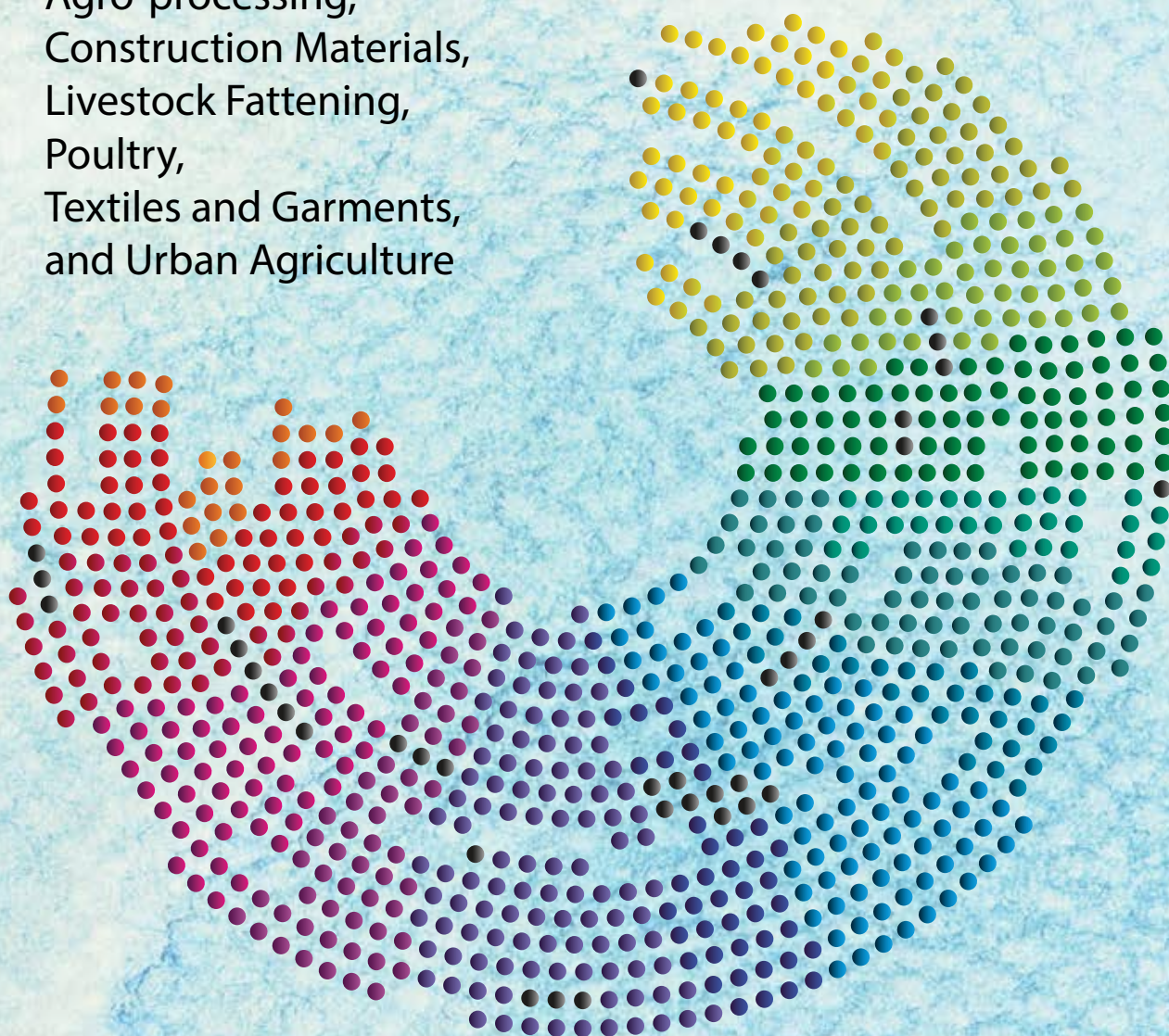


International
Labour
Organization

Rapid Market Assessments for Six Sectors

Agro-processing,
Construction Materials,
Livestock Fattening,
Poultry,
Textiles and Garments,
and Urban Agriculture



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Rapid Market Assessments for Six Sectors: Agro-processing, Construction Materials, Livestock Fattening, Poultry, Textiles and Garments, and Urban Agriculture

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Forward

Ethiopia is the second-most populous country in Africa with a population of 99.4 million and 2.5% population growth rate. The labour force is growing rapidly due to the young dominated demographic profile. It is estimated that approximately three million young Ethiopians enter the labour force every year. However, strengthening the demand side of the labour market remains a challenge and unemployment and underemployment continue to be major challenge even though some improvements have been seen in recent years. As a result, growing numbers of Ethiopians have been looking for job opportunities either in the capital province or abroad. For the past three decades, the Kingdom of Saudi Arabia (KSA) has been a major destination for Ethiopian migrant workers. However, as migrants use both regular and irregular routes, it is difficult to know the number of Ethiopians living in the KSA.

In November 2013, the Government of KSA (GoKSA) decided to expel irregular migrants as part of the “Saudization” of the KSA labour market, aimed at creating job opportunities for young unemployed Saudis and regularization of the labour market. Between November 2013 and March 2014, more than 163,018 Ethiopian migrants were forcibly repatriated.¹ Given the sudden and unprepared nature of this forced repatriation and with little or no fallback position, the seamless reintegration of these returnees has been painfully slow and largely unaddressed. KSA returnees face severe difficulties, particularly in terms of decent livelihood opportunities and reintegration into the Ethiopian labour market.

In this regard, assessment of the capacity of the labour market to absorb returnees was seen crucial, especially in the migrant-prone areas of the country. This assessment help in identifying the sectors and value chains that are most able to absorb returnees in the country so as to better target skills development interventions towards labour market demand and developing initial hypotheses as to the bottlenecks and constraints in these sectors and value chains that hinder returnees and other potential migrants from accessing economic opportunities. To this effect a “*Rapid Market Assessments for Six Sectors: Agro-processing, Construction Materials, Livestock Fattening, Poultry, Textiles and Garments, and Urban Agriculture*” were undertaken.

This assessment provides deeper understanding of certain sectors with potential to absorb returnees and other potential migrants. The assessment further provided sufficient information about the potential and relevance of certain sectors, sub-sectors and value chains, and whether interventions to develop these sectors would be feasible. The assessment was conducted in three regions namely Tigray, Amhara,

and Oromia, and in particular specific zones within those regions showing a high incidence of irregular migration.

It is my hope that the proposed long term and short term recommendations of this assessment can inform interventions by the Government of Ethiopia as well International partners working on economic reintegration of returnees as well as strengthening the existing labour market of the country. I would like to congratulate the Government of Federal Democratic Republic of Ethiopia and particularly the Ministry of Labour and Social Affairs for its efforts geared towards reintegration of returnees. Finally, I would like to thank the European Union who is funding the ILO project *“Support to the reintegration of returnees in Ethiopia, 2015 - 2017”* under which this assessment was produced.

George Okutho
Director

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Executive Summary

In November 2013, the Government of Saudi Arabia decided to expel irregular migrants, aimed at creating job opportunities for young unemployed Saudis and regularisation of the labour market. Between November 2013 and March 2014, more than 160,000 Ethiopian migrants were forcibly repatriated. The government of Federal Democratic Republic of Ethiopia and other relevant stakeholders integrated emergency efforts and managed the repatriation process. However, the experiences of returned migrants and the challenge of successful reintegration remain largely unaddressed. This challenge necessitated the development of the ILO project 'Support to the reintegration of returnees in Ethiopia' which aims to assist returned migrant workers in accessing productive employment and decent work. To support this work, between June and October 2016, a Rapid Market Analysis was carried out in three regions of Ethiopia, Tigray, Amhara and Oromia, in order to identify value chains with the highest potential opportunities for returnees and potential migrants, indicate key constraints and suggest ways forward for future programming.

Following the development of sector selection criteria, the research team moved from a scoping list of 13 sub-sectors and value chains to a long-list of six sub-sectors or value chains. Rather than focusing in for further analysis on a handful ('shortlist') of these, following discussions with ILO Ethiopia, it was decided to continue reviewing all six sectors, while accepting this might compromise depth of analysis. It was also agreed to drop infrastructure as the lowest ranking sector on the long list, while further dividing manufacturing into two sub-sectors - textiles and garments and agro-processing. As such, the six sectors covered in this analysis are: agro-processing, construction materials, livestock fattening, poultry, textiles and garments, and urban agriculture. The analysis highlights high potential for returnees in five of the sectors considered, listed with highest potential first: poultry, livestock fattening, construction materials, textiles and garments, and urban agriculture. There is considered to be lower potential, at least in the short-term, in agro-processing. Sector scores are compared more fully in section nine.

Briefly reviewing each of the sectors, in poultry, most opportunities are likely to be in small-scale production. Limited skills development and assets are required, returns are relatively quick, and there are significant opportunities for women. The sector is growing rapidly with large unmet demand in urban areas, suggesting production would be best placed in urban or peri-urban areas. A growing number of market actors are working in the sector, particularly in the provision of inputs such as day old chicks, veterinary products and equipment providers. However the sector is significantly constrained by these actors tending not to distribute to more remote areas, while high flock mortality rates make the sector risky for returnees.

Livestock fattening paints a not altogether dissimilar picture. It is common across the target regions and currently engaging a number of returnees. Opportunities are mostly in the production and sale of fattened livestock, but also in related enterprises such as inputs provision and brokerage and trading in the marketing of the fattened animals. Enterprise investment costs are fairly low, with return on investment fairly fast. Returnees are also likely to have relevant previous experience, while TVET colleges and Bureaus of Agriculture are able to provide short trainings to improve practice. However, livestock fattening is constrained by high feed cost, poor quality and low availability of feed resources, inadequate veterinary services, weak extension services as well as good management practices and proper policy support for livestock development.

There is significant potential in urban agriculture for returnees, including many women. New opportunities are likely to be accessible due to previous returnee experience working in basic homestead farming and the limited skills development required. Horticulture in particular offers the opportunity of comparatively high and quick rates of return. As Ethiopia continues to rapidly urbanise and incomes grow, demand in urban areas for agriculture products is also growing quickly – which urban agriculture is well placed to meet. However the flipside is that space is limited and most urban agriculture is carried out on dispersed small farms by small enterprises. This makes it harder for input providers to market products. Further growing urbanisation provides pressure to reduce space for urban agriculture, with urban planners generally prioritising other sectors.

The high potential of the construction materials sector is driven, one, by the rapidly growing construction sector on the back of growing private sector and government demand and, two, the labour intensive nature of the sector. Most opportunities are likely to be in small enterprises in urban areas across the three regions. Wages tend to be high, though for cobblestone production there can be large gaps between jobs. Skill requirements are low, while many returnees are likely to have picked up relevant skills in Saudi Arabia. There are challenges though in accessing finance and workspaces, while there are few market actors in the sector supporting functions. The most significant challenge though relates to the political economy. Work is competitive and requires local connections which returnees may have lost. This is particularly the case in public cobblestone projects, where each local administration seems to have different processes.

The textiles and garments sector encompasses two value chains: the textiles and apparel industry and the traditional garments sub-sector. Potential exists for increasing opportunities for MSEs and employment as the Government of Ethiopia invests more in increasing in areas under cotton through irrigation and developing integrated agri-industrial parks that are aimed at industry development. Employment opportunities will include skilled and unskilled labour in spinning, weaving, knitting, embroidery and finishing. Though likely to face challenges due to their educational

levels, returnees are likely to access these opportunities. A number of returnees are also already working in the production and sale of traditional garments and tailoring services. Returnees face challenges in establishing such enterprises though. Though MFIs provide loans, these tend to be of inadequate size. In addition, access to skills, especially traditional weaving skills and improved technologies is limited – though it is easier to acquire tailoring service skills.

The number of returnees engaged in agro-processing currently is low. However, in addition to primary processing activities, employment opportunities exist in large and medium-scale processors (LMPs). The broader Addis Ababa area, Bahir Dar, Adama/Nazareth, Awassa, Mekele, and Diredawa are the most feasible locations for agro-processing. In addition, potential opportunities may also arise upstream and downstream in the agricultural value chains as the government establishes integrated agro-industrial parks. However, the employment opportunities in the LMPs are not accessible for most returnees due to limited education. Further TVET colleges are not providing training here and reported not having adequate trainers and equipment at the centres. They noted that running such courses would be more expensive considering the unit costs per trainee.

The study ends with recommendations to enhance opportunities for returnees. These are broken down in two ways. One, recommendations for specific value chains versus cross-cutting recommendations. This distinction is important as though the focus of this study is on assessing which value chains are likely to provide most opportunities for returnees, returnees are not clearly demarcated into a handful of value chains but rather spread out across many. As such, improving how partners work with returnees and improving networks between returnees may significantly enhance returnee opportunities. Two, short-term recommendations that ILO Ethiopia may wish to start carrying out now within current programming versus longer term recommendations that may require an extension to programme resources or to be taken on by a further programme. Recommendations are listed in detail in section ten, but some key elements are highlighted here.

Short-term cross-cutting recommendations include increasing the ILO's market intelligence so that the ILO can further develop future strategies while also improving its credibility and offer to market actors, with in depth analyses of the poultry value chain, livestock fattening value chain, construction materials and urban agriculture sectors and on the labour market for the textile and garment sector. Information flow in the returnee system is generally weak and ILO should work with partners to develop better returnee results monitoring and feedback systems. ILO should also work to further empower partners and connect to key private sector actors. Work with MFIs should prioritise support to Islamic finance while support to MSE agencies should explore the potential for coaching on land use planning. Networks between returnees should also be further exploited, suggesting, for instance, a knowledge sharing event between returnees.

In the short (and long) term it is recommended that the ILO support the following sectors: construction materials, livestock fattening, poultry, textiles and garments, and urban agriculture. Relevant skills, access to finance and access to land are all clear constraints for returnees accessing sectors, such, support should continue to focus on skills development and improving access to finance and land. Short term value chain recommendations include in poultry considering partnering with ILRI to support the roll out of their egg laying equipment scheme. For livestock fattening, work should aim to support TVET capacity to train on animal feed formulation- potentially in partnership with the Livestock and Dairy Research Institute. For textiles and garments, there is a similar need to link up TVET colleges to sector specialists, such as the Textile and Apparel Institute, so training can be linked to newly established firms. However ILO could explore facilitating internship and job-placements in textile companies. For construction materials, short term recommendations include working to support the status of relevant training for returnees at the Federal TVET agency and colleges and developing a clear political economy strategy. In urban agriculture, an initial focus should be on working with MSE agencies to explore improved modelling around how land is disbursed to enterprises. It is recommended that support does not intensively focus on the agro-processing sector as there are less opportunities for returnees in the short-term².

Longer term, ILO should explore the potential to move away from using upfront grants, including performance based payments to TVET colleges or guarantees to MFIs. Work with MFIs should prioritise the development of new financial products for returnees, such as training attendance loans and asset financing equipment and lease purchases. Overall ILO should seek to engage further market system actors, such as private sector MFI and TVET colleges, using the information and successes it will have developed.

Longer term there is also the real opportunity to support the development of inclusive value chains. Input distribution is a significant challenge for several sectors. In poultry, distribution to rural areas is limited, and there is the potential to increase their capacity to distribute to more rural areas and embedding information on use. This is particularly important for veterinary products. Further, to address high mortality rates, finance providers could be supported to develop relevant insurance products. In livestock fattening, the distribution of access to good quality feed is particularly important, while another approach could be to facilitate some returnees to start MSEs in feed formulation and link with livestock fatteners and poultry producers. Market access is a key constraint in cobblestone production, with work suggested to stimulate demand in the private sector- which would both address reliance long term on government contracts and more medium term, on gaps between government contracts. For textiles and garments, with the growing number of textile

² Nevertheless recommendations are provided in section ten case the ILO decides to support this sector.

manufacturing companies setting up operations in Ethiopia, ILO will need to scale-up support to improve the capacity of TVET colleges, plus other garment colleges, in assessing industry skill needs and improving equipment in colleges. However this modality needs not be just ILO funding, but rather a partnership between all actors involved. For urban agriculture, the ILO should focus on land planning and work through urban agricultural units to make the case more effectively to urban planners and decision makers on the importance of urban agriculture.

1. Introduction: Context and Objectives



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With approximately three million young Ethiopians entering the labour force every year, ensuring productive employment opportunities for them poses a challenge. As a result, growing numbers of Ethiopians have been looking for job opportunities either in the capital province or abroad. For the past three decades, Saudi Arabia has been a major destination for Ethiopian migrant workers.

In November 2013, the Government of Saudi Arabia decided to expel irregular migrants, aimed at creating job opportunities for young unemployed Saudis and regularisation of the labour market. Between November 2013 and March 2014, more than 163,018 Ethiopian migrants were forcibly repatriated. The government of Federal Democratic Republic of Ethiopia and other relevant stakeholders such as IOM, UNICEF etc. integrated emergency efforts and managed the repatriation process. However, the experiences of returned migrants and the challenge of successful reintegration remain largely unaddressed. Support to returnees to integrate and make a living in their homeland is still in early stages.

