Market Assessment for Tigray and SNNPR

November 2015

LIFT
LAND INVESTMENT FOR TRANSFORMATION PROGRAMME

UKaid
from the British people

MINISTRY OF AGRICULTURE

Contents

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Acronyms

ATA	Agricultural Transformation Agency
AGP	Agriculture Growth Programme (World Bank)
AISCO	Agricultural Inputs Supply Corporation
CYMMYT	International Maize and Wheat Improvement Centre
DA –	Development Agents
DECSI -	Dedebit Credit and Savings Institution
DFID –	Department of International Development, UK
EIAR –	Ethiopian Institute of Agricultural Research
ELAP –	Ethiopia Strengthening Land Administration Programme
EPLAU –	Environmental Protection and Land Administration Unit
ETB –	Ethiopian Birr
FDRE –	Federal Democratic Republic of Ethiopia
FGD –	Focus Group Discussions
FHH –	Female Headed Households
FLLC –	First-level Land Certification
GOE –	Government of Ethiopia
GRAD -	Graduating with Resilience to Achieve Sustainable Development (SNV)
HABP –	Household Asset Building Programme
HH –	Household
ICRISAT –	International Crops Research Institute for the Semi-Arid Tropics
IFDC –	International Fertilizer Development Centre
IFPRI –	International Food Policy Research Institute
ILRI –	International Livestock Research Institute
IPM –	Integrated Pest Management
ISSD –	Integrated Seed Sector Development Project
JICA –	Japan International Cooperation Agency
KA –	Kebele Administration
KLAC –	Kebele Land Administration Committees
LIFT –	Land Investment for Transformation
M4P –	Making Markets Work for the Poor
NBE –	National Bank of Ethiopia
MFI –	Micro Finance Institution
MHH –	Male Head Households
PEPE –	Private Enterprise Programme Ethiopia (DFID)
PSNP –	Productivity Safety Net Programme
RUSACCO –	Rural Savings and Credit Cooperative
SACCO –	Savings and Credit Cooperative
SARI -	Southern Agricultural Research Institute
SLLC –	Second-level Land Certification
SNNP(R) –	Southern Nation Nationalities and Peoples' Region
SNV –	Netherlands Development Organisation
TA –	Technical Assistance
TARI –	Tigray Agricultural Research Institute
TOT –	Training of Trainers
USAID –	United States Agency for International Development
VG –	Vulnerable Groups (includes women, elderly, youth and people with disabilities)

Section 1: Introduction

The M4P Component of the LIFT Programme

Land Investment for Transformation (LIFT) is a DFID-funded programme that uses the "Making Markets Work for the Poor" (M4P) approach to increase incomes of the poor by providing second-level land certification (SLLC), improving rural land administration, and developing the rural land sector. Land certification is the key driver of the programme, so LIFT will support the Government of Ethiopia (GoE) to provide around 14 million second-level land certificates[1] to farmers in four regions (Oromia, Amhara, Southern Nations, Nationalities, and Peoples' Region (SNNPR) and Tigray). The M4P component of the programme aims to ensure that farmers are able to maximise benefits from second-level land certification through a number of complimentary interventions in three sectors: rural land rental, access to credit, and environment and conservation agriculture.

The implementation phase of the programme started in March 2014 and will continue until August 2020. During the first year and a half of operation, LIFT focused its M4P activities in the regions of Amhara and Oromia only. This staggered approach was designed to test implementation of M4P methodology in a country where the concept is relatively new[2], and in a field (rural land certification) where M4P has not been widely applied.

Initial analysis identified the three sectors mentioned above as potential areas of intervention. Detailed market assessment in Amhara and Oromia then identified a series of feasible interventions that are currently being implemented. The M4P approach has proved to be very effective in enabling the team to understand how the overall system works in each of these three areas, and to identify the key constraints and underlying causes that prevent farmers and vulnerable groups from participating in and benefiting from these sectors. Flexibility built into the approach has also allowed the programme to adapt its interventions to realities on the ground, to maximise their impact.

As a result, following the work plan agreed with DFID and the GoE, and in line with the roll-out of SLLC around the country, the programme is now undertaking preparatory work to expand its M4P interventions into Tigray and SNNP. It will follow a very similar process to that implemented during the first phase of the programme, which is further detailed in Section 5.

This report is the project's second market assessment. The focus of this report is on the three key M4P-related sectors identified during the inception phase of the programme (rural land rental sector; access to credit; environment and conservation agriculture) but with a different geographical focus – the SNNP and Tigray Regions. These three sectors remain the three key channels through which smallholder farmers can benefit from the new land tenure system that LIFT is supporting.

Objectives and Methodology

The objective of the assessment is to identify region-specific constraints that might limit the positive impact of SLLC and land administration system reform, as well as to start identifying interventions appropriate to these two regions. Having built up a wealth of knowledge since completing the first market assessment, the team might identify constraints that had previously not been identified and that should inform the design of new interventions/activities.

This market assessment has been prepared through a combination of primary and secondary research. The LIFT team, including management and M4P technical staff, have made several field visits to conduct primary research, while the M4P team (with the support of an external consultant specialising in M4P and agriculture, and a political economy analyst) undertook an in-depth market assessment in SNNP and Tigray in June and July 2015, following the question guide included under Annex 1. The team paid attention to constraints faced by vulnerable groups, including women and girls, the elderly, and people living with disabilities. The institutions/groups/individuals interviewed are listed in Annex 2. In addition, the team has been able to build on the experience and knowledge accumulated through the first year and a half of operation on the ground.

This report follows a similar structure to the Amhara and Oromia market assessment. However, to avoid unnecessary repetition, we have omitted some general sections included in the first market assessment such as the description of the M4P approach and the analysis of where the poor are in the three sectors. Where

[1] LIFT will issue one certificate per parcel.

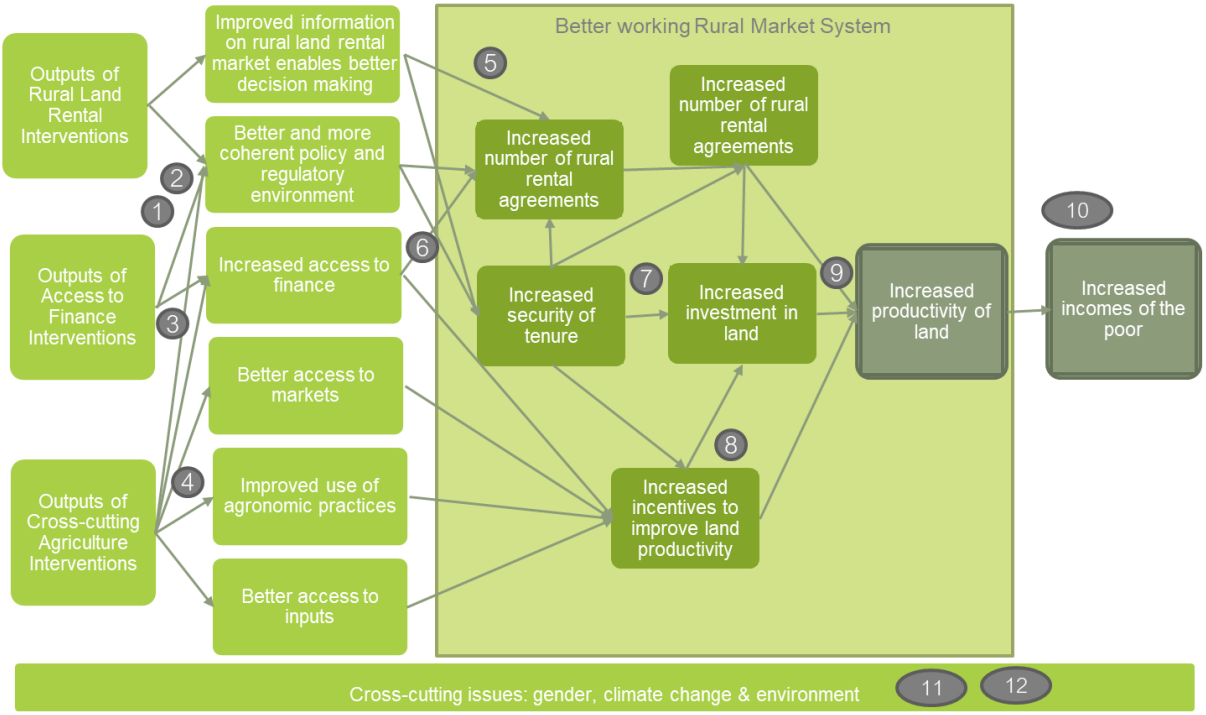
[2] DFID's Private Sector Enterprise Programme (PEPE) is the only other programme being implemented in Ethiopia using the M4P methodology. PEPE started its operations in September 2012.

appropriate, we have indicated similarities and differences with the previous market assessment and, to avoid unnecessary repetition, some subsections have been summarised.

1.3 Overall Theory of Change

The theory of change for the M4P component of LIFT was already presented in the first market assessment. The findings of the second market assessment confirm that that theory of change remains valid and that the channels identified for achieving the desired outcomes and impact of the programme still apply (Figure 1).

Figure 1. Theory of change for M4P component



The assumptions of the ToC are indicated as numbers in the figure and detailed in the table below

Assumption #	Detailed assumption
Assumption 1	GoE's policy aims to support productivity increases of smallholder farmers
Assumption 2	GoE willing to undertake regulatory reforms
Assumption 3	MFIs willing to develop new credit products
Assumption 4	Farmers adopt new technologies and agronomic practices
Assumption 5	Farmers develop confidence/trust in renting out their land
Assumption 6	Farmers are willing to use the new credit products issued by MFIs
Assumption 7	Increased security of tenure through SLLC leads to increased investment in land
Assumption 8	Farmers are willing to take on risk
Assumption 9	Additional investment generated is put to economically productive and environmentally beneficial use
Assumption 10	Increased investment leads to increased incomes of the poor
Assumption 11	Greater economic growth and improved incomes achieved by specifically empowering girls & women
Assumption 12	Better land husbandry leads to improved carbon fixation through more stable soils

Section 2: Rural Land Rental

This section describes how the rural land rental sector functions in SNNP and Tigray. It analyses the regulatory environment, demand and supply of land for rent, and services that support the sector. It then looks at vulnerable groups and assesses political economy issues. Finally, it analyses symptoms and causes of sector failures, offers an updated theory of change, and presents a range of interventions and activities for Tigray and SNNP.

Description of the Sector

The rural land rental sector in Tigray and SNNP is underdeveloped. The number of rental agreements remains low, and mainly consists of sharecropping arrangements, and short-term agreements (normally around one year). This limits the ability of the sector to allocate resources efficiently, prevents increased investment in the land, and reduces farmers' ability to expand sources of income.

The Regulatory Environment

The Federal Democratic Republic of Ethiopia Rural Land Administration and Land Use Proclamation (456/2005) states that "peasant farmers, semi-pastoralist and pastoralist (sic) who are given holding certificates can lease to other farmers or investors land from their holding of a size sufficient for the intended development in a manner that it shall not displace them, for a period of time to be determined by rural land administration laws of regions based on particular local conditions". This lack of precision in the size/proportion of land that can be rented has meant that the regions have developed very different policies.

For example, in SNNP, according to Regional Proclamation No. 110/2007 farmers are allowed to rent out their land with no explicit restrictions on the percentage of land that can be rented ("*Peasant farmers, semi-pastoralist and pastoralist who are given land holding certificates can rent out land for farmers or investors from their holding of a size sufficient for the intended development in a manner that it shall not displace them*"). In addition, the proclamation allows for three different durations:

- Up to 5 years, for farmer to farmer rentals for cereal crops.
- Up to 10 years, for farmer to farmer rentals for other perennial crops (e.g. some fruits, coffee, etc.)
- Up to 15/25 years for rentals to investors or institutions. The investors must be registered at the Investment Bureau.

In Tigray, however, farmers are significantly more restricted in how much land they can rent out. According to Regional State Rural Land Administration and Use Proclamation No. 239/2006 and regulation No. 85/2006, Article 9, farmers can only rent out up to half their certified landholding to other farmers or investors. In addition, there is no special provision for members of vulnerable groups to rent out a larger percentage of their holding (compared to Oromia Proclamation 456/2005, under which vulnerable groups are exempt from the 50 percent limit). As for duration, land rental agreements for traditional farming practices are for a maximum of three years, unless the rentee is an investor applying modern technologies, in which case they have the right to rent for up to 20 years.

A key role in implementing proclamations is played by the EPLAU offices. However, there seem to be few incentives for them to actively promote the development of the land rental sector, particularly for cash rentals. This seems to be because the concept of cash rental is relatively new; there is limited understanding of the benefits of cash rentals among farmers and vulnerable groups; the Federal Proclamation states that "transfer through rent/lease can be for rural/urban residents who are or wish to be engaged in agriculture". This is interpreted to mean that farmers must be actively engaged in their fields to retain the right of landholding, so their ability to rent out their land and focus on other more productive sources of non-farm income is limited.

Market assessment also revealed that reform is taking place at the Federal Rural Land Administration and Land Use Proclamation. Although the catalyst seems to be the need to adapt the proclamation to the reality of SLLC, it offers the chance to discuss relevant issues such as the percentage of land that can be rented out or the need to address the varying needs of vulnerable groups. Once the reform process is finalised at federal level, it will be necessary to adjust regional proclamations.

Land Rental

Very few transactions are recorded formally, which means that renters and rentees do not benefit from increased legal security. In fact, the large majority of transactions happen informally. Anecdotal evidence during market assessment confirms that the number of registered agreements at woreda and even kebele levels is limited, and that a lot of agreements are reached outside the formal system. This is confirmed by the

2013 ELAP Baseline Survey, which shows that nearly 41 percent of sampled households participated in informal land rental transactions, either to rent out or rent land (Table 1).

Table 1: Participation in informal land transactions in 2011 season, by region

	Rented/share out (%)	Rented/ share in (%)	Aggregate participation (in/out/both)	Mean land (ha)	
				Rented out	Rented in
Amhara	23.7	50.0	71.1	1.12	1.24
SNNP	19.2	23.5	41.0	0.57	0.70
Tigray	20.9	22.0	41.4	0.81	1.02
Oromia	27.5	25.7	50.4	0.84	0.88
All	22.7	26.0	46.7	0.79	0.92
F-value	6.1	25.9***	26.0***	5.56***	4.78***

(i) ** & *** indicate level of statistical significance at 5% and 1% respectively.

(ii) Source: ELAP Baseline Survey, 2013

In both Tigray and SNNP the main reasons for renting out land are very similar to those presented in Amhara and Oromia.[3] These include: i) Lack of manpower to cultivate the land and oxen to plough it; ii) need for money to buy inputs to farm other parcels; iii) migration to towns (or abroad) and the need for someone to farm the land; iv) unforeseen events and short-term distress (e.g. death in the family, temporary injuries).

It is important to emphasize that there is a distinction to be made between those farmers that rent their land just as a safety net/food security tool (who are more prone to sharecropping arrangements) and those farmers who view their land as an asset to invest it and that can generate high returns and be income generating. The latter are those being targeted by LIFT.

A large number of rental transactions involve vulnerable groups, including elders, female-headed households, and the disabled. For these groups, income generated from renting is often used for household consumption to pay for their children's education and for medical expenses. They tend to rent out their land to people they know and trust, since they have a limited awareness of the rights and obligations of both rentee and renters, as well as low trust in land rental law enforcement, and are therefore afraid of losing their land. As a result, they fail to maximise the price obtained for their land.

Demand for land mainly comes from two different sources: from more wealthy farmers who want to expand their cultivated land for commercial purposes, and either have excess oxen/draught power, or can afford to pay for ploughing or tractor rental services; landless people who have sufficient labour resources but not enough land to cultivate, such as the younger generations.

One of the challenges faced by farmers looking for land to rent seems to be limited availability (the market assessment elicited conflicting responses on this issue). In addition, there is no systematic flow of information, so it is difficult for farmers to find accurate information on the supply of land for rent. Most information is generated through informal channels, such as family and friends, neighbours and social gatherings. Some farmers even indicated they were reluctant to rent out their land in case they were perceived as 'being poor' by the community. This suggests there are negative connotations associated with land rentals, particularly cash agreements.

In some kebeles in SNNP and Tigray, informal "brokers" exist who offer information on available land for a nominal fee, ranging from 100 Birr for non-irrigable land to 400 Birr for irrigable land. These brokers provide an important alternative source of information and often act as facilitators for consolidation and renting,

[3] See LIFT report "Credit and land rental demand assessment". February 2015.

particularly for those coming from outside the locality. Farmers are wary of these brokers, however, as they do not necessarily value their services, and fear their involvement will increase the price of land rentals; additionally, the land administration offices distrust them and fear their involvement will lead to illegal land sales.

Cash Rental Versus Sharecropping

Although both types of agreement are found, in both Tigray and SNNP there seems to be a preference for sharecropping[4] rather than cash rental agreements.

In general, cash rental transactions are preferred for the following reasons: i) for short-term financial needs (e.g. food gaps or medical expenses); ii) for one-off investments, e.g. to pay for fertiliser loans; iii) compensation for sudden shortfalls in the availability of labour. These agreements tend to be more common among farmers who have several plots and use the income from renting out one plot to buy inputs, etc.

Sharecropping arrangements are preferred by farmers more concerned with food security, particularly vulnerable groups. This is the traditional form of rental and there is greater understanding of the economics. The team's research suggests that renters often prefer sharecropping because they feel it offers a "more secure" arrangement, whereas with cash rentals they are more afraid of losing their land. Sharecropping agreements tend to be more informal, with elders acting as witnesses. This significantly reduces costs compared with cash rentals (see Registration of Land Rental Transactions below) and means there are no legal restrictions over the duration or percentage of land.

A gradual shift from sharecropping to cash rental agreements seems to be taking place because:

- Sharecropping agreements are subject to the willingness of the rentee to invest in the land to get the desired returns. As a result, renters do not always obtain anticipated returns.
- Land rental prices have increased steadily in recent years, making it more attractive for farmers to rent out their land. This is particularly true of irrigable land, where potential returns are significant.

Anecdotal evidence from SNNP suggests that, for one year of cash rental, prices range from ETB 20,000/ha to ETB 24,000/ha for irrigable land, and between ETB 4,000/ha to ETB 6,000/ha for rain-fed land. In Tigray prices are slightly cheaper, with cash rental prices ranging from ETB 20,000/ha to ETB 32,000/ha for a two-year rental.

Rental prices are set on a competitive basis, taking the expected return of land and a series of other factors into consideration when negotiating the final rental price. These variables include:

- Location of the land (lowland versus highland)
- Fertility of the land
- Whether the land is irrigable or not
- Proximity to grazing land (negatively correlated)
- Proximity to infrastructure such as roads
- The need for cash from the renter's side
- Information available on the price of similar land in similar localities

Knowledge of Land Policy and Rights

In both Tigray and SNNP there is limited awareness of the main land policy and rights, both at the governmental and farmer level.

[4] There is a different definition of sharecropping in each region and even within regions. Sharecropping means an equal sharing of yields as well as costs of inputs between renters and rentees, but while crop residue is shared equally in Tigray, they belong to the rentee in SNNP.

Table ***2*** presents the results of ELAP's baseline survey and shows households' limited understanding of their rights as rentees/renters, and in cases of expropriation. It shows there are significant regional disparities in perception of rentees' rights. For example, in SNNP only 64.6 percent of households perceive they are aware of their rights (and this indicator does not capture those with an incorrect understanding).

Table 2: Perception of households' land rights in percent

Knowledge of:	Tigray	Amhara	Oromia	SNNP	All	Chi-sq. value
Right to use (%)	96.2	98.7	94.4	95.5	95.6	3.1
Right to bequeath (%)	63.2	81.6	56.6	70.9	64.5	24.0***
Right to rent/share/contract out (%)	75.2	86.8	50.7	64.6	64.4	57.9***
Right to use it as security for credit (%)	15.4	32.9	21.7	44.0	27.1	63.6***
Right to sell (%)	4.5	-	5.0	8.6	5.5	10.0**
Others (%)	3.0	-	3.5	2.6	2.8	2.9
I don't know (%)	-	1.3	-	-	0.1	11.5***

** *** show significance at 5% and 1% levels

Source: ELAP Baseline Survey, April 2013.

These findings are consistent with the reality on the ground. Renters and rentees seem to have a limited understanding of their rights and obligations regarding land rental agreements. This understanding mainly comes by word of mouth from friends, relatives, and other farmers – this is often inaccurate and even completely wrong. Village/kebele meetings seem to be the most effective way of communicating land policy and rights, but very few awareness campaigns take place. This is mainly due to the limited financial capacity of EPLAUs and limited numbers of suitable staff.

There is also a need for more widespread understanding among government officials. Anecdotal evidence suggests there is confusion over specific aspects of the regulations, such as the right of farmers to fully rent out their land (this is the case in SNNP). Most land administration officials have an agriculture-related educational background, with less training in land use administration.

In addition, there are limited resources available to train and create awareness among relevant government stakeholders, from EPLAU officers at the woreda level to kebele administrations and Land Administration Committees. In SNNP, field assessments revealed that training had taken place in a limited manner at the woreda level; however, this had rarely fed down into kebele administrative structures. Furthermore, there were no resources available to share printed copies of training materials or even copies of the proclamation and regulations with these kebele administrative structures[5]. In Tigray, however, greater resources seem to have been invested in training and capacity building. Anecdotal evidence suggests that stakeholders have received frequent and regular communications on the proclamation and regulations at the community level; therefore, community-level awareness has been improved.

Registration of Land Rental Transactions

In accordance with Federal Proclamation No. 456/2005, as part of the rural land administration system, SNNP and Tigray have issued specific land administration and use regulations that include a requirement to register land rental transactions.

In SNNP, cash rental agreements of up to 2 years need to be registered with the kebele administration by the farmer, with the approval of the LAC. However, longer arrangements of up to 5 years, as well as farmer-to-investor agreements from 5 to 15 years need to be registered at the woreda Land Administration Office. To do this, farmers require authentication of all documentation and the presence of three witnesses. SNNP is the only one of the four regions where a standard land rental agreement form is available. This form was developed by the Regional Agriculture Bureau.

