



# The commodification of social relationships in agriculture: Evidence from northern Ethiopia

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## ABSTRACT

In recent decades, small-scale farmers' market orientation approaches have increasingly been adopted to tackle the problem of food insecurity. However, little is known about how this affects other non-market exchange relationships. The present paper addresses this knowledge gap using qualitative data gathered from small-scale farmers at three selected sites in northern Ethiopia. We took a social exchange theory perspective to examine how resource exchanges have altered after-market orientations in rural communities. The results indicate that, in addition to the benefits for better-off households, integration into the market economy improves the bargaining power and autonomy of middle-income groups as well as the physically fit younger generations. The results also suggest that market orientation generates new livelihood opportunities and market-based relationships, which in turn facilitate the formalisation and transformation of local institutions. On the other hand, market orientation has adverse impacts on traditional practices of resource exchange – such as labour for labour, oxen for labour, labour for harvest/yield, or labour for food – or the exchange of other services. Our results indicate that because these in-kind resource exchange relationships have been replaced by monetary transactions, the poor have become even more vulnerable. The policy implication is that while promoting market-driven approaches to food security, complementary mechanisms must be put in place to empower those living in the most vulnerable conditions.

## 1. Introduction

Small-scale farmers in rural Ethiopia, like farmers in other developing countries, live in uncertain conditions and suffer from a wide range of resource constraints, such as a lack of land, livestock, and access to inputs or irrigation technologies. Maintaining livelihoods independently in the face of such uncertainty is therefore often difficult for the poor. Hence, risk reduction through resource exchange and sharing are common strategies amongst the rural poor (Dercon and Krishnan, 2000).

Resource sharing and exchange are traditional solutions to minimise resource limitations and food insecurity problems among small-scale farmers (Gurven et al., 2015). Subsistence farming is often uncertain and is exposed to various risks – such as drought and input–output market uncertainties – that influence its productivity. The repeated materialisation of such risks have prompted small-scale farmers to

develop deep-rooted norms and mechanisms for resource exchange. These norms emphasise reciprocal rights and obligations among community members and serve as social security and informal insurance mechanisms during times of personal hardship (Haagsma and Mouche, 2013; Dercon and Krishnan, 2000). Inequality, weather shocks or other factors can disrupt a farmer's wellbeing and require additional resource sharing as a risk reduction mechanism (Dercon and Krishnan, 2000). In areas where informal exchange relationships are deeply rooted, cultural values emphasising altruistic gifts, generosity and egalitarianism are common (Haagsma and Mouche, 2013). Such exchanges are traditionally organised through in-kind transactions and supported by various social institutions, such as savings groups and cooperatives. In areas where sharing is the norm, in-kind exchange of labour, oxen power, seed, food and other productive resources is common.

Despite the apparent benefits of resource pooling, an exchange

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relationship entails the short-term cost of foregoing resources. In the absence of enforcement contacts, exchange relationships can create debts and the risk that the other party fails to reciprocate during a period of critical need, which negatively affects the stability of reciprocal sharing relationships (Gurven et al., 2015; Haagsma and Mouche, 2013). As a result, households with market-oriented livelihood trajectories often prefer market-based exchange, in which payment between the exchanging parties usually occurs simultaneously, therefore eliminating future risk (Hamer and Hamer, 1994). It should be noted, however, that debts in the form of micro-credits and other formal loans (and their associated risks) are also common in market-based systems.

Following the adoption of a market-based system, social theorists have noted the disappearance of traditional exchange relationships in the countryside through the disembedding of social relationships in favour of new economic relationships, which generate immediate economic benefits that are less likely to be embedded within previous social practices (Wallace et al., 2016). These new relationships are presumed to be predominant in market intervention areas in which individuals develop their own new economic networks and integrations. Individuals who are more involved in the market system may rely more on cash savings to effectively buffer risk. Hence, increased market orientation is presumed to have a wide range of effects that extend from improving welfare to altering the pre-existing non-market social relationships, such as resource sharing and exchange. However, research on market orientation, value chains and cash cropping tends to disregard these effects and focus on measuring only certain impacts, such as those on employment, income, productivity, food security and related socioeconomic indicators (Abafita et al., 2016; Gebremedhin and Jaleta, 2012; Shiferaw et al., 2011; Gebremedhin and Jaleta, 2010).

This paper adds to the literature on how the transition from subsistence to cash crop farming affects non-market (socioeconomic) resource exchange relationships. This literature presents relevant case studies from Brazil (Pegler, 2015), Peru (Gurven et al., 2015) and Cameroon (Oishi, 2012). Earlier studies investigated changes in exchange relations in the context of shifting from hunting–gathering to commercial farming practices. However, hunting–gathering practices and integration into

commercial farming are somewhat unrelated. These trajectories are quite independent, in terms of both productive resource exchanges and management practices. In many developing countries, livelihood trajectories are much more engaged in subsistence food or cash crop productions, which are very interdependent. Hence, the shift from food to cash crop production is presumed to affect both the form and the quantity of the exchange relations. As far as we know, there has been no previous research into the way the transition from food crop to cash crop farming affects non-market exchange relationships, particularly in Ethiopia.

Against this backdrop, the present research investigated the change in exchange relationships resulting from a shift from food to cash crop farming in northern Ethiopia. The research used data collected through focus group discussions (FGDs) with farmers in communities where the transition to commercial farming has become a major strategy in agricultural development and has significant social implications. In this paper, we present the answers to the following questions: which social groups continue to rely on traditional exchange, why and how? Which social groups are primarily shifting to market orientation, why and how? And how does this shift affect traditional exchange systems?

To answer these questions, we adopted a social exchange theory (SET) perspective to examine how resource exchanges have altered after market orientations in rural communities (McGuire, 2008). We studied the effects on different social groups among small-scale farmers in northern Ethiopia using qualitative data gathered from three sites, namely Raya Azebo, Kafta Humera and Lay Gayint (Fig. 1).