This challenge necessitated the development of the ILO project 'Support to the reintegration of returnees in Ethiopia'. The project aims to improve labour migration governance in Ethiopia and efficiently and effectively assist returned migrant workers in accessing productive employment and decent work. The reintegration comprises of the following four major interventions:

- ➔ Social support including psycho-social support
- ➔ Awareness raising programs on the consequences of irregular migration, possible local livelihood opportunities and to avoid discrimination towards returnees

- ➔ Economic empowerment of returnees
- ➔ Institutional development to support national cooperation and capacity to manage return and reintegration.

To this end the project has identified a number of activities clustered around three outcome areas:

- ➔ Returnees and local vulnerable community members have been provided with needs-appropriate social support
- ➔ Training programmes that meet local economic opportunities and individuals' interest have been designed and delivered
- ➔ Returnees and local vulnerable community members have been provided with long-term socio-economic (re)integration support

To support this work, the ILO has sought international consultants to conduct rapid market assessments (RMA) of relevant sectors for returnees and migrants in three priority regions: Tigray, Amhara and Oromia. The RMA will specifically aim to collect sufficient information to enable the ILO project team to

- A.** Make an informed decision about the potential and relevance of certain sectors, sub-sectors and value chains, and to judge whether interventions to develop these sectors would be feasible;
- B.** Better target skills development interventions for the target group toward existing labour market demand and economic opportunities for self-employment;
- C.** Make initial hypotheses about what are the underlying constraints in the market and identify possible sectoral interventions that help returnees and other potential migrants to exploit economic opportunities in sectors and value chains with potential.

2. Methodology



The analysis was carried out in several steps from June to October 2016.



Step 1 - Understanding assessment goals and needs: Following an initial call with ILO Ethiopia and an analysis of relevant ILO Ethiopia documents and external resources, a second call was held to cover outstanding questions, including on ideal study form, the target group and geographic focus.



Step 2 - Developing a detailed research proposal: This outlined how the researchers proposed to carry out the research, including a rough field visit itinerary and the types of stakeholders to interview.



Step 3 - Setting sector selection criteria: Criteria were developed, clustered around three clusters: relevance to the target group, opportunities to create inclusive growth, and feasibility to intervene. Specific criteria were based on a review of ILO guidance, project documents and analysis by the consultants. Sub-questions were similarly developed for each criteria and different weightings were determined for each criteria to match their relative importance in determining the extent of opportunities for returnees in the value chain. Feedback was provided by the ILO to enhance criteria before approval. The criteria, sub-questions and weighting are included as Annex A.



Step 4 - Scoping and sector long listing: Following a quick review of key project documents and the consultants own experience, a list of 13 potential sub-sectors or value chains were initially considered. These consisted of: rural crop production, horticulture, urban agriculture, cattle, sheep and goat fattening, poultry, animal feed production, apiculture, inputs

for manufacturing, manufacturing, construction materials, infrastructure, trading services, and food services (restaurants and cafeterias).

In order to develop a long-list, the analysis took an 'exclusionary' approach, excluding sub-sectors or value chains that did not pass basic heuristic questions: is the value chain relevant across regions, are there a mix of urban and rural value chains, are there many opportunities in the value chain, are resource requirement to improve the value chain low, and is the Ethiopian government supporting the sector. Information was obtained from key project reports, consultants own knowledge and interviews with the ILO. More interviews had been planned but delays in developing a protocol letter meant they could not be carried out in time. The following long-list was developed: urban agriculture, poultry, livestock fattening, infrastructure, manufacturing, and construction material



Step 5 - Sector shortlisting: Initially the long list was analysed based on a review of secondary sources, project documents and interviews with key stakeholders. Sectors were scored against the selection criteria, and three sectors were recommended. However ILO Ethiopia advised that, though the sector recommendations were seen as strong, more value would be found in the analysis looking at a larger number of sectors rather than a smaller number in more depth. It was agreed to focus on the six sectors identified in the long listing but recognise that the depth of analysis would be less than originally planned.



Step 6 - Rapid Market Assessments (RMAs): RMAs were conducted on the chosen sectors as part of an in-country visit 5 - 19 August 2016. Time was balanced between Addis Ababa, with interviews with apex organisations, federal agencies and donor agencies, and in target regions and woredas with local representatives from TVET colleges, MFIs, MSE agencies, etc. In Amhara, the researchers visited Ataye woreda in North Shoa and Mersa in North Wollo. In Tigray, the researchers visited Raya Azebo in South Tigray and Adi Gudem in South East Tigray. In Oromia, the researchers visited Sherka woreda in Arsi. The mission to west Arsi was cancelled due to the security situation.



Step 7 - Consultative meeting with stakeholders: The in-country visit ended with a presentation on initial findings to ILO Ethiopia.



Step 8 - Final report write-up: Feedback from the consultative meeting and further comments were incorporated into a draft report. Following feedback from ILO, this was completed in October 2016.

3. Poultry



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Poultry production is widespread in Ethiopia, with the poultry population estimated to be more than fifty million. Although modern farms have recently been established and slightly expanded mainly in the capital and nearby cities, their share from total national poultry production is still very low, and small-scale village poultry contributes almost 99% of the national egg and poultry meat production. Here a few birds are owned by individual households and are maintained under a traditional scavenging system, with few or no inputs for housing, feeding and health care—however in these cases poultry is more seen as supporting household subsistence, providing a source of protein, a small but steady income stream and an asset to sell in case of minor emergencies. Though this subsistence is very important, e.g. Hailemichael et al (2016) highlight that village poultry is carried out by 60% of rural households interviewed in Tigray, Amhara, Oromia and SNNPR, this analysis will aim to focus on commercial production of poultry i.e. where poultry is produced using more modern approaches to provide an important source of income rather than predominantly satisfy farm household needs.

3.1. Relevance to target group

3.1.1. Current presence of returnees in the sector: 4/5

There are no clear figures on the number of returnees working in poultry in Ethiopia as relevant reports rarely break down agriculture into constituent parts. However reports and interviewees suggest a moderately high level. Bihoegn and Denu (2015) note that 40% of returnees interviewed who are working, are working in agriculture. Within agriculture, studies note that animal husbandry is generally less



prevalent than crop production. However, it is still a significant sector. For instance, Daniel (2015) notes key areas of returnee engagement in primary agriculture are cereal growing, horticulture and livestock business (poultry and cattle fattening) – he notes that the latter is particularly prevalent in central and eastern zones of Tigray, Finfine special zone and Arsi Administrative zones of Oromia and North Eastern, Oromo-zone and North Shoa zones of Amhara. Further on this research field visit, a number of model returnees working in poultry were identified. Reports mentioned do not include a gender breakdown amongst returnees working in poultry, but informants highlighted that a significant number of women returnees are working in poultry.

3.1.2. Nature of participation of poor in the sector: 3.5/5

As noted above, village or backyard poultry is prevalent across target regions- however the focus here is on more commercially focused enterprises i.e. where poultry plays a key role in household income. Various classification systems exist of poultry farming approaches. Fitsum and Aliy (2014) distinguish, for instance, between village or backyard poultry production systems, small-scale poultry production system and commercial poultry production system. Interest here is in the latter two. Small-scale poultry farms, with flock sizes ranging from 50-500, are located more in urban and peri-urban areas, with production system characterized by medium level of feed, water and veterinary service inputs and minimal to low biosecurity. Larger scale commercial poultry production have generally over 10,000 birds, kept under indoor conditions with a medium to high biosecurity level. This system depends on imported exotic breeds that require intensive inputs. Production is entirely market oriented to meet large demand in major cities. Though the poor participate across the value chain including in provision of inputs such as animal health and feeds, retail distribution and other support services, the large majority of opportunities are in production. Beyond prevalent backyard production, for smaller-scale production, opportunities for the poor lie more in starting own enterprises, while for larger businesses, opportunities are more likely to lie as employees identified through networks or referral.

Village poultry is in part so prevalent as it requires little work and can be carried out as a side activity alongside other livelihood activities that demand time. However Ayele and Rich (2010) note here that poultry is not a main source of livelihoods, ranking in 3rd or 4th place in terms of its contribution relative to other livelihood activities. Even so, backyard poultry can contribute as much as 20-25% to household incomes, so its livelihood impacts are not trivial. However in focusing on commercial production, there are a number of more salient points. Important to returnees, there is a relatively quick pay out on investment, with it taking 3 to 4 months for bought chicks to start laying eggs or be ready for sale. Returns are also high, with Bihohegn and Denu (2015) noting a minimum rate of return of 25/30% per harvesting period.



There is scope as well to incrementally progress in the sector over time, for instance using poultry as a stepping-stone to invest in larger livestock, growing flock size or investment in more technology or bio-security measures. However poultry is a risky business, with high mortality rates amongst flocks. For instance, Hailemichael et al (2016) find that in village production, death accounted for up to 56% of the outflow of local and improved flocks, with disease causing more than 70% of this mortality (followed by predators and accidents at, respectively, about 15% and 9%). This risk of birds being wiped out by diseases, they note, is one of the most important reasons that households do not want to expend effort and money on improved husbandry and housing of village poultry. Indeed, on the field research, enterprises were highlighted where whole flocks of 25 or 50 chickens had died.

The value chain also provides significant opportunities for women. This is in part as poultry can be managed by women as part of household activities, unlike other agricultural activities. Hailemichael et al (2016), in a survey of village poultry farming households, found that women tended to be viewed by households as responsible for poultry management in the majority of cases (64%), with more than half of income jointly controlled by men and women (and men and women alone controlling income in 13% and 30% respectively of households). This said, as poultry production is carried out alongside other work, it does not necessarily replace it, and there is a risk of sector support increasing women's overall workload alongside care and other livelihood activities- and projects should monitor changes here where supporting the sector.

3.1.3. Appropriateness of sector for returnees: 4/5

Traditional scavenging poultry practices require little specific knowledge. Indeed Hailemichael et al (2016) note that low levels of education is not a barrier to traditional poultry production. Though reports on returnees don't focus in on poultry, they do show that returnees have basic skills and experience in agriculture more broadly. For instance, IOM (2014) finds that of those working before migrating, most were working in agriculture. Informants noted that poultry rearing is a common practice in Ethiopia and returnees would likely have some relevant skills and experience from family farms. However for small-scale (or larger) production, more specialist knowledge is required. Short-term TVET trainings in Ethiopia for returnees focus on designing and implementation of poultry feeding plans, poultry health control system, operation of poultry production machinery and equipment's and primary record keeping in poultry production. A representative from the TVET college in Ataye noted that of 45 current returnees training in poultry, around 12 had already tried working in poultry with up to 25 chickens, but most had failed, in particular due to chicken health issues- and he highlighted this was the most important training topic.



One of the benefits of working in poultry are the low capital investment levels required. For village backyard poultry production system, there are little or no inputs for housing, feeding or health care and it does not involve investments beyond the cost of the foundation stock and a few handfuls of local grains. For small-scale businesses, costs are larger but still modest. They include chicken stock, chicken coops, and feed and drink materials and containers and vitamins. In a review of eight potential value chains for returnees, Bihohegn and Denu (2015) note that asset requirements are cheapest for poultry at over 5,000 ETB a person - however this is presumably for a smaller business of less than 50 chickens, while a returnee who bought a larger 200 chickens noted 38,000 fee for the stock alone. Informants in Arsi noted the need for 70,000 ETB investment. ILRI is working on a new project as part of its LIVES programmes, discussed later on, which centres on providing producers equipment for laying eggs, costing 30 USD. Bihongen and Denu (2016) find that the challenge is less asset cost, more their availability, in particular limited availability of medicine, feeds and appropriate chicken types. Informants also noted challenges in accessing capital. The reasons for this are less clear, but a returnee highlighted that she lacked collateral to access credit, while it also seems likely that finance providers may see poultry as high risk. It also appears that there is little support here from extension officers and other development agencies. Hailemichael et al (2016) find in a study of nearly 3,000 households, one-third noted that they needed credit to improve their poultry but only 1% reported receiving linkage support to access credit services.

Though generally returnees are not enthusiastic to work in agriculture and are more enthusiastic to work in trade, there is higher interest in poultry as there is a high rate of return and good returns. However interviewees noted that working in chicken involves real commitment to live regularly check chickens for any issues and to be willing to “live among them” which not all returnees may have.





3.1.4. Differences for potential migrants: 2.5/5

There is likely to be little difference between returnees and potential migrants in regards to accessing poultry. Most returnee experience in poultry was likely gained before travelling, while returnees were unlikely to be working with poultry in Saudi Arabia. That said more generically some returnees may have saved some assets that can be invested in poultry. More broadly informants in East Tigray noted that returnees are generally more aware of loan opportunities, investigating different business ideas more, performing better in trainings- and overall perform higher than potential migrants in sectors they focus on, with model poultry businesses in their area more likely to be returnees than potential migrants.

3.2. Opportunity for inclusive growth

3.2.1. Likelihood of sector growth: 4/5

The government's 'Ethiopia livestock master plan' notes that the poultry sub-sector contributed in 2015, 4,172 million ETB to GDP, with total chicken meat production of 48,900 tonnes and total egg production of 419 million eggs. As noted above, Hailemichael et al (2016) found that most rural households hold chickens (60%), which when combined with urban areas, gives 57% of all households keeping poultry. Focusing on larger farms, the Livestock Master Plan (Shapiro et al, 2015) notes 120,000 Improved family poultry-keeping households (farms or units of 25 hens each) in 2015.

The master plan projects growth in chicken meat production to 164,000 tonnes and eggs to 3.9 billion by 2020 through improved family poultry practices and expanded specialized poultry, with the poultry sub-sector's contribution to the GDP increasing to 15,631 million ETB. This would mean 416,000 improved family poultry-keeping housings by 2020. However this projected growth seems optimistic and is based on many limiting factors being overcome, while the Growth and Transformation Plan II (National Planning Commission, 2015) notes that in agriculture, livestock is a key sector where growth has fallen short of potential. The chairman of the Ethiopian Poultry Producers Association also highlighted that demand was growing significantly, but was less than in comparable countries in Africa as people were not sufficiently aware of health benefits- and he noted he was discussing with the Ministry of Health and the US embassy ways to promote the sector.

Looking across study regions, Hailemichael et al (2016) noted that at the village production level, in Tigray and Amhara around 76% of households had poultry, with around 45% in Oromia. Flock size per household was highest in Amhara at 11 followed by Oromia at 10. Within this there are though significant regional differences to be followed up in further studies. For instance, Fitsum and Aliy (2014)



notes that the West and Central Tigray Zones together account for about 70% of the total regional poultry population.

Though perhaps bullish, the Livestock Master Plan does highlight key economic trends that are likely to lead to continued growing demand for poultry, notably population growth, while rising incomes and urbanisation are likely to lead to habit changes towards meat and protein rich diets. New agro-processing industrial parks around the country are also likely to increase demand, if producers can be properly linked to them.

3.2.2. Scope for improving target group employment in the sector: 4/5

Informants and reports agreed consistently that poultry demand is growing, in particular in urban areas, and that the market would take up any new production. Many noted substantial rises in egg and chicken prices in recent years. Hailemichael et al (2016), for instance, note that the average price of adult birds at 58–80 ETB per bird in 2012 was up to five times higher prices in 2006. Continued growth in demand is projected to lead to large numbers of new opportunities across the value chain. These are most likely to be in farm production, particularly in the establishment of semi-commercial enterprises. The Master Plan anticipates 416,000 such households by 2020, a 247% increase on 120,000 in 2015. ILRI also note the potential for large extra employment in micro hatching. That said, the sector is not especially labour intensive. More basic small-scale production may require just the one person, while an additional few people may be employed as stocks grow up to 500. Larger commercial farms will need larger numbers of people, but representatives from ILRI noted that they tend not be labour intensive due to high automation and biosecurity concerns.

Bihohegn and Denu (2015) highlight the sector has significant potential for creating greater economic opportunities for many more returnees, and the new opportunities identified above are likely to be accessible to returnees. As noted, barriers to entry are fairly low compared to other sectors and, as noted by a representative from Mercy Corps, with skills development and support in accessing finance, returnees should be able to establish successful businesses here- indeed several have started to do so. These are significantly most likely to be in small-scale production, with a smaller number possible in the distribution of inputs and marketing, and for those more qualified, potentially in larger commercial farms. However the low labour intensity of the sector suggests the number of new opportunities are likely to be moderate - or the need for scale agents to increase the number of returnees starting such enterprises. Though local village production occurs across rural, peri-urban and to a lesser extent urban areas, small-scale production is more likely to be viable in peri-urban and urban areas, while larger commercial producers are concentrated



around Addis Ababa and Debre Zeit, and further emerging in other growing urban areas. Bihogen and Denu (2015) highlight the sector as having particular potential in Tigray- Woreda towns in Eastern, Central and Southern Zones; Amhara- Woreda towns in North and South Wollo, Oromia zone, North Shoa; Oromia- Woreda towns in Arsi and Jimma zone. Informants stressed two areas, one in Tigray around Mekelle linked to the growing DOC farm based there (see below); and around Adama, where many feed suppliers are based and there is a large, growing, richer urban population.