In Tigray, formal land rental agreements of up to 3 years need to be registered at the kebele level, while rental agreements over 3 years need to be registered at the woreda court/justice office.

[5] Note that discussions are under way for LIFT to support woreda and kebele level capacity building on land rights, among others, including printing of the proclamations.

Field observations suggest that the enforcement of these regulations is low, at the woreda level. In one woreda Land Administration Office visited in the SNNP region, only two farmer-to-farmer rentals had been registered, and no cases of farmer-to-investor rental had been reported, although such type of renting takes place[6]. Similarly, in Tigray, only four formal rental contract agreements had been registered in the previous year at the woreda office visited. Anecdotal evidence also suggests, however, that, in general, farmers believe in the importance of formal registration and renters in particular feel more secure when their land rental agreement is registered.

Reasons for low transaction registration are similar to Amhara and Oromia. These are:

- Many agreements are reached with family and relatives, who 'trust' each other.
- There is limited awareness of the consequences of informal land rental arrangements.
- To register at the woreda level, farmers often need to travel long distances, which has monetary implications. Moreover, they need to take three witnesses, which is often difficult and expensive.
- To register at the woreda level, they must pay a fee, in contrast to informal contract agreements.
- There seems to be some understanding of the benefits of registering rental agreements (i.e. greater security courting the event of a dispute) but this is still often seen as unnecessary.

Land Exchanges

The Federal Democratic Republic of Ethiopia Rural Land Administration and Land Use Proclamation (456/2005) gives the right to land holders to voluntarily exchange their land holdings, provided that exchanges have the effect of consolidation. This provision is important to prevent fragmentation and to make land holdings more productive.

In SNNP, Regional Proclamation No. 110/1999 allows local communities to legally exchange land. There are, however, requirements to be fulfilled (e.g. equal size and productivity of land) between the two exchanging individuals. In Tigray, land exchange or consolidation is possible, dependant on the willingness of both parties. Agreements are finalised at the woreda land administration and justice offices.

Although land exchange is promoted by EPLAU officials, it is not very common. In most cases, the exchange of land rental rights takes place in the presence of elders to witness the exchange and renting arrangement. According to the law, this custom-based agreement can have a duration of up to two years. In Tigray, however, land exchanges are formally made and registered as per the law. As a result, disputes are significantly reduced as there is a clear system in place at the grassroots level.

Gender Equality and Social Inclusion

Vulnerable groups (VGs) participate predominately as renters rather than land-seekers in the rural land rental sector. Practical challenges, including a lack of knowledge and skills, and time constraints, remain major barriers for women wishing to cultivate land by themselves. VGs, in particular, face limitations in resources, such as a lack of access to ploughing oxen, farm implements and access to credit to buy agricultural inputs. This therefore limits the productivity of their land and their opportunities for renting more land.

When renting out land, sharecropping is the preferred form of rental by VGs. This is mainly for practical reasons, including lack of labour (and capital) and the desire to avoid the risk of food price fluctuations. Another reason for preferring sharecropping is that most rentees would rather invest their money in long-term agreements (usually longer than one year) compared to renters, who often prefer to rent land for shorter periods of time. Shorter tenancy agreements allow renters the flexibility to change tenants depending on productivity and work ethic. Annual agreements enable the renter to ensure they find good rentees for the next cropping season and secure their holding right. However, if the rentee meets the expectations of the renter, agreements can be extended endlessly. Land rental is often chosen only when there is no other option to get money from other sources to meet the immediate financial needs of the family.

In SNNP, VGs prefer to rent out land to relatives, as they rely on trust as a strong but informal form of social pressure. Conversely, in Tigray, VGs seem to favour rentees who can manage the farm well (e.g. timely weeding, appropriate application of fertiliser, use of improved seed and herbicide etc.), irrespective of family or social relations. In general, VGs have a good understanding of land rental prices from relatives and

[6] Information obtained during face to face interviews in Meskan woreda with staff at the land office.

neighbours or from those who have rented out their land during the same season. They are fully aware that rental prices vary according to the known productivity of the land.

With regard to land policy and regulations, VGs, particularly women in male-headed households, are significantly less informed of existing land laws than men. For instance, very few female-headed households are aware of the fact and understand that they have the right to inherit.

Despite apparently low numbers of disputes being recorded in SNNP and Tigray, disputes are not uncommon. Many disputes are unreported, often due to women's fear of possible repercussions when challenging husbands or fathers, which can result in incidents where women lose either access to their land or specific land rights. In SNNP, for example, the in-laws of a woman who has lost her husband can claim the land belongs to them and force the widow to be inherited by a brother in-law or to leave the land. Orphaned children also experience land rights violations from renters, guardians, or even close family members.

Environment and Climate Change

The variable length of landholding rental contracts (as detailed in section 2.1) contributes to the sustainable use and management of land. A long-term contract is an incentive for tenants to improve the productivity of the rented land by adopting sustainable land management practices, such as applying animal manure, compost and mulching, and implementing soil conservation structures, such as drainage channels, grassed water ways and terraces. Longer rental periods also encourage the planting of perennial crops and trees, which have positive impacts on soil management and fertility, providing wind breaks, canopy cover for shade and reducing soil compaction and run-off during rains.

Although regulatory frameworks exist within the two regions, the renting out of landholdings is very weak and, where this does occur, agreements are for very short periods of time (less than the legally recognised timeframe). Short-term land rentals can have serious negative impacts on farmland, as well as the wider environment. In this situation, renters are encouraged to exploit the land to maximise short-term benefits without considering the long-term negative impacts on the farmland. Landlessness is also an issue in the regions; many landless households are forced to exploit common or state-owned land for their livelihoods, clear forests for agriculture (particularly in SNNP) or resort to charcoal burning and other environmentally unsustainable activities. Therefore, landholding rental activities that could engage landless households would help to mitigate this.

However, long-term rental agreements may have their own environmental problems in the event of inappropriate land use and planning. For instance, renters may use the land for environmentally damaging tree planting (e.g. eucalyptus plantations)[7]. This impact can be mitigated through effective control by the concerned government ministry or department. Furthermore, there is evidence to suggest that long-term agreements are not currently attractive to either tenant or landowner. With the current fluctuating rental systems (with unstable rental prices), there is a preference for renewable short-term agreements to allow flexibility on both sides.

In order to protect rented landholdings from degradation and address unsustainable land use and management, some options include:

- Entering into a long-term contract with the tenant instead of a short-term contract. However, with the development of brokers and expanding households' ability to rent to entrepreneurs this may encourage long-term contracts being utilised.
- Entering into a formal contract to enforce the rental agreement.
- Sharing the costs of conservation between the renter and the tenant, e.g. lowering the rental price if the tenant engages in sustainable land management practices.

Stakeholder Mapping

The range of rural land rental sector stakeholders in Tigray and SNNP is the same as for Oromia and Tigray. To avoid repetition, we have included these stakeholders and a brief description of their role in Annex 4.

[7] There are fierce opposing arguments on the ecological impacts of eucalyptus trees at present. In any case, if situations are created where most of the landscape is covered with this tree species, that may not be good for the environment as well as food security of a specific community or even the country. As eucalyptus tree is a fast-growing species with excellent coppicing ability, long-term land renters are encouraged to plant it.

Table 3 shows the significant stakeholders and maps their interest in and influence on the rural land rental sector (Will-Power Diagram). This is a representation of the team's assessment of the current situation, so there is room for adjustment if the situation evolves.

Table 3: Significant stakeholder's analysis

Who	Interest (what do they want?)	Influence (how much power do they have and over what?)	Note
Regional Environmental Protection and Land Use Office	Regional EPLAU ensures that land rental transactions are made according to the proclamation and regulation. However, bureau faces financial and staff constraints. Promotion of land rental is not on their agenda.	High influence, as it is responsible for designing guidelines for implementation of the proclamation and its regulations at the regional level. Provides technical backstopping and monitoring to ensure effective implementation.	Needs further support in its financial and capacity-building activities in order to play its role effectively.
Regional Bureau of Agriculture	Does not encourage renting by VGs or cash-short households, who should be better supported by special extension packages and not be forced to rent out their land.	The influence of the bureau in promoting the land rental sector is low.	
Woreda Land Administration Office	Ensures that land rental transactions are made according to the proclamation and regulation. They follow the guidelines received by the Regional EPLAU.	Very limited capacity, to the extent of not being able to participate in overall field activities.	The office is neglected and does not get the necessary attention. As a result, it lacks sufficient capacity both in budget and staffing.
Woreda Justice/Court	High interest in the enforcement of the proclamation and regulations.	Limited influence at the initial stages of dispute systems, as most activities are performed by Land Administration Committees and traditional social courts. High interest and influence in those cases that reach the formal judicial system.	In the case of Tigray, the office has a structure that can reach down to the community by establishing cluster-based court services.
Kebele Land Administration	High interest, as it is held accountable for any success or failure on land transactions in the kebele. It aims to ensure proper implementation of the proclamation and its regulations.	It has high influence in order to discharge its duties and responsibilities. Since the administration has a deeply rooted network, any wrong-doing in land transactions is noticed and appropriate measures are taken.	There are serious capacity gaps at the kebele administration level, which means there are many errors in processing land transactions.
Land Administration Committee	They have high interest to effectively register land transactions and resolve disputes as they are trusted by the community.	High influence in resolving disputes and arbitrating land transactions. They are well respected in the community and are a trusted source of information on land issues.	LAC members have limited awareness of the proclamation and its regulation due to limited awareness campaigns.

Who	Interest (what do they want?)	Influence (how much power do they have and over what?)	Note
Brokers	Since land transaction in both the rural and urban context is a lucrative business, brokers have high interests to get the maximum benefit out of brokering the transactions.	They may have high influence in setting the price and mediating negotiations between rentees and renters.	The number of brokers in land transactions is limited in the rural context.

The degree of importance and influence of stakeholders is fluid. For instance, the introduction of a new regulation is likely to have an effect, and may empower or disempower some stakeholders, which will further affect their incentives. Furthermore, if alternative sources of information on available land to rent appear in future, for example through the introduction of ICT, the influence of the brokers would diminish. This table shows that there are numerous opportunities and possibilities for LIFT to partner with appropriate sector-relevant stakeholders

To give a first indication of potential LIFT partners, Table 4 presents the Influence-Importance matrix. The 'High importance – High influence' quadrant indicates which stakeholders are crucial for the successful implementation of interventions in the rural land rental sector.

Table 4: Influence – Importance matrix in rural land rental sector

	Low influence	High influence
High importance	Woreda Land Administration Office Woreda Justice/Court	Regional EPLAU Office Kebele Land Administration Land Administration Committee
Low importance	Regional Bureau of Agriculture Woreda Office of Agriculture	Brokers

Analysis of Symptoms and Causes of Sectorial Failure

This assessment points to a set of constraints that prevent farmers and vulnerable groups to participate in and benefit from the rural land rental sector in Tigray and SNNP. Some of these symptoms apply to the entire country and, although they were already identified in the first assessment, they have been further refined as we now have a much better understanding of the sector. New symptoms that are relevant both at the national and regional level have also been identified. They are presented below.

Symptoms

The following symptoms are present in Tigray and SNNP, as well as in Oromia and Amhara:

Core

- *Many rental transactions take place informally.* A large majority of land rental transactions in rural areas are not registered at the kebele or woreda level and are agreed informally. Many farmers are not able to see the benefits of formalising rental agreements and perceive it as a bureaucratic and costly process that does not increase their security of tenure.
- *Farmers in general, and vulnerable groups in particular, prefer sharecropping to cash renting, although cash renting is becoming increasingly prevalent.* The traditional method of renting land has been through sharecropping agreements, where renter and rentee share land outputs (not necessarily on equal terms). This remains a particularly attractive arrangement for vulnerable households as it provides them with food security. However, there is a progressive realisation that rentees do not necessarily invest as much as required; therefore, outputs produced are insufficient. Also, the steady increase in land rental prices is making a return to this option much more attractive (and worth the risk).

Supporting functions

- *There is limited support from government stakeholders to promote the development of the rural land rental sector.* Both the regional EPLAU offices and the woreda land administration offices support the implementation of the proclamations but play a very limited role in promoting the rural land rental sector.

Rules (policies, institutions)

- *The land rental registration system is cumbersome.* In Tigray and SNNP very few rental agreements are registered at the kebele and woreda level. Farmers do not necessarily value the benefits of formalising their contracts as the cost of doing so (registration fees, required paperwork, travel costs for farmer and witnesses) is seen as excessive.

There are also a number of symptoms that are particularly relevant to Tigray and SNNP:

Core

- *The number of rental agreements (both formal and informal) is low.* The land rental sectors in Tigray and SNNP seem more underdeveloped than those in Amhara and Oromia, and fewer transactions (both formal and informal) take place. Farmers fear they could lose their land when it is rented out, as they do not have updated land certificates and do not trust the possibility of enforcing rental contracts.

Supporting functions

- *There are limited sources of information on land availability, mostly informal.* Farmers who are interested in renting in land usually use word of mouth and social gatherings to find land, as do farmers who are willing to rent out their land to the highest possible bidder. In some areas of Tigray and SNNP, however, brokers try to facilitate agreements, but their presence is still marginal, and they are viewed with distrust.

Finally, some of the symptoms originally identified seem to be particularly relevant to SNNP:

Supporting functions

- *Poor awareness among stakeholders of their rights and obligations.* As shown by the 2013 ELAP Baseline Survey, households in SNNP perceive that their knowledge of their rights to rent/share/contract out is lower than households in Tigray. This is confirmed by anecdotal findings during field work. We found that farmers in Tigray are more aware of their rights (because the woreda land offices are more active); farmers in SNNP have a much more limited (and sometimes incorrect) understanding of existing laws. For example, some farmers in Meskan woreda (SNNP) were under the impression that they had to pay taxes and a fee for registering the land when registering their land agreement, which is not the case. This was also the case for government officials – EPLAU and woreda land offices were better informed and knowledgeable in Tigray than in SNNP.

Causes

The cause of all these symptoms is that the sector is failing to respond adequately to the needs of the poor. As a result, the poor are disadvantaged and not able to maximise revenue from their main asset – land.

The main causes of sectorial failures in the rural land rental sector remain very similar to those identified in the first market assessment. They include:

- **Information asymmetries:** Even though the Tigray and SNNP proclamations and regulations detail the process for renting land, there is poor understanding among farmers and regional government stakeholders of what these rules are. Processes in the land administration system could allow for a more efficient allocation of land (such as land exchanges), but there is limited promotion and understanding of how to make them operational. In addition, other information asymmetries arise from limited information on land availability for rent and market prices for land rentals, particularly for vulnerable groups. Addressing these failures is important to ensure that rentees and farmers from Tigray and SNNP are able to make more informed decisions, which will allow for a more effective allocation of land.
- Failure in arbitrage: in Tigray and SNNP, as was the case in Amhara and Oromia, renters prefer sharecropping, which is a less efficient arrangement than cash rental. Renters are interested in maximising food security and will therefore prefer rentees to grow food crops (which have lower returns than cash crops); rentees are interested in maximising incomes by growing the most remunerative crops. This potentially inhibits renting. To promote rental, we need to ensure that renters are satisfied they will get

sufficient money from the rentee to buy the same amount of food as they would have got from sharecropping.

- **Policy and regulatory failures**: the number of cash rental agreements is low, as policy and regulatory failures generate insecurity of tenure, particularly for vulnerable groups, and make the registration process too cumbersome. Poor functioning of the land administration system also limits the willingness of farmers to rent out their land. Addressing these failures will generate a better and more coherent policy and regulatory environment, which will help increase the amount of land being rented.
- **Institutional constraints:** despite increased efforts in Tigray to raise the awareness of woreda and kebele land offices, the capacity of EPLAU offices (particularly in SNNP) remains limited. They lack sufficient financial and staff inputs (including high staff turnover) to adequately support the promotion of the land rental sector.

Indicative list of Interventions and Activities

The interventions and activities that will be undertaken in Tigray and SNNP will address the existing constraints in the rural land rental sector. As explained in section 5.1 of this report, overall interventions will inevitably be aligned with those being implemented in Amhara and Oromia, as there are many similarities in the causes that limit the ability of smallholder farmers to benefit from the sector.

For purposes of clarity, the activities that we will undertake in Tigray and SNNP have been categorised as follows:

- Activities that are currently being implemented in Amhara and Oromia and will be implemented in Tigray and SNNP through adoption and scaling up. These interventions are relatively standard, and no real adjustment will be required to adopt/scale up their use in the new regions. For example, capacity-building activities for VGs so that they better understand land rental issues.
- Activities that are currently being implemented in Amhara and Oromia and will be implemented in Tigray and SNNP through adaptation. In essence, the objectives of the intervention/activities will remain the same, but there will be a need to adjust them to address the specificities of the new regions. For these interventions, there might be a need to undertake further assessments or a re-designed pilot. For example, we will need to assess the specific regulatory constraints faced by smallholder farmers which limit their incentive to rent land.
- New activities that will be implemented in Tigray and SNNP. For example, organise familiarisation visits for new land brokers to Amhara and Oromia to better understand how the system should function.

Following this categorisation, Table 5 presents the list of activities that will be implemented in Tigray and SNNP. In-depth detail of these activities will be provided with the submission of the next deliverable, the Intervention Plan.

Table 5. Rural land rental interventions and activities

Overall interventions	Activities to be implemented in Tigray and SNNP through adoption/scaling up	Activities to be implemented in Tigray and SNNP through adaptation (possible pilot/assessment)	New activities to be implemented in Tigray and SNNP (might require pilot)
Facilitate development of systems that generate and distribute information on land availability	Raise awareness of services provided by land brokers among the kebele administration, elders' committees and land administration offices at the woreda level. Increase capacity of VGs to understand land rental issues, price calculations, etc.	Support the provision of services by land rental brokers in irrigable areas. This includes training for service providers in collecting, storing and disseminating information; ethics of commercial activities; adaptation of new small irrigation technologies.	Identify a network of service providers (i.e. land brokers) to exchange information on land rental (dry and rainy season) and on potential entrepreneurs interested in aggregating land for horticulture. Organise familiarisation visits for a new network of service providers to kebeles in Oromia and Amhara where land rental service providers are active and successful.
Increase awareness on functioning of land rental systems	Undertake training activities for relevant government entities at the woreda and kebele level, as well as cooperatives and other relevant stakeholders to increase their understanding of how the land rental system operates.	Develop a communications campaign on the opportunities for land rental in Tigray and SNNP (including learned lessons from the communications campaign in Amhara and Oromia).	
Improve regulatory framework for rental transactions	Support regional EPLAUs in the formulation of new regulations and policy analysis.	Assess regulatory constraints in Tigray and SNNP that have an impact on the willingness of renters and rentees to engage in cash rental agreements. Train woreda and kebele EPLAU officers on the revised framework as well as any regulatory or procedural changes that are achieved.	Undertake an awareness campaign for the rural population on the regulatory changes that will help streamline the rental process. Assess specific challenges faced by VGs in existing land rental regulations in Tigray and SNNP and suggest appropriate changes.
Undertake research on relevant and actionable land issues and disseminate findings	Organise conferences/workshops to disseminate findings of action-research studies undertaken by LIFT.	Analyse (quantitatively and qualitatively) the impact that policy differences have on the incomes of smallholder farmers in Tigray and SNNP (including use of quasi-experimental methods).	Engage 'champions of change' or relevant figures to promote policy discussions with policy makers at the regional and federal level.

Theory of Change

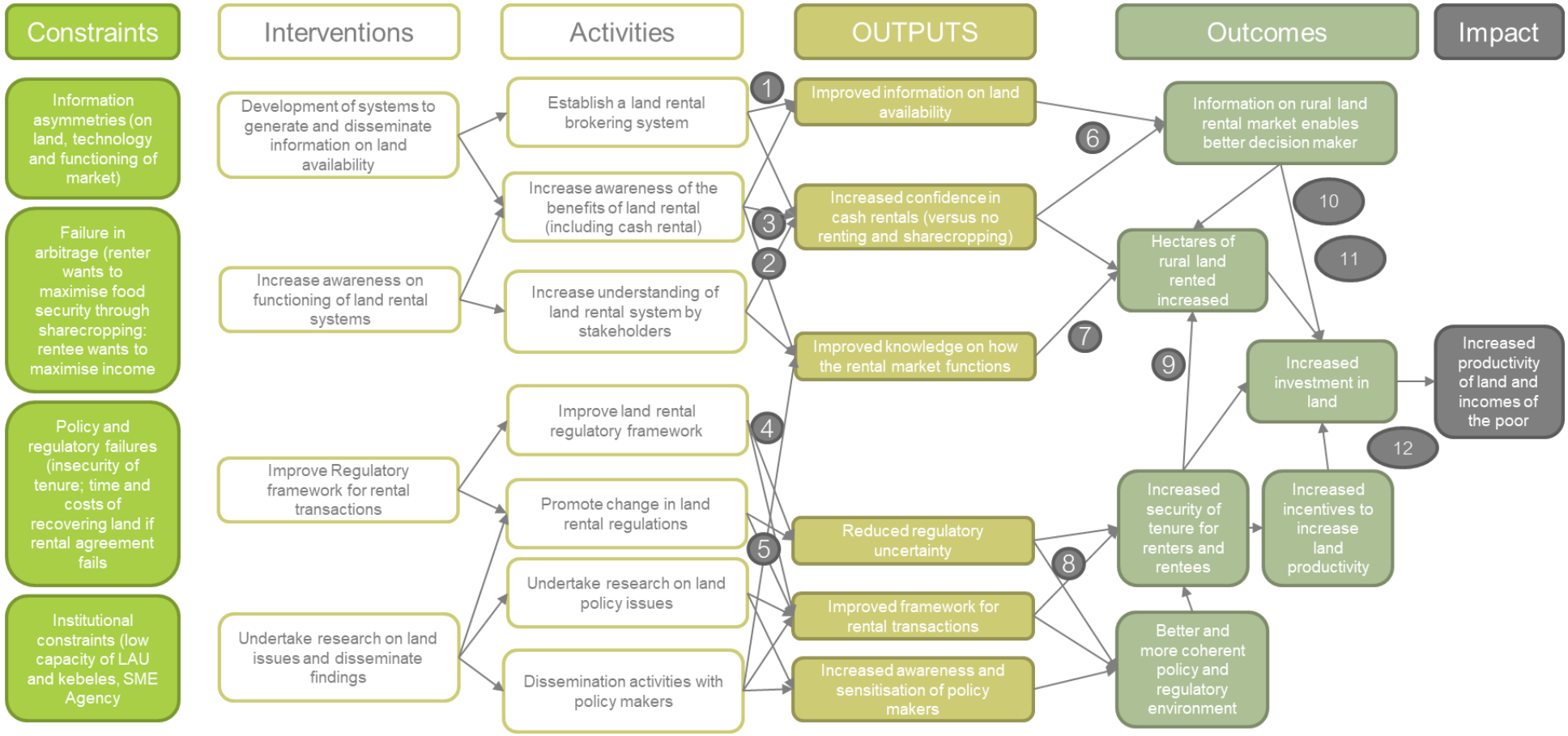
The theory of change for the rural land rental sector describes the link between the constraints and proposed interventions with the outputs that the M4P component of LIFT will deliver, and how these outputs will help achieve the desired outcomes and contribute to achieving the overall impact of LIFT.