This paper contributes to a broader understanding of the effects of agricultural development strategies aimed at socially inclusive development through the integration of farmers in agricultural value chains. In it, we first reflect on Ethiopia’s policies aimed at facilitating small-holder farmers’ commercialisation by examining how such policies indirectly affect multiple non-market social dimensions, and then contribute to a better understanding of how to address possible adverse social impacts. This is particularly relevant in light of current efforts to develop effective social protection policies. A misunderstanding of the roles of existing social networks can lead to unintended consequences



Fig. 1. The study areas.

for the functioning of these networks. This could have damaging effects on the capacity of the poor to mitigate and cope with the impacts of shocks. A better understanding of these effects can lead to the development of policies that support the existing social networks on which the poor rely.

## 2. Literature review

Rural areas are in a process of transformation resulting from the multitude of opportunities offered by market orientation and its enabling conditions, such as telecom, road and transport services (Rammelt et al., 2017; Kiiza and Pederson, 2012). There are arguments for and against small-scale farmers' market orientation and its effects on exchange social relationships. One argument in favour of market orientation is that it extends and widens local people's economic and social networks of traders, processors and urban consumers (Pegler, 2015; Long, 2001). This in turn can improve access to input and output markets for loans, improved seeds, agro-chemicals and price incentives (Gebru et al., 2019b; McGuire, 2008). Pegler (2015) argued that through these new connections, people can move from often uncertain traditional in-kind resource exchanges to more secure market-based exchange relationships, especially if this is linked to the global market economy.

Market orientation is also said to positively affect the exchange relationships of agricultural labourers and employers by improving the forms and values of exchanges. In subsistence agriculture, exchange is less negotiable and is often determined by friendship and kinship. In labour markets, for example, the setting of wages is often merit based, negotiable and well incentivised. Several scholars have argued that labour market orientation improves efficiencies, such as in the quality and specialisation of labour (Gurven et al., 2015; Polyani, 1944). In traditional social exchange relationships, these efficiencies might be 'compromised' by other goals besides efficiency, such as prioritising kinship and other local relationships. Oishi (2012) concluded that in Cameroon the increased reliance on wage labour for cash crop production has altered the relationship between employee and employer. Labourers have come to realise the value of their labour and, as long as there is sufficient labour demand, they can choose where to work, negotiate their employment conditions and generally benefit from working for cash.

Furthermore, as mentioned in the introduction, the increased security of exchange in market-based systems is often perceived to improve exchange relationships, as the instantaneous settling of the exchange minimises the likelihood of default (Gurven et al., 2015). Those in favour of markets argue that cash transactions promote equality among those involved, since the parties to such transactions assume that equivalent exchange values are traded, independent of the informal relationships between the transacting parties. Some go as far as to suggest that this may lead to greater socio-political autonomy in local contexts (Oishi, 2012).

Some empirical studies have shown that market-integrated societies exhibit more generous social behaviour than isolated small-scale subsistence societies. For instance, Henrich et al. (2005) found that populations whose diet is increasingly derived from purchased food give a larger portion of their monetary endowments to others. In addition, as market integration stimulates economic growth, economies of scale at various stages of production could trigger resources pooling and collaboration to penetrate input–output markets (Chamberlain and Anseeuw, 2017; Mojo et al., 2017).

An argument against market orientation is that although entry into a market economy may create economic opportunities, this change often jeopardises the cultural norms of rural communities. For instance, previous studies in southern Ethiopia revealed that after farmers' entry into coffee cash cropping, in-kind transactions were replaced by cash monetary transactions. This led to the erosion of moral values, as people became more materialistic (Hamer and Hamer, 1994). This change was

said to be particularly problematic for youths and female-headed households, as they lack such productive assets as land, labour, draught power and money. Moreover, integration into market economies results in the erosion of cultural norms and customary practices of reciprocity and self-help, and their replacement with more individualistic and self-centred values (Haagsma and Mouche, 2013; Hamer and Hamer, 1994). Such changing norms and values then lead to the disappearance or disintegration of traditional resource sharing behaviours. For example, empirical research in the Peruvian Amazon found that market integration led to increasingly finance-based transactions at the expense of informal sharing with kin or other exchange partners (Putsche, 2000). Similar findings were found for Cameroon (Oishi, 2012).

Several other studies also found negative effects of market-based relationships on reciprocity. For instance, based on their study in sub-Saharan Africa, Haagsma and Mouche (2013) reported that when people gain financial advantage over others, they become more economically independent and start to undermine traditional social relationships and ignore their reciprocity-based social obligations. Similarly, the increased integration of small-scale farmers into market-oriented agriculture might adversely affect labour sharing, as employers (surplus producers) have more available cash and increase their profits by hiring wage workers. Wage labour is easier to acquire and therefore gets the job done faster. It also saves time because there is no need for reciprocal acts. Moreover, the increased use of herbicides reduces the need for labour in peak weeding months, but increases the need for cash.

The effect of markets extends beyond patterns of resource sharing by altering other aspects of social life. These cases show that it is not possible to generalise about the direction and magnitude of market orientation impacts on exchange relationships. Following this, scholars have suggested the need to conduct site-specific studies following new interventions towards market-orientation (Pegler, 2015).

## 3. Analytical concepts and framework

Social exchange theory (SET) – a theory for understanding social behaviours (Cropanzano and Mitchell, 2005; Meeker 1971) – has been shown to be a suitable theoretical framework for analysing exchange relationships. The SET framework focuses on how relationships develop, how relationships are experienced, the patterns and dynamics that emerge within ongoing relationships, and the factors that mediate the stability of relationships over time (Sabatelli and Shehan, 2009). A relationship's stability is explored by studying the ways in which constraints and opportunities interact to impact the relationship. Exchange behaviour between two individuals is viewed as an exchange of acts (in the form of specific quantities and types of items) with associated rewards and costs (Cropanzano and Mitchell, 2005). SET has been used in various fields, including sociology (Emerson, 1976), family studies (Sabatelli and Shehan, 2009), social psychology, anthropology, organisational management (Bordia et al., 2017; Cropanzano and Mitchell, 2005) and socioeconomics (Látková and Vogt, 2012; Oishi, 2012). In general, the studies focused on how different development pathways affect resource exchange as well as people's attitude towards the pre-existing norms of exchanges.

Interpersonal exchange can be treated as interconnected individual choices that require some rules to guide them. Exchange behaviours can be assessed on the scales of reciprocity, rationality, altruism, group gain, status consistency and competition (Meeker, 1971). Reciprocal interdependence emphasises contingent interpersonal transactions, whereby an action by one party leads to a response by another. A social exchange requires a bidirectional transaction of give and take.