3.3. Feasibility to stimulate change

3.3.1. Willing and able market actors: 4/5

Boere et al (2015) note that there are approximately 25–30 medium to large scale integrated farms that keep poultry and that process and distribute their products themselves. These are concentrated in the area covering Addis Ababa, Debre Zeit, Mojo and Adama. Commercial poultry farms are also coming up in other growing urban areas, such as Mekelle, Dire Dawa, Gondar, Awassa and Bahir Dar. Large commercial farms in Debre Zeit and Modjo often own their own supermarkets to sell their products and exclude traders from the chain in Addis Ababa. For backyard and small-scale producers, farmers themselves may play the function of processors, transporters, and sellers of their products, directly interacting with consumers either in the village market or live-bird markets. However other informants noted the importance of brokers and their powerful role in the market. In this context, the manager of Elere poultry noted a goal to develop large-scale processing facilities, including a slaughterhouse and cold storage facilities, so that his company would be able but directly from producers and then sell to market, helping guarantee farmers market access.

Leading hatcheries are listed in Boere et al (2015). Most private hatcheries are concentrated in Debre Zeit, though off particular note is development of a large hatchery in Mekelle in Tigray, Ethiochicks, which is selling DOCs to Tigray, with increasingly farmers from Amhara and Oromia travelling to it. It supplies about 900,000 fertile eggs, 180,000-day-old chickens and 100,000 pullets and cocks per year to smallholders and is increasing capacity. There are also many public poultry growing and distribution centres, operating with the major objective of distributing improved exotic breeds of layer and dual purpose breeds to smallholder farmers in the region. Subsidized prices are about 25% lower than the market price and development agents often work as intermediaries to ensure the flow of DOCs from to rural farmers. However representatives from ILRI pointed out that the public hatcheries are not very efficient, and that the two systems aren't working well together. Further, Boere et al (2015) note that despite these, the total output of the



hatcheries currently is too low to meet demand, leading to long waiting lists for poultry keepers.

Boere et al (2015) note that there are a few commercial feed producers that produce specialised poultry feed in the country, like Alema Koudijs Feed, Akaki Feed Factory, Ethiofeed and Friendship Agro-Industries. Feed mills generally use locally produced raw materials. However, premixes and concentrates are usually imported since there is no production of good quality premixes and concentrates in the country. Recently, a few foreign investors have come to Ethiopia to produce compound feed on a large-scale, most notably Astral Foods and Feedco.

Boere et al (2015) go on to note NVI- PANVAC in Debre Zeit produces a number of vaccines for poultry. Other important vaccines are not available from local producers. Only East-African Pharmaceuticals produces some veterinary medicines itself, though currently the Ethiopian government is registering more and more veterinary medicines and vaccines and aiming to increase business opportunities for suppliers. At the moment some of the most important suppliers of veterinary products are: Equatorial Business Group, East-Africa Pharmaceuticals, Rangvet PLC and Gasco Trading. Though vaccines provided is covered by the government, medicines are generally provided by the private sector, and Ayele and Rich (2010) notes the recent emergence of privately-owned veterinary services – with pharmacies, practices and medicines widely available.

Boere et al (2015) add that poultry farm equipment is available through several farm equipment distributors. The distributors have close relationships with several companies abroad. Customers are farmers at all scales. Small and medium scale farmers mostly buy drinkers and feeders, while large scale farmers need more comprehensive solutions including hatchery and climate systems. The most important importers and suppliers domestically are Gasco Trading, Wiseteam PLC and Friendship Agro-Industries.

However these input providers exist, take-up is poor. Hailemichael et al (2016), note that, in their study of village production, only about 20% of households reported that they purchased and used at least one type of input for poultry production. Of the 20%, about 58% reported they purchased cereals, followed by drugs, vaccines, feeding and watering equipment, hatching eggs and DOCs at respectively 25%, 7%, 2%, <1% and <1%. This is partially explained as rural distribution systems are very poor, with farmers or extension services acting on their behalf having to travel to their warehouses in the large cities.

Boere et al (2015) note that some universities have their own poultry unit, but the management quality and utilization of training options from these units differ from university to university. The Netherlands consortium Holland Africa Poultry Partners has, with financial inputs from both the Ethiopian and Dutch government built a practical training centre, the National Poultry Training Centre, in Debre Zeit. Further



all the regions have at least two Agricultural TVET colleges, all of which include animal production in their programmes. No private sector training institutes working in poultry were identified in the study.

Though a representative from DECSI highlighted that there was direction from the government for MFIs to support the poultry sector, no products were observed specifically relevant for poultry. However, as opposed to other sectors, the high-risk element to poultry suggests an insurance product would also be very valuable. Agricultural loan levels appeared to be small, capped at 15,000 for instance By DECSI - lower than the costs for a more sizeable farm. The chairman of the Ethiopian Poultry Producers Association noted that commercial banks are less interested in the sector as, due to high mortality rates, they see it as a high-risk sector.

The sector is supported by several association organisations, each with a different focus. The Ethiopian Poultry Producers Association is active in particular in advocating for a better business environment and supporting networking in the sector. Its members are predominantly larger producers. The Ethiopian Veterinary Association is also active in the poultry sector, for instance carrying out regular assessments on major challenges in the sector, with special reference to health and feed related constraints. It has also provided trainings on business plan development and management to private veterinary service providers with the aim help them sustain and diversify their scope of service delivery towards the potential but neglected sectors including small scale poultry, and has a future plan to support them in providing vaccination and clinical services to small scale and backyard poultry with special reference to Newcastle disease. There is also the Ethiopian Animal Feed Industry Association. From its website and interviews with representatives from ILRI, it appears to be less active. That said, it has organised sector events, facilitated training to its members on feed practices and tried to introduce new technologies and seeds to the sector.

3.3.2. Conduciveness of political economy: 4/5

The government's second Growth and Transformation Plan highlights the importance of increasing livestock productivity and production, with the objective of adequately exploiting its potential for growth, export earnings and job creation. The strategies set to realize these objectives are: improving animal health, animal feed and animal breed with targets to increase the productivity of meat, milk, honey and egg production. The application of livestock policies is specifically laid down in the 2014 Livestock Master Plan. This foresees several major interventions to support commercial poultry production, including: ensuring sufficient land is allocated and put into poultry feed production (especially maize and soybeans); promoting private sector investments to increase the number and size of specialized commercial scale broiler and layer units; and encouraging the private sector to invest in poultry



agribusiness, especially day old chick and pullet production and meat and egg processing.

There is clear government support and strategy for the sector, while the business environment is sufficiently enabling. However Ayele and Rich (2010) note that there are no specific governance structures established for domestic production and marketing. Interactions are largely ad hoc, with limited to no coordination between different parties involved in the value chain. The business environment could also be improved, with issues raised such as high import taxes on various inputs for poultry production, notably the 53% import tax on pre-mixes and concentrates for poultry feed. Furthermore, there is no government regulation to guide processing, nor do biosecurity measures exist in the traditional sector- and nor are they well enforced in the sector at large.

3.3.3. Likelihood of distortion: 2/4

In 2014, the International Livestock Research Institute and partners initiated a new collaboration, African Chicken Genetic Gain, to provide better chickens to smallholder farmers in Africa. This targets Ethiopia, Nigeria and Tanzania and is mainly financed by the Bill & Melinda Gates Foundation with a budget for the first 5-year phase of USD 15 million. In Ethiopia the programme is being implemented in Amhara, Oromia, SNNPR and Tigray, as well as in and around Addis Ababa. Though there may be space to collaborate here in the future, this work is currently still at a research stage rather than being ready for large-scale implementation.

More advanced and more relevant as a potential partner is ILRI's Livestock and Irrigation Value chains for Ethiopian Smallholder programme, funded by the Department of Foreign Affairs, Trade and Development of Canada. The poultry sector is a key focus of this and includes work to help the establishment of small-scale agribusiness production of DOCs, with ILRI partnering with local extension services to provide basic brooding equipment and information. A large number of model farmers are now working with this technology, and ILRI are interested to find partners to help scale this work.

Though more in pastoralist areas, the USAID PRIME programme is also working in poultry sector supporting access to feed and inputs. Though focusing outside of the ILO target areas, some of the input suppliers PRIME has partnered with are inside target areas- most notably work with Ethiochicks to extend sales through local agents to PRIME focal areas. PRIME is likely to provide valuable lessons, while care should be taken if working with businesses that PRIME is working with.

There has also been significant Netherland government support to the sector, including a Poultry Programme that supported trade missions between Netherlands and Ethiopia and the establishment of the first National Poultry Training Centre in



Ethiopia, while the Agri-Business Support Facility facilitated the organization of a tri-annual Poultry Platform and supported the development of the Ethiopian Poultry Producers Association. Boere et al (2015) also notes that ACDI/VOCA implements a US funded three-year Feed Enhancement for Ethiopian Development II project, which increases livestock and poultry productivity by further developing the animal feed sector, including through supporting the Ethiopian Animal Feed Industry Association. However we were unable to interview representatives from the Netherlands or ACDI/VOCA in the field visit.

Overall, it is clear that a number of donors are working in the sector. This suggests, in the least, a need to be further aware of where and how these agencies are acting and to not distort their work. However there may be some opportunities to work with them, in particular with ILRI's work to support layer small agri-businesses.

Supporting the development of a more inclusive poultry value chain can create significant opportunities for returnees and the sector is ranked highest overall (see **Table 1**). Most opportunities are likely to be in small-scale production, with smaller numbers in distribution of inputs and marketing, in particular in peri-urban and urban areas where there is a large and growing demand for eggs and meat. Wage employment opportunities in commercial farms are likely to be small and relevant only to more qualified returnees. Opportunities are accessible to returnees. Many returnees will already have experience managing foraging poultry, while the skill requirements to move to small-scale commercial production can be taught fairly quickly. Asset requirements are also low, while both the speed and level of return on investment are high. Poultry is also often seen as women's responsibility and provides significant opportunities for women. There is significant government support to the sector, and a variety of market actors that a project could work with to support returnee opportunities, such as DOC, veterinary products and equipment providers. Indeed, informants stressed opportunities in particular in two areas, one in Tigray around Mekelle linked to the expanding DOC farm; and around Adama, where many feed suppliers are based and there is a large, growing, richer urban population. However the sector does face challenges. A number of other development agencies are working here, and so co-ordination is needed. Though they exist, input providers are not sufficiently supplying rural areas, with producers having to travel to more urban areas to make purchases or relying on friendly local extension services doing this for them. Of most concern are, at times, very high mortality rates for producers. This is partially due to poor distribution of veterinary products, but there is no silver bullet solution. Other approaches are needed, such as the development of relevant insurance products.

4. Livestock Fattening



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Livestock fattening in Ethiopia has been recognized as a potential profitable activity that enhances the income of smallholder farmers (Shapiro et al, 1993). Furthermore, the increasing human population is placing pressure on grazing lands, as land is being cultivated for cereal production while the demand for meat is increasing. To meet this demand, both large scale (commercial feedlots) and small scale fattening operations are carried out in Ethiopia. Fattening of animals in agro-pastoral system in low lands and the mixed crop-livestock system in high lands is a common practice. For example, it is becoming increasingly important in areas surrounding major cities and towns in the country, which have high demand for livestock products e.g. farmers in Arsi Negele fatten animals using *atela* (local brewing by-product), which they purchase from local brewers and then sell them into the market (Addisu et al, 2012).

The main focus of the value chain will be the production and sale of fattened livestock - the species of choice for fattening will depend on the local context, though sheep and goats have better turnover. In addition to primary focus of the value chain (production and sale of fattened livestock), other opportunities associated with the value chain are inputs enterprises, labour provision in fattening enterprises and brokerage and trading services in the marketing of the fattened animals. Few employment opportunities for unskilled labour in the enterprises were also reported.



4.1. Relevance to the target group

4.1.1. Current presence of returnees in the sector: 4/5

There is no clear data on the number of men or women engaged in the sector, but studies such as Bihohegn and Denu (2015) indicate that a good proportion of the returnees (estimated at 40%) were engaged in primary agriculture (including livestock fattening). The key informants and MSE owners met during the research indicated that the production and sale of fattened animals was a key enterprise that engaged the returnees. Similarly, Bihonegn and Denu (2015) indicates that considerable number of returnees in central and eastern zones of Tigray; Finfine special zone and Arsi Administrative zones of Oromia as well as North Eastern, Oromo-zone and North Shoa part of Amhara were engaged in cattle and sheep fattening.

4.1.2. Nature of participation of the poor in the sector: 3.5/5

Livestock fattening is common in almost all agro-ecologies including Oromia, Amhara and Tigray regions, with a lower prevalence in the lowlands. Further, the use of improved forages and concentrate feeds for fattening is a growing practice, as the prices of meat increases. Birhan and Manaye (2014) identified three livestock fattening systems: these were traditional, by-product and Hararghe production systems. Traditionally, smallholder farmers purchased oxen specifically to fatten for 3 – 6 months on the available inputs, targeting sales during festive holidays so as to get higher price per weight margins on each fattened animal. Even in urban areas, livestock keeping was practiced using household wastes, agro-industrial by products such as molasses and brewery residues, weed and grass from public lands and crop residues from market and urban farmers. As for the Hararghe livestock fattening system, farmers bought cattle from the surrounding lowlands, then fatten them under zero grazing and sold them. The commercial feedlots are located in East Shoa Zone of Oromia Regional State, particularly around Mojo, Adama, Wonji and Melkessa areas and targets the major export and domestic abattoirs and live animal export.

In both rural and urban areas, smallholder fattening is an important source of income and sale of livestock is important for meeting household expenses, settling the cost of social obligations and purchasing food items. For example, Animut and Wamatu (2014) estimate that about 26% of male and 4% of female-headed rural households in the Amhara Regional State were involved in fattening small ruminants while about 16% of the total sheep in Jimma zone and 15% in Keffa zone were under fattening.

Returnees engaged in livestock fattening and MSE owners interviewed reported that though the costs of fattening may be higher for cattle, household livestock



fattening was reported to have relatively low start-up costs and labour requirements. Bihohegn and Denu (2015) note that farmers could produce fattened livestock for market within 3 – 4 months, with good return on investments – 25-30 % investment return per each round of the products. Similarly, a study carried out by Belete et al (2010) revealed that fattened cattle from Haraghea area fetch a premium price of up to 50% over other fattened cattle in the Addis Ababa market. In addition to fattening livestock, returnees interviewed indicated that some of them were engaged in complementary activities such as input production that was increasing opportunities for employment for returnees. For example, in Mersa an MSE engaged in a multi-purpose farm (selling milk and fattened animals) reported that to address the constraints of feed, they started fodder farming and feed production and engaged an additional three employees who were all returnees.

Generally men are the key players in crop and livestock production, and are also the principal beneficiaries in terms of control over the income generated from the sale of those commodities. Nevertheless, as women constitute about 65% of the population engaged in agriculture, livestock fattening and dairy production are areas that employ women. However, men have better access to technology, credit and training, mainly due to their strong position as head of the household and greater access to off-farm mobility. This hinders women from taking on leadership roles.

4.1.3. Appropriateness of the sector for returnees: 4/5

Bihohegn and Denu (2015) identified availability of shades, barns, acquisition of local breeds, veterinary drugs and services, animal feed, water points and working capital as the most important inputs required to start a livestock fattening enterprise. Both the key informants and returnees indicated that the returnees were willing to engage in livestock fattening. In addition, they also noted that returnees have the appropriate skills in livestock fattening considering that agriculture is a sector in which most of the returnees had previous experience working in before migration and they have traditional experience in it. Further, these skills were acquirable from the TVETs while the Bureau of Agriculture provided on-farm technical support and extension services free to the returnees who were engaged in the business. However, livestock fattening is constrained by high feed cost, poor quality and low availability of feed resources, inadequate veterinary services, weak extension services as well as good management practices and proper policy support for livestock development. At regional level, as with other MSEs, returnees in livestock fattening faced constraints in access to timely, affordable and appropriate type of financing and access to markets were identified as the main constraints.

Bihonegn and Denu (2015) estimate that the cost of starting a fattening enterprise of 7 – 10 sheep/goats is 7,500 ETB. Higher cost estimates were given for starting a cattle-fattening enterprise – MSE owners indicated costs of up to 150,000 ETB for



good multi-purpose farm (meat and milk) of 3 – 5 animals. Though some returnees had savings, which they used to start their own business, access to financing is a challenge. The loan products provided by the MFIs were not considered Islamic (the loans were interest-bearing) appropriate and returnees had to run group business in most cases to access the group guarantee or they had to have a collateral for the loans. In addition, as reported by the Dede-bit Manager at Mehoni, MFIs considered returnees as risky customers, considering some of them had previously used the loans they borrowed to finance their remigration, rather than for business start-up.