Figure 2 presents the theory of change for the rural land rental sector (updated since the first market assessment). It is important to note that the list of activities might be refined further in the next step of the process (i.e. the preparation of the Intervention Plan) but any further modifications will still fit under this overall framework.

The changes envisioned in the rural land rental sector that would allow it to work better for the poor are made under certain assumptions. These assumptions are indicated as numbers in Figure 2 and detailed in the table below.

Assumption #	Detailed assumptions
Assumption 1	Famers willing to trust providers of information
Assumption 2	Famers willing to learn about and understand land rental system functioning
Assumption 3	Cash rentals more profitable than sharecropping agreements
Assumption 4	GoE open to regulatory improvements at the regional level
Assumption 5	GoE willing to incorporate research findings into their policy decision making
Assumption 6	Farmers willing to trust the information system
Assumption 7	Better information increases incentives of farmers to rent
Assumption 8	Improved regulatory framework is enforced
Assumption 9	Increased security of tenure leads to increased land use
Assumption 10	Farmers are capable of making the right decisions
Assumption 11	Cash rentees invest more in land than sharecropping
Assumption 12	Increased investment leads to increased productivity and incomes of the poor

Figure 2: Theory of change for the rural land rental sector



Section 3: Access to credit

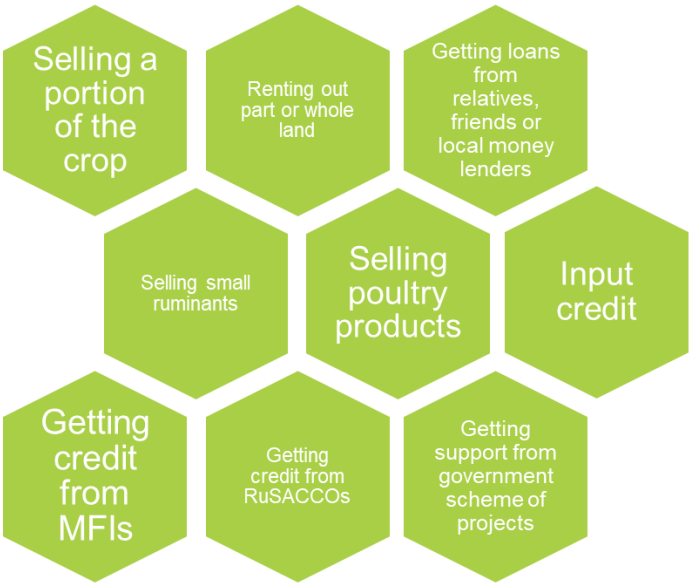
Description of the Sector

The majority of the population living in rural areas in Tigray and SNNP are engaged in farming. This provides them with two main sources of income: crops and livestock. These two resources complement one other: crop residue is used to feed animals, while animals such as oxen and donkeys are used for cultivation, post-harvest and transport activities. Beyond this interdependency, farmers have to invest money to maintain both their crop cultivation and their animals, and therefore need them to provide some level of return. Crop cultivation, for example, requires agricultural inputs (seed, fertiliser, crop protection items etc.) as well as other support (labour for tilling, weeding, threshing etc.), all of which requires payment at the time of purchase, even though farmers only get a return after harvest and/or sale in the market. Similarly, livestock farmers need to pay for feed and veterinary services up-front, but only get a return when they sell their animal or rent it out to other farmers. As a result, there is a significant gap between when farmers need money and when they receive money, meaning they have to manage their finances using whatever tools are available to them.

In Ethiopia, and in Tigray and SNNP in particular, farmers try to bridge their income and spending gap using their existing resources or by adopting low-cost practices for cultivation or livestock rearing. Some farmers use savings from the preceding year's harvest or sales of milk and other animal products to cover costs, but often their savings fall short. If farmers are unable to resolve their cash flow gap, they have a number of options, many of which they use simultaneously. These include:

- **Credit from local lenders, family members or neighbours.** When farmers need cash for a short period, they usually borrow it from family members, friends or neighbours. The amounts and duration of these loans tend to be very low (one week or similar). As a last resort, local money lenders also extend credit, although they often charge excessive interest (50% per annum or more).
- **Selling a portion of their crop.** The grain and other crops that farmers grow are used first and foremost for family consumption needs, with any surplus sold to traders in the market. Farmers generally do not sell all their produce immediately after harvest. Instead they store a significant portion in their house using traditional storage methods. Stored crops are then sold ahead of the sowing season to pay for inputs and agricultural services.
- **Renting out part of /all their land.** Although not a preferred option for most farmers, some rent out part of their land to get immediate funds which can be used for household needs. This option is more common among vulnerable groups (women, minority populations, the elderly), who are more likely to rent out all their available land as they may lack the resources to farm it.
- **Selling small ruminants (sheep, goats, etc.).** In addition to cows, oxen and donkeys used for cultivation, most farmers keep small ruminants. These provide added nutrition from milk and meat, produce wool and can be sold when farmers require additional funds.
- **Selling poultry and poultry products.** Poultry provides farmers with eggs and meat and can also be sold either to other farmers or in the market as a way of raising funds.
- **Credit from MFIs.** Another financing option is to take a loan from local MFIs. Two of the largest MFIs in Tigray and SNNP respectively are Dedebit Credit and Savings Institution (DECSI) and OMO Microfinance Institution. Both have extensive networks of branches and agents (up to the kebele level). In rural areas they mostly provide agricultural loans to farmers. Loans do not require security but are extended via group lending to between 5 and 7 farmers. Other MFIs also operate in the two regions (e.g. Aggar Microfinance in SNNP and Adeday Microfinance in Tigray), but have a comparatively small reach, and their capacity to provide credit is limited.
- **Credit from Rural Savings and Credit Cooperatives (RuSACCOs).** Some farmers keep savings in nearby savings and credit cooperatives. These RuSACCOs operate under the Cooperative Department of the Bureau of Agriculture and can provide credit to farmers based on their level of savings with the institution, provided they have sufficient funds to lend out.

Figure 3: Existing sources of finance for farmers in SNNP and Tigray



- **Support from government schemes/projects:** The Household Asset Building Programme (HABP) and Productive Safety Net Programme (PSNP) both work closely with the Bureau of Agriculture and offer cash support in selected woredas and kebeles. Phase 2 of the Agriculture Growth Programme also plans to incorporate access to credit as part of its strategy. The Agricultural Transformation Agency (ATA), under its new cluster development strategy, also targets linkages between financial institutions and farmers for selected crops.
- **Support through input credit.** In Tigray, farmers do not receive credit for purchasing inputs, so they have to pay cash at the time of delivery. In SNNP, however, there is a process through which farmers deemed to be in need can access credit for agricultural inputs. In these cases, the Bureau of Agriculture conducts a needs assessment with local kebele administrations to identify farmers who are unable to pay cash for agricultural inputs (seed and fertiliser). Based on this assessment, selected farmers can go to OMO Microfinance and receive a coupon which allows them to access inputs from a cooperative or agriculture office on credit. They pay this credit back to OMO microfinance after the harvest.

A more detailed picture of the amounts and sources of credit used by farmers in Tigray and SNNP is broken down in the results of the 2012 ELAP baseline survey (see Table 6).

Table 6: Use of credit, by region

		Tigray	SNNP
Credit taken for farming (Birr)		393	29
Credit for farming during last season (% borrowed)		26.3	3.7
Source of credit (% of all sources)	Government	62.3	0
	NGOs	7.2	0
	Credit & saving associations/MFIs	8.7	16.7
	Private lenders (including relatives/friends)	10.1	83.3
	Cooperatives	11.6	0

Source: Adapted from ELAP Baseline Survey, 2012

Our market assessment found that, in contrast to the findings of the ELAP survey, farmers accessing credit in both Tigray and SNNP took much higher-value loans than those specified in Table 5. Even so, many farmers reported that the amount of credit they received was insufficient for their needs. The assessment also found that a greater proportion of farmers is taking loans than the ELAP findings suggest. Lastly, findings from the

LIFT market assessment show that MFIs and Credit and Savings Associations play a much greater role in both Tigray and SNNP.

Looking in more detail at the overall structure and features of the access to credit sector, the market assessment showed a number of similarities with Amhara & Oromia, but also a few differences:

Loan sizes are too small to meet farmers' needs. Farmers in rural areas require credit for a range of purposes, including purchasing agricultural inputs and various household needs. As in Oromia and Amhara, farmers in Tigray and SNNP generally struggle to access the level of credit they feel they need. For example, one quintal of urea costs over ETB 1,100, while one quintal of DAP or blended NPS fertiliser costs over ETB 1,500. The cost of improved seeds ranges between ETB 1,100 to 1,400, depending on the crop. Farmers therefore require relatively high levels of credit, yet lending strategies of local MFIs are rather conservative. Loan sizes for new groups are small – even where the group's overall credit worthiness is high – and only increase gradually over time. Equally, although most MFIs have a lending cap (for the highest possible loan disbursement), average loan sizes are generally well below this cap. The maximum loan size found by the assessment for different MFIs is given below.

Table 7: Credit cap for different MFIs

Name of MFI	Max. Loan Size for Rural Client (Birr)	Number of Active Borrowers	Gross Loan Portfolio (Birr)	Avg. Loan for Active Borrow. (Birr)
Wisdom (Vision Fund)	7,000	45,331	101,205,955	2,232.59
Aggar	25,000	5,854	19,130,224	3,267.89
DECSI	50,000	396,648	1,849,942,011	4,663.94
Meklit	20,000	14,224	23,029,053	1,619.03
OMO	30,000	327,888	585,102,740	1,784.46

Source: Primary interview and Country Survey Report of Ethiopia from www.mfttransparaency.org

Although maximum loan sizes can be as high as ETB 50,000, anecdotal evidence suggests that the average loan awarded by MFIs is around ETB 7,000/group, illustrating the significant gap between potential and actual loans. Table 7 shows that, across the sub-set of MFIs operating in Tigray (DECSI) and SNNP (OMO, Aggar, Wisdom, Meklit), average loans sizes/member tend to be higher, but they are still significantly below lending caps. The difficulty of accessing bigger loans means that many farmers have to secure credit from multiple sources in order to cultivate their land effectively.

***Market penetration remains uneven*.** Overall, the market assessment showed a good MFI presence in rural areas of Tigray and SNNP. However, while the main actors are well known in their respective areas, their coverage is patchy – particularly in SNNP. Exact penetration is difficult to calculate, but a reasonable proxy estimate can be made using 2007 census data. According to the census, the total population of Tigray was 4.3 million[8] and SNNP was 14.9 million[9], with the average household containing 5 members[10]. Given the number of active borrowers detailed in Table 7, this implies that DECSI currently covers up to 46% of households in Tigray, and OMO covers up to 11% of households in SNNP (compared with around 22% coverage of households by ACSI in Amhara, and 9% coverage of households by OCSSCO in Oromia). As in Amhara and Oromia, the bulk of MFI loans in both Tigray and SNNP are extended in rural areas, meaning household coverage may in reality be somewhat greater. At the same time, rural loans are the most costly to monitor and therefore tend to be more expensive than comparable loans in urban areas. Aggar Microfinance in SNNP, for example, charges 18% interest and 3% service charge for agricultural loans, compared to 16% interest and 3% service charge for urban small loans.

[8] http://www.csa.gov.et/newcsaweb/images/documents/surveys/Population%20and%20Housing%20census/ETH-pop-2007/survey0/data/Doc/Reports/National_Statistical.pdf
[9] http://www.csa.gov.et/newcsaweb/images/documents/surveys/Population%20and%20Housing%20census/ETH-pop-2007/survey0/data/Doc/Reports/National_Statistical.pdf
[10] http://dhsprogram.com/pubs/pdf/TR4/TR4.pdf

Agricultural loans from MFIs are predominantly accessed via group-based lending. As in Amhara and Oromia, borrowers generally need to form groups of 5 to 7 members and apply for a loan jointly (in lieu of providing security). The large MFIs in Tigray and SNNP, DECSI and OMO, also require letters from kebele administrations before loan applications can be processed. First (or second) -level land certificates from loan applicants are also requested, primarily to ensure applicants are resident in the area where they are applying. Since 2009 MFIs (including DECSI in Tigray) have been evolving beyond pure group-based lending, with a few, more innovative, organisations pursuing different types of individual loans. For urban small loans, the ongoing business of the applicant or their house can be used as security. In agribusiness, the loan applicant needs to prepare and submit a business plan which can serve as security for a loan, along with the assets of the business. MFIs then provide credit based on their assessment of the client's assets and credit repayment capabilities.

For the landless in Tigray and SNNP, credit can be accessed with support from the Micro and Small Enterprise (MSE) Development Agency, by submitting a letter as proof of residence and obtaining confirmation from the kebele administration. DECSI and OMO will then provide a loan to enable the group to rent land or engage in other investment activities, such as cattle-fattening, dairy businesses, machinery purchases, etc. This supports groups so that, in a few years, they can save enough money to start other sustainable economic activities. Normally it takes 5 years for landless groups to qualify for other economic activities from their savings, and the land reverts to the kebele for other groups.

For agricultural loans, farmers need to:

- Go through an assessment process
- Get a recommendation letter from the kebele administration
- Form a group of 5 to 7 people

RuSACCOs are a viable, but not always reliable, alternative for farmers to access credit. Rural Savings and Credit Cooperatives (RuSACCOs) are present in most areas of Tigray and SNNP, and many farmers are members. They operate in relatively small geographic areas and are under the supervision of the cooperative agency. Farmers can save small amounts of money in RuSACCOs and then apply for credit using their existing savings as a guarantee. Normally, farmers are allowed to borrow up to three times their existing savings, but this depends on the overall availability of funds within the organisation. To receive credit, members also have to save continuously for six months. Business plans are not a mandatory criterion for loans, although many RuSACCOs have agreements with members that can, to some extent, serve as business proposals. While RuSACCOs do not have lending caps in the same way that MFIs do, their overall loan funds tend to be much smaller. To offset this constraint, RuSACCOs sometimes come together into larger unions. In Guraghe Zone of SNNP, for example, 108 saving and credit cooperatives have together formed the Netsanet Fana Saving and Credit Cooperative Union. The union has 18,800 members and last year disbursed ETB 30 million of credit, out of which ETB 12 million was member savings. In order to finance additional lending, the union borrowed money from the Development Bank of Ethiopia at a low interest rate of 6%.

Despite demand, individual-based loans are rarely available in rural areas, particularly for farming purposes. The market assessment found that most farmers prefer individual loans as they can avoid group liabilities; they believe they can get greater amounts of credit over time. This strongly mirrors views expressed in Amhara and Oromia, where a demand assessment showed that 52% and 62% of farmers respectively had a strong interest in accessing loans based on an individual evaluation of their assets[11]. Individual loans for running small businesses are provided by some MFIs in urban areas or supported by special schemes and programmes. DECSI has started providing individual loans against business plans in agribusiness (OMO in SNNP is yet to do this). DECSI does not provide input credit to farmers (for seeds and fertiliser), as per directives of the regional government. Instead, it aims to support farmers in other activities such as livestock fattening (oxen, cows and goats), milk production, improved heifers, petty trading, irrigation agriculture (including motor pumps), beehives and bee colonies, and other technological inputs such as planters, threshers, choppers, etc.

Few MFIs offer agricultural input credit to farmers. In Tigray, there were previously provisions for agricultural input credit; however, according to new directives from the regional government following rising defaults, all agricultural inputs (improved seed and fertiliser) are now sold fully on a cash basis. DECSI is therefore unable to provide input credit to its rural clients. Conversely, in SNNP, OMO has an arrangement with the Bureau of Agriculture, cooperative unions and National Bank of Ethiopia to provide input credit to

[11]Credit and Land Rental Demand Assessment (Amhara & Oromia), LIFT M4P component, page 8

farmers who require it. In essence, OMO gets funding for this from the government via commercial banks (with the regional government providing security to the banks). Inputs are then distributed to primary cooperatives. Individuals who have sufficient funds can purchase inputs directly from them. Those who do not have the funds can qualify for a coupon which is provided by OMO and allows them to purchase inputs on credit. Screening for eligibility takes place at the kebele level and includes a general assessment of ability to repay. The interest rate on input credit is 15%, half of which is passed on to the commercial banks and half retained by OMO. This system goes some way toward addressing the income and expenditure gap faced by farmers, and it is worth exploring in other regions.

Farmers in rural areas struggle to provide acceptable securities when applying for credit. When farmers need loans for agricultural purposes, the value of their land – in terms of expected crop production – is considered in lending decisions. In contrast to urban areas, farmers are unable to use their houses as a security for loans. However, farmers can use their livestock and multi-year fruit and timber trees to demonstrate credit worthiness. MFIs use this information to determine the amount of credit that can be provided to each individual (within a group). During the market assessment, some MFI branch office managers highlighted that the second-level land certificate (SLLC) could, once issued, be included in loan assessments. Both DECSI and OMO are open to exploring different structures for using SLLCs to provide credit to farmers.

MFIs face regulatory limitations to providing individual loans. The 2009 federal statute indicates that the maximum loan size for MFIs with savings below ETB 1,000,000 is ETB 5,000. For MFIs, the savings portfolio of which exceeds ETB 1,000,000, the maximum loan size is unrestricted; however, loans should not exceed 20% of the total loan portfolio. Loans to individuals cannot exceed 1% of the MFI's total capital, while loans to groups cannot exceed 4% of total capital. According to Directive MFI/17/2002, the maximum loan period for loans up to ETB 5,000 is 24 months; above this amount the maximum period is 60 months. The National Bank of Ethiopia (NBE) has imposed these loan limits partly to dissuade MFIs from drifting from their core mission of poverty alleviation[12].

MFIs face constraints to sourcing additional funds to support lending. The supply of credit to rural areas, especially to farmers, is lower than the demand. MFIs and RuSACCOs depend primarily on the savings they can accumulate from their clients to provide loans; however, these savings are insufficient. Both DECSI and OMO (as well as many smaller MFIs and RuSACCOs) have arrangements with commercial banks to access additional funds that they can disburse to clients, but the mismatch between supply and demand for credit remains. MFIs and other credit providers are therefore interested in exploring different refinancing schemes which would allow them to access further funds in order to grow their loan portfolios.

DECSI and OMO have also expanded their reach by partnering with a number of development projects, such as the Agricultural Transformation Agency (ATA), Agricultural Growth Programme (AGP), and Graduation with Resilience to Achieve Sustainable Development (GRAD). By partnering with these projects, they are able to access technical support and additional funding as part of expanding their activities with poor and disadvantaged clients.

Cooperatives and unions do not extend significant credit to farmers. Farmers get some of their agricultural inputs from primary cooperatives (improved seed and fertiliser) but generally pay in cash, particularly in Tigray where input credit is not permitted. Cooperative unions regularly provide credit to selected primary cooperatives, especially to buy outputs (mainly grains and beans); however, this is generally not extended to farmers. A number of cooperative unions have a strong capital base and wide outreach, and unions are also able to get loans from the Development Bank of Ethiopia at 3% interest. As in Oromia and Amhara, however, unions tend to use these funds for commercial activities rather than extending them to farmers. By law, primary cooperatives should save for at least 6 months in order to get a maximum loan limit, which is three times their savings (out of which 20% goes to buy shares – not dissimilar to the RuSACCOs). Moreover, 70% of the profit is distributed as dividends to shareholders, the balance being retained within the cooperative. Cooperative unions also provide training for member cooperatives on a cluster basis; however, training is infrequent and irregular due to the unions' financial constraints. Training can include bookkeeping, management, saving mobilisation and credit disbursement. In most cases, training is provided after a rapid needs assessment. Unions assign cooperative promotional agents at the primary cooperative level in a cluster form, usually 1 agent for 5 primary cooperatives.

Internal rules, regulations and capacity-building efforts for cooperatives (primary, RuSACCOs and unions) are not fully tailored to the needs of farmers. Efforts by the government to provide capacity building

[12] Ethiopia Case Study at mftransparency.org

for cooperatives and unions currently fall short. For instance, unions struggle with logistics making it difficult for them to monitor primary cooperatives effectively and provide timely and regular technical support. They are also short of skilled personnel (e.g., loan officers and bookkeepers at primary cooperative level) to provide sufficient support to member cooperatives. The Cooperative Promotion and Marketing Office has struggled to coordinate and strengthen cooperatives or to sustain initiatives and dialogue around how cooperatives could be supported to function better. There are few linkages between cooperatives, unions and providers of rural finance, with cooperatives struggling to mobilise funds. Since RuSACCOs, primary cooperatives and unions do not receive funding from MFIs, they can at times perceive each other as competitors.

