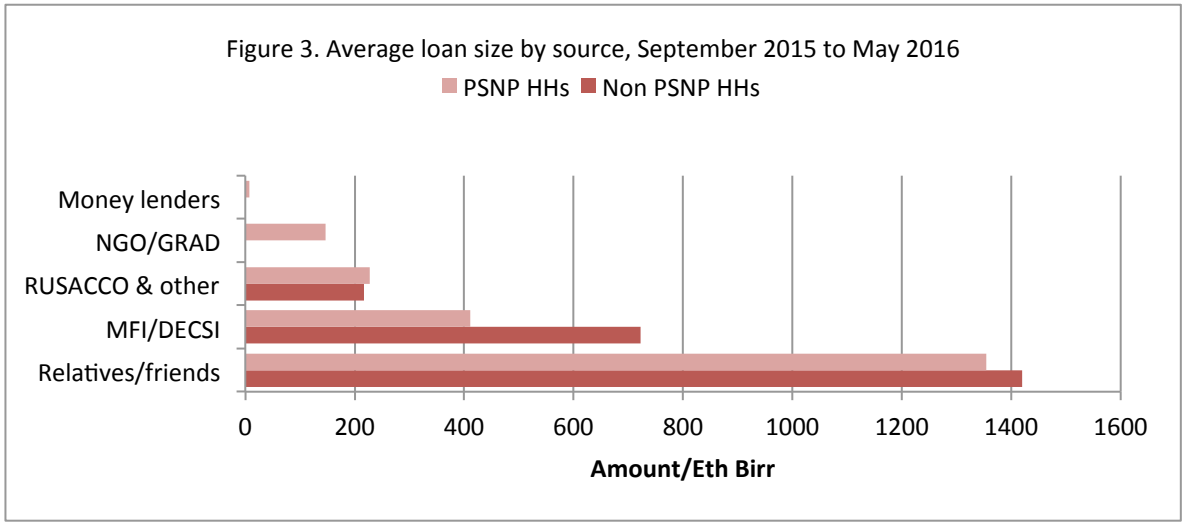
Loan size (Eth birr)	Proportion of households receiving loan	
	PSNP households	Non-PSNP households
< 1,000 (US$ 48)	30%	28%
1,000-4,999 (US$ 48-240)	39%	36%
5,000-9,999 (US$ 240-480)	27%	15%
≥10,000 (US$ 480)	4%	21%

Source of loans

All focus groups confirmed that relatives and friends were the primary source of loans, accounting for approximately 60% of borrowings for all households. Micro-finance institutions – including the Dedebit Credit and Saving Institution (DECSI) – was the second most popular source of borrowing, accounting for 19% and 31% of loans for PSNP and non-PSNP households respectively, while rural saving and credit cooperatives (RUSACCOs) were the third most popular source and accounted for around 10% of all household loans. Some informants were members of VESA[x] groups supported by the USAID GRAD

project[xi], and confirmed that they had borrowed from the group savings, while a few informants mentioned that they took money from money lenders[xii] (Figure 3).

In the discussions on source of loans, a number of PSNP informants commented that it was more difficult to secure new loans during a time of severe drought as: relatives and friends were similarly affected by the drought; prior loans had to be paid-off in full in order to apply for a DECSI loan; and money-lenders were more cautious as, in previous severe droughts, the number of defaults on loans had typically increased.