Access to land is a major issues in any agricultural enterprise, with Save the Children (2013) finding that 65% of youth interested in farming activities reported that they do not have access to land. Though an initial start in livestock farming was reported not to require significant amount of land - 3-6 sheep/goat and or 1-2 cattle may be kept in the backyard and feed on natural feeds, with expansion enterprises would require larger space considering the need to produce own feed for livestock. The MSE agency was facilitating access to workspaces for the returnee MSEs, though the returnees reported that the spaces were small and were only guaranteed for the first five years.

4.1.4. Difference for potential migrants: 2.5/5

There are not much differences in the value chain for returnees and potential migrants as their profiles are similar as both the returnees and potential migrants had experience working in the agricultural sector. However, it was reported that some returnees may have gained additional experience in Saudi Arabia, were more outgoing and had better work ethics allowing them to be more successful in business and in direct employment. The potential migrants enjoyed some advantages over the returnees in that they had better networks and understanding of the markets. As such the sector is seen as similarly relevant for potential migrants as returnees.

4.2. Opportunity for inclusive growth

4.2.1. Likelihood of sector growth: 4/5

Ethiopia is the world's tenth largest producer of livestock, and the livestock sector contributes 15 to 17% of overall GDP and 35 to 49% of agricultural GDP with export earnings in the formal market (10% of all formal export earnings, or USD 150 million per annum) and the informal market (perhaps USD 300 million per annum). In addition, it sustains and supports the livelihoods of approximately 70% of the rural households (Gebremirriam et al, 2010). With over 52 million heads of cattle in Ethiopia, the highland mixed crop–livestock production system account for 70% of the livestock resources and the pastoral areas is home to 30%.



According to Belachew and Jemberu (2003), Ethiopia enjoys competitive advantage in the livestock sectors due to its huge livestock population, linkages and proximity to the export markets, conducive investment policies, the liberalization of the economy and the supports and attentions given by the government to export trade. As populations increase, urbanize, and become richer, demand for meat and other livestock products will rise significantly. In addition to exports to neighbouring countries (Sudan, Somalia and Djibouti), which account for 53.4%, and the Gulf States and other Middle Eastern countries (36%), Addis Ababa is the main domestic market for meat (MoA and ILRI, 2013a). There is increasing demand for animals from local abattoirs to meet increasing domestic demand and increasing export markets demand- which demand producers have limited capacity to meet at size and consistency.

The government's vision of the sector is to make Ethiopia a surplus producer and leading exporter of quality meat in Africa by 2025. This will be achieved by increasing live animal exports from 470,000 to 756,800, volume of meat from 16,700 tons to 131,200 tons, and annual meat consumption from 10 kg per person to 50 kg (MoA and ILRI, 2013a). To achieve this, government aims to raise red meat production by 52% from 2015-2020 by increasing production in small feedlots by 60% and 30% increase in production in medium feedlots. It is expected that this investment will result in up to 3,500 direct jobs created and support of over 6,000 smallholder farmers through sourcing contracts (ATA, 2016).

During interviews with MSEs in livestock fattening, they indicated significant demand for meat within their woredas and neighbouring areas. In all the regions, there is a significant increase in population, number of hotels and trading activities in towns and a significant number of fattened animals are slaughtered every day. Another flow of fattened animals is export. For example, Halala (2015) indicates that animals from highland regions (Amhara and Tigray) were traded across the Sudan border for local consumption in Sudan or re-export to Egypt and other countries in the Gulf. Other channels include local purchases for replacement stock and draught animals.

4.2.2. Scope for improving the target group employment in the sector: 3.5/5

Livestock fattening is recognized as potential profitable enterprise. For example, Pasha (2006) recognized livestock fattening as a potential profitable activity that enhances the income of smallholder farmers. Further, Bihogegn and Denu (2015) note that returnees and potential migrants with access to land, water and animal feed with reasonable access to vet services can start up a fattening enterprise with 7-10 sheep/goats with a minimum capital of 7,500 ETB and sell at 8-12 weeks for market at 25-30 % investment return per each round of the products.



The significant demand for livestock products is expected to create significant numbers of jobs and small business opportunities. For instance, Land O'Lakes (2010) finds that the growth in the dairy sub-sector could create up to 73,000 new dairy related jobs by 2020. In addition to labour opportunities in production activities, there are opportunities in the provision of inputs, as brokers and middlemen in the markets, and sale and distribution of meat as butchers and middlemen. Though careers in agriculture were not previously attractive, recently, there has been an emerging trend of self-employment on livestock enterprises even by university graduates (Lemma, 2014).

The Bureau of Agriculture and MSE Agency were encouraging returnees to set up businesses in livestock fattening. The fattening was based on traditional husbandry practices and locally available inputs with minimal supplementation. The labour requirement was dependent on the number of animals kept. As the number of animals kept was few in most of the enterprises in the study area, the enterprises were not labour-intensive, as it shared with other farming activities. Respondents indicated that the use of hired labour such as fatteners or feeders was minimal. Furthermore, for the group enterprises, the members were involved in the various activities. However, few entrepreneurs (e.g. returnees in Mersa) indicated that they were developing input (feed) processing enterprise and were employing additional number of returnees as laborers.

It is clear from the assessment, that returnee enterprises should focus on growing their business and working together, so as to benefit from economic of scale and have better access to market. They should focus on market oriented short cycle fattening, using proper feeding and management practices to ensure better economic return and continuity in the supply of beef cattle in the market to meet the escalating demand for such high quality animal products.





4.3. Feasibility to stimulate change

4.3.1. Willing and able market actors: 3.5/5

While the major actors in the backyard fattening are the livestock producers, there are a number of commercial feedlots which are linked to the export abattoirs (such as Helimex Export Abattoir, Elfora Agro-Processing, Modjo Modern Export Abattoir, Luna Export Abattoir and Organic Export) with an annual slaughter capacity of 2.5 million shoats (Sebsibe, 2008). Furthermore, the existence of different abattoirs and live animal exporters in and around peri-urban, urban and large cities such as Addis Ababa, Adama, Mojo, Dukam and Debre-Zeit/Bishoftu created a favorable environment for live animal market (Gebregziabher and Gebrehiwot, 2011).

According to Bihogegn and Denu (2015) the seasonal nature of demand for sheep/goats represents an opportunity to focus on short-term fattening to produce animals in the appropriate condition to coincide with periods of peak prices. Studies also suggest that backyard fattening is cheaper than feedlot operation, primarily due to the availability of feeds produced or available on the same farms. Consequently, cattle and sheep/goat fattening were identified as preferred enterprises in both rural and urban areas. Similarly, key informants identified animal feeds; an associated enterprise as an investment area in rural and urban areas. The Returnees Needs/ Situation Assessment study conducted by Bihonegn and Denu (2015) also identified animal feeding and fattening as a potential investment area for returnees, especially in the rural areas of Oromia, Tigray and Amhara regions.

Animal health inputs are available from both the private and public sector. For example, the Bureau of Agriculture provides for preventive services such as vaccinations and disease control, as the country is considered endemic for a number of diseases. The private sector provides animal feeds and basic clinical inputs, though the coverage is limited to major urban centres. Thus, the access to veterinary drugs, feed and other inputs remains a challenge. There are also a number of different abattoirs and live animal exporters in and around peri-urban, urban and large cities such as Addis Ababa, Adama, Mojo, Dukam and Debre-Zeit/Bishoftu that have created a favorable environment for live animal market.

In rural areas, government bureaus such as the Bureau of Agriculture are facilitating access to technical skills, inputs and support for livestock fattening start-ups. In addition, while MFIs provide financing to local enterprises in close collaboration with MSE Agency, the TVET colleges are facilitating access to improved husbandry and feed production techniques. As for employment opportunities, access is mainly through local networks and relationships. At regional level, the MSE Agency and Bureau of Agriculture are encouraging the emergence of small scale fattening by linking them with MFIs and guaranteeing loans and supporting them with extension support. As indicated in the interviews with the TVETs, better husbandry skills were



acquirable from studying at TVETs, as occupational competency and over time working in the enterprises. Further, additional agricultural support was available from the TVETs through informal networks or through industry extension unit and from the Bureau of Agriculture.

A number of universities and research institutions (such as ILRI) are also involved in research that have generated wealth of knowledge that can be employed to improve the productivity of livestock in the country.

4.3.2. Conduciveness of political economy: 4/5

With the Agriculture Development Led Industrialization (ADLI) as the first comprehensive strategy, livestock development in Ethiopia is guided by a number of broad policies and strategies. The sector is considered a priority for stimulating economic growth, reducing poverty and achieving food security. For example, the GTP strongly supports intensified production of marketable farm products for domestic and export markets, by small farm holders and private agricultural investors. In addition, the policy implementation framework (PIF), which provides a strategic framework for the prioritization and planning of investments that will drive Ethiopia's agricultural growth and development (2010–2020) has identified livestock as one of the priority investment areas. During the PIF period it is targeted to increase livestock production and productivity annually by 8 and 4%, respectively (MoA and ILRI, 2013b). In addition, the Livestock Master Plan for Ethiopia proposes 7,762 million Ethiopian ETB (USD 388.1 million) investments, 57% and 43% from the public and private sectors, respectively (Shapiro et al, 2015). The government of Ethiopia is trying to expand the sector by motivating investors to meet projected increase in demand from both export and domestic markets.

The establishment of local fattening enterprises was mediated by a number of government institutions that ease access to skills, licensing, and financing and technical support services. These institutions include MSE (TVET and Enterprise Development Office in Amhara) that facilitate linkages to TVET who in turn provide training for the returnees, and to MFIs that provides financing. As for securing employment in the enterprises, informal networks were important considering enterprise owners were dependent on referrals in finding a good employee. Access to these assets was generally accessible for returnees, as they were considered members of the local community, though for ease of access to training, financing and technical support, returnees had to register with the MoLSA and MSE Agency and be a member of a group in most cases.



4.3.3. Likelihood of distortion: 2.5/5

There are a number of actors including USAID and SNV that are supporting the livestock sector. CNFA's Agricultural Growth Program-Livestock Market Development (AGP-LMD) project is USAID/Ethiopia's contribution to the Government of Ethiopia Agricultural Growth Program's (AGP) livestock development activities. SNV programmes includes Cooperative for Change which improves the business performance of agricultural cooperative unions and their member cooperatives, establishes sustainable markets and increases income for smallholder families; and the Agricultural Growth Program: Livestock Market Development that increases productivity and competitiveness of selected livestock value chains, improves the enabling environment and enhances nutritional status of rural households.

Livestock fattening is recognized as potential profitable enterprise and is currently engaging a number of returnees. It is common in almost all agro-ecologies including Oromia, Amhara and Tigray regions, with a lower prevalence in the lowlands. In addition to primary focus of the value chain (production and sale of fattened livestock), other opportunities associated with the value chain are inputs enterprises, labour provision in fattening enterprises and brokerage and trading services in the marketing of the fattened animals. Few employment opportunities for unskilled labour in the enterprises were also reported. The enterprise was reported to have low investment costs, while a high and quick return on investment. Returnees have the appropriate skills in livestock fattening considering that agriculture is a sector in which most of the returnees had previous experience working in before migration and they have traditional experience in it. Further, these skills are acquirable from the TVETs while the Bureau of Agriculture provides on-farm technical support and extension services free to the returnees who are engaged in the business. There is significant support to the sector. In rural areas, government bureaus such as the Bureau of Agriculture are facilitating access to technical skills, inputs and support for livestock fattening start-ups. In addition, while MFIs provide financing to local enterprises in close collaboration with the MoLSA and MSE Agency, which provides registration services, and linkages with training and access to workspaces, TVET colleges are facilitating access to improved husbandry and feed production techniques. However, livestock fattening is constrained by high feed cost, poor quality and low availability of feed resources, inadequate veterinary services, weak extension services as well as good management practices and proper policy support for livestock development.

5. Construction Materials



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The construction materials sub-sector includes a number of separate but very connected products, including sand, gravel, cement and stone. Within this, this analysis focuses on several value chains as preliminary analysis highlighted higher opportunities here, while more information was available on them - namely cobblestones used in road and paving construction, hollow block cement block production and sand extraction. However with further analysis, it would be valuable to bring in analysis from other materials.

5.1. Relevance to target group

5.1.1. Current presence of returnees in the sector: 2/5

There are no clear figures on the number of returnees working in construction materials in Ethiopia. They are likely low as studies highlight that many returnees are rather working in other sectors, namely petty trade and agriculture, a view supported by informants. However Bihogegn and Denu (2015) note that though not the most popular area, some returnees are working in heavy construction labour work in urban areas, namely cobblestone carving, construction materials extraction and production. In the field research, informants noted that returnees were working in the sub-sector, while we met several in South Tigray working in hollow block production. Informants noted though that most of the returnees working in the sub-sector were male.



5.1.2. Nature of participation of poor in the sector: 3.5/5

The participation of the poor will vary naturally with products, but there are few larger businesses in this area, and most roles will be working in micro and small enterprises. There are a large number of co-operatives, in particular in cobblestone production, but even these will bring in wage labour for more basic tasks at moments of higher demand. Roles are available across value chains. For instance, cobblestone production involves work in quarrying, chiselling to transforming the raw material into cobblestones, and paving. In this case, chiselling is by a long way the most labour intensive.

Though varying by role and product, informants highlighted that generally wages for work in construction materials are high compared to others sectors. Focusing in on cobblestones, GIZ (2012) highlights how this will vary by role, with foremen being paid 40-50 ETB a day, pavers paid slightly less, and unskilled quarry taking the average salary in a city for daily labour, roughly 15-25 ETB per day. However the risk is higher than in other sectors as work is normally directed to specific projects rather than continuous market demand. This is less of an issue for materials, such as hollow blocks, that are needed for multiple projects and diverse clients and as such demand is more continuous, and more for cobblestones, where work is currently reliant on government projects which may have substantive gaps between them and off course be awarded to different enterprises.

The sector provides good prospects though for those who work in it, with a capacity to expand both seniority and enterprise size. This is most dramatically represented in the cobblestone sector, where with training, workers can move up to the foreman level. More generally, one of the aims of government support to cobblestones has been to improve enterprise skill levels and culture of saving, to enable them to transfer to more senior construction or masonry roles. Supporting this, the Ministry of Urban Development and Construction (2013) notes that operators have saved millions of ETB and have been enabled to establish medium level enterprises.

Though more men than women work in the sector, many opportunities exist for women. For instance in the government funded work on cobblestones, around 40/45% of jobs have been taken up by women, while others note the many jobs for women in hollow block production for housing in Addis Ababa. However it is still a male dominated industry, with these exceptions above potentially due to strategic decisions within relevant government areas funding work rather than the open market.

Though working conditions in construction are often poor, working in construction materials is less of an issue. Of concern though, is work at quarrying where there is no legislation to govern their opening, mining, rehabilitation and closure and health and safety conditions can be poor.



5.1.3. Appropriateness of sector for returnees: 3.5/5

Construction material production skills are relatively quick and easy to learn. This is part of the government's rationale for supporting cobblestone road construction, for instance, as it creates large numbers of employment opportunities for relatively unskilled young people. GIZ (2009) notes that training for chisellers can be completed in about two weeks at a TVET college. Paving requires more training, with pavers receiving competency certificates after eight weeks, with half of the training time spent on the actual paving site. Foremen need an additional eight weeks before they get their competency certificates. Hollow block production needs a similarly basic training on topics such as determining the right proportions of inputs, on block dimensions, quality control, compression and strength. Further IOM (2014) notes that returnees worked in construction in Saudi Arabia, which is likely to be an asset for them, especially where working with more advanced technology.

The investment needed also varies by role. For instance, cobblestone laying requires hammers, levelling instruments and a compacting machine. Raw materials aside, costs can be around 20,000 ETB. Chiselling requires a variety of hammers, chisels and shovels, and may come to a similar amount. Sand extraction may just involve comparable small equipment to work and move the sand, including shovels, wheelbarrows and sieves. Hollow block production requires more capital. A production machine costing 35/40,000 ETB and further wood slab and small equipment items costing 15,000 ETB more. With raw materials and the cost of leasing land, this can come to around 120,000 ETB.

The bigger challenge is about finding a workplace. Though this is a challenge for all sectors, the dean of the TVET College in South Tigray viewed it as a particular issue for construction materials, with, for instance, hollow block production requiring significant space to store materials, produce, and leave fresh blocks to dry. If interested parties register as a cooperative and approach local MSE agencies, they might be provided land for free for five years. However there may be long waiting lists for such land. Otherwise parties must to bid for land leases at auctions or rent from those with leases- either option can be very expensive. Relevant quarries often need to be found as well which can require significant time, while permission is needed for workplaces along rivers to extract sand. The higher assets needed in some roles suggest the increased importance of access to finance as well, with returnees noting challenges in accessing loans to purchase larger machinery.