Private enterprises are not generally a source of credit to farmers. Many farmers buy inputs from different retail shops and sell their outputs to local market traders, who are the major buyers of their products. Most of these transactions take place on a cash basis. Companies (input companies/importers, wholesalers and processors) that supply products to the retailers, processing companies, or wholesalers (who buy outputs from the traders) also do business in cash or maintain only a few days of credit with their trade partners. There is therefore limited scope for farmers to get credit support from these enterprises. In Tigray and SNNP, there are a handful of grain traders who advance funds to selected farmers; however, this is based purely on informal, trust relationships and is very limited in scope, meaning there is little potential to expand.

Access to credit is particularly low within the Muslim community

Muslim women FGD participants in Raya Alamata (Tigray) indicated they faced pressure from their religious leaders not to take loans from MFIs. Religious leaders warned members that they would not provide funeral and other spiritual services if their members had enrolled in interest-bearing loan services. Some of them ignored these warnings to take loans and negotiate informally. The MFI (DECSI) has adopted an approach of in-kind loans to respond to the problem.

There is an insufficient supply of financial services tailored to the Muslim population. According to the 2007 census, some 4% of the population in Tigray and over 14% in SNNP is Muslim[13]. Their faith does not allow the giving or taking of interest-bearing loans (usury) and members of the community therefore face challenges from religious leaders if they wish to access credit from MFIs. DECSI in Tigray has therefore started providing an in-kind loan service called Murabaha[14]. It is based on a needs assessment and can be provided individually or as a group loan, depending on the client's preference; however, clients need to produce a business plan before a loan can be processed. During the market assessment, DECSI's general manager stated that through April 2015 the organisation had provided a total of ETB 806,832 in Islamic loans to 63 people through individual and small group lending. These loans cover the purchase of water pumps, irrigation tools and sewing machines, as well as dairy production, weaving etc. Areas in Tigray where the demand for Islamic loans is high are Alamata, Entecho, Adwa, Maichew, Wenberta and Agula woredas.

OMO in SNNP has yet to develop a financial product aimed at the Muslim community but has plans to create products this fiscal year. There is significant demand in Silte, Alaba and Meskan woredas for financial products that are Sharia-compliant; OMO is in the process of visiting MFIs with experience of Sharia-based financial products in order to better understand them. They are also eager to benefit from expertise and experience offered by donors and NGOs to properly establish and operate this type of product. Smaller MFIs in both Tigray and SNNP have generally not yet thought about introducing Islamic finance; however, as there is a significant Muslim population across the country, there are opportunities for introduction elsewhere and scale-up to support greater financial access for these communities.

Additional forms of credit are present, but their use is limited. Both farmers and cooperative unions keep grain for long periods of time, but they do not currently use it as security for borrowing. A number of primary cooperatives have good but underutilised warehouse facilities. Many cooperative unions similarly have good warehouse facilities but tend to use them only temporarily, between buying produce from primary cooperatives and selling it to wholesalers or processors. Pooling produce and storing it safely in warehouses could be an avenue for accessing credit, with receipts acting as security. A few new systems for promoting this form of

[13] https://en.wikipedia.org/wiki/Tigray_Region for Tigray and https://en.wikipedia.org/wiki/Southern_Nations,_Nationalities,_and_Peoples%27_Region for SNNP

[14] Murabaha is an Islamic financing structure, where an intermediary buys a property with free and clear title to it. The intermediary and prospective buyer then agree upon a sale price (including an agreed profit for the intermediary) that can be made through a series of instalments, or as a lump sum payment as per http://www.investopedia.com/terms/m/murabaha.asp

access to credit are being trialled and, if successful, could be scaled up. Credit inventory or warehouse receipt systems are being practised for exportable items like pulses or coffee, but wider application of it to major crops has not been used so far. ATA, in its new cluster-based development plan, incorporated the initiation of credit inventory for selected crops, and the details of how this will work are still being developed.

Crop insurance is being introduced but remains at a nascent stage. Crop insurance is being rolled out in Tigray by DECSI and Nyala Insurance in collaboration with Relief Society of Tigray (REST), Africa insurance companies, Mekele University, Oxfam USA and other international partners. Weather Index crop insurance is linked to a weather index measuring rain fall deficiency (drought), but currently no other factors of crop failure. Weather Index insurance in Tigray was first piloted in 2009 with 200 farmers. This was scaled up to 1,308 farmers across 5 kebeles in 2010. Currently, the initiative works in 11 woredas, 81 kebeles and with 26,672 farmers in Tigray[15]. Farmers are insured for both long-cycle crops (sorghum, wheat, maize, barley and bean) and short-cycle crops, and can pay insurance premiums either in cash or by providing labour toward risk-reducing activities in the community. Paying through labour is the favoured option by farmers; for example, in Raya Azobo, 426 farmers paid premiums in cash compared to 3,016 farmers who paid through labour. In Raya Alamata, 250 farmers paid in cash while 2,250 paid through labour.

In SNNP crop insurance has not taken off due to lack of demand from farmers, according to the representative of Nyala Insurance. Instead, they have introduced livestock insurance in Wolayeta zone (in association with World Vision).h World Vision organises livestock producer groups and then links them with Nyala Insurance. World Vision is providing initial premiums on behalf of farmers. Although the insurance company argued there was a lack of demand for insurance in the area, the market assessment separately found that a potential barrier to demand was a lack of knowledge about the presence and features of crop insurance among local farmers.

Mobile money has the potential to change the dynamics of money transfers and access to credit. Mobile money was introduced in Ethiopia under the brand name of M-Birr by MOSS ICT. The service is provided by the five largest MFIs in different regions of Ethiopia, including DECSI in Tigray and OMO in SNNP. DECSI first piloted M-BIRR in 2013 in two woredas, and now has 245 agents working in the area. DECSI trains agents as well as the managers, accountants and auditors of each branch. Transactions are implemented via mobile networks, but an offline version is in development.

OMO in SNNP is also testing M-Birr (mobile banking) in several areas. It is preparing to scale-up M-Birr across all 136 woredas in the region and have identified 650 mobile bank agents who are already clients of the organisation. Agents will have greater outreach than the existing branch network to provide mobile banking services to the rural population. As at DECSI, training is provided to agents and OMO branch staff. Agents will receive mobile hardware free of cost but will need a minimum of ETB 10,000 capital. Existing programmes are working to support mobile banking and electronic payments solutions across the country, specifically PEPE.

Projects and programmes are trying to develop new systems involving MFIs and cooperatives to create access to credit for farmers. A number of projects funded by USAID and DFID, as well as programmes such as the Agriculture Transformation Agency (ATA) are trying out new systems to support greater access to finance for farmers through both MFIs and cooperatives.

For example, ATA is collaborating with commercial banks and MFIs to offer vouchers (via cooperatives) to farmers requiring support to purchase inputs (detailed above). The DFID-funded Private Enterprise Programme Ethiopia (PEPE) includes a component specifically focused on assisting microfinance institutions to make more credit available to micro, small and medium-sized enterprises. PEPE is also looking at branchless banking and making MFI services available via SACCOs as part of its scope. Its target is to increase access to credit for 20,000 farmers and support increased savings for 350,000 individuals. These savings can then provide the basis for expanded lending from RuSACCOs. Although PEPE has a dual urban/rural focus, there is good scope to collaborate with this project and integrate its learning into LIFT interventions, in particular findings around mobile banking and electronic payments. Separately, the GRAD project (funded by USAID and implemented by CARE and SNV) is working in partnership with leading MFIs in Tigray and SNNP to create access to various credit products for their target population. USAID and JICA are also supporting crop insurance initiatives in various ways.

[15]The insured woredas are Raya Alamata, Raya Azobo, QolaTemben, SaesitTsaedaAmeba, Kulte Awelaelo, Atsbi Wenberta, Adwa, Ahefero, Tehtay Abereglie, Seharti Samre and Werei Leke.

While many activities are taking place within the access to finance space, specific gaps remain, especially with regard to addressing security challenges (for example through SLLC-linked products and agricultural leasing), supporting greater access across different populations (Islamic finance), and mitigating risks within rural lending (insurance).

Gender Equality and Social Inclusion

Members of vulnerable groups (VG), like other farmers, need credit to purchase agricultural inputs, pay for agricultural services and labour, to take care of small ruminants and fund small-scale agribusiness like dairy production, fattening, etc. Some also need money for petty trading or general household needs (such as bridging food shortages, covering medical expenses, educating children etc.). Women, the elderly and people with physical disabilities are generally perceived by MFIs as being less able to repay loans, and their likelihood of accessing credit from formal financial institutions is comparatively low. For MFIs, group guarantee is the most common form of security, but vulnerable groups often find themselves at a disadvantage. Other farmers can be unwilling to include them in groups for fear they will reduce the group's credit worthiness. Addressing this will require significant interventions aimed at changing policies, or tailoring schemes specifically for the needs of VGs.

Another potential source of credit for VGs is Rural Savings and Credit Cooperatives (RuSACCOs). However, for RuSACCOs (as for MFIs), the provision of credit depends on the savings members are able to make. As demand for credit from cooperatives is high, a shortage of available funds means that VGs sometimes struggle to access loans even when they are able to save regularly. The market assessment could not definitively determine the extent to which this is a function of discrimination rather than late applications for funds by vulnerable groups, but both factors are present. There is currently no mechanism within RuSACCOs to give preference to VGs when disbursing funds.

Recently, a few MFIs (DECSI for example) have started introducing individual lending. This opens a window for VGs struggling to access standard group loans, as financial institutions are increasingly able to assess the credit worthiness of individuals based on their specific situation. Many individuals spoken to as part of the assessment were enthusiastic about this development and keen for these activities be scaled up, although it is not clear whether individual assessments will in practice result in more lending to these groups. Another option to support greater lending to VGs could be to work with VG-only groups, though this has not yet been tried. Separately, there seems to be an awareness gap between women and men regarding the use of land certificates to access credit. The ELAP baseline survey 2013 shows that, whereas 29 percent of male-headed households understood they could use land as a security against loans, only 19 percent of women-headed households had the same understanding.

The market assessment found that many spouses consult each other and make joint decisions over the size and purpose of loans, as both of them need to appear in person to sign for it. There is no visible difference in the purpose of credit between husband and wife, and they set their priorities based on specific household needs and challenges. The assessment found that there was a great deal of consultation and negotiation between spouses to balance priorities and capacity to pay. In terms of loan size, however, women tended to be more conservative than men. Female household heads were similarly more risk-averse than male household heads and tended to take out smaller loans. A few instances also emerged of credit income being misused by men for non-family benefits, leading to disputes and, at times, negative outcomes such as distressed land rental to repay loans.

Except for the scheme for landless people, there is no policy preference shown towards VGs in recognition of the particular challenges they face. MFIs generally do not have special policies to support VGs and only those active in the labour market (18-60 years old) are eligible to access credit. This means the elderly can be particularly disadvantaged, even if they have their own land and land certificates. Access to credit for women is also highly variable between different institutions. A few niche organisations focus on providing credit to vulnerable groups, but they lack scale and reach, particularly in rural areas.

Environment and Climate Change

No specific environmental issues were identified during the market assessment for access to finance, although it is expected that opportunities will be identified as mechanisms to enhance financial markets are explored.

Stakeholder Mapping

A large number of stakeholders are involved in the access to credit sector in Tigray and SNNP. Some are directly involved in credit provision to farmers while others perform different support functions or are active on the rules and regulations side. A full list of stakeholders for Tigray and SNNP is broken down in Annex 4.

Some stakeholders within the access to credit sector in Tigray and SNNP have more influence than others. Table 8 presents a significant stakeholder analysis, describing key stakeholders in Tigray and SNNP, as well as their key interests and level of influence.

Table 8: Significant stakeholder analysis

Who	Interest (what do they want?)	Influence (how much power do they have and over what?)	Remarks
MFIs	High interest to disburse credit and generate income	High influence as they are established to promote savings and improve the lives and livelihoods of the poor through provision of credit to generate income	They want to remain dominant so do not encourage other financial institutions (e.g. saving and credit cooperatives and RuSACCOs) to flourish in rural settings
Donor-funded Government Projects	High interest to promote rural financing to address poverty	High influence on strengthening saving and credit cooperatives, including RuSACCOs, to let them meet the demand for credit	Focus on capacity building to strengthen saving credit institutions
Farmers	High interest in obtaining credit with preferential terms	Low influence since they do not have bargaining power Low financial capacity to save to qualify for credit provision	Low capacity to mobilise savings
Kebele Administration	High interest to have access for credit for the kebele community to alleviate poverty	Low influence since most of their time is devoted to administrative tasks such as tax collection, dispute resolution and promotion of agricultural extension, etc.	Low capacity to mobilise the community to save
Saving and Credit Cooperatives including RuSACCOs	High interest to promote saving and credit in the rural setting	Low influence due to poor image and reputation in the previous Derg regime High outstanding loans and low capacity to collect repayment Limited loanable capital Limited influence to mobilise savings Limited membership in some areas	Limited support from stakeholders (government, NGOs, MFIs) to get loanable capital
Unions	High interest to become alternative loan providers, and to grow and engage in international trade and industries	Low influence since member primary cooperatives are weak with low savings	Limited loanable capital
Marketing and Cooperative Office	Low interest as they do not have necessary systems and structures at lower levels	Low influence as they do not have the necessary power to influence credit providers e.g. MFIs	
NGOs	Low interest due to the Charities and Societies law	Their contribution in this sector is very insignificant so their influence to bring about visible changes is low	The Charities and Societies law does not encourage them to promote credit provision

Who	Interest (what do they want?)	Influence (how much power do they have and over what?)	Remarks
National Bank of Ethiopia	High interest in proper functioning of financial institutions, and to ensure access to credit for the people	High influence since they make regulations and directives under which the financial institutions need to operate	NBE plays the role of a regulator in the access to credit system

Stakeholders' interests and level of influence can evolve over time. For instance, the introduction of mobile money could help farmers to manage their money more effectively and reduce their need to access credit. Similarly, crop insurance could give farmers more confidence in their agricultural production and stimulate more investment in their land. Mobile money and insurance are not specifically included in the significant stakeholder table, as their current reach is marginal, but they are worth bearing in mind for possible partnerships to expand reach and otherwise support LIFT's interventions.

A summary of the most relevant stakeholders for the implementation of LIFT's interventions in Tigray and SNNP is shown in Table 9.

Table 9: Influence – Importance matrix in access to credit sector

	Low Influence	High influence
High Importance	Farmers Kebele Administration Saving and Credit Cooperatives Cooperative Unions Commercial Banks	MFIs Donor-funded Government Project
Low importance	Marketing & Cooperative Office NGOs	

Analysis of Symptoms and Causes of Sectorial Failure

As in Amhara and Oromia, the market assessment shows a set of pre-existing constraints within the rural access to credit sector which has led to the sector failing to provide rentees and smallholder farmers with sufficient support. In this section we aim to differentiate symptoms from causes, to ensure our interventions address the root causes preventing end-beneficiaries from participating in and fully benefiting from access to credit. A number of symptoms and causes which exist at the national level have previously been identified in earlier market assessment undertaken in Oromia and Amhara. Others are more regional, and it is these which frame the focus of the following sub-sections.

Symptoms

The following symptoms are present in Tigray and SNNP, as well as Oromia and Amhara:

Core

- *The amount and size of credit going to farmers is insufficient.* Loan amounts, when disbursed, are too small to meet the needs of most borrowers. Many existing products ignore the fluctuating incomes of smallholder farmers and are limited in scope in terms of acceptable security. The level of capital within RuSACCOs and MFIs is often too low, so credit is in very short supply. People from VGs in particular struggle to access loans as they are often excluded from lending groups and products are not tailored to their needs.
- *There is limited understanding of the financial instruments available.* Across all stakeholders there is only a partial understanding of what financing options are available and for whom they are suitable. There is also limited understanding of emerging products and opportunities such as mobile banking and micro-insurance. Vulnerable groups especially receive little support and mentoring on how to maximise the benefits of different financial products, and financial institutions have limited interest in better understanding and serving this customer segment.

Supporting functions

- *Primary cooperatives are not used to provide (input) credit to farmers.* The capacity of cooperatives in terms of finance, human resources and management are limited, making it difficult for them to effectively provide credit and monitor loans.

In addition, a number of region-specific symptoms emerge in Tigray and SNNP:

Core

- *Farmers are hesitant to borrow money and only do so when they have no other option* (i.e. via private sources etc.). This is despite reasonable coverage by MFIs and RuSACCOs in both regions. In contrast to Amhara and Oromia, where RuSACCOs are popular and most farmers belong to one, in Tigray and SNNP membership is less common and more localised. Despite saving regularly, some farmers have failed to access credit with a RuSACCO due to a lack of available funds. This has damaged trust in a number of areas.
- *Access to credit is particularly low for Muslim communities, partly because of religious objections to interest-based loans.* To address this, DECSI (Tigray) is currently providing loans in the form of materials, a form of credit which is gaining in popularity. Notably, no similar product exists in SNNP, despite having a greater Muslim population. A sharia-compliant product could potentially support much greater access in SNNP.
- *The portfolio of financial products and services offered in Tigray and SNNP remains limited.* Many existing products do not fully suit farmers' needs or their ability to repay. Product innovations – particularly in mobile banking and insurance – are ongoing but have not reached sufficient scale to effectively and sustainably reach target beneficiaries.

Supporting functions

- *Preference for lending for agri-business as opposed to crop-cultivation.* In Tigray, DECSI has started providing individual loans to agri-businesses, based on the assets of these businesses and a submitted business plan. This type of lending seems somewhat preferred to offering loans for crop-cultivation.

Rules (policies and institutions)

- *Buying inputs using credit is very difficult, constraining investment.* In Tigray, directives from regional government directly prevent such lending by MFIs; while it is possible in SNNP, it is a very limited activity for OMO, the largest MFI. A lack of funds for inputs can lead to distressed lending by farmers when they are in need of cash, and some farmers turn to local moneylenders who charge very high interest (50% or more per annum) on loans. It is a further barrier to farmers accessing MFI products and services and being able to effectively invest in their land.

Causes

The cause of all these symptoms is that the sector is failing to respond adequately. As a result, smallholder farmers are not able to access credit that would allow them to invest in their land and increase their incomes. The main contributors to failures in the rural land rental sector are:

- *Low incentive to lend by MFIs*: a key factor for the low incentive of MFIs to lend to smallholder farmers is their lack of security. As farmers cannot use their land as guarantee (unlike in urban areas), the risk of awarding loans to them is very high. Some farmers are able to use trees or crop production as a guarantee, but the cost of recovery by the financial institutions is too high. In addition, existing regulations indirectly limit loan sizes and severely constrain lending to individuals. The capacity of MFIs and RuSACCOs to mobilise savings is also limited, leading them to rely on external sources of funding (for example, commercial banks and international programmes) for credit provision. This increases loan costs, reducing the profitability of lending to smallholder farmers and the associated incentive to invest. There are currently no refinancing schemes available for MFIs, which further limits their willingness to tap the smallholder farmers' credit sector.

- *Information asymmetries:*

MFIs, RuSACCOs and other financial institutions have their own rules and guidelines which are not always aligned with the needs of farmers. Farmers prefer individual based lending and require flexible financial products which can be adapted to their crop-specific needs. Farmers' cash flow may vary depending on their crop, for example, and require payment schedules to be tailored accordingly. Current methodologies and product features do not allow for different needs, something which has a particular impact on minority groups such as the Muslim community.

Similarly, loan assessments made by financial institutions fail to consider certain customer characteristics and resources, such as stored crops or potential income from land. Although there are a number of alternative ways to facilitate credit, including credit inventory systems, these are generally not being used because the relevant stakeholders are not aware of them. A number of innovations, such as weather insurance and mobile money, are currently being piloted, but they have limited outreach and their ability to scale up is not yet clear. However, if successful, these innovations could play an instrumental role in facilitating access.

Lastly, many farmers have concerns about taking loans and do not always understand the products available to them and their potential advantages.

- *Institutional failures:* Primary cooperatives could potentially support farmers to get some credit but the low capacity of both their own staff and many farmers means they cannot reliably provide this type of service. Many cooperatives struggle with shortages in skilled human resources (due to high staff turnover), a shortage of capital and limited access to credit (primary cooperatives cannot individually access credit from banks). Cooperative Unions are highly dependent on government security for accessing bank loans and do not have the capacity to set up credit schemes for primary cooperatives.
- RuSACCOs similarly have limited capacity in labour and financing, and in Tigray and SNNP are also not available in all woredas and kebeles (despite the efforts of the GoE to expand them).
- Financial institutions lack access to sufficient funds for lending, reducing the credit supply in rural areas. Although MFIs and some RuSACCOs are able to access some funds via commercial banks and international programmes, these channels remain insufficient.
- *Policy and regulatory failures*: The inability to use the produce of land as a guarantee in rural areas is a serious limitation on the ability of smallholder farmers to access credit. Maximum loan sizes and central limitations on lending to individuals also reduce the availability and size of loans. A lack of input credit, which has been limited in some regions due to rising defaults, further constrains farmers' ability to borrow and invest. Alternative mechanisms such as the securitisation of potential produce of the land can offset these failures to an extent, but challenges remain.

Indicative List of Interventions and Activities

The interventions and activities that will be undertaken in Tigray and SNNP will address the existing constraints in the access to credit sector. As explained further in section 5.1 of this report, the overall interventions will inevitably be aligned with those being implemented in Amhara and Oromia as there are many similarities in the causes that limit the ability of smallholder farmers to benefit from the sector.

For purposes of clarity, the activities that we will undertake in Tigray and SNNP have been categorised as follows:

- Activities that are currently being implemented in Amhara and Oromia and will be implemented in Tigray and SNNP through adoption and scaling up. These interventions are relatively standard, and no real adjustment will be required to adopt/scale up their use in the new regions (e.g. awareness campaign on how to access credit using SLLC).
- Activities that are currently being implemented in Amhara and Oromia and will be implemented in Tigray and SNNP through adaptation. In essence, the objectives of the intervention/activities will remain the same but there will be a need to adjust them to address the specificities of the new regions (e.g. we will need to work with MFIs in Tigray and SNNP to adapt the technology that is being used in Amhara and Oromia to provide credit using the produce of land as a guarantee).
- New activities that will be implemented in Tigray and SNNP (e.g. facilitate development of Sharia-compliant lending).