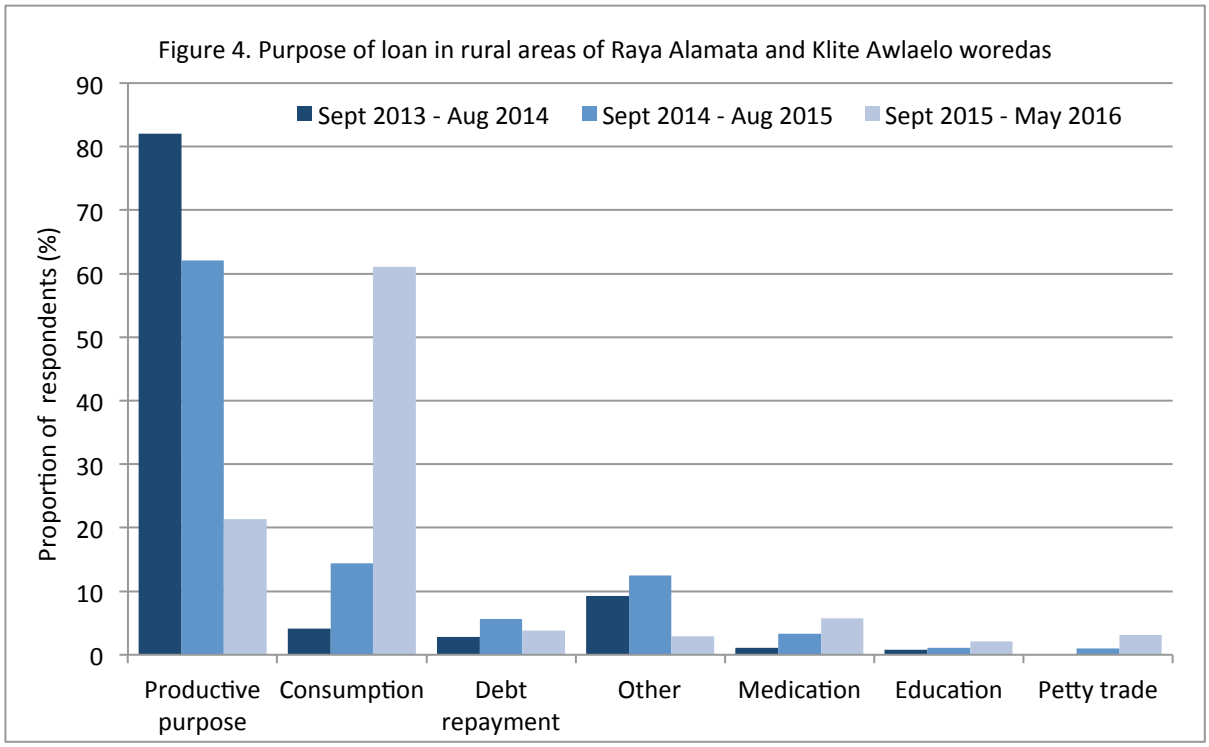
Reasons for borrowing

In normal years, people usually borrowed for productive purposes such as purchase of agriculture inputs, or livestock for breeding or fattening. However, due to the drought and poor harvests, in mid-September 2015 the main purpose of loans switched to the purchase of food to meet basic household food needs. Specifically, informants estimated that households had spent an average of Eth birr 1,600 (US$ 76) on food, and that this accounted for around 60% of recent loans. They also confirmed that these borrowings were in addition to cash distributed under the PSNP and emergency food assistance.

Informants also contrasted recent loans with loans taken in 2013 and 2014. They estimated that in the previous two years that 85% and 54% respectively of the value of the loans had been used for productive purposes, in particular for seeds, fertilizer and livestock. Taking into account recent loans for other purposes – health, education and debt repayment – the value of loans taken for productive purposes since September 2015 had fallen to an average of Eth birr 649 or less than 25% of all loans (see Table 3 and Figure 4). The productive loans taken were reported to be primarily for seed and fertilizer.[xiii]

Table 3: Household loan utilization, September 2015 to May 2016

Use of loan	Amount (Eth birr)		
	PSNP	Non-PSNP	All households
Consumption	1,548	1,646	1,597
Health	68	226	147
Education	94	34	64
Productive	592	553	572
Debt	150	40	95
Petty	20	133	77
Other	28	120	74
Total	2,500	2,752	2,626



Views on indebtedness

There was widespread agreement amongst all informants that with the main 2016 *meher* harvest still several months away, poorer households would be forced to continue to borrow to meet food, health, schooling and other requirements, and that external support from the PSNP and emergency assistance was inadequate. Due to the increased level of borrowing since the onset of the drought in mid-September 2015, they were concerned that debts would persist beyond the 2016 *meher* harvest, and would need to be rescheduled into 2017. In addition, until all loans were repaid they would not be able to buy livestock to either rebuild their livestock assets, or fatten and sell animals for additional income.