In regards to returnee interest in working in the sector, on the one hand the work is often physically demanding while manual labour is often considered low status. It also can take some time on the job to build up skill levels, and hence income, for roles that pay rates per outcome e.g. chiselling. However with the potential to set up own micro-enterprises and the overall higher incomes than other sectors, it is likely to appeal to a significant group of returnees. Overall informants highlighted interest



in moving into cobblestones and hollow blocks when training was available, while there are already a number of returnees working in construction materials.

5.1.4. Differences for potential migrants: 3/5

There is likely to be little difference between returnees and potential migrants in regards to accessing construction material opportunities. Returnees may have the upper hand in that some returnees may have saved some assets that can be invested in new enterprise, while more broadly local TVET agency, DECSI, MLSE and MSE representatives in East Tigray noted that returnees generally are more aware of loan opportunities, investigating different business ideas more, performing better in trainings- and overall perform higher than potential migrants in sectors they focus on. Further, as noted above, a sizeable number of returnees worked in the construction sector in Saudi Arabia. However counter-balancing this, more than other sectors analysed here, local networks play an important role in navigating local politics and finding opportunities in this sub-sector- which to some extent potential migrants may have more than returnees who have been abroad.

5.2. Opportunity for inclusive growth

5.2.1. Likelihood of sector growth: 4.5/ 5

The construction sector is a key sector of the Ethiopian economy, contributing to 7.5% of GDP in 2013/14 (National Planning Commission, 2015). More importantly it is growing at a remarkable rate. The National Planning Commission (2015) notes that from 2010/11 to 2013/14, it grew at around 30%, the fastest of any major economic sector (and three times overall GDP growth of 10%), with major expansions in the construction of roads, railways, dams and residential houses. The target is noted of 20% a year growth in 2019/20.

No data was located on construction materials specifically, but informants highlighted that growth here would necessarily mirror that of the wider sector as hollow blocks and aggregates are vital basic products for government and private sector projects. The growth of the cobblestone sector has been more tied to specific government initiatives that have been supported by development agencies. These are discussed more below, but to provide some context, the Ministry of Urban Development and Construction (2013) notes that since the modern introduction of cobblestone techniques into Ethiopia in 2008 to 2012/13, more than 2,202 km of cobblestone roads, taxi terminal, feeder roads and public squares in mainly urban and peri-urban areas were built at a cost of more than 8,810,952,000 ETB (>475 million USD). This has created job opportunities for about 489,000 people.

Long-term demand for cobblestones also appears clear. The World Bank helped fund much of this initial work in cobblestones as part of its Urban Development



Programme, alongside significant support from GIZ. Though GIZ is no longer supporting the sector, the World Bank programme has now gone into a second phase that will last until 2019 and take cobblestone road construction to 26 new urban local governments. The World Bank is also seeking additional funding to roll out funding for cobblestone road construction to all other urban areas after. However beyond this project, growth is less clear and a World Bank representative noted that it depends to some extent on whether prices can be reduced to the point that the private sector starts driving demand e.g. hotels funding feeder roads. A UNIDO representatives also sounded a note of caution that though construction will be a major economic sector into the medium term, programming needs to think about the long term sustainability of the sector, and ensure there are transition paths to more sustainable jobs.

Demand for products appears to be fairly consistent across regions, with a general progression as urban areas continue to expand and as work moves additionally to regional and zonal cities. To date, cobblestone road construction, as funded by the World Bank, has been focused more on Oromia (six urban areas), Amhara (four urban areas), SNNPR (four urban areas) and Dire Dawa and Harar city states, with future plans particularly increasing working in Tigray (seven urban areas), stepping up some support in Amhara (seven urban areas) and maintaining support to Oromia (four urban areas) and SNNPR (four urban areas) (World Bank, 2014).

5.2.2. Opportunity for inclusive growth: 3.5/5

Informants consistently noted that with the rapid growth of the construction material sector, there is demand from the public and private sectors for more production. The sector is also labour intensive and continues to generate significant numbers of employment opportunities. However though positive on the outcome of such competition, informants did raise the challenge of new enterprises competing with those already established. For instance, returnees already working in hollow block production noted that though new enterprises would face competition from current enterprises, new entrants would find a market if they delivered a high quality job. A Mercy Corps representative noted that there are more opportunities in smaller cities, with supply in bigger cities such as Addis Ababa more saturated with local enterprises- valuable in itself but also highlighting that opportunities vary and demand needs to be known at the local level. Of more concern is the complex political economy in the awarding of cobblestone projects to small enterprises. This is detailed further on, but as a note of concern, a representative from the Tigray Business Chamber of Commerce noted that government contracts go to graduates from universities and not those who have received short-term training (which is what returnees are currently set to receive). A World Bank representative refuted this explicitly, noting short-term training was valid (while in addition many roles didn't need training, such as wage labourers and transport), and was implicitly refuted by



various TVET colleges who do trainings in this area. It does though suggest there may be some discrepancies in certification requirements in the awarding of contracts, value in further research, and that in the end, some more skilled jobs e.g. foremen, may currently be beyond returnees without more extensive training.

However overall this analysis agrees with Bihogegn and Denu (2015) that the construction materials sub-sector has high potential for returnees. The TVET representative from South Tigray noted that it is the best sector for returnees as it is growing so much and incomes are high. Returnees met in this area during the field visit noted that their enterprises were successful and were positive for the future. However the political economy, further discussed below, will remain a major hindrance- hence the lower score for this criteria. The analysis above suggests that, though there are some larger construction material companies, most opportunities will be in setting up and working in micro and small enterprises, with such roles shared out across materials and material value chains. The World Bank representative noted that to address the political economy for cobblestones production, joining existing cooperatives may be a better strategy for returnees than forming new groups. Further analysis is needed to get a better picture of where geographically there are most opportunities (which should consider not just demand, but viability e.g. proximity of quarries or rivers), but they are likely to be high in urban areas across the three regions. However hollow block production is likely to be more in demand in larger cities, while there may be more demand in cobblestone production away from the largest cities, where supply is becoming more saturated. The World Bank representative noted that the best opportunities are likely to be regional capitals as annually they get a large budget from the Urban Development, while the programme seems to be scaling up in Amhara and Tigray.

5.3. Feasibility to stimulate change

5.3.1. Willing and able market actors: 4/5

Informants highlighted that though there are some larger enterprises working in construction materials in the larger cities, most production was carried out by a large number of smaller enterprises. This is most evidently so in cobblestone production, as this is to some extent purposeful government policy, with GIZ (2012) noting that over 2,000 MSEs have been created in nine assessed cities alone to take on the work, some of which have invested their initial profits in productive goods such as construction machinery, which again renders them more competitive.

Other important value chain actors include the local governments who own quarry land and will provide workspaces to enterprises for a limited time, with the MSE agency helping steer this process though again local politics will have an important impact. A number of small brokers are also involved, potentially buying aggregates



from producers and selling to markets or directly to end users. Hollow blocks are more likely to be sold directly to end-users. The final buyer of materials also varies with both private and public sector projects requiring materials. For cobblestone road construction, as noted above in this analysis, the main buyer is local government in urban areas, with support in particular from the World Bank.

A key input provider are equipment providers. These will vary between products and value chain role. Generally informants viewed these as accessible, both larger machinery (with many firms based in Adama) and smaller tools produced by local blacksmiths. GIZ (2009) notes that low quality tools made work less efficient and even dangerous at the start of cobblestone work. Following discussions between producers and local blacksmiths, these were improved to some extent. However others noted that there was also new equipment that could be more efficient but needs testing e.g. light machines for stone breaking

Training plays a key part in the construction materials sector, with a training centre set up in each of the regional capitals and integrated within the TVET system (Ministry of Urban Development and Construction, 2013), with TVET agencies are also represented in the Technical Support Team to guide cities when it comes to labour acquisition and labour needs (GIZ, 2009). A comprehensive model curriculum and Occupational Standards for cobblestone development was developed for TVET colleges, while training of trainer training was conducted within the regional capitals and rolled out to the secondary cities TVET colleges. More recently as part of Federal TVET agency moves to streamline professional descriptions, cobble road construction was removed from the agency catalogue of professions. However the Federal TVET agency are open to redeveloping it if encouraged by ILO.

As noted above, access to finance is a challenge for the sector. A representative from DECSI in East Tigray highlighted that construction materials in East Tigray and the country more generally are neither a priority area nor a deprioritised sector, and that loans will generally be provided if applicants pass criteria. However larger equipment needs make access to finance a larger constraint than for other sectors analysed here. Informants noted that the problem was less significant for producers working on government contracts though, as the government on credit can provide equipment or in some places a guarantee is provided for enterprises unable to provide collateral.

5.3.2. Conduciveness of political economy: 3/5

The government has prioritised the construction sector in both its first and second Growth and Transformation Plans. This said, the focus is more on infrastructure development with less reference to construction materials. In reference to cobblestone development, a key strategic focus in the second Growth and Transformation Plan is to improve the provision of road infrastructure by expanding



the road network both in terms of quantity and quality. Though not specifically mentioned, cobblestone development seems to be a key part of this with the Ministry of Urban Development and Construction and the Federal Micro and Small Enterprises Development Agency coordinating cobblestone road construction at federal level, while at a regional level it is coordinated by steering committees with representatives from all relevant government and private organizations.

However the World Bank representative highlights that the real challenge with the cobblestone work is not federal support, but the political economy at the local urban government level. The Urban Development Programme that is helping fund cobblestone development (see below) is less about supporting the construction sector and more about improving local governance. However though improved, management of the work at the city level is still a challenge. Practice varies by region, with some urban areas ensuring that contracts each go to a different enterprise to share jobs around, while others seem to overly favour one or two enterprises. Overall, a focus on appeasing local constituents has reduced competitive pressures on enterprises, for instance with some urban areas blocking bids for contracts from enterprises based in other areas, and kept the price paid for cobblestone high (and led to reduced interest from the private sector). At any rate, to help the returnees to access opportunities requires the project, or more likely actors it works through, to have a very strong understanding of the local context. Managers of TVET colleges and local MSE agencies are likely to have such knowledge, with TVET managers for instance often advisers to local urban government cobblestone initiatives.

The political economy around other construction products appears simpler. For instance, returnees working in hollow block production in Raya Azebo woreda noted how they received quality assurance from the construction department of Mekelle University, while the necessary permits were readily accessible, namely a license to run an MSE from the MSE Agency and a trade license from the Bureau of Trade. Permits are needed to extract stones and sand at quarries and rivers. Again informants noted that this was not a serious challenge, but was expedited if supported by the local MSE agency.

5.3.3. Likelihood of distortion: 4/5

Few development agencies appear to be working in construction materials aside from cobblestone road construction. In this respect, large-scale construction of cobblestone roads was initiated in 2008 with an Ethiopian federal infrastructure fund providing most of the required financial, with GIZ, providing technical assistance to cities in financial and urban planning and project planning and implementation. The World Bank's Urban Development Programme, which aims to address institutional, also supported work and fiscal gaps at the urban local government



level by supporting improved performance in the planning, delivery, and sustained provision of urban services and infrastructure by local governments.

GIZ support has since ceased, while World Bank support has increased. A second phase of the Urban Development Programme is now in operation. It involves 380 million USD credit to scale up support to 26 new Urban Local Governments (ULGs), giving a total of 44 ULGs supported as support continues to ULGs supported in the first phase. The 26 new ULGs represent the next tier of important cities in the country based on population, accounting for 4.3 million people, or about 26 per cent of the total urban population. The programme runs until 2019, but is likely to be extended then to another 41 cities, so to all 85 ULGs in total in the country. Though there are many expenditure groups in the programme, a key element is and will remain funding cobblestone road construction. Though it seems unlikely that ILO could become a formal partner to this work, in the least, it will provide more demand for cobblestone employment that ILO can harness - however through more careful strategizing and advocacy, it may be possible to increase involvement in the project, including into other areas of work the project is addressing, such as urban drainage and sanitation.

Though noting that the construction materials sub-sector includes a variety of different value chains, overall this analysis suggests high potential for returnees. This has two particular drivers. One, the construction sector is growing quickly in Ethiopia. Consideration is needed on the longer term trajectory (for instance in cobblestones, what happens when donor support ends), but in the short to medium term demand for construction materials looks set to continue growing. Two, the sector is labour intensive. Overall most opportunities will be in setting up or joining existing micro and small enterprises, with such roles shared out across materials and material value chains. Hollow block production is likely to be more in demand in larger cities, while there may be more demand in cobblestone production towards regional capitals. Opportunities are appropriate for returnees, with wages good and the scope for development, but in cobblestone production, work is less certain and there can be sizeable gaps between roles. Unless there are specific government or donor requests otherwise, the sector is also male dominated. Skill requirements are not very high and can be provided in a short training, while many returnees are likely to have learnt relevant skills while working in construction in Saudi Arabia (though work in Ethiopia is less technologically advanced). Bigger issues though are likely to be access to finance and workspaces, which are higher than some of the other sectors analysed here. Other challenges relate to the 'thinness' of the market systems. Though there are strong value chains from producer to buyer, there is little co-ordination, TVET college training is patchy, while little information was found on equipment providers. The most significant challenge though relates to the political economy. Work in construction material production is very competitive and requires having very strong local connections which returnees may have lost. This is particularly the case in public cobblestone projects, where further each local administration seems to have different processes.

6. Textiles and Garments



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The Ethiopian textiles and apparel industry encompasses spinning, weaving, finishing of textiles, manufacture of cordage, rope, twine, netting, knitting mills, and manufacturing of wearing apparel. The firms in the industry produce products such as cotton and woolen fabrics, nylon fabrics, acrylic and cotton yarn, blanket, bed sheet, shirts, carpets, gunny bags, wearing apparels, and sewing thread. In addition, there is the traditional garments sub-sector that produces traditional textile products.

The textile and garments sector is one of the sectors considered as growth oriented by the government of Ethiopia, as it is engaged in the production of good and services in sectors given priorities in the economic development of the country in most government policy and strategy documents. Consequently, investments in the sector have grown significantly in the last few years. This creates opportunities for employment and setting up MSE for the returnees and unemployed, as value chains develop upstream and downstream from the core activity – production of cotton.

6.1. Relevance to the target group

6.1.1. Current presence of returnees in the sector: 3/5

Though statistics are lacking, the textile and garments, especially production and sale of traditional garments and tailoring services were identified as MSEs engaging the returnees. It was noted that the traditional garments sub-sector is traditional-based, homegrown activity and was labour-intensive, but due to the scale of the existing MSEs they could only employ 3 – 5 employees. Further, key informant in Adi Gudum indicated that there were a number of model returnees were reported to be engaged in traditional garments and tailoring services during the study.



6.1.2. Nature of participation of poor in the sector: 3.5/5

The Ethiopian traditional cloth produced by handloom has long historical development, making an important contribution to satisfying peoples' requirement for traditional textile products. The MSEs in this sub-sector were informal with small profit margins and employing a maximum of 3 – 5 employees. Entry into the traditional garments sub-sector is difficult, as it requires the acquisition of traditional weaving skills, which are passed down from generation to generation within the family.

Nevertheless, potential exists for increasing opportunities for MSEs and employment as the Government of Ethiopia invests more in increasing in areas under cotton through irrigation and developing IAPs that are aimed at industry development. The employment opportunities will include skilled and unskilled labour in spinning, weaving, knitting, embroidery and finishing. Though likely to face challenges due to their educational levels, returnees are likely to access these opportunities.

In the textile manufacturing sub-sector, employment opportunities existed in spinning, weaving, knitting, embroidery and finishing – positions mainly as operators, technicians and middle level managers. For example, the Dean of Mekelle Garment College reported that by 2014, 37,000 employees were engaged in the 108 factories, 50 – 85% of them were women. The income from employment in the sub-sectors was reported to range between 500 and 1000 ETB per month (Alderin, 2014). However, the working condition of the traditional weavers was poor – they suffer from highly repetitive hand exertion, vibration and localized mechanical pressure, which contribute towards occurrence of Cumulative trauma disorders – CTD (Kassaw, 2013).

6.1.3. Appropriateness of the sector for returnees: 2.5/5

A number of studies such as Bihonegn and Denu (2015) have also identified the sector as economically viable investment areas in the urban and semi-urban areas of Amhara, Oromia and Tigray National Regional States. To start enterprises in textiles and garments, one needs to have skills, financing to access inputs such as equipment and materials, and business premises. Though, the MFIs provided loans, the loans were of inadequate size and did not meet the requirement of the some clients. In addition, access to skills, especially traditional weaving skills and improved technologies was limited. However, the provision of tailoring services was easier, as it only needed sewing skills, which were easily available through the TVETs and informally.