Table 10 presents the list of activities that will be implemented in Tigray and SNNP. In-depth detail of these activities will be provided with the submission of the next deliverable, the Intervention Plan.

Table 10. Access to credit interventions and activities

Overall interventions	Activities to be implemented in Tigray & SNNP through adoption/scaling up	Activities to be implemented in Tigray & SNNP through adaptation (might require pilot/assessment)	New activities to be implemented in Tigray & SNNP (might require pilot)
Promote development of new agricultural individual loan products linked to SLLC	Increase farmers' awareness and understanding of SLLC-linked credit (once established), specifically its key characteristics and advantages.	Support MFIs in Tigray and SNNP to develop the internal systems (risk management; lending procedures; calculations) required to responsibly provide SLLC-linked credit to farmers. Support MFIs to pilot and refine SLLC-linked products for rural communities. Facilitate scale-up, if piloting is successful.	Train EPLAUs on new systems and products being rolled out and their relevant responsibilities. Develop and pilot SLLC-linked product aimed at women-headed households.
Promote development of new products in agricultural finance (credit related)	Expand leasing–renting models (if viable) for use of agro-machinery, involving MFIs and/or leasing companies.	Determine the specific needs of VGs and ensure these are considered in the development of new financial products and services.	Explore development and/or expansion of insurance solutions tailored to the needs of farmers. Facilitate wider roll-out by MFIs of Sharia-compliant lending, leveraging learning from existing models.
Promote partnerships in finance to overcome risk and market limitations	Support development of financial policies to allow increased access to credit in rural areas. Facilitate re-financing of MFIs through the involvement of interested stakeholders.		Facilitate regular information sharing between partner MFIs to discuss successes and difficulties in implementing new products such as SLLC-linked credit.
Improve knowledge and information on supply and demand of rural credit services	Promote exchanges of information with MFIs and commercial banks to improve knowledge on supply and demand of rural access to credit market.	Increase farmers' awareness of different financial products (leasing, insurance, Sharia-compliant products), encouraging diversification from traditional group lending.	

Theory of Change

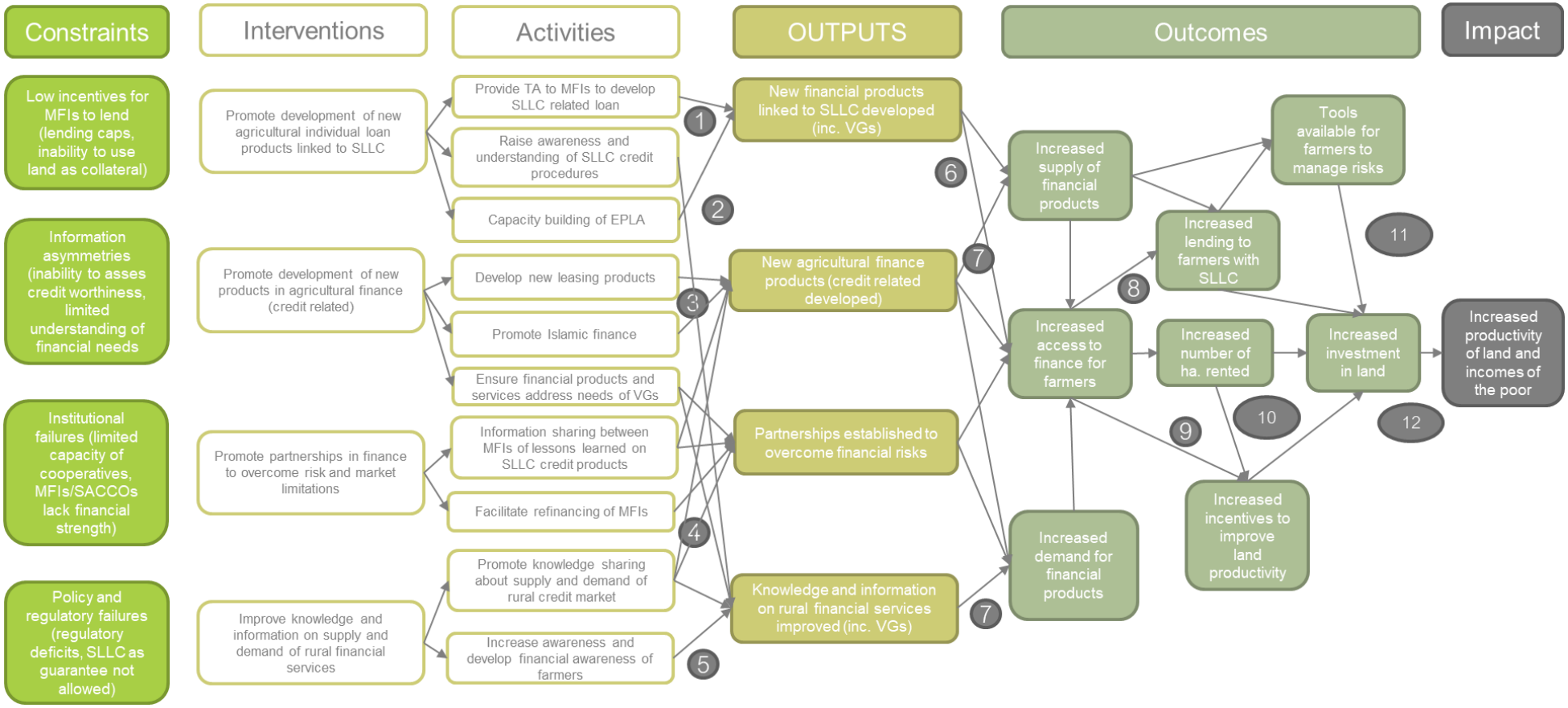
The theory of change for the access to credit sector describes the link between the constraints, proposed interventions and desired outputs/outcomes of the programme.

Figure 4 presents the theory of change for access to credit. The constraints identified in Tigray and SNNP are broadly the same as those seen in Amhara and Oromia, but a number of the symptoms through which they manifest themselves are different. Given this, although the overall interventions are the same as those in the first market assessment, some activities differ. For example, more time may need to be allocated to awareness raising among farmers as part of supporting greater take-up of financial products by those who MFIs do not currently reach. Opportunities around Islamic finance and insurance will also be explored.

The changes envisioned in the access to credit sector for the overall better functioning of the land sector are made under certain assumptions. These assumptions are indicated as numbers in Figure 4 and detailed in the table below.

Assumption #	Detailed assumptions
Assumption 1	Financial institutions willing to develop new products (linked to SLLC)
Assumption 2	New systems effectively reduce risk of providing credit to farmers
Assumption 3	Farmers willing to adopt technology to access credit
Assumption 4	Regulatory constraints are overcome
Assumption 5	Financial institutions interested in expending their client base
Assumption 6	Farmers willing to overcome the risk of using SLLC to access finance
Assumption 7	Farmers find that new products address their credit needs
Assumption 8	Farmers willing to take the risks of accessing credit
Assumption 9	Cash rentees invest more in land than sharecropping
Assumption 10	New rentees willing to invest in land
Assumption 11	Increased capital not diverted to other uses
Assumption 12	Additional investment generated put to economically productive use

Figure 4: Theory of change for access to credit



Section 4: Environment and Conservation Agriculture

Description of the Sector

Like the rest of Ethiopia, the agricultural sector in Tigray and SNNP is dominated by smallholder farmers. Farmers use their land prudently to grow multiple crops, on the one hand to ensure food security and on the other to have income to satisfy other household needs. The main crops are teff, wheat, maize, barley and sorghum, although some farmers also cultivate beans, oilseeds and vegetables, depending on soil condition and the availability of irrigation facilities. Crop yields are low compared to other countries, and the general trend over the past decade has been that any significant increases in crop production have been driven by an expansion of the areas cultivated rather than improved land productivity. Improving productivity of existing agricultural land should therefore be a key focus for development across all LIFT regions.

Although yields vary significantly both within and across regions due to multiple factors (including differences in topography, soil fertility, climatic conditions, type of crop, etc.), it is clear that where farmers adopt improved and appropriate technologies, they see better outcomes than when they practice traditional methods (Table 11). Supporting the adoption of better technologies and methods could, thus, go a long way towards improving productivity and economic outcomes.

Table 11: Yield and profit of major crops for farmers (one ha of land)

Crop	A	B	C (A*B)	D	E (C- D)
	Yield per Ha (quintal)	Average price per quintal (Birr)	Total value of produce (Birr)	Production Cost (Birr)	Gross profit (Birr)
Wheat (row planting)	48	900	43,200	17,160	26,040
Wheat (broadcasting)	32	900	28,800	10,450	18,350
Maize	60	450	27,000	14,000	14,000

Source: Primary Interview

Extension Services

Extension departments from the Bureau of Agriculture are well structured both at the woreda and kebele level, particularly in Tigray. At the kebele level, farmers are organised in groups of 30 and then into sub-groups of 5. Development agents at the kebele level work with these development groups to disseminate agricultural technology and information. Representatives from each group also receive training on various aspects of improved technology, then disseminate their learning to others in their group. Training takes place at Farmers' Training Centres (FTC) and occasionally development agents also visit farmers' fields. The extension department is better staffed in Tigray than in SNNP, as most kebeles have 4 development agents working with farmers, compared to SNNP where there is a shortage of development agents in many kebeles. Staff turnover is a key challenge within extension services, as many agents leave if they find better jobs.

As in Amhara and Oromia, bureaux of agriculture at the woreda level are broken down into departments, with designated personnel looking after specific issues such as crop production, irrigation, cooperatives, animal health, etc. These departments work closely with development agents.

Separately, the two regional arms of the Ethiopian Institute of Agricultural Research (EIAR), the Tigray Agricultural Research Institute (TARI) and Southern Agricultural Research Institute (SARI) work with a limited number of model farmers to test new varieties and agricultural technology. Model farmers are usually larger-scale farmers who absorb advanced information and techniques by participating in trials of the different research institutions. Successful technologies are then promoted by extension departments to a wider population of farmers.

In addition to more traditional extension services, ATA has launched an ICT platform which provides information to farmers. The platform includes a hotline (under Ethiotelecom). Anyone can call 8028 to get specific agriculture-related information. Farmers who call answer a few screening questions to determine their region and preferred language; they are then connected to get the required information in their own language.

Initially the hotline received calls mostly from model farmers and development agents16; however, with time and effective promotion it has the potential to help many more farmers.

Seeds

Although the Bureau of Agriculture is primarily responsible for supplying improved seeds to farmers, they are not readily available. More than three-quarters of farmers in Tigray and over half in SNNP depend on other farmers or grain traders for seeds. In SNNP, just over a third of farmers receive seeds from the Bureau of Agriculture and only 9% receive them from cooperatives. In Tigray, 22% of farmers receive seeds via cooperatives, but very few access them directly from the Bureau of Agriculture. The insufficient supply of seeds is well understood and a number of programmes (AGP, ATA. Ethiopian Seed Enterprise, among others) are working to promote the production of improved seeds and facilitate farmers' access. Access is slowly improving, but the vast majority of farmers are currently unable to access a sufficient quantity of improved seeds.

Fertilisers

In addition to providing improved seeds, the Bureau of Agriculture, together with development agents, provides recommendations to farmers on the correct dosages of chemical fertilisers. The physical supply of fertilisers – based on a detailed estimation of demand – Is managed mainly by cooperatives (Tigray) or by the Bureau itself (SNNP).

Figure 5. Bags for packaging blended fertiliser in Tigray

The market assessment showed that most farmers in the study areas are currently getting DAP and urea as prescribed fertilisers for their land and crops. The Agriculture Transformation Agency (ATA) rolled out Ethiosys, a programme aimed at providing more nuanced and updated estimates of nutrient requirements of land in specific woredas and kebeles. ATA then supported one cooperative union in each region to set up fertiliser-blending plants to produce blended fertilisers appropriate to the needs of the soil. In 2015, only a few woredas received this blended fertiliser, but the Bureau of Agriculture is planning for most farmers to receive blended fertiliser from next year. If rolled out properly, this has the potential to improve soil fertility and increase crop yields significantly.

Many farmers interviewed as part of the market assessment highlighted that they did not receive the quantity of fertiliser they required on time, which hampered their production of crops. A number of factors seem to be contributing to this, including a lengthy process for demand estimation under the traditional system and fertiliser import and distribution challenges. Paying for fertiliser is also difficult, particularly in Tigray where farmers pay for it in cash. In SNNP, there is a mixed cash and credit system in place; farmers who are unable to pay for fertilisers in cash ahead of planting are able to access coupons from OMO microfinance to use as payment. These farmers then refund the coupons after their harvest.

In addition to existing initiatives aimed at increasing access to quality fertilisers, many farmers have some knowledge about how to produce compost – both on the ground and in pits – as a result of training provided by development agents. However, it takes around four months to produce compost and farmers complain that the process is very labour intensive.

Some farmers in SNNP use compost for perennial crops, vegetable seedlings and chilli. For annual crops, use of compost is limited, primarily because of a shortage of biomass. This is generally attributable to the tendency of farmers to use manure for fuel. In Tigray, most farmers are trained by DAs in compost-production methods, and are encouraged to use it regularly; however, due to the shortage of biomass, not all farmers produce enough to meet their needs. In some areas, where a number of farmers have a surplus of compost, small-scale trading takes place between farmers. The indicative price is 80 birr per load (approx. 40 quintal). Although the scale of this trade is limited, it demonstrates awareness of the use of compost and a willingness to pay for compost when available.

[16] http://www.theguardian.com/global-development/2014/sep/19/ethiopia-agriculture-hotline-opportunities-farmers

General use of organic fertilisers is greater in Tigray (31%) and SNNP (25%) than in Amhara and Oromia[17], but there remains an interesting opportunity to expand this use, for example by encouraging greater production of compost among national companies (such as Soil and More) and combining this with stronger marketing in relevant communities and regions.

Crop Protection Items

The use of different types of crop protection items is very limited, and the Bureau of Agriculture discourages farmers from excessive use of agro-chemicals. Some of the pesticides, insecticides, herbicides and chemicals for storage are recommended by the Bureau of Agriculture, and farmers can get those from agriculture office (in SNNP) or from cooperatives (in Tigray). Not all crop protection items are available when farmers need them, however, leading to many farmers purchasing what they require in local markets. Agriculture offices and cooperatives have direct contract with private importers and suppliers, but these private companies also maintain a proprietary retail network in local markets to better reach farmers. There are some good, responsible companies providing high-quality crop protection items, but many also market low-cost products of questionable quality. There is also little-or-no knowledge dissemination by key market actors on the use, dosage and application of different crop protection items, making it difficult for farmers to know what they are getting. In some instances, chemicals used are hazardous to the health of both farmers and their local environment.

Most farmers are aware of integrated pest management (IPM), since a lot of them received training on IPM from the agriculture department. However, adoption of IPM is very limited at the field level, since limited follow up is provided by development agents.

Input Dealers

Farmers are meant to get seeds, fertilisers and crop protection items mostly from the Bureau of Agriculture and cooperatives. However, as supply is scarce and not all types of seeds are available via traditional channels, many also depend on other farmers for their supply. In addition, there are shops in local markets selling seeds and crop protection items, but they are not widespread enough to fully cover demand. A number of mobile vendors sell seeds and crop protection items at weekly markets at the kebele level, moving from one market to another. The quality of their products is often questionable, but farmers still buy from them when they are unable to source sufficient inputs elsewhere.

Figure 6: Traditional storage in the basement

One reason why formal input retailers are scarce is that they require a licence. A licence is given only if the owner of the business is (or they employ) a qualified agriculture graduate (agronomist/veterinary professional). Some input retail shops manage demonstration plots and provide advice to farmers to promote their business, but they often receive very limited training from distributors and agro-chemical companies on product use and the accurate identification of diseases. Informal retail shops and mobile vendors mostly sell cheap agro-chemicals together with other products, and most lack the skills to provide effective advice to farmers.

Some development projects, including the USAID-funded GRAD, work with input retailers, but their support is limited. Both ATA and AGP intend to integrate input retailers into the second phase of their development plan, which, if successful, would support retailers to be both more knowledgeable and provide better products and services to farmers.

Storage and Processing

Farmers generally do not sell all of their harvest in one go. They do the basic cleaning and drying near their house or field. After threshing, the farmers separate sand, dirt and other inert materials from their grains and other crops. Farmers get different prices for their grains depending on the quality determined by traders. The price determinants are colour, shape, uniformity and cleanliness of the crop. The difference in price can be more than 150-200 birr from first-grade to second- and third-grade grain. Farmers keep their grains in

[17] Agriculture Production in Ethiopia: Results of 2012 ATA baseline survey, Nicholas Minot and Bradley Sawyer, IFPRI, 2013

traditional storage in the basement of their houses or in their bedrooms. Traders do little processing other than a second round of cleaning of the grains. Most of the required processing is done by the final processor, i.e. a flour mill for wheat or a brewery for barley. Some cooperative unions with their own facilities, such as flour mills, take responsibility for cleaning, sorting and grading, and have the appropriate machinery.

Some companies, such as Hi-Tech, are trying to promote low-cost storage bags for farmers. The capacity of storage bags ranges from 1 quintal to 1500 quintal, and last from 3 years to 15 years. The agriculture department and GRAD project also promote these low-cost environmentally friendly storage options. Some of the cooperative unions have their own storage facilities, with a capacity of 5,000-7,000 quintals. ATA is willing to work in its cluster plan with these cooperative unions to develop a warehouse receipt/credit inventory system.

Mechanisation

In both Tigray and SNNP, animal power plays a major role in agriculture. Farmers depend on their oxen for tilling and threshing. Most farmers have their own oxen, and families that do not own oxen rent them from neighbouring farmers. Donkeys and horse carts are used to bring inputs to the fields, transport crops from fields to farmers' houses and after post-harvest activities, from farmers' houses to market. Agricultural research institutes have conducted pilots on the usage of various machines and tools such as planters, tractors, walking tractors and combined harvesters, but the adoption of these is very limited. However, some entrepreneurs and commercial farmers who own big machines such as tractors rent them out after their own use. Some machine owners also come from neighbouring regions to rent out their tractors, especially from woredas in Oromia bordering SNNP. Large cooperative unions have one or more tractors to rent to their member farmers, although in reality most of them remain idle because of the high rental cost. Farmers are also unaware of the benefits of using machines for cultivation and post-harvest purposes and continue to rely on traditional animal power.

Irrigation

Irrigation can improve the productivity of crops significantly. Across Ethiopia most farmers practise rain-fed cultivation and organise their agricultural activities accordingly. Until recently, the majority of households in Tigray and SNNP did not have access to irrigation technology or facilities, as can be seen from the ATA 2012 baseline survey (Table 12).

Table 12: Availability of irrigation facilities

	Tigray	SNNP
Percentage of households with irrigation	9.5	6.6
Percentage of crop land that is irrigated	1.7	1.8

Source: Adapted from ATA Baseline Survey 2012

Over the past 3 years, however, the situation in Tigray seems to have changed dramatically. The Bureau of Agriculture, with support from regional government, has established large-scale irrigation facilities to give farmers greater access to water. This is helping them to achieve higher yields, cultivate different types of crops and improve crop intensity. In addition to these large-scale irrigation schemes, a number of simple, small-scale techniques (use of groundwater, hand-dug wells, lake and river pumping, rainwater harvesting, drip irrigation and treadle pumps) are also being promoted. Table 13 shows current levels of irrigation in Tigray, as well as plans for expanding access to irrigation facilities, according to the Bureau of Agriculture.

Table 13: Current situation of access to irrigation facilities in Tigray

Zone	2014-2015			2015-2016 (Plan)	
	Cultivable Land (Ha)	Irrigation Land (Ha)	Percentage	Irrigation Land (Ha)	Percentage
Central Zone	195,299	70,905.3	36.3	84,163	43.09
North West Zone	214,527	60,509.9	28.2	79,745.94	34.17
Western Zone	137,131	31,377.8	22.88	42,350.8	30.88

Zone	2014-2015			2015-2016 (Plan)	
Eastern Zone	93,227	40,074.15	42.99	47,710.45	51.18
Southern Zone (LIFT Target Area)	144,380	35,536.36	24.63	46,091.36	31.92
South East Zone	115,883	36,027.23	31.09	42,498.23	26.67
Mekele	6623	1396.05	21.08	1350	20.38
Total Tigray	907,070	275,853.79	30.41	343,909.78	37.91

Source: Primary information collected from Bureau of Agriculture, Irrigation Department

It appears that Tigray is undergoing a transformation in access to irrigation, moving from coverage of just 1.7% of total cultivable land to nearly 30.5%. The Bureau of Agriculture aims to continue expanding irrigation facilities to more farmers. Due to the Tigray's topography, not all farmers will be able to access the same type of irrigation; however, significant advances are being made. Mountainous areas, for example, may need to adopt other irrigation techniques (relaying of water with donkeys and then using drip irrigation, for example); farmers currently do not adopt other techniques, primarily because of long distances from water sources.

Figure 7. Borehole and canal for irrigating lands

There is less information available about the level of irrigation access in SNNP; however, during the market assessment, it was evident that here too the situation is improving. Farmers are aware of different irrigation techniques and commercial farms use irrigation facilities to cover their needs. Further efforts may be required by regional government in order to make notable advances, but there is some momentum. This suggests that the overall situation for irrigation is stronger in these two regions than in Amhara and Oromia.

In Tigray, however, although large irrigation facilities are increasingly available, their operation and maintenance is not standardised. Maintenance services and replacement parts are also very difficult to source locally. The assessment found that there was a great deal of water wastage in some irrigation facilities, as well as unsafe use of electricity. It will take time for the system to embrace private sector companies to set up repair shops so that farmers and users can get services when they need them.