SET was developed by Homans (1958) to understand human behaviour and explain human interactions. Later, Emerson (1962) and Blau (2017) extended the theory to analyse how individuals and organisations interact to maximise their gains and minimise their costs. The theory suggests that individuals are likely to engage in an exchange if

they believe that the costs of the exchange do not outweigh the resulting benefits (Látková and Vogt, 2012; Skidmore, 1975). The costs and benefits of exchange can be in the form of labour, animal power, goods, services, information, time, money or status (Emerson, 1962; Kelley and Thibaut, 1978).

In line with this reasoning, a community that shifts its livelihood from subsistence farming to cash cropping is likely to maintain traditional non-market resource exchange if the perceived costs associated with such exchange relationships do not exceed their benefits. Otherwise, the community is likely to shift to market-based forms of exchange, depending on the emerging opportunities and constraints. This could result in either modifications of the traditional exchange relationships or their abandonment. In this paper, the introduction and expansion of agricultural commercialisation is assumed to bring about changes – for better or for worse – in non-market resource exchange relationships, depending on a range of local conditions and individuals' wealth status. For example, positive changes in market orientation could be most prominent among the better-off (who can afford to employ rather than share labour). The literature review and analytical framework revealed both positive and negative effects on resource exchange relationships as a result of the shift from subsistence to market-oriented agriculture. The key findings are summarised in Fig. 2.

#### 4. Context of the study

This study was conducted in three districts – namely Lay Gayint, Kafta Humera and Raya Azebo – that had been selected for a broader research project on inclusiveness in food value chains. In these districts, a varying mix of food and cash crops are grown. During our previous work in each district we found positive correlations between cash crop orientation and farmers' income, food security and wider employment opportunities. We also found that the lower socioeconomic classes are generally excluded from these commercial crop value chain developments (Gebru et al. 2019a; Gebru et al. 2019b).

In each case, it became clear that household asset endowments (particularly land and livestock) are a key factor for 'inclusion' in commercial value chains. The 'excluded' households benefited insofar as they would gain access to employment in the new commercial activities. However, it also became clear that these employment opportunities did not eliminate their dependence on other forms of social exchange. For example, the shift towards commercialisation did not resolve persistent household food insecurity for the poor (Gebru et al. 2019a; Gebru et al. 2019b). At the same time – and this is the focus of the present paper – those same trends towards commercialisation seem to erode the pre-existing forms of social exchange on which the poor rely. Before we attempt to quantify the relative costs and benefits, there is a need to understand these causal mechanisms through a qualitative approach.

In this paper, the three cases are used to reveal the interplay between market orientation and social relationships. This paper is therefore part of a broader socioeconomic impact evaluation of the process of commercialisation of the food system in Ethiopia.

Lay Gayint is located in the South Gondar zones of Amhara Regional National State. It is between 1500 and 3500 m above sea level, and has a mean annual temperature of 16 °C and a mean annual rainfall of 400–1100 mm (Office of Agriculture in study area, 2016). The district has a total population of 206,499 persons (Office of Agriculture in study area, 2016). The district is known for its cereal-based farming systems, with barley, wheat and potatoes being the dominant crops. Since 2010, Lay Gayint has also been known for its increased market-oriented malt barley production.

The district of Kafta Humera is in the western zone of Tigray Regional State, 954 km from Addis Ababa to the north and 570 km from Mekelle to the west (Fig. 1). The district is bordered to the west by Sudan, to the north by Eritrea, to the south by Welkait district and a part of Tsegede district, and to the southwest by Amhara Region. Kafta Humera has a total population of 115,580 persons (Humera OARD,

2017).

Raya Azebo is one of the five districts in the southern zone of Tigray Regional State. It has a population of 135,870 persons. A total of 32,360 households were counted in this district, resulting in an average of 4.20 persons per household. Mixed farming (crops and livestock) is the dominant farming system. Sorghum, teff, maize, barley and chickpea are the major crops in the study area. The district has a total area of 38,421 ha of cultivated land. Rain-fed agriculture is still dominant, but the area under irrigation is increasing (Kiros et al., 2009). Although the valley is known for its untapped ground water potential, it suffers from droughts at least once every 10 years, triggering various degrees of human and livestock damage, which results in either migration or the premature loss of life. The exploitation of groundwater in the last 10 years has enabled the cultivation of vegetables such as onion, tomato and pepper, which are now widely grown and important components of rural livelihoods.

## 5. Methodology

### 5.1. Data collection methods

The present study employed three interdependent data collection methods. First, to gain an impression at the start of the investigation of each of the villages studied, three key informant interviews (KIIs) were held with a total of 19 officials involved with the market-oriented commodity of the study district. Second, to further understand the impact of cash orientation on exchange relationships, a round of focus group discussions (FGDs) was conducted in 2016 and in 2017. In this study, FGDs allowed us to: (1) explore the less visible emerging changes in behaviour or sociocultural norms; (2) understand how people collectively construct meanings and make sense of the phenomena/change both for themselves and for others in the group; (3) and simultaneously collect a range of perspectives about the changes, as information was sought from a group of people rather than a single participant.

The FGD procedures were consistent across all sites and involved separate group discussions with female and male farmers stratified by wealth status. FGD participants were identified in consultation with key informants in the villages. Identification was according to specific selection criteria to ensure a representative sample in terms of cash croppers/non-cash croppers, low to high wealth status, gender and age. In total, we conducted 36 FGDs with a total of 146 participants (70 men, 76 women) (Table 1).

We applied a qualitative research approach to gain insight into how the shift to cash cropping affects non-market-based exchange relationships. Multi-stage sampling procedures were employed to generate relevant data for this paper.