The Government of Ethiopia has encouraged returnees to be included in the sector by providing training through TVETs and providing financing and technical support through the MFIs and MSE Agency respectively. The returnees were engaged in MSEs, which only require basic skills in business management for enterprise



owners and traditional weaving and sewing skills for employees. While the basic skills in entrepreneurship and were available, access to traditional weaving skills is a challenge, as the skills is passed down from generation to generation and no formal skills providers exist. However, the TVETs were providing skills in tailoring and were supporting upgrading of the technology used in the traditional garments. It was noted in a number of studies that shortage of skilled personnel at management and operational level was one of the constraints facing firms in textiles and garments. However, due to their lower educational qualifications, it will be difficult for returnees to access the few existing opportunities.

6.1.4. Difference for potential migrants: 3/5

There were no major reported differences between returnees and potential migrants in skills, experiences, assets and inclinations to work in the sector. However, some returnees had some assets and saving for start-up while potential migrants had better access to informal networks for employment.

6.2. Opportunity for inclusive growth

6.2.1. Likelihood of sector growth: 4/5

The Ethiopian textile and apparel industry has huge potential and has grown an average of 51% over the last 5-6 years with additional potential for forward and backward linkages considering that the country has over 2.6 million hectares of land³ suitable for cotton production (EIA, 2010). With a gross value of around 9.1 billion ETB and valued added of 396 million ETB, the Central Statistics Agency indicated that the sectors employed a total of 19,233 workers in 2012/13 (AACCSA, 2014). In 2014, the numbers increased to 37,000 workers while the export size amounted to around 113 million USD. The target set for 2020 is to realize and export growth of 1 billion USD when the sector's total export value is expected to grow from 6% to 22%. It must be noted that the sector has a number of advantages including it saves capital, it employs large labor force, and it uses agricultural outputs as inputs and creates the opportunity to be internationally competitive. Furthermore, the presence of a cheap, skilled and highly-motivated workforce, and country's impressive economic growth over the past years have helped the surge in growth in the sector.

Bihogegn and Denu (2015) identified textile and garments as an engine for fast economic growth with potential for employment and MSEs with potential rate of return of 25 – 30%. It was noted that a number of countries such as China, Turkey and India were moving their textile and garment-manufacturing base to the

³ It is estimated that only 7% of the land is currently cultivated.



developing countries with lower labor cost so as to compete in the international market. For example, according to the Dean of Mekelle Garment College, a number of new textile companies were setting up operations in Mekelle, regional city of Tigray region creating a huge demand for skilled and unskilled labour.

Similarly, though data was not available, key informants (MSEs owners, MSE agency and sector experts), indicated that the local traditional garments sub-sector was also expected to grow though limited by the slower production capacity. Furthermore, the sub-sector is linked with tourism and the fashion industry in domestic market and Ethiopians living abroad. For example, Abdikadir, a local weaver and MSE owner in Mehoni, Eastern Tigray indicated that customers were continuously demanding new designs and styles. Kassaw (2013) notes that traditional fashion textile-based MSEs give a lot of employee opportunities, income generations, substitute imported good, and contribute to the development of the country in terms of foreign currency exchange and foster the tourism industry. Further the production capacity and aspiration of customers are increasing from year to year on the fashions. However, the competitiveness of the sub-sector will depend on their productivity, technology, quality and time taken to deliver to the markets among other factors.

6.2.2. Scope for improving target group employment in the sector: 3.5/5

Traditionally the leather and textile industry has been labour intensive, utilizing domestic raw materials and manpower resources. However, they have started moving towards capital intensity, which entails lower employment opportunities for the growing population, university graduates and rural-urban migrants. Furthermore, 73% of the textile industries were operating below their capacity due to underutilization of capacity breakdown of power, shortage of inputs both from domestic and foreign markets, low labor productivity and low working capital and high cost of credit (Manufacturing Survey, 2014). With increasing number of multi-nationals coming into Ethiopia, the sector has potential for skilled and unskilled employment as technicians and production workers, especially in larger industries and production of cotton. Though the traditional garments sub-sector is spread around the rural areas such as Mersa in Southern Tigray, about 75% of the manufacturing is centered on Addis Ababa and its 10Km radius with few industries in the regional cities such as Mekele, Kombolcha and Bahr Dar. However, the government is exploring ways of growing and spreading to all the regions by creation of the integrated agro-industrial parks that would coordinate and integrate dispersed value chain components by clustering and creating linkages between farmers, processors and consumers.



6.3. Feasibility to stimulate change

6.3.1. Willing and able market actors: 4/5

A number of public and private actors operate at macro, meso and micro levels in the textile and garments industry. At macro level, there is the Ministry of Trade and Industry (MOTI), Ministry of Agriculture and Natural Resource (MoANR), Ministry of Education (MOE), Ministry of Capacity Building (MOCB), Ministry of Infrastructure (MOI), Ethiopian Agricultural Research Organization (EARO) and Ethiopian Investment Commission (EIC). At macro level, Quality and Standard Authority of Ethiopia (QSAE), Chamber of Commerce, Textile and Apparel Institute (TAI), professional and sector associations, regional governments, universities are the main actors. At the micro level the concerned firms (Cotton, Textile, and Garment) sub-sectors are found.

Many stakeholders, including donors, NGOs and government are supporting the sector. The Ethiopian Textile Development Institute, Garment Colleges (e.g. Mekele), Bahr Dar universities and TVETs (in limited skills development and entrepreneurship support) are mainly involved in skills development, training, research and development, while the Ethiopian Textile and Garment Manufacturers Association (ETGAMA) and the Ethiopian Cotton Association are the main business associations engaged in the sector. The Government of Ethiopia is facilitating cluster-based development through IAIPs with the support of a number of stakeholders such as UNIDO, the Food and Agricultural Organization, the United Nations Development Program and the Italian Development Cooperation.

In the target regions, the TVETs, MSE Agency and MFIs were the main institutions involved in supporting the returnees to access opportunities in the sector. However, these institutions face a number of capacity limitations including technical and financial capacity. For example, a number of TVET colleges interviewed reported that they lacked trainers, and equipment and materials for training on textile and garments. Further, traditional art of weaving was not an occupational competency given in the TVETs. Similarly, the MFIs have limited financial capacity to meet the huge demand for loans. Hence, in most cases the loan sizes were inadequate to finance businesses. As for the private sector, there were number of textile industries existed including Kombolcha and Mekele and inputs suppliers. While the returnees running MSEs were linked to the inputs suppliers through informal channels, there were no linkages between them and the large textile manufacturing companies.



6.3.2. Conduciveness of political economy: 4/5

Ethiopia is focusing on promoting the textile industry in order to be export oriented and become competitive at the global market earmarking textiles manufacturing as one of the key sectors. The Ethiopian Investment Commission (EIC) was formed in 2009 as an autonomous institute to lead and develop key industries such as textiles and garments. The Commission has identified a number of incentives for investors including: custom duty exemption (100% exemption from payment of custom duty imported capital good and 15% on imported spare parts), exemption from income tax (for new investment and those investors establish in regional areas like Gambella, Benishangul/Gumuz, Afar etc.), 100% duty free importation of machineries, equipment, and export incentives.

The GTP II identifies textile and garments as a priority sector and the Ministry of Trade and Industry is the focal institution for promoting and implementing the strategic program. In addition, the Ethiopia Investment Authority is mandated to act as a one-stop shop for registering foreign investments and supporting investors become operational and capital requirement exemptions are available for companies operating in key industries such as textile. As for financing the Ethiopian Development Bank provides subsidized loans, with interest rates of as low as 8.5%, to new and expanding businesses through support from the European Investment Bank (EIB) while the government has embarked on various infrastructure projects to improve the supply of electricity and roads.

6.3.3. Likelihood of distortion: 2/5

As the government is the dominant actor in the sector and has developed strategies and policies to address the key constraints, it will be difficult to influence any changes that are targeted at smaller sectors of the population as returnees. Further, it must be noted that there are a number of actors such as UNIDO and SNV that are supporting the sector.

Considered as growth oriented by the government of Ethiopia, the textile and garments sector encompasses two value chains: the textiles and apparel industry encompasses spinning, weaving, finishing of textiles, manufacture of cordage, rope, twine, netting, knitting mills, and manufacturing of wearing apparel; and the traditional garments sub-sector that produces traditional textile products. Potential exists for increasing opportunities for MSEs and employment as the Government of Ethiopia invests more in increasing in areas under cotton through irrigation and developing IAPs that are aimed at industry development. For example, the Dean of Mekelle Garment College reported that by 2014, 37,000 employees were engaged in the 108 factories, 50 – 85% of them were women. The employment opportunities will include skilled and unskilled labour in spinning, weaving, knitting, embroidery and finishing. Though likely to face challenges due to their educational levels, returnees are likely to access these opportunities. A number of returnees are also already working in the production and sale of traditional garments and tailoring services. However entry into the traditional garments sub-sector is difficult, as it requires the acquisition of traditional weaving skills, which are passed down from generation to generation within the family. To start enterprises in textiles and garments, one needs to have skills, financing to access inputs such as equipment and materials, and business premises. Though the MFIs provide loans, these tend to be of inadequate size. In addition, access to skills, especially traditional weaving skills and improved technologies is limited. However, the provision of tailoring services was easier, as it only needed sewing skills, which are more easily available through the TVETs and informally.



7. Urban Agriculture



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Unlike the other economic areas analysed here, urban agriculture is not a sector per se, but rather refers to the location of work, covering both urban and peri-urban areas, from tiny home spaces (windowsills, containers, fences, rooftops, basements, walls, etc.) to recreational grounds, utility and transportation rights-of-way (stream or roadsides), to suburban public or private estates. Many different value chains are involved. For instance, Yihdego and Kassa (2009) note that the main agricultural activities in Mekelle that generate good employment opportunity and/or additional income are crop production, vegetation, dairy farming, poultry, fattening and beekeeping. Other analysis highlight the different type of enterprises occurring in urban versus peri-urban areas, presumably in part due to more limited space in more urban areas. For instance UNEP (2014) notes in Addis Ababa, poultry, animal fattening, dairy, beekeeping and vegetable production are predominantly done in urban core areas, while mixed farming of cereal crops, primarily wheat and teff and livestock production is practiced in peri-urban areas. As such this analysis will examine the broad crosscutting issues addressing different value chains. However the focus will be on horticulture as several studies e.g. Duressa (2007) suggest it is the most prevalent value chain (though other studies contest this and highlight other value chains). More importantly as it requires little land, production is fairly rapid and can attract a high premium, and high perishability gives produce an advantage over rural producers, it may be more appealing to returnees. Further poultry and livestock are considered in other analyses.



7.1. Relevance to target group

7.1.1. Current presence of returnees in the sector: 4/5

There are no clear figures on the number of returnees working in urban agriculture in Ethiopia, in part as studies focus on agriculture in rural areas while examining other sectors in more urban areas. However reports provide some indications. Though many returnees are keen to work in trade and services, studies highlight the large number of returnees working in agriculture (around 40% of all working returnees), with informants noting the popularity of fruit and vegetables. Separately Bihohegn and Denu (2015) highlight that returnees are moving into urban agriculture, noting a number of model farmers working in the sector, witnessed as well on the field research and highlighted by the Addis Ababa Urban Agriculture Unit. Interviewees highlighted that though there were more male returnees, a large number of female returnees were working in the sector.

7.1.2. Nature of participation of poor in the sector: 4/5

Though urban farmers come from all income groups, the majority of them are low to medium income earners, who grow food for self-consumption or supplementary income, often on small plots that they do not own, with little if any support or protection. Though more widely practiced as a subsistence approach, this analysis focuses on urban agriculture as a key income earner for households, and as such comprises work predominately carried out both by individual farmers as well as farmers organized in micro-enterprises and cooperatives, but also a smaller number of larger-scale commercial enterprises. Use of wage labour is also common, providing additional jobs for the poor. The contribution of urban agriculture, however, to employment goes beyond direct production, to include other groups involved in the urban food chain who depend on agriculture, such as those in inputs, marketing, transport and processing

Urban agriculture, where carried out as a key income earner (rather than for household consumption) is profitable but not excessively so. Bezabih and Bihon (2007) find that urban agriculture in Mekelle can be a very profitable business. On the basis of three harvests per year and assuming a stable market and no yield losses, a plot of 40 m² planted with high-value crops for which there is an excess of demand, such as onion and tomato, could yield 900–950 ETB per year. Yihdego and Kassa (2009) finds that in Mekelle the average household income of the sample respondents is 11,106 ETB and the average daily income is 31 ETB. Mpofu (2013) finds in a study on cooperatives in Addis Ababa, that three vegetable growing cooperatives gained an average annual income of 157,005 ETB, giving an average monthly income of 581 ETB per each member of the cooperative. This was equivalent to the middle income of group in Ethiopia. Informants also supported the view that it was a profitable area to work in.



It also has the advantage of being less risky than other sectors, with demand for products fairly consistent throughout the year, though fasting seasons may decrease dairy and meat demands while increasing vegetables; while at a smaller scale, it can be highly compatible with other kinds of employment, particularly informal business or even casual labour, while providing valuable household consumption. However progressing in the sector and expanding a business is a challenge as land is a significant issue, discussed further below, though informants highlighted the potential to intensify production in smaller spaces (e.g. stacking up poultry boxes) or renting further land if income is sufficient.

Though often dominated by men, the sector provides significant opportunities for women. In a study on urban agriculture in Addis Ababa, UNEP (2014) notes a higher proportion of male farmers, with women mainly active in poultry, dairy and vegetable farming. In vegetable farming, 67% of farmers and 33% women. There is evidence as well that urban agriculture can give women greater control over household resources, budget, decision-making and benefits. However the additional workload should not be ignored, while barriers to women do exist and women tend to farm smaller plots.

7.1.3. appropriateness of the sector for returnees: 3.5/5

Homestead farming is a traditional farming practice in Ethiopia and many would have learnt traditional farming approaches for vegetables across seasons on their parents' farms. Many as well were working in agriculture in Ethiopia before migrating, and so many likely have relevant skills and experience. Reports note that education requirements to work in urban agriculture are also less so than other sectors (e.g. UNEP, 2014) and it is attractive to households where heads have received less education (e.g. WB, 2013). However more advanced horticulture skills are likely to require further skills development. TVET colleges, for instance, expect to carry out training on horticulture lasting 13 days, including training on land preparation, seedling, and disease control and harvesting. Informants highlighted the need for business administration skills as well.

Asset requirements for the sector are comparatively low. A returnee working in the sector noted the need for an investment of 15,000 ETB to allow for renting oxen to plough land, seeds, pesticides and fertilizer. The major challenge though is access to land. For the returnee above, this was provided by the city administration for five years for free – but for others without this support, access would be significantly harder. Indeed, representatives from urban agriculture units in both Addis Ababa and Mekelle noted that access to land was the biggest sector challenge. This is not so much the leasing process which was seen to work fairly efficiently, but as land is limited in urban areas, and urban agriculture has to compete with other uses, such as new residential builds, factories and the service sector. As discussed later on,



these other sectors have more support in city administration planning, resulting in little land being zoned by planners as appropriate for urban agriculture- and what there is being very expensive.

Though returnee interest in working in agriculture is low, this is likely to be less of a concern here as horticulture can provide a higher rate of return and quicker turnaround than other agricultural value products, urban agricultural can be carried out alongside other livelihood approaches, and as negative views of agricultural are likely in part to be more connected to working in rural areas.

7.1.4. Differences for potential migrants: 2.5/5

Returnees generally gained relevant experience and learnt relevant skills while in Ethiopia before going to Saudi Arabia, while profiles between returnees and potentially migrants are similar. As such it is likely that there are little differences between returnees and potential migrants in terms of accessing opportunities in the sector. One benefit some returnees may have is having developing some cash/ assets while in Saudi Arabia, but this refers to few returnees, while start-up capital needs are small for urban agriculture work. Generally informants noted that returnees are higher performing than potential migrants across sectors, hence the slightly negative score.



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7.2. Opportunity for inclusive growth

7.2.1. Likelihood of sector growth: 3.5/5

No data was found on the size of urban agriculture in Ethiopia, though the World Bank (2013) notes previous estimates have given an average figure for African cities that 35% of urban populations are involved in agriculture. Focusing more on market oriented production, most research in Ethiopia has focused on Addis Ababa. UNEP (2014) highlight the large size of the contribution of farm products to Addis Ababa from urban producers, making up roughly 30 % of vegetables including 60–70% of leafy vegetables, 60–70% of milk and 40–60% of eggs consumed in the city. The contribution of urban agriculture to total employment for Addis Ababa is found to be quite low (3%) compared with other economic activities. However the economic benefits of urban agriculture extend beyond the producers to include other groups involved in the urban food chain who depend on agriculture, such as those in marketing, transport and processing – the report suggests numbers for direct and indirect employment are similar. More conservatively, others suggest the number of direct and indirect beneficiaries from farming reaches up to 54,000 people. Focusing on vegetables, Mpofu (2013) found that there were about 16,000 people engaged in producing vegetables in Addis Ababa. Out of these, about 7,454 families were organized into 11 farmer's cooperatives. Informants did not note that urban agriculture was more or less prevalent in Addis Ababa than other urban areas. However the large demand in Addis Ababa suggests that urban agriculture is more likely to be seen as a business in Addis Ababa (and other larger cities) (as opposed to subsistence farming) than smaller urban areas. As such trying to very roughly estimate employment across Ethiopia suggests 150,000 jobs related to urban agriculture and 45,000 in horticulture⁵.