Access to Market

Routes to market, and their associated challenges, are very similar in Tigray and SNNP compared to Amhara and Oromia. The major crops that farmers cultivate are teff, wheat, maize, barley and beans, with some also producing crops such as oilseeds, vegetables, fruits, pepper, garlic and onions on a limited scale. There is an established market chain, with farmers selling produce either to cooperatives or traders in nearby markets. The reach of cooperatives is generally weak, meaning that traders are the major buyers. In both cases, farmers bring their produce to buyers. For the majority of farmers there is a market relatively close (within 5-7 kilometres), though for some it is much further (up to 15 kilometres). Farmers are also generally price takers, with little influence over price levels, as these are largely driven by traders and, to some extent, cooperatives. Once bought, produce is sold on to be processed by different entities.

Conservation Agriculture

Some farmers do not want to use chemical fertiliser in their land as they believe chemical fertilisers can destroy their soil. Even when they are encouraged to take fertilisers from agriculture offices as per the recommendation of development agents, they do not apply them on their land. There is no documented justification for this

belief, but it persists. At the same time, a number of existing initiatives are working to develop permaculture[18] to produce sustainable agriculture without the use of chemical fertilisers or other items usually used by the farmers. There is a huge global demand for safe and organic food, and an organisation called Green Path Foods is trying to develop a system to cater to this market. They currently work out of a government nursery near Butajira in SNNP and are currently engaging with a small number of avocado farmers. They also promote some non-traditional crops such as lettuce, lavender, etc. Although this is unlikely to become mainstream in the short term, it can help farmers achieve a higher return from their produce and is worth exploring further.

Livestock Fodder

Most farmers have their own livestock, cows, donkeys and small ruminants. These are used for agricultural purposes during cultivation, post-harvest and transportation, but also provide a source of nutrition for farmers' families and can act as an emergency source of funds during times of need. Animal manure is used to produce compost as well as serve as an alternative to firewood for many households. There is lack of communal grazing fields in most areas, so farmers use crop residue to feed their animals, at times purchasing it from other farmers. Animals do not get fresh fodder often, which restricts their growth and general health. This especially affects farmers engaged in fattening animals. There may, therefore, be an opportunity for some farmers to grow high-yielding grass in order to sell it on to others. This has proven a very profitable business in other countries (for example, in the provinces of TraVinh, Can Tho and Soc Trang in South Vietnam) and could potentially be introduced.

Impact of the Current Drought on LIFT Interventions

Certain, largely lowland, areas of Ethiopia are currently experiencing a severe drought and GoE estimates that by January 2016 over 18 million people will require food aid. The severely drought effected areas are as follows:

- Much of Afar and Somali regions
- East Hararge zone in Oromia
- South and North Wollo in Amhara
- South and Eastern zones of Tigray
- North and South Omo, and Alaba Special Woreda in SNNP

As LIFT is not working in the Afar and Somali regions, the situation there will not directly affect its interventions. LIFT's M4P interventions are taking place in the woredas where SLLC is being carried out, but we are not working in the severely affected areas in Amhara, Oromia, and SNNP.

The lowland woreda of Raya Alamata in Tigray is significantly drought affected.

However, in all woredas where there is a lowland area, there will be some drought-affected pockets. It is also apparent that, while highland areas have generally had adequate rainfall to grow crops, the amount is reduced and often inadequate to fill the dams and other groundwater resources. This will have an effect on the water available for livestock and human populations.

It is not necessary to significantly alter the assessment to address the implications of the drought, partly because of the geographical limitations listed above and because the major impacts at farmer level will be likely not to take place until May 2016, by which time the situation will have been alleviated by the short rains. Initial interventions will also be in the areas of land rental and access to credit, which will not be directly affected by the drought. The interventions currently being undertaken in Oromia and Amhara are also not directly involved with livestock.

However, the regional and woreda authorities may be understandably distracted from their support to LIFT programmes by the higher priority of the food aid activities to the detriment of the M4P interventions.

In the Intervention Plan that follows the market assessment, the timing and nature of detailed interventions will take account of the drought impact on a woreda by woreda basis and be adjusted accordingly. For example, interventions will be piloted in the less affected areas. The plan will recognise this risk which will be included in the programme risk matrix and timing agreed with the regions to ensure consistency with these activities.

[18] **Permaculture** is a system of agricultural and social design principlescentred around simulating or directly utilising the patterns and features observed in natural ecosystems. The word *permaculture* originally referred to "permanent agriculture", but was expanded to stand also for "permanent culture", as it was seen that social aspects were integral to a truly sustainable system, as per https://en.wikipedia.org/wiki/Permaculture

During implementation of the activities planned furthermore we will need to ensure through high level consultation and support that our activities remain high on the regional agenda."

Gender Equality and Social Inclusion

Members of vulnerable groups face different constraints to other farmers in their farm management and agricultural practices. Some of the differences noted during field work are described in brief below:

- **Fertiliser:** Even though members of vulnerable groups are aware of the benefits of using organic fertiliser and compost, they cannot force renters to use them when they rent out their lands. Also, compost production has increased the workload of female members of households, as they are responsible for collecting manure and other biomass and managing the pit where it is made. Female members have a firm belief that organic fertilisers have a positive impact on improving their land and increasing crop yield; this motivates them to carry the additional burden.
- **Mechanisation:** Members of vulnerable groups rent out their land mostly because they are not able to carry out all cultivation-related activities on their own. Mechanisation can change the position of VGs from renting out to managing their own land, provided that the price is affordable, and supply of the service is adequate.
- **Conservation practices:** Some members of vulnerable groups are aware of good conservation practices such as inter-cropping and crop rotation. However, they are not able to apply them when they rent out their land. Rentees grow the type of crop that will give them the highest return in a given year. It requires knowledge among VGs, awareness among rentees and enforcement from a kebele administration or the Bureau of Agriculture to implement practices to ensure proper land conservation.
- **Extension services:** Both men and women are organised into 1:30 and 1:5 development groups along gender lines. 1:30 group leaders take training mostly at woreda agriculture offices, which they share with their 1:5 group leaders. They are then expected to share their knowledge with 1:5 group members. Occasionally agricultural extension agents carry out field-level extension support, and, if it is close to the home, women can take part. There are also kebele-level agricultural conferences for both men and women. However, there is low female turnout at such meetings. Also, the focus for development groups follows the perceived traditional roles of men and women; therefore, women receive less agricultural extension support, and the men less health extension support.
- **Irrigation:** While the increase in irrigation is appreciated for its great potential in improving household economies, it increases workloads for women. However, women in male-headed households support irrigation, as it is a unique opportunity for community members to overcome constraints attributed to scarcity of water resources and lack of irrigable land. As irrigation is labour intensive, most female-headed households and other VGs rent out their land instead of doing such intensive work. There are also some strong female-headed households who rent irrigable land from other VGs and less active male farmers.
- **Cooperatives:** Women in male-headed households tend not to be members of cooperatives, although the law allows them to be members with their husbands. In contrast, female household heads are members. Women in male-headed households do not see the advantage of membership as their husbands already benefit from the limited services offered by the cooperatives (e.g. fertilisers, seeds, and consumer goods)[19].
- **Conservation-based agriculture and women's situation:** Many new technologies related to conservation-based agriculture add to the workload of female members of the household, yet no visible change in the division of labour is observed from community-level discussions. However, although there is some change at institutional level discussions. On the other hand, women's control over resources is increasing, as seen from spouse consultation and joint decision making on important economic decisions noted during assessment. Some women in male-headed households even take the lead in influencing agricultural decisions.

Environment and Climate Change

Within Tigray and SNNP, environmental issues identified within the agricultural sector were similar to those identified in Amhara and Oromia which include:

Organic fertilisers: Farmers acquire information on the quantity and use of mineral fertiliser from development agents. Many farmers have limited knowledge on the use of organic fertilisers but understand the importance

[19] Information obtained through focus group discussions in Raya Alamata woreda (Tigray).

of compost and composting techniques. Many households understand that compost has the potential to improve soil fertility to a greater extent than artificial fertilisers. However, despite this, households are unable to enforce tenants to use compost when renting out their landholdings. Furthermore, although farmers are well aware of how to prepare compost, it is labour intensive and households that have limited labour resources are unable to engage in composting. Farmers who have livestock often use cow dung primarily for fuel and, if some extra remains, it is distributed around the back yard to enhance fertility of the soil.

Fertiliser application: Like all other regions in the country, farmers in Tigray and SNNP use fertiliser which is purchased on a cash basis from cooperatives. The most commonly used are DAP and urea. For the past 30 years, these have been recommended with the application of 1QT of DAP per ha and 0.5QT of urea per ha). Although the application of fertilisers is a major contributor to increased crop production, farmers' knowledge of the precise amounts of fertiliser needed for their cropland is limited. This in turn leads to unbalanced fertiliser application which results in environmental issues such as pollution of surface water, groundwater, soil and the atmosphere.

Mechanisation: Ploughing cropland several times before planting is a common practice in Ethiopia. Repeated deep ploughing of the land helps loosen soil structure, promotes drainage and aeration, controls weeds, and turns under crop residues. Repeated tillage, however, reduces soil organic matter, making it less able to absorb and retain water and is more prone to erosion and run-off. Multiple tillage reduces land fertility as fertile soil turns back down. Mitigating this negative impact can be accomplished by introducing techniques such as rotovation and shallow ploughing. This increase in mechanisation may, however, significantly reduce landless households in both Tigray and SNNP engaging in casual farm labour and lead them to resort to environmentally destructive activities such as forest clearing (particularly in SNNP which is highly forested and harbours the remains of the tropical rainforest belt of southwest Ethiopia) and charcoal burning.

Conservation practice: Many farmers do not know about conservation farming, and techniques such as integrated pest management (IPM), green manures, zero till, etc. There is little uptake of practices, such as mixed or intercropping, crop rotations and agroforestry. This is again linked to short tenure but is also a feature of weak extension services and landowners having little or no control over what tenant farmers crop.

Water: The majority of farmers are dependent on rain-fed agriculture. Water is therefore a limiting factor on productivity, and poor management of water can have significant environmental impacts such as flooding, erosion, siltation of waterways, loss of top soil, etc. Effective management of water will also reduce the effect of drought. Access to and management of water is, therefore, an important issue. Again, short tenure does not encourage investment in rain harvesting or better management of rainfall (slowing surface run off, bunds, etc.).

Agrochemicals application: The use of agrochemicals is widespread in the country, including Tigray and SNNP. Overuse of these chemicals, such as Malathion and DDT is very common. Although pesticides and herbicides are applied to control plant and animal pests and increase agricultural production, these chemicals also affect non-target plants and animals, pollute surface and groundwater, and degrade the wider environment. As in the previous assessment in Oromia and Amhara, it was found that farmers in Tigray and SNNP also spray DDT on harvested wheat, which is dangerous to human health and the environment. DDT is one of the most persistent organic pollutants – its impacts on the environment and on human health are profound, and it is banned from use in agriculture under the Stockholm Convention. It is important, therefore, to identify routes to removing this from the agricultural system. While there are some organic control mechanisms that can potentially rectify these issues, it is crucial to also identify other, less damaging chemical pesticides and herbicides that can be utilised in the regions at a comparable price. The storage and use of all agrochemicals is also a source of environmental impact and should also be considered.

Continuous (intensive) cropping: In the two regions, most farmers cultivate cropland year after year without fallowing, or any other sustainable land management practices. Population pressure and the resulting fragmented and reduced croplands are the main reasons for this continuous cropping without corresponding improvements in land management practices. While producing crops on farmers' plots every year helps them to secure more yields, continuous cropping can have harmful impacts on soil conditions unless nutrients are restored through fallowing, crop rotation or application of organic fertilisers.

Cultivation of steep slopes: Cultivation of steep slopes due to scarcity of arable land is a common phenomenon in the Ethiopian highlands, including in Tigray and SNNP. The environmental impacts are serious when cultivation takes place on hillsides that lack conservation structures such as soil, stone or fanya juu bunds, grassed waterways and reduced tillage, as erosion occurs, resulting in reduced soil fertility and water pollution when fertilisers are washed into river systems. To avoid the adverse environmental impacts of some

agricultural practices, such as application of fertiliser, agrochemicals, intensive cropping, conventional tillage and cultivation of steep slopes, potential measures include:

- Application of efficient and balanced fertiliser for the right soil type instead of the existing blanket recommendation
- Farmers may not have the expertise on how to apply the right amount for the right soil type, how to properly store chemicals, and the appropriate mechanism for application, hence advice by extension agents and agronomists is invaluable
- Advice for farmers to use compost and manure as these are sustainable ways of improving the fertility condition of cropland
- Advice for farmers on the application of the right amount of agrochemicals
- Training for extension agents and agronomists to guide farmers to apply the right amount of agrochemicals in the recommended way, and on the proper storage of chemicals
- Advice for farmers to practice improved land management practices such as fallowing, mulching and crop rotation
- Increase in uptake of water management techniques to increase productivity and reduce environmental impact
- Advice for farmers about the benefit of reduced tillage instead of existing intensive cultivation
- Advice for farmers to put the appropriate soil conservation structures in place while cultivating steep slopes

Stakeholder Mapping

In Tigray and SNNP, various actors provide the different services farmers require. There are also a number of stakeholders associated with regulations concerning demand and supply of products and services for agriculture. Many stakeholders operating in Tigray and SNNP are similar to those in Amhara and Oromia, but there are also marked differences. A full list of stakeholders for Tigray and SNNP is broken down in Annex 4.

Table 14 analyses significant stakeholders in Tigray and SNNP and their key interests and influence.

Table 14: Significant stakeholder analysis

Who	Interest (what do they want?)	Influence (how much power do they have and over what?)	Note
Agricultural Extension Department	High interest, as it is the main task of this department	The main focus of the federal government is to ensure a climate-resilient green economy. The agricultural extension programme works to achieve the overall goal of the federal government	Actual performance or outputs reported are highly inflated to meet targets, as a result of which realistic planning is hampered
Public input providers	They are the major input providers and hence have high interest to provide the required inputs for increasing production and productivity	They have high influence since their outreach is high	The enforcing mechanism to use inputs is top down and coercive. In Tigray, farmers are obliged to buy fertiliser and improved seeds with cash
Donor-funded and government projects	High interest, as their main domain is to transform the environment and conservation-based development	They have high influence due to their strong engagement in transforming the environment and economic development in the rural setting	Introduce and adapt new thinking, practices and skills in the rural community where most practices are traditional
Research institutions	High interest as they have strong engagement in innovating, adapting and promoting environmentally friendly research practices They work closely with farmers' groups. This	Low influence as they provide research results to promote by extension	The linkage between the research and extension is improving but still there are gaps to be filled

Who	Interest (what do they want?)	Influence (how much power do they have and over what?)	Note
	participatory research helps farmers' own research results		
Private input providers	High interest to provide inputs as a means for income generation	Low influence as their outreach is limited due to limited capital and strict requirements for licences	

The position of stakeholders in level of importance and influence can evolve over time. For instance, cooperative unions who will be given responsibility for establishing factories for blending and distributing fertiliser to farmers will have much higher importance and influence than they do currently.

To give an indication of potential partners for the successful implementation of LIFT interventions, Table 15 presents those stakeholders that have the highest importance and the highest influence.

Table 15: Influence – Importance matrix in environment and conservation agriculture

	Low influence	High influence
High importance	Cooperatives Private Input Providers	Agricultural Extension Department Public Input Providers Grain Traders Donor-funded Government Project
Low importance	Research Institutions	

Analysis of Symptoms and Causes of Sectorial Failure

As in Amhara and Oromia, the assessment showed a set of constraints that prevent farmers and vulnerable groups from participating in and benefiting from the environment and conservation agriculture sector. A number of symptoms and causes exist at the national level and were previously identified as part of the earlier market assessment undertaken in Amhara and Oromia. Others are more regional, and it is these which frame the focus of the following sub-sections.

Symptoms

Cross-cutting symptoms present in all four regions include:

Core

- *Improved seeds are not available for all crops.* In all four regions, few farmers have access to improved varieties of seeds in a timely fashion. Several ongoing initiatives by research institutions, development projects, private companies and cooperative unions aim to improve this situation by promoting seed multiplication of different crops, but quantities and availability of these seeds are still very limited. Although this falls outside the immediate scope of LIFT, a key observation is that a more concerted effort among existing stakeholders is needed to effectively improve this constraint.

Supporting functions

- *Limited knowledge of improved storage and post-harvest techniques reduces profitability.* Most farmers around the country use traditional storage techniques that increase crop damage and wastage, especially when crops are preserved for a longer period of time. They also apply crop protection methods that can be harmful both for their own health and that of consumers. One reason is that farmers buy poor-quality (and cheaper) products from illegal traders in the market.
- *Limited offer of embedded services by input providers.* In all four regions, farmers go to retail shops to buy different types of inputs. However, while regulations require qualified agricultural graduates to operate these outlets, this is not always the case. Many retailers are also not very pro-active, or business minded, and as a result do not offer farmers information about products or effective application methods as part of their services. In addition, a lot of informal shops and makeshift establishments sell inputs (in many cases

of poor quality) without any technical support at all. All these factors combined mean farmers often struggle to receive appropriate advice.

Additional symptoms, identified in Tigray and SNNP during the current market assessment but seemingly present also in Oromia and Amhara include:

Core

- Sustainable, organic agricultural practices are not observed by most farmers, limiting their access to a significant international market. Most farmers use chemical fertilisers and various crop protection items for cultivation and storage. As a result, they are unable to cater to increasing global demand for organic products. One organisation in SNNP, Green Path Foods, is working to establish permaculture with a small number of farmers, by providing them with cultivation knowledge and ensuring buy-back, but the potential market could be much larger.

Support functions

- *Limited availability of animal feed, reducing productivity of both animals and land.* A majority of farmers have their own animals and depend on them for cultivation and post-harvest activities. Lack of communal grazing land restricts farmers from providing fresh fodder to their animals. Farmers mainly use crop residue to feed their animals. This limits the productivity of animals and prevents optimum output.

Some constraints, while present in all four regions, appear more pronounced in Tigray and SNNP:

Support functions

- *Poor mechanisation prevents farmers adopting modern agricultural practices effectively.* In all four regions, farmers are mostly dependent on animal power. Therefore, it takes a long time to prepare and work their land; tilling and threshing become physically challenging. In some cases, farmers do not even have animals of their own, and have to use even more traditional and less productive practices, such as hoes. Available market solutions using agro-machinery exist in Ethiopia, but their reach is very limited, as suppliers have few incentives to cater to the smallholder market. This constraint is particularly relevant in Tigray and SNNP, where there are very few cases of mechanisation (and significantly fewer than in Amhara and Oromia).

Lastly, a few general constraints present in other regions manifest themselves differently in Tigray:

Core

- *Limited production and application of organic fertiliser, hampering land productivity.* In Tigray, farmers seem to have a good understanding of techniques for producing compost, as a result of specific training led by the Tigray EPLAU. This is not the case in the other three regions, where production and application of organic fertiliser is much more limited. Across the country, the technology available makes the process lengthy and laborious. There is also a lack of sufficient biomass to produce the amount of compost necessary. This leads to insufficient application of organic fertiliser, which hampers long-term soil health and productivity. The challenge in Tigray is less about awareness raising and more supporting the use of modern, effective techniques.

Supporting functions

- *Lack of appropriate extension services, constraining yields and incomes.* Farmers generally have limited knowledge of appropriate agricultural practices, and still apply primitive techniques. One reason is that development agents appointed by agriculture extension offices are not trained in modern agricultural practices and cannot provide effective support to farmers who want to improve yields. Interestingly, this constraint is less present in Tigray, where the availability of development agents and quality of information is higher than other regions. Here the issue is more about expanding farmers' access to this information.
- *Limited availability of appropriate irrigation facilities.* Although in recent years access to irrigation has improved across all regions (and in particular Tigray), most farmers do not have access to irrigation facilities, either government-sponsored large irrigation systems or more flexible, smaller-scale technologies supplied by the private sector. In Tigray, there has been recent expansion of large-scale irrigation facilities, and access is now higher than in other regions. However, maintenance and upkeep remains a challenge, potentially having an impact on sustainability.

Causes

The cause of all these symptoms is that the market fails to respond adequately and in a timely fashion; therefore, smallholder farmers are not able to maximise returns from their land. Key contributors to market failure in the environment and conservation agriculture sector are:

- *Information (and knowledge) asymmetries*: farmers have a poor understanding of best agronomic practices, as well as mechanisation opportunities (such as appropriate irrigation and suitable walking tractors) that would help them increase the productivity of their land. This is the case in all regions, though less so in Tigray. In addition, input service providers do not have enough understanding and willingness to penetrate the vast rural market. This results in low use of required products and machineries, which ultimately leads to low yields and incomes. Farmers also have limited understanding of existing opportunities in the market. For example, there is significant potential for grass cultivation (which can provide both organic compost and fresh fodder for animal feed) as well as for accessing the organic market (through permaculture practices).
- *Institutional failures*: The government has an extensive extension network, but it does not always provide all the information farmers need, or even the right information. In irrigation, support has been provided for large irrigation systems that do not necessarily cater to the needs of most farmers, and there has been limited support for the development of smaller schemes appropriate to the variable terrain of the country. In addition, the capacity of research centres continues to be too weak to commercialise research findings effectively. Overall, there is a lack of commercial linkages and partnerships to bring together research findings and models to benefit both farmers and the private sector. This is particularly the case with mechanisation in Tigray and SNNP, where services are not available and are not even offered by cooperative unions.
- *Coordination failures*: Key inputs such as seeds, fertilisers and crop protection items often do not reach farmers at the optimum quantity at the right time. The government and cooperative system of supplying these inputs is cumbersome and very lengthy. Different organisations are working to improve the seed sector, but farmers are still not getting improved seed for all their crops because of a lack of efficient coordination. However, the role being played by ATA seems to be a positive step forward towards improving this coordination.

Indicative List of Interventions and Activities

The interventions and activities that will be undertaken in Tigray and SNNP will address the existing constraints in the environment and conservation agriculture sector. As explained in section 5.1 of this report, the overall interventions will inevitably be aligned with those being implemented in Amhara and Oromia, as there are many similarities in the causes that limit the ability of smallholder farmers to benefit.