The current level of indebtedness was seen as a 'major burden' by 71% of informants, with long-term consequences on their livelihoods, whereas 20% categorized debts as a 'minor burden' and 9% as 'no burden'. Households with group loans from DECSI expressed particular concern because their land had been used as collateral, and do feared losing this land. While informants expressed concern for themselves, several also expressed concern for landless households and young families with young children, that they perceived to be particular vulnerable to rising levels of indebtedness.

Conclusions

This study indicates the important long-term negative impacts of the 2015 El Niño episode on rural farming communities in southern and eastern Tigray. In addition to substantial harvest and livestock losses, average debt values increased by 60% in PSNP households and 57% in non-PSNP households, taking total outstanding debts to US$ 271 and US$ 310 respectively (Table 1). Households are likely to continue to incur additional borrowing fromrelatives and neighbours, DECSI, RUASSCOs and other sources to meet their basic food needs.

Although farmers attributed recent increases in indebtedness to the El Niño, they also reported various other factors that impact on current and longer-term indebtedness including: year-on-year fertilizer prices increases; registration on development and emergency assistance programs; and the timing of loan repayments when farm-gate prices are at their lowest. Religious ceremonies and festivals that coincide with the dry season and require expenditure were also mentioned.

Indebtedness is a major concern for most households and many saw the effects of the 2015 El Niño drought continuing throughout 2016, and potentially into 2017 and beyond. Without continued and increased assistance, households are concerned that they will have to continue to sell assets – including livestock – and migrate in search of casual labor in nearby towns and cities.

Disclaimer
The views and information in this document are an output of the AKLPD project and do not necessarily reflect the views of USAID or the United States Government.

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Endnotes

[i] AKLDP Field Notes (2016). El Niño in Ethiopia. Early impacts of drought in South Tigray zone http://www.agri-learning-ethiopia.org/wp-content/uploads/2016/01/AKLDP-Field-Notes-Tigray-Jan-2016.pdf
[ii] Joint Government and Humanitarian Partners (2015). 2016 Ethiopia, Humanitarian Requirements Document
[iii] Pankhurst and Bevan (un-dated). Hunger, Poverty and 'Famine' in Ethiopia: Some Evidence from Twenty Rural Sites in Amhara, Tigray, Oromiya and SNNP Regions http://www.eldis.org/vfile/upload/1/document/0708/DOC16584.pdf)
[iv] AKLDP Monthly Food Price Briefs http://www.agri-learning-ethiopia.org/technical-briefs/
[v] See also Endnote i
[vi] Joint Government and Humanitarian Partners (2015). 2016 Ethiopia, Humanitarian Requirements Document
[vii] http://documents.worldbank.org/curated/en/164341468203680278/pdf/ISR-Disclosable-P146883-03-09-2016-1457561885644.pdf; Overview of PSNP: PSNP 4 FM manual training 19-23, March, 2008
[viii] Joint Government and Humanitarian Partners (2015). 2016 Ethiopia, Humanitarian Requirements Document
[ix] Early Warning and Response Reports (2016) of Raya Alamata and Klite Awlaelo woredas
[x] Village Economic and Social Association (VESA) groups that promote members savings and loans
[xi] The USAID-funded and CARE Ethiopia implemented Graduation with Resilience to Achieve Sustainable Development (GRAD)
[xii] Some key informants suggested that borrowing from money lenders was under-reported as informants did not want to be stigmatized by neighbors. If borrowing from money-lenders is under-reported it may be that indebtedness is higher than reported in these Field Notes
[xiii] Informants in both *woredas* confirmed that taking fertilizer on credit was a pre-condition for being registered for the PSNP or emergency food assistance. Many also believe that in the drier parts of Tigray that fertilizer application can have a negative impact on plant growth as it tends to 'burn' young crops