Figures are also scarce on growth of the sector. The Growth and Transformation Plan II (National Planning Commission, 2015) notes annual growth in the crop sector was 7% from 2010/11 to 2013/14, high but less than overall annual GDP growth of 10%. Horticulture growth though is likely to have been higher than 7.5%. The report notes growing private sector investment in crops, in particular in horticulture, which is referred to as a particularly contributing to employment and export diversification. However though not addressed formally in reports, growth in urban agriculture specifically does not seem to have been as substantive as other sectors, in part due to limited land availability- and the encroaching growth of cities (see below).

⁵ The calculations take 54,000 jobs in urban agriculture in Addis Ababa, of which 16,000 are in horticulture. This is scaled up, noting that the population of Addis Ababa of 3.5 million is 20% of Ethiopia's 19.5 million urban population, with the resulting figure halved as there may be less businesses outside of the major cities and to ensure caution.





Little data exists again at the regional level. Bezabih and Bihon (2007) note that in Mekelle, 6,628 households are engaged in urban agriculture mainly in the production of horticulture crops. A significant number in a town of just over 200,000 inhabitants, but likely to include households farming for consumption as well as income. The Ministry of Agriculture manages Urban Agricultural Units across urban areas, but interviews noted different levels of resources and efficiency.

The same economic trends bode well and poorly for urban agriculture. According to UN-HABITAT (UNEP, 2014), Ethiopia's current urban population will reach 32 million by 2030. This rapid urbanisation is expected to result in a dramatic increase in the demand for agricultural products. Its comparative advantage of proximity to the market means urban agriculture is well placed to supply this growing demand, in particular growing urban demand for perishable products, including vegetables, meat and eggs. However urbanisation also threatens the long-term viability of urban agriculture. Urban encroachment and the development of road networks are contributing to increased land scarcity for agriculture. Farmers in both urban and peri-urban areas are experiencing significant insecurity about their present land holdings, and have few resources to protect themselves against rising pressures to develop agricultural land. Given urban growth trajectories for Addis Ababa and other urban areas, these pressures are likely to intensify.

A separate long run trend is the anticipated growth of the agro-processing in the country, reviewed in a separate sector analysis. Though there is currently little relevant agro-processing, there is a long term government plan to support it, with priorities noted by informants to process dairy, tomatoes and meat. If connected to urban agriculture inputs, this could lead to long-term even higher demand for products and sector growth.

7.2.2. Scope for improving target group employment in the sector: 3.5/5

Interviewees consistently highlighted the large and growing market demand for horticultural products, noting price increases for fruit and vegetables. That said, this will vary significantly between places and products. One informant, for instance, warned against supporting dairy in Mekelle as the market is already saturated. The sector is also moderately labour intensive as, as noted by the New York State Energy Research and Development Authority (2013), agricultural operations on smaller plot sizes make capital-intensive, mechanized equipment hard to justify from an economic standpoint; instead, operations must rely to a higher degree on manual labour. For instance, Yihdego and Kassa (2009) notes that about half of respondents had family members 18 years old or over working for them, with on average 2.38 family members in each household engaged in different agricultural activities. In addition, they found about half hired employees other than family members,



of whom they hire on average, 2 daily workers, 4.2 temporary workers and 2.6 permanent workers. Looking at indirect employment, using 2003 data, UNEP (2014) note that the composition of those working directly in urban agriculture production accounted for about 45% and those dependent on urban agriculture was 55%.

As such, we concur with Bihogegn and Denu (2015) who highlight that the sector has significant potential for creating greater economic opportunities for many more returnees. This view is backed up by interviews, most notably with returnees working in the sector and the representative of the TVET College in Mersa. Interviews noted that differences are small across regions, though one noted Oromia was dryer making work harder but this was compensated by a larger population, while another highlighted particular opportunities in Tigray. There are currently many small enterprises and few large enterprises, partially due to the constraint of land and discussed below, and most opportunities will be working in small enterprises, including running micro-enterprises, collaborating in cooperatives and working as day labourers on small farms.

7.3. Feasibility to stimulate change

7.3.1. Willing and able market actors: 4/5

Informants and research highlighted that there are few large enterprises working in production in urban agriculture. The one exception was seen to be in dairy where there are a number of larger commercial farms. This is largely seen to be due to limited space availability. Rather one of the main characteristics of the sector is that it is dominated by a larger number of dispersed small-scale producers. Another major characteristic is that producers are significantly closer to markets, and supported by better infrastructure generally than in more remote areas. Though Bezabih and Bihon (2007) note that in Mekelle most farmers sell their producer to middlemen, a significant number sell direct to final buyers. By comparison, the wholesaler-collector function in the marketing system of rural agriculture is much more significant. The analysis did not look significantly into the buyers of products as, perhaps surprisingly, the literature seems to focus more on the private sector as input providers. As such, further analysis would add value by exploring in detail routes to market.

A further characteristic is that producers are significantly closer to sources of inputs, and there are a many larger market actors in the sector supporting functions. UNEP (2014) highlights the prominent role of the private sector in the sector, with a diverse range of actors, functions and services. Though most focused on Addis Ababa, animal feed suppliers, mushroom seed laboratories, milk processing firms and agricultural input suppliers, have national mandates and play an increasingly significant role in the promotion of urban agriculture in other Ethiopian cities. Of most relevance to horticulture are private organizations, institutions and individuals

marketing vegetable seeds, fertilizer, farm tools, irrigation equipment and sprayers. As such, Bezabih and Bihon (2007) note that the availability and cost of inputs is a low issue. For instance, in their research in Mekelle they find that the large majority of respondents (76.9%) used both chemical and organic fertilizers, 11.6% used only organic fertilizers, 7.7% only inorganic fertilisers, and only a minority (3.8%) used neither. This is a point broadly agreed on by returnees working in the sector, with the exception of a shortage of spray machines for pesticides and low quality of pesticides. However though inputs exist, there seems to be little use of more innovative technology and processes to allow more intensive farming in small spaces, for instance drip irrigation, intensive green housing equipment, rooftop farming, rental of small mechanised tillers, the Small-Plot Intensive farming approach, use of polyculture (using multiple crops in the same space) approaches and use of confined animal feeding operations (often known as factory farming) approaches to livestock.

Extension services are also available from the government. Though urban agricultural units are less resourced than their rural counterparts, a report from the 2012 Addis Ababa Urban Agriculture Core Process workshop outlines the types of services offered. These include: provision of technical support; introduction and training of new technologies; input provision and facilitation; veterinary services; artificial insemination services; competence certification services; and meat and meat production quality/hygiene control. Informants doubted that the private sector was providing large-scale training in urban agriculture. Rather training is covered by public TVET institutes and extension.

Access to finance is highlighted as a significant constraint in the literature (e.g. World Bank, 2013) but was highlighted less by informants. A representative from DECSI in East Tigray highlighted that urban agriculture was one of the priority sectors they had government direction to support. Commercial banks do not have these priorities and were seen as less relevant for returnees here, suggesting both loan requirements and collateral below commercial finance levels.

No association is supporting the sector across the country. The closest effort was work in 2012 by some NGOS, with support from the Addis Ababa Urban Agricultural Units, USAID and FAO, to launch an Addis Ababa Urban Agriculture Stakeholders' Network, a platform for sharing knowledge and coordinating approaches to promote urban agriculture in the city. Though promising, there is little evidence of this network now, and the representative from the Addis Ababa Urban Agricultural Unit noted that it started with promise but effectively closed down when donor funds ran out—suggesting it was not founded on a sustainable business model.



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7.3.2. Feasibility to stimulate change: 2.5/5

At a city administration level, there seems to be increasing support for urban agriculture. For instance, urban areas will have a set Urban Agricultural Unit based within regional agricultural teams. However several units appear to be more active than others. In particular, urban agriculture appears to be high on the agenda in Addis Ababa. Here the city administration has an Urban Agriculture department under the Trade & Industry Development Bureau, the Addis Ababa Urban Agriculture Core Process, which undertakes and overlooks relevant activities in the city, and provides significant extension services. Bezabih and Bihon (2007) as well note the establishment of the Mekelle Urban Agricultural Office specifically to give support to urban agriculture producers, which supports the production of vegetables and leafy crops, both for home gardens and in the peri-urban production zones.

However there seems to be less support in national plans. The Growth and Transformation Plan II (National Planning Commission, 2015) notes that the crop subsector constitutes the major share of agricultural GDP. Accordingly, it states that increasing the production and productivity of major crops will continue to be a priority in the next five years to maintain the fast and sustained growth achieved during the last decade. Special efforts will be made towards increasing the production of high value crops through increasing productivity, which is likely to include horticulture. However the plan does not specifically mention urban agriculture. Representatives from urban agricultural units in Mekelle and Addis Ababa noted that at the policy level, the government is significantly more focused on rural areas which have more much more extensive resources, including development agents, cooperative advisers at cooperatives and veterinary technicians across.





UNEP (2014) notes that in Addis Ababa, though likely to be more nationally resonant, while the city administration considers urban agriculture an important activity, policy frameworks to enable it are hindered by (a) low awareness amongst policy makers about of the importance of urban agriculture (b) limited leasing periods of five years for urban agriculture (c) legal and informal encroachment on peri-urban farmers' land (d) and lack of institutional coordination for urban agriculture within other sectors. Zooming in, it notes that the biggest issue that seems to face the sector is land rights and urban encroachment. Urban encroachment and the development of road networks are contributing to increased land scarcity for agriculture. Farmers in both urban and peri-urban areas are experiencing significant insecurity about their present land holdings, and have few resources to protect themselves against rising pressures to develop agricultural land. Informants did not see this changing in the future and rather saw the situation as likely to deteriorate. This said, this problem is likely to be significantly less in peri-urban areas.

It is hard to see how the ILO could effectively encourage more proactive land-use policies, but it would likely involve working to increase the exposure and knowledge of key organisations involved in planning, such as the: urban planning institutes who coordinate urban land-use planning; the Office of Land Administration and Construction which certifies urban agriculture land allocations; city councils which develop policy, allocate the budget for municipal development activities, and provide political leadership; and Bureaus of Trade and Industry which issues urban agriculture-related investment permits and licenses private service providers and producers .

7.3.3. Likelihood of distortion: 3.5/5

There seems to be little donor activity specifically in urban agriculture. A USAID and PEPFAR funded Urban Gardens Program in Ethiopia ended in 2012 after creating more than 500 community and school vegetable gardens across 20 cities and towns in six provinces. The program worked with 51 local partner organizations to train community gardeners on innovative, yet practical, agricultural approaches, good nutrition, and savings. The project in particular helped marginalized, HIV-affected women and children by improving their health and financial stability. A follow on 'Workforce Development/POTENTIAL' project implemented by Save the Children, focused on Ethiopian youth with services to help them develop income streams and gain the skills, knowledge, and social capital, is operating in rural and peri-urban areas of which the urban agriculture is still implicit in the program, but not a key focus. The FAO has also previously given substantive support to the sector in Addis Ababa, for instance in (with USAID) supporting the development of an 'Urban and peri-urban agricultural policy and strategy for Addis Ababa' in 2005. However a representative from the Addis Ababa Urban Agricultural Unit noted that substantive FAO support had now ended. Plan Canada's website notes that it is also running an urban farming

project in Ethiopia that provides project participants with the seeds, tools, and skills they need to grow fruit and vegetables successfully in small gardens and patches of land. However they did not respond to our request for an interview. Such activity is likely to be comparatively small, and it is likely that, with the sheer diversity of urban agricultural activity, a number of other small organisations are providing focused support. UNEP (2014) for instance notes that there were around 25 NGOs and community-based organizations in Addis Ababa alone involved in livelihood promotion for urban poor and marginalized people, with urban agriculture a key activity.

There is more support to horticulture generally, with SNV, for instance, facilitating producer access to inputs across the three study regions and SNNPR. For example, its 2013/14 Annual Report notes that it has worked through its programme GRAD with 16 agro-dealers to supply inputs such as vegetable seeds, feed, farm tools and veterinary drugs, while also supporting the demonstration and promotion of products. The system has enabled over 9,600 smallholder farmers to access timely inputs, of better quality than usually supplied by the market, near to their villages and at affordable prices. GRAD ends in 2016, but a similar project for the coming five years is being submitted to USAID. The focus of the project has been to connect rural households to input suppliers working in rural towns, but there may be scope to work with GRAD to increase access to urban or more likely peri-urban areas. Further in horticulture, PEPE is facilitating a fruits and vegetable processor and supplier (farmer union) to work together through aggregation and processing, with a contractual agreement for an out grower schemes between large farms and small farms – the intervention targets 2400 farmers in 3 years. In addition, they are trying to improve the inputs supply system through development of partnerships between the government and private sector. As such, it seems unlikely that the sector is overly distorted by other donors, while lessons learnt in the GRAD programme and by PEPE, and even connections, could be usefully used for future work.





Urban agriculture is a broad area defined by geographical location rather than specific value chains, and though this research has focused more on horticulture, the cross-cutting strengths and weaknesses of working in urban areas are often more important. There is significant potential in urban agriculture for returnees in urban and peri-urban areas across. Opportunities are likely to be accessible for returnees due to common previous experience working in basic homestead farming and the limited skills development required. Asset requirements are also fairly low compared to other sectors. Opportunities are of value as well- urban agriculture can be carried out alongside other work, it contributes to domestic nutrition and resilience, and offers significant opportunities for women. Horticulture in particular offers the opportunity of comparatively high and quick rates of return. However looking more at the wider system urban agriculture is carried out within highlights the strengths and weaknesses of working in urban environments. As Ethiopia swiftly urbanises and incomes grow, demand in urban areas for agriculture products is also growing rapidly. This supports all urban agriculture products, with producers closer to markets than rural production, but particularly so for perishable goods, as urban production is less constrained by limited cold storage systems. Inputs are also often more accessible than in rural areas as provider logistics are easier. However space is limited in urban areas and most urban agriculture is carried out on dispersed small farms by small enterprises- indeed most opportunities for returnees will be in smaller enterprises, whether in micro-enterprises, co-operatives or wage labour on small plots. This dispersion makes it harder for input providers to market products. Of more concern, most informants noted pressure to reduce space for urban agriculture. Urban planners see more value in supporting other sectors while government policy generally favours agriculture in more rural areas. Urbanisation is leading to an encroachment on urban agriculture spaces. Often property rights are not clear, meaning reducing investment into farms, including the equipment more necessary for farming in small areas.

8. Agro-processing



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Agro-processing forms a sub-set of the manufacturing sector and involves the processing/changing of form of raw materials from the agricultural, forestry and fisheries sector and includes a wide range of edible and non-edible agricultural products. The Ethiopia's Central Statistical Agency (CSA) classifies agro-processors into large and medium-scale processors (LMPs), and small-scale enterprises. While the LMPs are concentrated around major cities and regional towns, the small-scale processors mainly in grain milling and bakery, and production of feeds predominate the more rural areas. This study focussed on the returnees' engagement in primary processing activities such as crop drying, shelling/threshing, cleaning, grading, and packaging, and small-scale enterprises engaged in agro-processing. However, we also analyse the employment opportunities in LMPs and the potential opportunities that may arise upstream and downstream in the agricultural value chains as the government establishes the integrated agro-industrial parks aimed at driving agro-processing development and growth.

8.1. Relevance to the target group

8.1.1. Current presence of returnees in the sector: 2.5/5

As indicated earlier agriculture remains the primary sector engaging large populations in Ethiopia, and the target regions in particular. The principal crops include coffee, pulses, potatoes and sugarcane. These crops thus also spur great amounts of activity in industries such as manufacturing, transport and marketing. Though accurate numbers were not available, informants indicated that the number of returnees engaged in agro-processing was low. For example, in a study on the business services



and training markets, only 3% of the returnees interviewed were engaged in agro-processing and it was identified as one of the business opportunities available to the community by 14% of the interviewees.

8.1.2. Nature of participation of the poor in the sector: 2/5

Most of those engaged in agro-processing were in food processing, considering that even small-scale processing was capital-intensive. Women dominated the sub-sector and were mainly business owners or employees engaged in food preparation and hotel services. As for the employment in the LMP, an assessment of the salary levels entry-level job opportunities within the Amhara region indicates that employees working in small-scale agro-processing were estimated at 1,750 ETB for those in animal processing and 2,100 ETB for those in cereal and grain processing. About 53 jobs were filled per year by employees with minimum age of 18 years with none of primary education in grains and cereals processing. The opportunities were lower for those involved in animal processing – estimated at 4 per year. These jobs were mainly in provision of unskilled labour and as traders.