In the first stage, three districts that encompass a varying mix of traditional and transitional farming systems were identified. There are two major reasons why the research was conducted in these three districts. First, we found various public–private partnerships in these districts that are making ongoing efforts to promote the commercialisation of small-scale farmers in an attempt to tackle food insecurity. Second, the three districts have three different agribusiness model arrangements that link small-scale food producers. Together, the three districts provide a full picture of the interplay between the commercialisation of small-scale farmers and local food security in Ethiopia. In the second stage, households in each sample villages were stratified by their status of participation in cash cropping (as participants and non-participants), as this status was expected to affect their perceptions of exchange relationships and social relationships in general. Wealth-based stratification was also carried out. This is a useful tool to assist in unpacking and understanding the diversity among smallholder farms, as well as to represent the wide differences in resource endowment. FGD participants were also stratified by wealth as it is one of the major factors that influence people's social networks and exchange relations in rural areas.



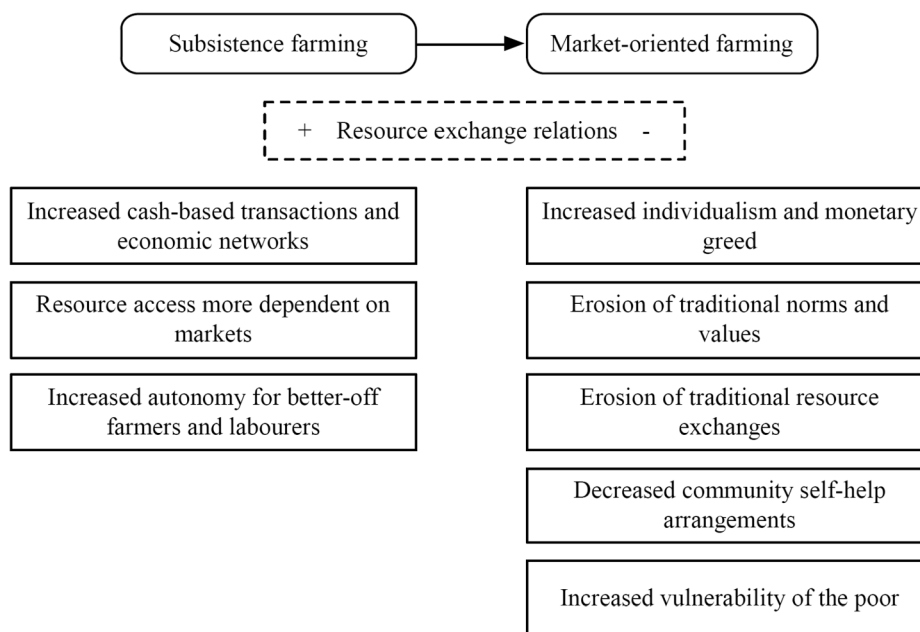


Fig. 2. The multiple pathways through which transitioning from subsistence to market-orientated farming can affect social relationships.

Table 1  
FGD participants.

District	Number of FGDs by class		Number of participants by gender	
	Wealth class	Number of FGDs	Female	Male
Raya Azebo	Better-off	3	8	11
	Average	3	9	5
	Poor	3	9	7
Kafta Humera	Better-off	3	5	11
	Average	3	6	9
	Poor	3	10	7
Lay Gayint	Better-off	3	8	6
	Average	3	9	5
	Poor	3	12	9
Total		27	76	70

Source: Authors’ own compilation, 2018.

Finally, FGD participants were stratified by gender due to the underlying differences in wealth status, participation in commercial farming and social exchange relationships between male- and female-headed households. Overall, in every research location, FGD participants were selected so as to include representatives of households that were engaged or not engaged in cash cropping, representatives of both gender groups and representatives of different wealth groups.

The discussion questions for focus groups concerned the participants’ involvement in cash cropping; trends before and after cash cropping in resource sharing and exchange patterns; communities’ viewpoint concerning the changes in exchange patterns; and the perceived benefits and losses related to the changes in exchange practices. Discussions were held in the Tigrigna language in Raya Azebo and Kafta Humera, and in Amharic in Lay Gayint. The discussions lasted two or three hours and were held in a field near their dwellings in each village. The first author (Gebru) conducted all the FGDs. Each FGD and KII was transcribed that evening or the following day by the FGD facilitator (researcher) according to the identified thematic issues (e.g. exchange, class and gender, relationship trends before and after the introduction of cash cropping, reason for the change in relationships).

5.2. Data analysis

Data generated from the KIIs and FGDs were analysed using thematic analysis (pattern matching), which is an inductive approach grounded in the participants’ views (Limon et al., 2017; Braun and Clarke, 2006). Thematic analysis provides a flexible and useful research tool than can potentially provide a rich and detailed, yet complex account of data (Braun and Clarke, 2006). It is a method for identifying, analysing and interpreting various aspects of the research topic or themes<sup>1</sup> within data. Thematic analysis identifies certain themes or patterns across an entire dataset, rather than within a data item, such as an individual interview or interviews with one person, as is the case with biographical or case study forms of analysis (Braun and Clarke, 2006). More importantly, it is adaptable to various theories and methods. A six-phase iterative process as proposed by qualitative scholars was followed to analyse the data generated from FGDs. The six phases are: 1) Familiarisation with the transcript, 2) Generating initial codes, 3) Searching for themes, 4) Reviewing themes, 5) Defining and naming themes and 6) Report synthesis (Braun and Clarke, 2006).

6. Results and Discussion

This section presents the results and discusses the major issues by comparing the trends in exchange relationships before and after market orientation. It is divided into two subsections: the first presents the shifts from traditional to commercial exchanges in resource exchanges (e.g. labour for labour, labour for harvest, and labour for draught power). Exchange relationships are mediated through several local institutions, such as cooperatives and savings groups. These were also expected to be affected by the market-based exchange relationships. The second subsection deals with the effects of market orientation on gift-based relationships.

<sup>1</sup> A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the dataset (Braun and Clarke, 2006).

6.1. Changes in resource exchange relationships

In Ethiopia, traditional social networks have for centuries played a crucial role in facilitating access to productive resources and services; this applies particularly to rural areas, which are characterised by imperfect formal input–output institutional arrangements (Abay et al., 2018). At the study sites, communities traditionally relied on various means of in-kind resource exchanges. Labour, draught power and food were commonly exchanged resources before the introduction of cash crops. Since their introduction, there have been changes in the forms of resource exchange relationships among the small-scale farmers, as shown in Table 2 below.