For purposes of clarity, the activities that we will undertake in Tigray and SNNP have been categorised as follows:

- Activities that are currently being implemented in Amhara and Oromia and will be implemented in Tigray and SNNP through adoption and scaling up. These interventions are relatively standard, and no real adjustment will be required to adopt/scale up their use in the new regions. For example, the business model being developed to promote investment in organic fertiliser (i.e. through a franchised distribution network) will be scaled up to all regions once operational.
- Activities that are currently being implemented in Amhara and Oromia and will be implemented in Tigray and SNNP through adaptation. In essence, the objectives of the intervention/activities will remain the same but there will be a need to adjust them to address the specificities of the new regions. For example, every contract farming scheme will need to be designed and negotiated according to the characteristic of the region.
- New activities that will be implemented in Tigray and SNNP. For example, promoting the use of higher-value agricultural activities like permaculture among smallholder farmers.

Table 16 presents the list of activities that will be implemented in Tigray and SNNP. In-depth detail of these activities will be provided with the submission of the next deliverable, the Intervention Plan.

Table 16. Environment and conservation agriculture interventions and activities

Overall interventions	Activities to be implemented in Tigray/SNNP through adoption / scaling up	Activities to be implemented in Tigray/SNNP through adaptation (possible pilot / assessment)	New activities to be implemented in Tigray/SNNP (might require a pilot phase)
Promote innovative ideas/projects which benefit farmers with SLLC	Promote investment in organic fertiliser and/or inoculant for bio-fertiliser through the development of a franchised distribution network. Promote usage of bio-pesticides and clean agriculture. Promote and ensure availability of appropriate agricultural machineries for farmers.	Facilitate the development of contract farming (it is even possible that the first contract farming arrangement is in Tigray with Raya beer). Introduce and promote use of innovative small irrigation systems.	Promote and facilitate higher-value agricultural activities such as permaculture and organic farming. Identify, train and link to market voluntary progressive farmers in irrigable areas to produce livestock fodder to be sold to neighbouring cattle owners.
Facilitate sharing knowledge and information of agricultural technology	Provide extension support through demonstration plots and field days using best practices and validation protocols. Provide training through 'training of trainers' activities to development agents, farmer leaders and farmers' organisations on best agronomic practices.		Facilitate knowledge and information sharing on agricultural technology and market access using ICT. Disseminate successful experiences from activities implemented in Amhara and Oromia.

Theory of Change

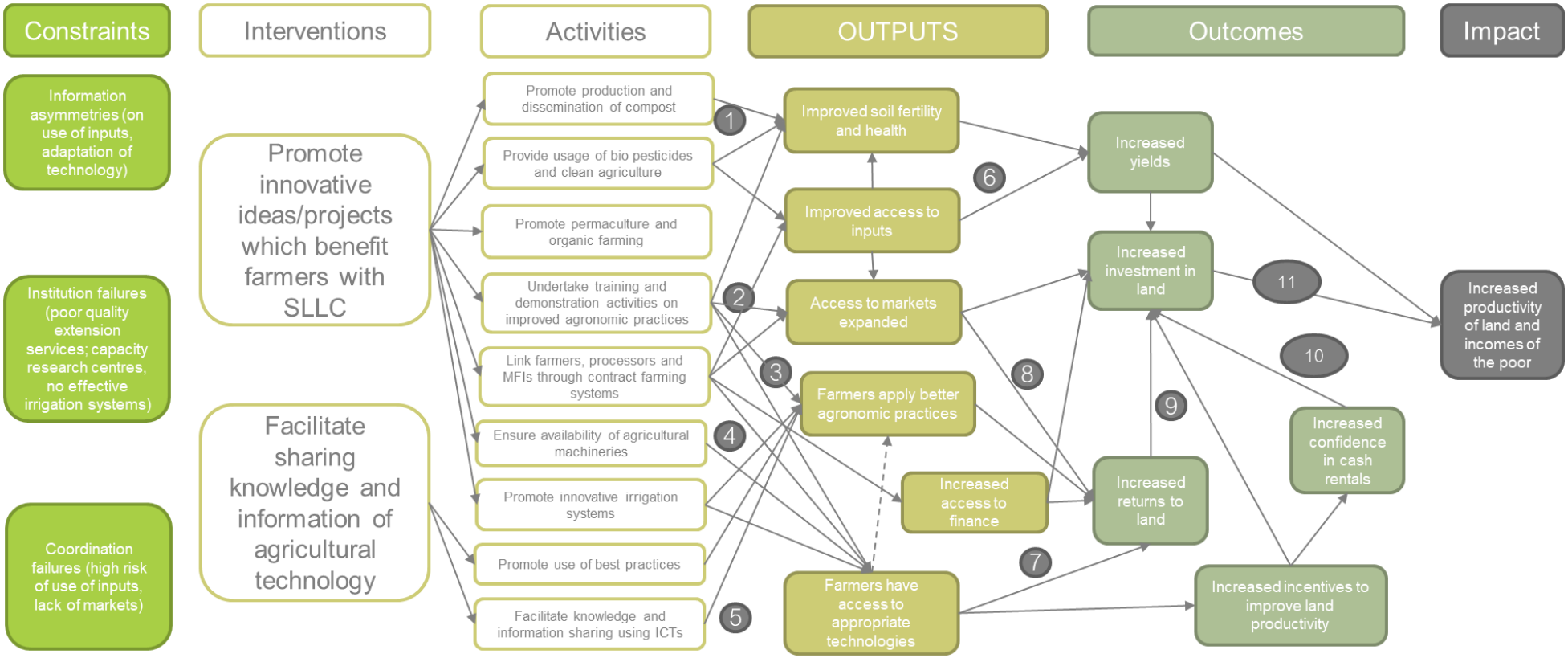
The theory of change for the environment and conservation agriculture market describes the link between the constraints that have been identified, the proposed interventions, and the expected outputs/outcomes within this market and how they contribute to the results of the LIFT programme.

Figure 8 presents the theory of change for the environment and conservation agriculture (updated since the first market assessment). It is important to note that this theory of change might evolve further in the next step of the process (i.e. upon submission of the Intervention Plan); however, we anticipate that all modifications will fit under this theory of change (i.e. contribute to the same outputs).

The changes envisioned in the agriculture for the overall better functioning of the land sector are made under certain assumptions. These assumptions are indicated as numbers in Figure 8 and detailed in the table below.

Assumption #	Detailed assumptions
Assumption 1	Farmers willing to use organic fertiliser rather than chemical fertilisers
Assumption 2	Farmers produce what the market demands
Assumption 3	Farmers adopt improved agronomic practices
Assumption 4	Contract farming scheme functions efficiently with no side setting
Assumption 5	Farmers willing to use new technologies
Assumption 6	Farmers use available inputs in an efficient way
Assumption 7	Farmers use new technologies efficiently
Assumption 8	Farmers able to obtain a higher price for their products
Assumption 9	Farmers willing to re-invest profits in their lands
Assumption 10	Rentees willing to invest in their land
Assumption 11	Additional investment generated put to economically productive use

Figure 8: Theory of change for environment and conservation agriculture



Section 5: Next Steps

Defining Interventions/Activities for Tigray/SNNPR

The second market assessment aimed to identify a series of interventions and activities to address the underlying constraints in the three sectors. However, as indicated throughout the document, the four LIFT regions share similar constraints. This means that the overall interventions will be similar across all regions but activities within those interventions will need to reflect regional differences.

In each sector we have categorised the interventions/activities for Tigray and SNNP as follows:

Activities that will be implemented in Tigray and SNNP through adoption and scaling up of current interventions

In some instances, we will expand the area of coverage for interventions currently being implemented in Amhara and Oromia to Tigray and SNNP. This might involve some minimum tailoring of activities to address the particularities of the other regions. More specifically:

- In cases where there is a pilot under way in Amhara and Oromia, we will wait until the pilot is concluded to take a decision on its potential expansion into Tigray and SNNP.
- In cases where we have engaged co-facilitators and consultants to support the implementation of interventions in Amhara and Oromia, we will aim to modify contracts accordingly. If this is not possible due to procurement or geographical constraints, we will procure the required support.

Activities that will be implemented in Tigray and SNNP through adaptation of current interventions

In other instances, the objective of ongoing interventions (i.e. those being implemented in Amhara and Oromia) will remain the same but there will be a need to adjust the activities to make sure they address the underlying causes identified in Tigray and SNNP. This might require:

- Implementing a new pilot activity to ensure that adaptation is successfully undertaken.
- Undertaking an in-depth assessment of specific aspects that we need to understand better in other to design the right activities.

New interventions/activities that will be implemented in Tigray and SNNP

New interventions and activities are being identified for implementation in Tigray and SNNP. Sections 2.6, 3.6 and 4.6 already present new activities that will be undertaken for each overall intervention. If new interventions are identified, we will undertake a feasibility analysis[20] and prepare a detailed strategy for implementation, following the template used during the first market assessment (included in Annex 4).

Upcoming Deliverables

Given the need to present LIFT interventions in a cohesive way, we propose that the next deliverable be an updated 'Intervention Plan for Amhara, Oromia, Tigray and SNNP'. In this document, we will reflect progress and changes that have taken place in the implementation of LIFT since the first Intervention Plan was prepared a year ago; adjust the coverage of existing interventions/activities where required; include any new interventions designed.

The output of the work will be a detailed intervention plan for the four LIFT regions.

[20] The feasibility analysis will include the same six high-level criteria already applied for the selection of the first round of interventions: i) pro-poor outreach and income potential; ii) growth potential; iii) social impact; iv) political economy; v) developmental priorities; vi) value for money.

Annex 1: Questionnaire for second market assessment

Topic 1: Land rental

- How does the land rental system function? Do farmers rent out their land?
- How prevalent is sharecropping and rental of land? What is the percentage of land currently rented? If rental, is it based on cash, credit, sharecropping?
- What is the average length of renting?
- How does the decision over land renting being made between husband and wife? What level of consultation is done and who make decisions over rent type, size, type, price, who to rent etc.?
- If enough level of consultation has not been done, how does that affect men, women and the family?
- How is the income from the rent utilised and how it is determined? How do women and men benefit or lose due to such decision over income utilisation?
- What is historical trend on rental price?
- How is price rental calculated?
- Which are the sources of information on land for renters and rentees? (Word of mouth, newspapers...)
- Are there people in rural areas who provide information on land rentals? How could information be shared in a more efficient way?
- Do people rent outside of their area or non-circle?
- Is there evidence of farmers aggregating land or doing land exchange? If not, would they be willing to do it?
- Are the people clear on their rights and obligations as renters and rentees?
- How to ensure land rental is in favour of the weaker?
- Are women willing to rent their land? What are the obstacles to doing so?
- Why are land rentals not registered in the kebele/woreda? Would there be a benefit of doing so?
- Are there disputes on land rental issues? (e.g. payment or tenure related) How are they resolved?

For Vulnerable Groups (Female Headed Households, Orphan Children, Elderly people, People with disability, Sick people for longer time):

- Do you rent out your land? Why do you opt for renting instead of managing by yourself?
- What percentage of your land is rented? Is there variation from year to year? If yes, why and what percentage of land currently rented?
- Is the rent based on cash, credit, sharecropping or any other form? What makes you prefer the kind of renting?
- What is the average length of renting?
- How do you get information on land renting price? Do you get lower price due to your position? What are the obstacles you face to rent out your land?
- How could information be shared to you in a more efficient way?
- Who are your most favoured rentees and why (family members, non-family members...?
- Are you clear on the rights and obligations as renters and rentees?
- How do we ensure land rental is in favour of the weaker?
- Why are land rentals not registered in the kebele/woreda? Would there be a benefit of doing so for you?
- Are there disputes on land rental issues? (E.g. payment or tenure related)? How are they resolved?
- Who represents you in such disputes? Do you feel your interest is maintained / respected or is there any form of violation? If yes, why is that happening and what can be done to protect such violations?
- What happens when individual land is transferred for public use?

Topic 2: Access to credit

Questions to famers/cooperatives

- Where do you go to access finance for input purchase/land rental/services provided? (MFIs, family, local money lenders, etc.)
- Do you get credit and other embedded services from buyers or sellers of inputs?
- What securities/guarantees are required by the provider of finance?
- How do you think you could increase access to credit?
- Would a system such as credit inventory/warehouse receipt system be valued by you?

Questions to financial institutions

- What % of your portfolio is an agricultural loan?
- Do MFIs/banks lend money against primary level certification (or secondary level if available)?
- Are MFIs/banks willing to use “right of use” as a security or “security substitute”?
- Do banks use certificate to assess the capacity of the person to receive loans?
- How are MFIs servicing the larger loans (besides the common group lending)?
- Would there be an interest in developing individual based lending?
- Are investors able to access finance against the “right of use” certificates?
- How are banks servicing loans to investors? Do they use to use “right of land” as security?
- Are there any non-security mechanisms such as warehouse receipt systems/crop insurances for access to credit? Any other solutions in the market at present?
- Is there any evidence from second stage certification pilot schemes that MFI/Banks lend more?
- Is insurance available in rural areas? If available, what type of insurance and what are the terms?
- Do the credit providers have the necessary capacity to ensure promotion of new products in agricultural finance?

For Vulnerable Groups (Male and Female Headed Households, Orphan Children, Elderly people, People with disability, Sick people for longer time):

Questions to famers

- Do you have credit need? For what purpose you mostly need credit?
- Is there a difference of credit need for the husband and the wife in the same household? Are there such differential credit need?
- Who makes decision over credit access for the family? Purpose, size of the loan etc.? What level of consultation exists for the credit need?
- If there are no good consultation between husband and wife, what is the effect on men, on women and the family?
- Where do you go to access finance? (MFIs, family, local money lenders, exchange of land, etc.)
- Do you experience distressed renting of land to get finance? When does that happen, for what purpose?
- Why are you forced to distress renting instead of accessing loan from other sources? What is the effect of such distressed renting as a result of lack of access to other credit sources?
- What is the arrangement for the cost of inputs with the rentees of your land? Who is the source of your credit if you are required to share the cost of input with your rentees? What are the constraints you face during such arrangements?
- Do you need credit to engage in non-agricultural activities? What are your constraints to get such loans?
- What securities/guarantees does the provider of finance require?
- How do you think you could increase access to credit?
- Would a system such as credit inventory/warehouse receipt system be valued by you?

Questions to financial institutions related to VGs

- What credit policy do you have to support VGs to make better productive (agricultural and non-agricultural loan)?
- What role can MFIs play in linking land having labour poor families and landless labour active families through their agricultural loan service?

- What kind of support MFIs can provide VGs to make them effective particularly in non-agricultural loans?

Topic 3: Cross cutting agricultural issues

Seeds

- Are seeds available in the market? Do you get them on time?
- Are quality seeds available? Are the right seeds available?
- Are you willing to specialise in seed multiplication/production?
- How do you pay for them?

Livestock

- Do you have livestock farms for milk or beef fattening in the locality? If yes, from where the feed for the animals come?
- Is there grass fields for supplying feed to the animals? What type of grass? How are you growing grass and supplying to the livestock farms? Is there any provision of contract farming for providing animal forage?

Fertilisers

- Which are the fertilisers available in the market?
- How do you know what type and quantity of fertiliser is required for your land? Who gives, if any, this information?
- How do the logistics of the fertiliser chain work? How can they be improved?
- What are the terms of payment for fertilisers?

Mechanisation

- Do you have access to any mechanised services? (Tractor, harvester, shellers, weeders, etc.) What is the cost?
- In what way mechanisation affects the life of women in male headed households?
- Who is paying for the equipment?
- Is there a rental system service provision?
- Is there any equipment that you know would improve your productivity and is not available?

Conservation practices

- Is any soil testing taking place?
- Do you use agrochemicals (herbicide, pesticide, insecticide)? Where does it come from? Are there embedded services to know how to produce it? How long have you been using them?
- Do you know about Integrated Pest Management (IPM)?
- How many times do you plough and why?
- Are you practising zero tillage or reduced tillage? Are you practising inter cropping? Do you have cropping patterns?
- What do they do with their cow manure?
- What measures you take for soil conservation? Soil bands, soil covering with fodder … others?
- What negative or positive impact will women in male headed households if bio-fertilisers and compost prepared at home?

Irrigation

- Do you irrigate? How often? What is the cost? Who pays?
- Why don’t cooperative engage in irrigation schemes?

Extension services

- Are extension agents providing support to the farmer? Do the extension agents provide the necessary and right advice? Which are their technical capabilities? Do women in MHH get equal access to extension services? If not, what are the reasons and what are the implications?

- How frequently do farmers get support from extension agents? In which areas do they provide advice?
- Are there other providers of agricultural information? Do cooperatives/traders/inputs sellers provide advice?
- Is there any farmers' training centre? How good they are? How much the farmers receive service from these training centres?

Primary processing

- Do they do drying, cleaning and use of by-products?
- Do you get information/support to do this from trader/cooperative?

Storage and packaging

- Do you have any storage facilities? If so, what kind?
- Do you have a system for better seed conservation?
- How is the sorting and grading done?
- What type of packaging, if any, do you use?

Market access - Farmers

- What do you produce?
- Where/who do you sell? (distance from market)
- What are the issues that you face when selling your products?
- Do you know what the market wants? Do you have enough market information?
- Are there any regulations that affect your business? Which and why?

Market access- Cooperatives, traders and processors

- What are the prominent products in the area?
- From whom do you buy (names, type (out growers, traders etc.)?
- What is market availability for your produce?
- Do you have problems sourcing products? If so which ones?
- Are there quality issues with the produce?
- What are the issues that you face when selling your products?
- Do you know what the market wants? Do you have enough market information?
- What trading arrangements do you have with your buyers such as credit and transport (per different buyer type)?
- Do you have storage facilities? Any issues? Do you use warehouse receipt system?
- Are there any regulations that affect your business? Which and why?
- What is the membership access of women in MHH? If no or low access of women, what are the reasons and what is the impact on women, men and the family?

For Vulnerable Groups (Female Headed Households, Orphan Children, Elderly people, People with disability, Sick people for longer time):

Fertilisers

- Which are the fertilisers available in the market?
- How do you know what type and quantity of fertiliser is required for your land? Who gives, if any, this information?
- Do you know the advantages of bio-fertiliser and compost/manure to your land? Do you insist your renter to use them? What are the constraints to use them?

Mechanisation

- Do you have access to any mechanized services? (Tractor, harvester, Sheller, weedier…) What is the cost?

- Who is paying for the equipment?
- Is there a rental system service provision?
- Is there any equipment that you know would improve your productivity and is not available?
- Can mechanisation service availability change your status from renting to managing your land?
- If so, what are your constraints to access such services? How can your constraints be improved?

Conservation practices

- Do you know about Integrated Pest Management (IPM)? Do you request your rentees to use it? What are the constraints to use it?
- Are you insisting your rentees to practice zero tillage or reduced tillage? Are you insisting your rentees to practice inter cropping? Do you have cropping patterns? What are the constraints to practice them and how can the constraints be improved?
- What do you do with your cow manure? Do you know about bio-fertiliser and compost preparation? Will you be interested to engage in preparing them for market? What support you require to engage in this activity?

Extension services

- Do you get extension support from DAs? If not, why not? Are you being denied from extension support because you rented your land? If yes, what is the effect and what can be done to improve the negative impact?
- Are you interested to engage in other agricultural activities other than farming (such as small ruminants, poultry and apiary)? What are the constraints to engage in such activities and what can be done to improve the constraints?

Primary processing

- Do they do drying, cleaning and use of by-products?
- Do you get information/support to do this from trader/cooperative?
- Can you engage in primary processing in the future? What are the constraints?

Storage and packaging

- Do you want to engage in storage and packing activities?
- Do you have any storage facilities? If so, what kind?
- Do you have a system for better seed conservation?
- How is the sorting and grading done?
- What type of packaging, if any, do you use?

Access to cooperatives

Do you have access to cooperatives? What are the constraints to get membership access to cooperatives?

What are the impacts of non-accessing cooperative membership?