6.1.1. Changes in labour-for-labour exchange

Human labour is a key productive resource in the Ethiopian farming system. To overcome immediate labour constraints, small-scale farmers used to have recourse to various labour exchange arrangements. The exchange of labour for labour (locally called *lifina* or *wonfel*) was the most widely used arrangement. The FGDs at all sites confirmed that *lifina* or *wonfel* was a common rotational labour exchange arrangement in which two or more people agree to share labour on the partners’ fields on alternate days. Labour-sharing practices in Ethiopia may also involve large-scale exchanges and borrowings of labour among households by the rotational organisation of events with a large group of households, locally known as *ofera* or *debo*. These practices sometimes exploit the seasonal variations in demand for labour among households during planting, weeding and harvesting periods (Krishnan and Sciubba, 2009).

These widely known local work groups are temporary social structures with the potential to improve labour efficiency (FGD). However, since the introduction of cash cropping, labour exchange arrangements have been disappearing. FGD participants mentioned the increased intensification of cash crops as the main reason for the decreasing trends in labour exchange arrangements among small-scale farmers. Cash crops require intensive care during different crop growth stages, and for this

**Table 2**  
Trends in exchange relationships before and after the introduction of cash cropping.

Resources	Forms of exchange		Major reasons for the change
	Before the introduction of cash cropping	After the introduction of cash cropping	
Labour	Exchanging labour for labour	Decreasing trend at all study sites	Most farmers grow similar crops at the same time, hence they do not have any ‘spare’ time for labour exchange There is increased crop value due to cash crop orientation; hence, exchanging labour for yield has been replaced by monthly wages
	Exchanging labour for part of the harvest: one person would work for another for an entire year in return for 25% of the harvest	Only wage labour is available	
Draught power	Exchanging labour for the use of oxen power: one person would work for two days in return for the use of two oxen for one day	Draught power is rental based	The value of draught power increased due to increased demand for intensive cultivation and a decreased livestock population over time Due to increased value of draught power
	Exchanging oxen power for part of the harvest	Draught power is often rental based	
Land	Sharecropping	Land is often rental based	Increased land value after cash crop introduction

Source: Authors’ own compilation from FGDs, 2018.

the demand for labour is higher than in the past. As most farmers grow similar cash crops, the peaks in labour demand coincide. As a result, surplus producers increasingly rely on employing wage labourers from local and regional labour markets.

The use of more labour in cash crop production in developing countries was documented by Hazell et al. (2010). Several agronomic case studies also revealed the importance of intensive agronomic management practices in cash cropping (Houssou et al. 2018; Chikowo et al. 2014)

As an FGD participant in Raya Azebo explained, traditional labour exchange arrangement mechanisms at different phases of the agricultural year (e.g. ploughing, weeding, harvesting) are on the verge of disappearing. After market orientation, the traditional labour exchange shifted to employee–employer agreements. This had notable impacts on the most vulnerable:

In the past, there was labour support for women, at least at weekends, and especially during peak ploughing and harvesting, as these are difficult activities for us [women]. In response to this, we used to work for them [the better-off] at their homes for special events, weeding and transporting the threshed grains. But after this change to vegetables, there is no such exchange arrangement. It has become difficult for poor women to grow crops on their own farms. (58-year-old, resource-poor female respondent, Raya Azebo)

Farmers in Kafta Humera and Lay Gayint also associated the disappearance of labour exchanges with ever-increasing labour demand from the cash crop growers. At both study sites, the labour demand was reported to be high during critical crop growth periods. Proper crop management generates higher quality produce and better prices. Cash crops had increased the value of labour in the community, but adversely affected traditional labour sharing arrangements. As a consequence, labour is increasingly associated with a financial transaction. Community members have different viewpoints regarding the benefits of this shift. For instance, older people and some disadvantage groups are worried about the existing money-oriented employee–employer social relationship situation, and compared it with what they had previously:

Before, if you were resource poor or incapable, your neighbours, relatives and able friends would help with ploughing, weeding, harvesting and transporting the harvest. But now [since the introduction of the cash crop], it is unthinkable. Everyone says ‘money’, even the kids if you happen to ask them for help. (72-year-old poor male farmer in Raya Azebo)

However, better-off people were positive about the monetary-based employee–employer relationship. They believe that it frees them from obligations towards local charity:

Before, if there was one better-off person and three poor people, the poor made the better-off person poorer because of their repeated begging. But this culture has changed since we’ve had casual employment opportunities. (47-year-old better-off male farmer in Lay Gayint)

The middle-class and younger generation also tend to appreciate the existing market-based labour arrangements and consider the previous in-kind exchange as unequal and exploitative.

In exchange for a token reward, we [poor women] used to work for them [the better-off] now and then; however, they used to underestimate our contribution. Now, we know that labour is labour! A female’s labour is equal to a male’s labour. Hence, we value [respect] each other. We work to get money, just like others work for us. (49-year-old middle-class woman in Raya Azebo)

6.1.2. Changes in labour-for-oxen exchange

Ploughing in the Ethiopian highlands is traditionally done using

paired oxen (Strock et al., 1991). The FGD results show that oxen exchange used to be a common tradition at the study sites. In the past, farmers who owned only one ox could overcome the problem by engaging in a *lifina* or *mekanajo* agreement with another farmer who also had only one ox: the paired oxen would be used on the partners' fields on alternate days. FGD results from Lay Gayint and Raya Azebo show that a farmer could also use another farmer's ox in return for one day's field labour. If a farmer had no oxen, the common exchange system was to give two days of human labour for every day on which a pair of oxen was borrowed.

FGD participants said that since the introduction of cash crops, in-kind labour–oxen draught power exchange had changed considerably. This is due to the increasing demand for draught power because of the frequent ploughing that cash crops require. This in turn makes draught power more expensive than human labour. This difference initially increased the number of labour days exchanged for oxen power, but eventually oxen-for-labour exchange was abandoned and replaced by cash-based rental agreements.

Over the last 10 years, the draught power requirement has become more critical than ever. It becomes more expensive. Sometimes it is even difficult to exchange draught power for labour during the critical sowing period. Oxen owners ask for as much as 500 or 600 birr [approx. USD 14/GBP] per day for a pair of oxen. Oxen rental was less common when we were growing only food crops. Oxen power used to be exchanged for labour, as oxen power was abundant. Due to this, non-oxen-owners often grow food crops that require less intensive ploughing. (69-year-old middle-class man in Raya Azebo)

Farmers' increased participation in cash cropping is one of the main factors mentioned as the direct cause of the decrease in labour-for-oxen exchange relationships.

As mentioned, the disappearance of labour-for-oxen exchange is associated with increased draught power requirements for cash crop production. As a result, oxen power has become a commodity. With lower cash flows, this can push marginal farmers to rent out their farmlands.

I remember that 15 or 20 years ago, there were many people who ploughed their farmland through labour–oxen exchange arrangements and were able to feed their families. But now, you rarely find such people. Most who don't own oxen rent out their land and rely on daily wage income. (56-year-old female FGD participant in Lay Gayint)

FGD participants at the Kafta Humera study site added that the lack of trust between oxen owners and non-owners was an additional reason for the disappearance of labour-for-oxen exchange relationships. This too is related to cash crop developments.

A few years ago, those who had extra oxen used to provide the service in advance to those who did not have oxen, in return for labour during the peak cropping season. But following the expansion of sesame as a cash crop, those who get oxen draught power services do not keep their promise and instead go for a better wage rate during the peak period. Following such experiences, draught power exchange has become less common. For this reason, one has to rent either oxen or tractors during the critical ploughing period. (59-year-old woman in Kafta Humera)

The labour-for-oxen exchange relationships used to be important to overcome immediate resource constraints, but cash cropping has largely replaced these traditional exchange relationships with cash-based rental arrangements. The almost total disappearance of labour-for-oxen exchange was particularly problematic for subsistence farmers, who often resorted to renting out their lands rather than engaging in food production. They also increasingly engaged in waged employment. This increased the labour supply and suppressed wages. The extent to which

this is compensated for financially by the new farm and non-farm employment opportunities in cash-cropping is unclear. What is clear, however, is that the poor have become more dependent on cash and markets, which introduces new forms of vulnerability.

### 6.1.3. Changes in labour-for-produce exchange

Based on empirical evidence in Ethiopia, Dercon and Krishnan (2000) indicated that non-monetary-based exchange networks are permanent structures with long-term objectives. However, following different development interventions, these non-monetary exchange networks are subject to change. For instance, as part of labour-for-harvest exchange relationships, low-income groups work fully or partially for a landholder in return for a part of the harvest (FGD in Raya Azebo). Prior to cash cropping, a person employed throughout the year through such an arrangement would get 25% of the year's harvest. This exchange form was considered beneficial for the poor as it addressed their immediate productive resource constraints.

Respondents explained that such arrangements no longer exist in any of the sample villages (FGD respondents in Lay Gayint, Kafta Humera and Raya Azebo). Labour-for-harvest exchange was said to have disappeared after the introduction of cash cropping as a result of the increase in the value of crops relative to the value of labour. Higher incomes from cash crops allow better-off households to reduce their reliance on non-market labour arrangements and increase their use of wage labour. It is easier for the better-off to rely on the labour market as it is more convenient, labour supply is more reliable, and so on. As a result, resource-poor farmers who previously benefitted from the exchange networks have become increasingly vulnerable and now fully depend on hand-to-mouth daily wages. This has led many households to migrate to other areas in search of traditional labour exchange opportunities.

Before the introduction of malt barley in this area, I had a landless neighbour who used to engage in such an arrangement [labour-for-harvest]. In 2011, he went to another area, as such arrangements have disappeared from here. (54-year-old woman in Lay Gayint)

Another FGD participant in Raya Azebo also acknowledged the disappearance of the labour-for-harvest exchange following the introduction of cash crop vegetable production. It not only triggered out-migration, but also reduced the number of labour migrants coming from highland areas.

It used to be common to find between 10 and 30 migrant farmers here from the highlands in search of labour-for-harvest exchange. But since vegetables [cash crops] have become dominant here, they know that there is no labour-for-harvest exchange in this area. Nowadays, it is uncommon to find such people here. Instead, now you can only find daily labourers, who come here for short stays. (48-year-old man in Raya Azebo)

In the case of Kafta Humera, where sesame cash cropping emerged, the labour-for-harvest exchange relationships are also reported to have disappeared and been replaced by land lease arrangements.

Following this [the disappearance of labour-for-harvest arrangements], poor landless households became wage labourers, while resourceful people in the nearby urban areas and elsewhere in larger cities are currently renting in most of the farm lands through land rent arrangements. (52-year-old man in Kafta Humera)

Some farmers, especially young ones, associated the disappearance of labour-for-harvest exchange with labourers' decreasing interest in staying for the entire season. Instead there are more daily job opportunities in cash crops. From the wage labourers' point of view, waiting for harvest can be uncertain and involves long-term investment, which they might not be willing to make.

## 6.2. Changes in local institutions

The wider shift to market-oriented farming influences not only resource exchange relationships directly relevant to the farm, but also social relationships of a cultural and religious nature. Local institutions can therefore be distinguished depending on whether they mediate productive functions or other sociocultural and religious functions.

In Ethiopia, farmer-based exchange networks/associations represent essential social capital that provides long-term benefits and opportunities. Such exchange networks can be organised for social and productive purposes. In the sample villages, farmers participate in both types of networks (see Table 3).

### 6.2.1. Changes in the functions of sociocultural and religious institutions

For instance, *iddir* and *mahiber* are basically funeral- and faith-based associations, respectively (FGD in Raya Azebo). Among the Ethiopian Orthodox *Tawahido* Christians, *mahiber* is a customary practice of organising spiritual gatherings. In *mahiber*, members honour the saints by gathering at a member’s house on a saint’s day each month, with a rotating host providing food and drinks for the guests (Pankhurst and Mariam, 2000). Several studies discuss *mahiber* together with associations such as *iddir* (burial associations) and *equbi* (savings associations) (Alula, 2008). These studies sketch the main functions of the associations without showing in detail the dynamics of these practices in the wake of agricultural transition such as cash cropping.

The FGD results show that since the introduction of cash crops, the role of *mahiber* has been weakened in terms of both its frequency and its social importance. This could be because such a network is resource consuming in terms of both time and money.