Annex 2: List of stakeholders visited

SNNP

Hawassa

- Regional Agriculture Bureau (Agriculture extension and Input department)
- Natural Resource and Environment Protection Authority (Land Administration and Use department)
- Agriculture Growth Program (AGP II)
- OMO Micro Finance Institution
- Agriculture Transformation Agency (ATA)
- Regional HABP
- Hawassa University
- Wisdom Micro finance
- Agricultural Input supply cooperation (AISCO)
- Irrigation Development, Institution and Administration Agency
- Agriculture Research Centre

Sodo woreda

- Agriculture Office
- Land Administration and use work processer
- Cooperative and Marketing office
- Women and child Affair office
- KelaMulti Purpose cooperative,
- Felek Saving and Credit Primary Cooperative
- NetsanetFana Cooperative union
- Grain Trader
- Agar Micro finance
- Justice and court Office
- Farmer group, Land administration Committee and Agriculture Development Agents (KebeleGolbe, KebeleNegasi)

Meskan woreda

- Agriculture Office
- Land Administration and use work processer
- Cooperative and Marketing office
- Women and child Affair office
- Labour and social affairs Office
- Green path food and Agriculture Research Centre
- Justice and court Office
- Farmer group and Land administration Committee and Agriculture Development Agents (KebeleBeche, KebeleDugoTuto)

Tigray

Mekele

- Environment Protection, Land Administration and Use Agency (EPLAU)

- Bureau of Agriculture (Agricultural Input Supply and Product Marketing, Agricultural Extension and Irrigation)
- Agricultural Input supply cooperation (AISCO)
- Women, Youth and Child affairs Bureau
- Enderta Union (blended Fertiliser processing)
- Small Scale and Micro Irrigation Support Project (SMIS)
- Tigray Agricultural Research Institution (TARI)
- Dedebit Credit and Saving Institution (DECSI)
- Adeday Micro-Finance Institution
- Agricultural Transformation Agency (ATA)
- Household Asset Building Programme (HABP)
- Agricultural Growth Programme (AGP)
- Mekele University (MU)
- Sustainable Land Management Project (SLMP)
- Productive Safety Net Project (PSNP)
- Regional Justice Office and Regional Council
- Cooperative Agency
- Agriculture input Producer (BurheTesfa Irrigation and Water Technologies PLC)
- Alliance of Green Revolution in Africa (AGRA)

Raya Alamata woreda

- Land Administration Office
- Office of Agriculture (Agricultural Extension, Agricultural Input supply and Irrigation)
- Cooperative Office
- Women and Child Affairs Office
- Adeday Micro-Finance Institution
- Dedebit Credit and Saving Institution (DECSI)
- Kebele (Land Administrator; Land Administration Committee; Development Agents)
- Kebele Land Court/Justice
- Farmers Group (KebeleSelam Be Kalesi, Kebele Selene Wha)

Embalaje woreda

- Land Administration Office
- Office of Agriculture (Agricultural Extension, Agricultural Input supply, Irrigation)
- Cooperative Office
- Women and Child Affairs Office
- Woreda Court/Justice Office
- Dedebit Credit and Saving Institution (DECSI)
- AlajeMulti Purpose Cooperative
- Kebele (Land Administrator; Land Administration Committee; Development Agents)
- Kebele Land Court/ justice
- Farmers Group (KebeleDejen, KebeleSeret)

- Rural Saving and Credit Cooperative (RUSACO)

Annex 3: Template for the design of interventions

Name of intervention

1. **Summary of the proposed intervention** (2 paragraphs max. summary)
2. **Describe the constraints addressed by this intervention** (what is the market situation, what constraints is it aiming to solve)
3. **List the detailed activities required to implement the intervention** (in bullet points)
4. **How does the proposed intervention contribute to LIFT's outputs and outcome?** (Refer to actual log frame; aim to quantify the contribution in terms of number of farmers, increase in incomes, etc.)
5. **How does the proposed intervention address the needs of vulnerable groups?**
6. **Describe the instruments that will be required for implementation of intervention** (facilitation, performance grant, TA)
7. **Describe the partners, co-facilitators and scaling up agents involved in the implementation of this intervention** (name, describe specific roles, capacity to implement)
8. **How sustainable is the intervention? How expandable? How scalable?**

List of Appendices

Appendix 1: Detailed budget for intervention (including the pilot)

Appendix 2: Detailed Work Plan for Implementation of the Intervention

Appendix 3: Results Chain

Appendix 4: Monitoring & Evaluation Plan

Appendix 5: Gender and Social Inclusion Screening

Appendix 6: Climate Change Screening

Annex 4: Analysis of stakeholders

RURAL LAND RENTAL

- ***Renter (farmer):*** As holders of the land, their interest is to ensure that they receive a fair price for their land, that their land is properly utilised, that they can retake the land in case of the rentee not paying the rent, and that the act of renting out the land doesn't undermine their ownership title. Women, the disabled and the youth are groups with particular interest in renting out their land.
- ***Rentee (farmer):*** farmers who rent in want to make sure that they pay a fair price for their land and to be sure that they are not denied the right to use the land for the agreed rental period. Rentees include farmers who are looking to expand the land cultivated for commercial purposes, or looking to rent contiguous plots of land to achieve economies of scale, and landless who are looking for land to farm.
- ***Mediators:*** these are people (normally elders) who informally act as negotiators between rentees and renters, to allow them to reach an agreement on the price and term of the rent. They tend to be elders in the communities. In most cases, there is no cash payment for this service and they get compensated through informal means (e.g. invitation to dinner).
- ***Primary Cooperative:*** The primary cooperative network in Ethiopia is extensive, with over 43,000 primary cooperatives established in the country in 2012. Oromia has the largest number of primary cooperatives (around 11,000), followed by Amhara (over 7,000). The most active cooperatives are those involved in agribusiness, which are meant to enhance economic production by providing fertilisers, improved seeds, pesticides and machinery (tractor renting) for farmers; as well as marketing of outputs (collect, assemble and sell agricultural commodities). Of these, there are around 2,600 cooperatives in Amhara and 4,700 in Oromia.
- ***Cooperative Union:*** Cooperative unions are comprised of number of primary cooperatives. There were around 245 cooperative unions in 2011. They provide inputs and buy/process outputs thorough primary cooperatives. Some of them also provide credit to the primary cooperatives for the purchase of outputs.
- ***Bureau of Environmental Protection & Land Administration (regional):*** the bureaux (though regional titles vary) oversee all management and guidance of regional land administration, registration, and use of land. It facilitates the endorsement of policy guidelines and is responsible for presenting land issues to the regional councils.
- ***Office of Environmental Protection & Land Administration (woreda):*** this office has a mandate to approve and register land rental agreements according to the regional land proclamation and policy. They have the authority to reject agreements if they feel that the agreement is not in favour of the weak (when the contract value is understated).
- ***Kebele Administration:*** the role of kebele administrators is to ensure that both husband & wife agree on renting the land, as well as that the land is free from other traditional rental agreements. The kebele has no mandate to approve the agreements.
- ***Community/Local Police:*** the local police should be engaged to prevent any form of abuse related to land rental agreement and ensure perpetrators are brought to justice.
- ***Elders:*** they facilitate rental agreements and are also key players in the dispute resolution system (as arbiter). Their interest in the land rental system is more for social benefit than for monetary benefits; they want to get high acceptance in the community and to strengthen their social network. However, they are invited for local beverages and sometimes meals to acknowledge their contribution.
- ***Kebele and woreda Court/Justice Office:*** they have the mandate to resolve land related disputes when the arbitration process is not successful. They apply the rural land law, proclamations and regulations.
- ***Woreda Women, Children and Youth Affairs Office:*** The office should extend its support to women and children land holders through its Women Development Group (WDG) structure. The support should include awareness raising, facilitating support during land rental negotiations and coordinating justice support from local police to justice office.
- ***Woreda Labour and Social Affairs Office:*** should extend support to elderly people, persons with impairment and other vulnerable groups through the Community Care Coalition (3C) structure. The support should include awareness raising and facilitating support during land rental negotiations.

- ***Regional Justice Office & Regional council:*** they prepare land policy and guidelines / endorsement of policies and guidelines / translation of policies; provision of justice relating to the land sector produced by regional land agencies/bureaux.
- ***Research institutions:*** there are a number of research institutions that work in the area of land, including assessing existing land policies and how they can be improved. These include, among others, the Land Tenure Institute / Haramaya University; the Institute of Land Administration /Bahir Dar University; Forum for Social Studies (FSS); and the Ethiopian Development Research Institution (EDRI), which includes the DFID-supported Ethiopia Strategy Support Programme (ESSP).
- ***Land Administration to Nurture Development (LAND):*** This USAID project works with the national and regional levels of Ethiopia's government to further improve the legal and regulatory framework related to land tenure and property rights with a focus on pastoral areas. USAID, DFID and GIZ (with EU funds) have signed a partnership agreement for unifying the approaches toward land management and registration avoiding overlap of activities (the G8 Land Partnership). LAND is now focussing on communal pastoral land. They work on researching and building systems for protecting pastoral land and certifying the right of use. They work also on policy and institutions but mainly in pastoral areas. LAND has also a mandate to strengthen universities on policy research and analysis. They work mainly with Haramaya University and Bahir Dar University.

Access to credit

- ***Farmers***: Farmers, as explained in the previous sections, demand access to credit since they require money to produce their crops or meet other household needs. In many cases, farmers do not have enough money before the cultivation season to pay for agricultural inputs (e.g. seeds, fertiliser, agro-chemicals, labourers, tools and machinery), and they might not have other readily available means to fund these requirements. Farmers require finance to be able to smooth consumption and they are only able to repay the money after the harvest and when they sell their produce.
- ***Rural Savings and Credit Cooperatives (RuSACCO)***: RuSACCOs operates in a relatively small geographic area covering specific woredas and kebeles. There are mixed experience among farmers about the benefits that they can get from RuSACCOs. Some people prefer RuSACCOs over other financial institutions since they can get bigger amount of credit based on the savings made, while others have bad experience since they were not able to get credit since particular RuSACCO had unavailability of loanable fund. Majority of the farmers are members of RuSACCOs and save little amount of money on a periodic basis there.
- ***Cooperative Unions***: Cooperative unions are comprised of primary cooperatives. They are engaged in supplying inputs to farmers through primary cooperatives or agricultural office and sometimes buy outputs thorough selected primary cooperatives. Sometimes unions provide short term credit to the primary cooperatives for the purchase of outputs.
- ***Microfinance Institutions (MFIs):*** MFIs are present in almost all parts of the Tigray and SNNP regions. Dedebit Credit and Savings Institution (DECSI) in Tigray is the first microfinance institution in Ethiopia and has a reach up to kebele level in Tigray. OMO microfinance is the state sponsored microfinance agency for SNNP. Both DECSI and OMO have a very wide network and covers almost all areas of Tigray and SNNP respectively. In the rural areas, the MFIs provide group based credit to the farmers that can be used for agricultural purposes. They also provide credit against specific business plan to do small-scale agribusiness. In addition to their normal microcredit operation, they are involved with different government and development projects to facilitate specific models of access to finance. OMO is involved in proving input credit to the selected farmers in SNNP in association with the Bureau of Agriculture and cooperative unions. There are other smaller MFIs that operate in these two regions as well, including but not limited to Aggar, Meklit and Adeday. All the MFIs actively provide credit support and also take savings from farmers.
- ***Commercial Banks:*** There are 19 licenced commercial banks in Ethiopia with a combined profit of 14,425 million Birr.[21] Some of them have a credit relationship with MFIs and cooperative unions to satisfy their financing needs. For example, OMO microfinance gets money from the Commercial Bank of Ethiopia while NetsanetFana Credit and Savings Cooperative, which is active in Guraghe Zone of SNNP borrows money from the Development Bank of Ethiopia. This credit is used to provide loans to primary cooperatives, farmers and other clients of MFIs or unions.
- ***National Bank of Ethiopia***: is the central bank of Ethiopia and the main regulatory body of the financial sector in Ethiopia. As such it is responsible for regulating the supply and availability of money and credit, as well as applicable interest rates.

[21] http://en.wikipedia.org/wiki/List_of_banks_in_Ethiopia

- ***Grain Traders:*** Traders buy grain (wheat, teff, barley, maize, sorghum, beans etc.) from the farmers in the local market. Small portions of grain traders also give credit support to the farmers that are well-acquainted to them during the cultivation season, the farmers are obliged to give the produce to those grain traders in return. When the grain traders buy products from the farmers, they usually buy it on cash, but sometimes they pay the farmers after a few days if they have a shortage of money.
- ***Wholesalers/Processors***: Wholesalers (such as large wholesale of teff) and processors (such as flour mills for wheat and breweries for barley) buy their products from the grain traders or cooperative unions. The transaction with the grain traders is usually a cash transaction, but sometimes they provide short-term credit to their suppliers. The cooperative unions that have a long term business relationship with the wholesaler or processor get credit facilities with them.
- ***Input Traders***: There are agricultural input traders / retailers at the woreda level and they sell those inputs for cash to the farmers.
- ***Input companies***: Various input companies sell inputs, especially agro-chemicals through retailers and cooperative union. They reputed companies sell their products to the retailers on a cash basis but have a long term credit arrangement with the cooperative unions. There are also some input companies that sell non-quality assured products and they often distribute their products on credit to the retailers.
- ***M-birr***: M-birr is a platform created by five large financial institutions in Ethiopia including DECSI and OMO in Tigray and SNNP respectively. They use the platform of the national mobile company Ethiotel and people can transfer money using their mobile. DECSI and OMO are setting up agent networks to facilitate various financial services for the general people, including farmers. The platform can be utilised to deposit and withdraw cash at an agent's premises, transfer money, purchase mobile top up, pay different other bills, buy goods, repay loans, check balance, request and receive a statement. There is provision for people to save money in their mobile banking account that can later be used to get further access to credit.
- ***Insurance Companies***: Crop insurance is a relatively new innovation in Ethiopia. It is supported by different donors in different regions including USAID and JICA. Nyala Insurance Share Company (NISCO) is involved in providing agricultural crop insurance in selected pilot woredas in Tigray and SNNP. Although the reach of crop insurance is extremely limited at this moment, it gives a safeguard to the farmers against unexpected weather conditions.
- ***NGOs and private companies:*** There are different NGOs that operate through various programmes in the rural areas of Tigray and SNNP. Some of these NGOs, such as World Vision, provide farmers with inputs, sometimes free of cost. Self Help Africa works with groups of farmers to develop savings and credit groups at the local level. There are also some private companies involved in the agriculture related business. Green Path Foods in SNNP provides avocado farmers seed and other related inputs on credit.
- ***Donor funded projects***: There are a number of donor funded projects / programmes that work with MFIs to provide access to credit to the farmers with credit guarantees. DFID funded PEPE has a separate component for working with MFIs to create access to finance for farmers and women's groups. The PSNP and HABP programmes give money to very poor farmers and help them to build their household assets. PSNP focuses on chronically food-insecure areas to benefit 1.1 million people by engaging them in various social works (road, pond, school construction, road pavement, irrigation scheme etc.). HABP creates access to credit for the beneficiaries through RUSACCO or MFIs (DECSI or OMO), but the beneficiary has to clear any previous debt and needs to be organized in a group. The program also supports households with training from development agents on how to utilize the credit better. USAID funded GRAD project is working in Tigray and SNNP and has a partnership with DECSI and OMO to provide financial access to their beneficiaries. The Agriculture Transformation Agency (ATA), a quasi-government entity with its new cluster development programme has specific emphasis on creating access to finance for the farmers of selected crops in specific woredas. The second phase of the Agricultural Growth Programme (AGP) will also have a separate access to credit component in its new design for the next five years.
- ***Kebele Administration:*** A letter from the Kebele Administration is mandatory for any person requiring to apply for credit from any MFI. This is to confirm that the person is a permanent resident of that specific kebele. For agricultural input credit in SNNP, the kebele administration conducts the assessment on people who are eligible to get credit in association with the Bureau of Agriculture.
- ***Micro and Small Enterprise Development Agency:*** This agency has offices at woreda level. One of their tasks of the agency is to form landless groups and facilitate their access to credit by linking them with MFIs.
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Environment and Conservation Agriculture

- ***Farmers:*** Farmers cultivate their lands and they need different inputs to make use of their lands. They require products such as seeds, fertiliser and agricultural chemicals. They also need different services from land preparation to harvest and post-harvest activities. These services include tilling of land, weeding, knowledge about diseases and agro-chemicals, shelling and threshing and knowledge about post-harvest activities and farm labourers at various levels among others. Farmers use the manure that they get from their animals (primarily cows and oxen) in the fields at after processing it as compost or apply dried manure as a traditional practice.
- ***Primary Cooperatives***: Primary cooperatives, as an association of local farmers, provide critical inputs to the farmers such as seeds and fertiliser. Both members and non-members of the cooperative can get inputs through them. Cooperatives are more present in Tigray than in SNNP. Cooperatives usually deal with a limited variety of seeds, primarily grains and beans. For fertiliser, primary cooperatives deals with only two types of fertiliser – Di-ammonium Phosphate (DAP) and Urea, but with the introduction of blended fertiliser, they are likely to be engaged in the distribution of specific blended fertiliser in specific area as per the soil requirement. Some of the primary cooperatives also buy produce from the farmers that they sell to the cooperative unions. Primary cooperatives have their own or rented warehouse facility or share some house with agriculture office or kebele administration to store inputs before distribution and outputs before it goes to the cooperative union.
- ***Cooperative Unions:*** Cooperative unions are a key actor for distribution of agricultural inputs. Cooperative unions also use their own vehicles or arrange hired vehicles to transport the inputs to the primary cooperatives or agricultural office at kebele level. They select some primary cooperatives that have better management capacity to purchase produce from the farmers. Some cooperative unions have good warehouse facilities where they store the inputs and outputs for a short period of time. Some of the cooperative unions also operate their own processing unit such as flour mill and use the purchased product to process it and sell the value added products. Two cooperative unions in Tigray and SNNP are given responsibility to set up blended fertiliser factory, operate those with their own management and distribute fertiliser as per soil condition.
- ***Input retailers:*** A lot of farmers buy seeds and agro-chemicals from different input retailers. Some of the input retailers have their shops at the woreda level. To have an input retail shop, an agronomist needs to be there as owner or employee but there are a lot of informal input retailers that have no agronomist and no license to do this business. Some of the retailers are mobile; they roam around from market to market in different woreda and sell their products to the farmers.
- ***Input companies***: Input companies in Ethiopia in the private sector are primarily importers. Seed importers concentrate on a hybrid variety of Maize and different vegetables. Agro-chemical importers import pesticides, insecticides and herbicides as per the demand of the farmers and their own marketing capabilities. There are companies that sell cheap agro-chemicals with limited effectiveness, while a few companies import higher priced products with assured effectiveness.
- ***Organic Fertiliser Manufacturers***: There are a few manufacturers of organic fertiliser such as National Fertiliser Manufacturing and Soil and More based in Addis Ababa. They produce organic fertiliser and market it through their distribution channels.
- ***Ethiopian Seed Enterprise (ESE):*** Ethiopian seed enterprise supplies improved seed to the farmers through the cooperatives. They collaborate with the research agencies to get foundation seed, perform seed multiplication, process the seed, pack it and send it to the farmers for use in their lands. They primarily supply hybrid varieties of maize and improved varieties of wheat.
- ***Agriculture Input Supply Enterprise (AISE)***: Agriculture Input Supply Enterprise is responsible for purchasing fertiliser from international suppliers and for collecting the demand of the farmers through cooperative unions. The required fertiliser is then supplied to the farmers using the cooperative channels. Their dominant role is likely to decrease with the permission given to the selected cooperative unions to import fertiliser for blending in near future.
- ***Traders:*** Traders are based on local areas, primarily close to woreda town areas. Farmers come to their shops to sell their grains, legumes and beans to them. Farmers need to use their own transportation means to bring products to the traders. The traders buy products on a cash basis and sell them to large wholesalers or processors, both public and private. Some of the traders also sell seeds to the farmers and act as seed retailer.
- ***Wholesalers and Processors:*** Grains and other agricultural products that are bought by the traders and cooperative unions are sold to different related processors and wholesalers. Wheat is sold to flour mills, teff is sold to

public and private wholesale enterprises and teff powder producers, barley is sold to breweries and wholesalers and legumes and different beans goes to wholesalers and exporters. These wholesalers and processors have specific quality parameters. Sometimes they convey those quality parameters to the traders and cooperative unions and sometimes they do cleaning and grading on their own in their individual facilities.

- ***Service providers:*** There are different levels of service providers such as private tractor service providers, although the number of them are few. They buy tractors from machine importers and rent it to the farmers during the season. There are also irrigation equipment sellers who sell to the farmers and cooperatives to get water for agriculture purposes. Labour required for agricultural activities often comes from family members, but farmers also get labour on payment from outside of their family when required.
- ***Machine and Equipment Importers:*** There are different types of importers who are engaged in agriculture related product imports and marketing. Tractor importers import a variety of tractors and market them. Irrigation equipment importers import and market different tools, materials and machines required for the purpose of irrigation. There are also importers that import harvesters, threshers, rotavator etc., but at a limited scale.
- ***Environment Protection, Land Administration and Use Bureau/Agency:*** EPLAUA (though titles change) in different regions are responsible to develop land use policy as per the proclamation and rules of that specific region. This affects the farmers since they need to abide by the rules when they are engaged in agricultural activities. Also when EPLAUA implements some environment protection programme such as watershed management, part of the land of the farmers is used for that purpose. This hampers the use of the productive land by the farmers in the short term although this is beneficial for them in the longer term.
- ***Directorate of Agriculture Extension:*** Directorate of Agriculture Extension (DAE) works under the Ministry of Agriculture and has an extensive network of people at the woreda and kebele level. They have a team of development agents (DAs) in each kebele. In each woreda, DAE has a full-fledged office with a number of agronomists, veterinary specialists and environment specialists, but some of the positions remain vacant for a long period of time. They provide advice and give training to the farmers on a wide variety of topics related to agriculture and livestock production and related issues.
- ***Kebele Administration:*** Kebele administration confirms the residency of any individual when there is requirement for demand estimation for inputs such as seed and fertiliser. Sometimes they work in close collaboration with the agriculture office for doing the demand assessment of inputs.
- ***Ethiopian Institute of Agricultural Research (EIAR)***: EIAR is a federal level body and works with regional level agricultural research institutions, TARI in Tigray and SARI in SNNP. They are engaged in an array of agricultural research in various crops. They are responsible for developing improved variety of seeds and then engage with the directorate of agriculture extension to disseminate the results to the farmers. They work with Farmer Development Groups and Farmer Extension Development Groups. EIAR also works with various international research institutes such as IFPRI, ILRI, ICRISAT and CYMMIT.
- ***OMO Microfinance***: In SNNP, OMO microfinance provides money to the people who are unable to purchase inputs on cash. The farmers are identified through an assessment and then need to get a letter from kebele administration. After showing that letter, OMO provides a coupon to the farmers and using that the farmers can get inputs (seed and fertiliser) from cooperative or agriculture office on credit. After harvesting of crops, farmers return the money to OMO microfinance.
- ***NGOs/Private Organisations***: There are number of NGOs that have their own agriculture programmes. They support farmers by providing them trainings on agriculture practices. They also give some of the inputs to the farmers on a periodic basis. World Vision through its area development programmes support farmers with inputs. Green Path Food is working with farmers and providing them training on new technology and buying the produce back from them.

Donor related projects: Agriculture Transformation Agency (ATA) is looking at agriculture related issues in Ethiopia holistically and works with government agencies, other projects, private sector organisations, financial and research institutions to help solve identified problems. The currently adopted a cluster approach to develop specific crop in specific area and laid out extensive plans for that. The Agriculture Growth Programme has developed its second phase planning and will be involved in physical market creation, market development and training among other activities. There are also a lot of projects going on with specific objectives and various donors, research institutions, universities and international implementing partners are engaged in these projects. Some of the projects active in Tigray and SNNP regions are USAID funded GRAD project, World Bank managed HABP/PSNP project, DFID funded PEPE project, World Bank managed Ethiopia Promoting Basic Services (PBS) Programme