*Iddirs* are funeral societies commonly established by community members, neighbours or among friends and families. While some *iddirs* are formed along the lines of profession, gender, religion or ethnicity, the most common types are village *iddirs*, which are open to all members of the village (Mariam, 2003). Following the introduction of cash cropping at the research sites, farmers’ engagement in *iddirs* has been strengthened as a result of the formalisation and tightening of rules concerning financial, service or material contributions for *iddirs* events.

### 6.2.2. Changes in the functions of agricultural development institutions

*Equbi* and cooperatives are organised for productive socioeconomic purposes. *Equbi* is a form of rotating credit and savings association that mainly functions as a financial intermediary. Although the sample villages are becoming more and more integrated into agricultural crops for market production, farmers continue to participate in *equbi*. An

explanation for this is that participation in this network gives households access to the money they need to invest in the crop. It therefore fits in with the cash- and market-based economic developments associated with cash cropping. Besides, saving money in *equbi* is less bureaucratic and is better adapted to the circumstances of the farmers compared to the formal savings and credit cooperatives.

Since the expansion of cash crop production in the sample villages, cooperatives (market- and cash-oriented institutions) have become important multifunctional institutions. They mainly serve to link farmers to inputs, credit and output markets through collective action. The importance of cooperatives was found to vary across the study sites. In the sesame and malt barley research sites, the cooperatives play a pivotal role as input–output market. However, cooperatives are less developed at the vegetables research site. As a result, input and output and financial problems were reported as being daily occurrences in the vegetable research area (FGD in Raya Azebo).

In the villages, there are various exchange networks/associations with locally defined roles and functions. This study found that as households have integrated into cash crop farming, the farmers’ degree of integration in economically productive exchange networks has strengthened. On the other hand, some of the traditionally constructed social functions and networks (e.g. labour exchange and faith-based social functions) have become weaker.

## 6.3. Changes in gifts and charity

In addition to the traditional non-market resource exchange relationships, gifts and charity also used to be common practices. Due to these practices, the economically poor or the elderly were less worried about unforeseen circumstances, such as a natural disaster. During such emergencies, they could rely on voluntary support from their communities. The needy may or may not have reciprocated by providing meals or drinks.

The major beneficiaries of voluntary labour support were elderly and widowed or divorced women. This support from within the community had existed for generations, but since the introduction of cash crops such practices are rare if not absent. As one 65-year-old economically poor FGD participant in Lay Gayint said:

In the past, we used to support each other in many cases. The better-off used to support the poor when they needed food grain. Even among us [women of similar status] we used to help each other with what we had. But now you rarely see such things here.

In rural areas, food is generally plentiful during the harvest period

**Table 3**  
Farmers’ exchange networks before and after the introduction of cash crops.

Exchange network	Situation analysis				
	Before the introduction of cash crops		After the introduction of cash crops		Remark
	Major function	Role of individuals in the networks	Major function	Role of individuals in the networks	
<i>Iddirs</i>	Funerals	Contribute food, money and time	Contribute food, money and time	Food, money and time sitting with those who are grieving	More formalised at all the study sites
<i>Mahiber</i>	Spiritual, faith-based social functions	Prepare food and drinks in groups or individually on certain days of the year	Unchanged	Unchanged roles, but over time decreased expenditure on such events at all the study sites	
<i>Equbi</i>	Savings	Contribute money for saving	Unchanged	Unchanged	Strong in Kafta Humera and Raya Azebo
Labour exchange: <i>ofera</i>	Labour support for the needy	Labour contribution	Less common	Less common	Very weak in Kafta Humera and Raya Azebo
Labour exchange: <i>lifina</i>	Labour sharing network	Labour	Less common	Less common	Very weak in Kafta Humera and Raya Azebo
Cooperative	Linking with input and finance	Less known	Multifunction: linking with input, finance and market	Membership	Very strong in Lay Gayint and Kafta Humera

Source: Authors’ own compilation based on FGDs, 201.



and scarce in summer (July–September). However, poor households often suffer from food scarcity for several months each year. These households used to be supported by other households in the form of either loans or donations. However, it was reported that local food support had been reduced following the introduction of cash crops. One of our FGD participants in Raya Azebo described his childhood experience as follows:

Until I was 20 years old, the better-off used to provide sorghum grain. Some of them provided it for free up to 25 kilos, others offered up to *lokotta* [50 kg]. Others provided interest-free grain in terms of loans. But now I do not see this happening anymore. (33-year-old man in Raya Azebo)

Another FGD participant described the change in the forms and extent of food grain offers within the community as follows:

During our childhood, rich people often opened their sorghum pits<sup>2</sup> in July for the poor. In those days, they offered sorghum for free by calling the poor people, regardless of their personal contacts. Over time this was changed to only blood relations or very close friends. Then offering was replaced with interest-free grain loan. Nowadays, it is rare – if it exists at all – and it is in the form of a financial loan with a 200 or 300 percent interest rate. (68-year-old poor woman in Raya Azebo)

At all the study sites, the offering of sweet corn and a token amount of a field crop or vegetable to one's neighbours or very close friends is still a fairly common practice. In addition, providing drinks and home-made bread (*injera*) to guests and fellow believers on holy days is still a widespread practice. In relation to this, at all the study sites we observed the celebration of religious events (*tsebell*) to which many people were invited to consume for food and drink.

In addition, people also rendered free-of-charge labour services to the elderly and female-headed households and supported less able community members. Moreover, during certain agricultural seasons, farmers who did not have sufficient draught power or family labour arranged to access these resources by organising social events (*ofera*) to mobilise help. Previously, when labour was required for ploughing, planting or harvesting (agricultural periods when labour demand is usually at its peak), farmers simply asked their community members for help. People were often willing to help even in the absence of ex-ante offers of material rewards. The free labour services were not limited to farming activities but were also provided for building new or maintaining old houses. The only reward (which was also voluntary) for these services was the food and drink that all the participants collectively consumed at the end of the day's work. This meal was provided by the villager who was receiving help.

In relation to the change in free-of-charge labour support over time, one of the FGD participants who had benefited from free labour for ploughing said the following:

[...] in 2002, after my husband had passed away, I asked for help ploughing. Thanks to the community! I got 10 pairs of oxen and about 20 people and they sowed all of my plots. As it was a good season, I got a good harvest and fed my kids without any worry for about one year. But now obtaining this much support is unthinkable, as people are money centred. (59-year-old widowed woman in Raya Azebo)

Another FGD participant lamented the lack of support from within the community:

In recent years, no-one gives free labour support. Even your close family members – brothers or sisters – will not help much; maybe for one or two days a year. People mostly cooperate in funeral events. No more than that! Labour is money. If you have money, you can employ as many labourers as you want; otherwise, you do not expect others to help you. (39-year-old poor woman in Raya Azebo)

The FGD participants at all the study sites associated the disappearance of free labour support with that of increased demand for labour following the expansion of cash cropping. It should be added that the pressure on resource-poor households to generate cash has also increased as a result of the loss of own production capacity, especially following the introduction of cash cropping and the consequent loss of access to productive resources through non-market social exchanges.

## 7. Conclusions and policy implications

Agricultural development interventions, such as promoting small-scale farmers' market orientation, have multidimensional impacts on traditional social exchange relationships, yet the subject has received little attention from academia. The effects of such interventions can be positive or negative, depending up on the capacity of the various social groups to adapt to the changes. The present research shows how small-scale farmers' market orientation affects resource exchange relationships and the functioning of local institutions. Local social institutional networks include exchange arrangements as well as the multifaceted ties among households, often in the form of social, burial and banking services.

The results indicate that market orientation has negatively altered traditional in-kind resource exchange relationships, which have been replaced by monetary transactions. This trend negatively affects the resource poor, who used to rely on these exchange relationships to access productive resources and overcome resource constraints. The loss of access to oxen through labour-for-oxen exchange, for example, has led many marginal landholders to abandon their own production and join the labour force.

On the other hand, the results also indicate that for the competent middle class and the physically capable new generations, integration into the market economy positively influences their negotiation power and autonomy. In addition, market orientation generates new livelihood opportunities and market-based relationships, which in turn facilitate the formalisation and transformation of some of the local institutions. The results further indicate that market orientation disrupts other social relationships, such as voluntary help. Over time, such disruptions lead to the rejection of deep-rooted humanity-based social fabrics of care in favour of material benefits.

This supports the explanations of social exchange or utilitarianism theory, which holds that people act to maximise their advantages and reduce their disadvantages in a given situation. Based on this theory, people are assumed to act rationally in any social relationship, which means that they carefully plan their actions and the socioeconomic consequences thereof. If they decide that the benefits outweigh the disadvantages, they will initiate or maintain the interaction, but if they perceive that the disadvantages outweigh the benefits, they will reject or abandon the interaction.

The relations between increasing market orientation and diminishing traditional exchange relationships have been further unravelled. The rise in demand for cash crops decreases the production of food crops for subsistence, which increases the need for cash to purchase those food commodities that are no longer produced by the cash croppers. At the same time, cash cropping increases the demand for labour. However, in the more competitive environment, the cash croppers prefer to rely on wage labour rather than traditional relationships to procure labour. The latter might not be available at the right time or be of the best quality. This reduces people's engagement in traditional exchange. The increasing demand for labour also increases the demand for cash, which

<sup>2</sup> In Raya Azebo, sorghum grain is stored in underground pits, which can be up to 3 m deep and 3 m wide.

again promotes further cash cropping and reduces cash croppers' interest in engaging in traditional exchange. An explanation for this is that participation in the market economy provides better-off and active participants access to resources such as loans, something that they cannot procure through informal traditional relations.

The changes clearly result in differential impacts across class, gender and generations on the one hand and between commercial farmers and non-commercial farmers on the other hand. While incomes – particularly those of the better-off and other middle-class groups who have the capacity to engage in cash-cropping – have increased, along with both productivity and job opportunities, there is another side to this story: resource-poor households that are unable to engage in cash cropping have lost access to productive resources. This loss was at least partly caused by the cash- and market-oriented economic development brought about by the push for the commercialisation of agriculture.

All this has led to a profound shift in the livelihoods of resource-poor households. They have abandoned subsistence agriculture and joined an underpaid and growing wage-labour class. In the context of Ethiopia, the long-term implications for poverty, inequality and food insecurity are far from clear. What is clear, however, is that the old vulnerabilities associated with subsistence farming – for example climate and disease risk – are being replaced by new forms of vulnerabilities, for instance increased labour competition, wage and food price fluctuations, and the loss of local social support mechanisms.

Our results have important policy implications for food security in particular and for inclusive development in general. Market orientation is less inclusive for the poor and is more suitable for those who have better asset bases (such as labour, livestock, land, networks and finance). Therefore, designing complementary policies that have far-reaching outcomes for inclusive development is quite pertinent. The policy implication is that while promoting market-driven approaches to food security, complementary mechanisms must be put in place to empower those living in the most vulnerable conditions. The complementary policy can be geared to either including the poor in the ongoing commercial farming or by introducing other mechanisms that ensure that such community members have decent lives.

Development partners promoting agricultural development in rural areas via market orientation could improve the outcomes of their programmes through better understanding of the local contexts and by widening the targeting processes that could empower the poor. This is particularly important in market-driven rural development programmes, as interventions often place little emphasis on the local realities by assuming that such interventions are always socially and economically feasible and widely beneficial. Hence, we suggest that economic developments through market orientation must pay attention to socioeconomic differences within the target population.

On the one hand, there is a need to improve poor households' participation in and benefits from commercial farming. This could be done by addressing some of the major operational problems, for example the exclusion of the poor in cash cropping due to their lack of asset endowments. In relation to the importance of working capital, evidence suggests that including the poor in commercial business with increased access to loans can have positive effects on several development outcomes (Omondi et al, 2017; FAO, 2015). Adequate financial support that would allow poor households to engage in cash cropping could be beneficial. Another strategy would be to invest in programmes that can help poorer households to build their asset base (e.g., land, livestock and finance) and empower them to decide whether they wish to engage in market-oriented production (and run the associated risks of loans and price fluctuations). In combination with social protection programmes, this empowerment could lead to a better mix of benefits from both formal and informal economic networks.

#### Declaration of Competing Interest

The authors declare that they have no known competing financial

interests or personal relationships that could have appeared to influence the work reported in this paper.

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