8.1.3. Appropriateness of the sector for returnees: 2.5/5

The economy of Ethiopia and Amhara, Oromia and Tigray regions in particular mainly depends on agriculture. However, as with other smallholder farmers, the returnees in primary agriculture had a low asset base, limited resource endowments, low farming technology, fragile and unstable market relationships and low access to services, finance and information. The main skills required in the LMPs were mainly in technicians and operators while for the small-scale enterprises minimal skills were required. Consequently, it was identified as the fifth most important technical skills possessed or needed to start a business in the three regions. However, there was challenge in access to skills, as the TVETs were not providing them. Further, the employment opportunities in the LMPs were not accessible for most of the returnees, as they did have such skills. The main skills required in the LMPs were mainly in technicians and operators while for the small-scale enterprises minimal skills were required. In addition, access to these skills was limited to them, due to their basic education and the fact that TVETs were not offering such courses.

As for employment, key informants noted that while opportunities for short term training in skills required in agro-processing may be available in larger cities, access was a challenge for returnees based in rural areas. It was further noted that the TVETs were not providing any skills development in agro-processing, as they did not have adequate trainers and equipment at the centres. The TVETs further noted that running such courses would be more expensive considering the unit costs per trainee.

8.1.4. Differences for potential migrants: 2.5/5

There were no differences between returnees and potential migrants in terms of experience, skills, assets or inclination to work in the sector. However, potential migrants, especially those residing in the cities had better access to informal networks for employment in the sector. Furthermore, as most of the opportunities for employment were based within the major cities, one had to be a resident there and know the informal networks that facilitated the employment. Conversely, returnees who had some saving had better capital for start-ups such as grain mills and bakery shops compared to the potential migrants.

8.2. Opportunity for inclusive growth

8.2.1. Likelihood of sector growth: 3.5/5

The country's overall economic growth has strong ties to the performance of the agriculture sector. However, as the Ethiopian economy advances, the role of agriculture is changing and the demand for value added and processed products is increasing, shifting the focus away from pure primary agriculture towards agro- processing. Currently, the country's industrial sector is still relatively small, accounting for 14% of GDP in 2013/14, to which manufacturing contributed 31% (or 4.4% of the overall GDP). From national perspective, agro-processing is the largest manufacturing industry in Ethiopia, and it is dominated by the food and beverages industry.

The demand for processed products is increasing owing to growing urbanization and improved incomes. Food import dependent countries such as Somalia and Sudan drive the regional market for processed goods. For example, proceeds from export of semi and processed foods earned Ethiopia 300 million USD from Somalia, 93 million USD from Sudan and 75 million from Djibouti in 2013 (Poujade, 2015). Globally, the export of processed food products is growing at approximately 10 per cent annually, suggesting that market conditions for exports of processed food are favorable (UNIDO).

In 2015, the total grain production reached 270.4 million quintals, of which cereal production accounted for 87.3 percent while pulses and oil seeds comprised 12.7 percent. Cereals and oilseeds production went up by 9.4 and 6.9 percent over the preceding year owing to the 3 and 4.9 percent expansion in cultivated land area respectively. This increasing growth in agricultural outputs provides incentives for increasing processing of the agricultural produce. Hence, the industrial sector recorded 21.6% growth, over the previous year (NBE, 2015). The rising incomes and associated consumer preference shift towards conveniently packed goods are forecasted to lead to demand growth of 5% per annum (ATA, 2016). However, agro-processing is not fully exploited and the share of the industrial sector in GDP is still low.



For example, a study conducted by AGRIFEX (Specialized International Exhibition in Agriculture and Food) in 2012, showed that local agro-processing output meets only about 13% of the country's demand (Poujade, 2015). The majority of the smallholder farming is confined to the informal sector mainly in primary agriculture.

To transform the agricultural sector, the government has divided the country into 17 agro-processing corridors. In addition, the Government of Ethiopia is investing in IAIPs, which are considered a vehicle for the structural transformation of the economy through the commercialization of the agricultural sector. They are also expected to help pave the way for the realization of the country's Vision 2025 of becoming a leading manufacturing hub in Africa.

8.2.2. Scope for improving the target group employment in the sector: 3/5

The Government of Ethiopia expects the industrial sector to play an important role in GDP growth, job creation, foreign exchange earnings, and small and medium-sized enterprise (SME) development over the coming years. As the government facilitates foreign investments, opportunities for employment are likely to increase around the major cities and in the IAIPs. As agro-processing has the potential to spur growth and create jobs, due to its strong backward linkages with the primary agricultural sector, opportunities will arise in marketing and auxiliary service opportunities along the value chains such as input supplying (improved seeds and fertiliser), small-scale irrigation, transport, storage and distribution, marketing, equipment maintenance, and provision of diseases and pest control services. Furthermore, The agriculture and agro-processing value chain represents an important source of labour intensive growth.

The broader Addis Ababa area, Bahir Dar, Adama/Nazareth, Awassa, Mekele, and Direedawa are the most feasible locations for agro-processing. However, currently more than 50% of the food industries concentrated in and around Addis Ababa. However, it was noted that returnees are likely to face challenges in access to these jobs, as access to training opportunities are limited and the lack of networks for employment.



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8.3. Feasibility to stimulate change

8.3.1. Willing and able market actors: 3/5

As a priority sector, the government is the main actor with few foreign food processing companies. The government has established the Food, Beverages and Pharmaceuticals Industry Development Institute that is mandated to provide oversight and support to various activities in the sector such as technical support, investor relations, and design national marketing strategies. According to the Federal Ethiopian Investment Commission, over 11,000 foreign investors and joint venture (local with foreign) were registered to invest in agro processing in Ethiopia between 1994 to July 2015, though less than half of them have set up business in the country (Meles, 2016). This is likely to result in increased demand for skilled and unskilled labour.

Rural producers were the main source of raw material for processing. However, as most were subsistence farmers, the non-availability of processable varieties of raw materials has limited opportunities for economies of scale. Furthermore, as production is weather-dependent, seasonality in production contributes further to the inadequacy of consistent supplies. In addition, the lack of infrastructure to support supply to processors is limited. As a result, wastage between the farm gate and the final consumer is often 40% in fresh products and up to 20% in cereal crops, contributing to unnecessarily high prices.

8.3.2. Conduciveness of the political economy: 4/5

Ethiopia aims to achieve middle-income status, leading in light manufacturing and increase the contribution of the industrial sector to GDP from 15% to 28% by 2025. Agro-processing is one of the key pillars of the GTPs (2010/11 - 2014/15) for its potential to spur growth and create jobs, due to its strong backward linkages with the primary agricultural sector. The GTP makes it clear that the sector occupies a key role in the economy and the Agricultural Development Led Industrialization [ADLI] policy required the development of medium and large-scale industries dedicated to supporting agricultural industries.

The Government of Ethiopia has developed an agro-processing roadmap and operational plan and has budgeted 300 USD million for on-site and off-site infrastructure at the IAIPs. At federal level, the Agricultural Commercialization Clusters (ACCs), which overlaps with IAIPS aims to connect smallholder farmers with commercial supply chain, and investment in strategic infrastructure. In addition, the Government of Ethiopia is encouraging the private sector investments in the sector by providing appropriate incentives such as electricity and opening up roads and rail to regional markets. The Private Sector in Agriculture (PSA) Team provides targeted





support to navigate the Ethiopian investment environment with the ultimate aim to connect smallholder farmers with commercial, market-focused supply chains to increase incomes and improve livelihoods.

8.3.2. Likelihood of distortion: 2/5

The Africa Alliance for Food Processing is supporting increase in the quality and competitiveness of the Ethiopian food-processing sector. The UNIDO is engaged in providing technical assistance in the three priority sectors identified in its Program for Country Partnership (PCP) for Ethiopia. The support has included the facilitation of feasibility studies for 4 IAPs in strategically located agricultural development corridors, and mobilizing funding to support infrastructure projects. Other than few actors as indicated above, the strategy is government driven with less flexibility and biased towards larger investors.

The number of returnees engaged in agro-processing currently is low. However, in addition to primary processing activities, employment opportunities exist in large and medium-scale processors (LMPs). The broader Addis Ababa area, Bahir Dar, Adama/ Nazareth, Awassa, Mekele, and Diredawa are the most feasible locations for agro-processing. As agro-processing has the potential to spur growth and create jobs, due to its strong backward linkages with the primary agricultural sector, opportunities will arise in marketing and auxiliary service opportunities along the value chains such as input supplying (improved seeds and fertiliser), small-scale irrigation, transport, storage and distribution, marketing, equipment maintenance, and provision of diseases and pest control services. In addition, potential opportunities may also arise upstream and downstream in the agricultural value chains as the government establishes the integrated agro-industrial parks aimed at driving agro-processing development and growth. However, the employment opportunities in the LMPs are not accessible for most of the returnees due to returnee limited education. Further TVET colleges are not providing training here and reported not having adequate trainers and equipment at the centres. They noted that running such courses would be more expensive considering the unit costs per trainee.

9. Sector scores



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Table 1 shows for each sector, their scores for each criteria, their weighting, and then the total weighted score. The range across sectors is 82 - 64.5 out a potential score of 110. The poultry and livestock sector have the highest scores, several points above construction materials, textiles and garments and urban agriculture, which all still have high scores. As noted in the recommendations, this suggests the value of further support to these value chains to create opportunities for returnees. Agro-processing has the lowest score by some way. Though significant potential in the future is suggested, returnees are looking for opportunities now and currently such opportunities are low, suggesting against focusing on the sector.

**Table 1: Criteria scores**

	Weighting	Poultry	Weighted	Livestock fattening	Weighted	Construction materials	Weighted	Textiles and garments	Weighted	Urban agriculture	Weighted	Agro-processing	Weighted
1. Current presence of returnees in the sector	2	4	8	4	8	2	4	3	6	4	8	2.5	5
2. Nature of returnees participation in the sector	2	3.5	7	3.5	7	3.5	7	3.5	7	3.5	7	2	4
3. Appropriateness of sector for returnees	3	4	12	4	12	3.5	10.5	2.5	7.5	3.5	10.5	2.5	7.5
4. Differences for potential migrants	2	2.5	5	2.5	5	3	6	3	6	2.5	5	2.5	5
5. Likelihood of sector growth	3	4	12	4	12	4.5	13.5	4	12	3.5	10.5	4	12

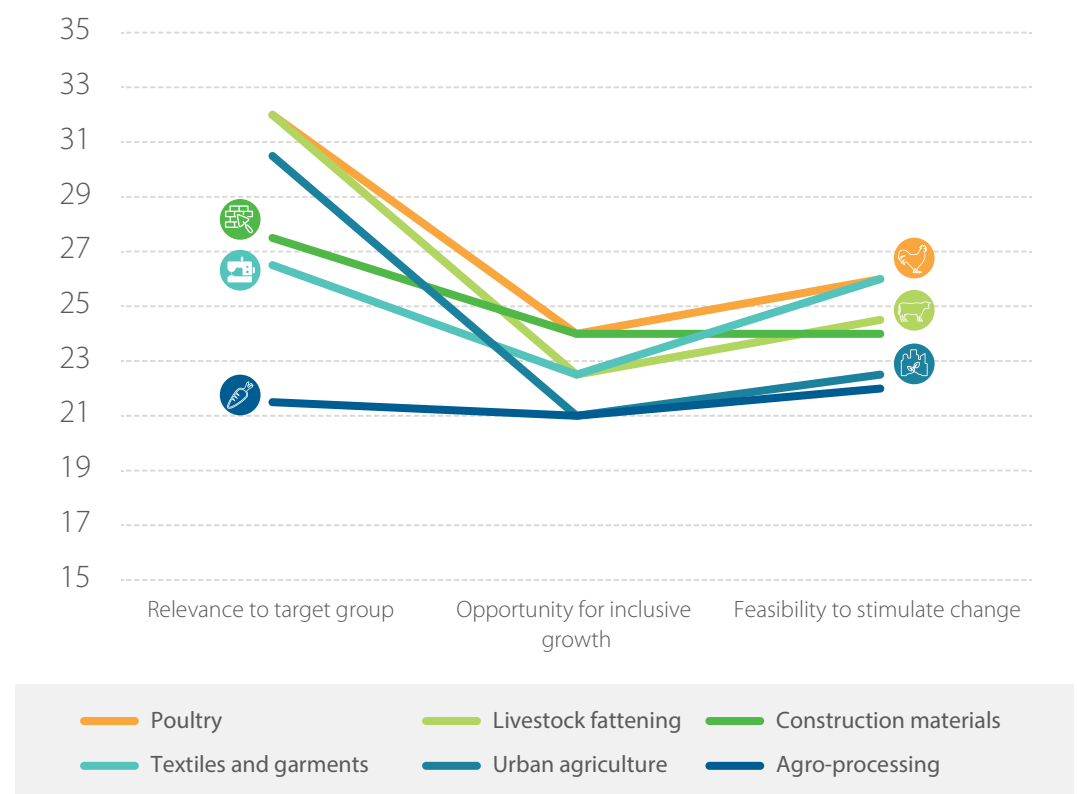
	Weighting	Poultry	Weighted	Livestock fattening	Weighted	Construction materials	Weighted	Textiles and garments	Weighted	Urban agriculture	Weighted	Agro- processing	Weighted
6. Scope for improving target group employment	3	4	12	3.5	10.5	3.5	10.5	3.5	10.5	3.5	10.5	3	9
7. Willing and able market actors	4	4	16	3.5	14	3.5	14	4	16	3.5	14	3	12
8. Conductiveness of political economy	2	4	8	4	8	3	6	4	8	2.5	5	4	8
9. Likelihood of distortion	1	2	2	2.5	2.5	4	4	2	2	3.5	3.5	2	2
Total			82		79		75.5		75		74		64.5
Ranking			1		2		3		4		5		6





However no sector is ideal and all have comparative strengths and weaknesses. Graph 1 helps indicate this by providing cluster (not criteria) scores per sector. It shows broadly poultry consistently scoring high and agro-processing scoring low. However it also shows that urban agriculture, though overall ranked lower, was seen as more relevant to returnees than construction materials and textiles and garments - in part as more returnees are currently working in this area and already likely have some experience. Construction materials came out particularly high for 'opportunity for inclusive growth', largely due to the rapid growth of the sector and labour intensively. Textiles and garments performed well in 'feasibility to stimulate change', in part due to the strong government support to the sector and various industrial parks and companies in the sector.

Graph 1: Cluster scores



10. Recommendations



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Our analysis found that the ILO project is already having an impact, with many returnees already benefitting and valuable trainings starting. The recommendations below seek to encourage and build on this valuable work. We also make two further observations that lead into the recommendations below. One, there were some signs of returnees waiting for training (or other services) before starting likely viable businesses, and training centres and other providers waiting on funds from ILO before starting trainings. Two, returnees are not clustered into a couple of value chains and growth of any one sector will create limited returnee opportunities. Rather larger scale is likely to be achieved through larger numbers of opportunities in several sectors supported by smaller numbers of opportunities in a larger number of sectors. This suggests a dual track approach: one, to build up the value chains that are likely to provide most opportunities for returnees- as noted above, these are poultry, livestock fattening, construction materials, textiles and garments, and urban agriculture; and two, take a non-sector specific approach to improve the system through which returnees find roles (that includes, for instance, MFIs, TVET colleges, MSE offices...). As such, we distinguish here between recommendations for specific value chains and those more sector neutral that rather look at how to improve the system that provides opportunities to returnees. We suggest more extensive support for the recommended sectors, but note that the cross cutting recommendations are likely to lead to support, though less extensive, for other sectors. This said, the two tracks are necessarily very connected and repetitions will be found between the two e.g. the general need to connect TVET colleges to the private sector and then a specific examples for textiles and garments.



Our recommendations further distinguish between both short term recommendations that the ILO programme could look to carry out in the near future and more long-term recommendations that might be more relevant for an extended or future programme. Value chain recommendations tend to be more long-term and cross-cutting more short-term, but this is not always the case. However the separation between short and long term is not always obvious and should be seen as flexible. Some recommendations hold for both short and long term, in which case we include them in short-term recommendations.

No	Time period	Value chain	Recommendation
1	Short-term	Cross-cutting	To better facilitate the system returnees are in and determine its own strategy, ILO needs more market intelligence. In-depth market analyses are recommended for all sectors that will be further supported, with a focus on the value chain for poultry, livestock fattening, construction materials and urban agriculture, and on the labour market for the textile and garment sector. The recommendations here should help steer some of the questions to focus on in studies, while also suggesting further specific issue studies.
2	Short-term	Cross-cutting	Information flow in the system is weak, in particular on where there has been success in providing opportunities to returnees. MFIs do not consistently keep records of number and of loans to returnees. TVET colleges do not consistently keep records of the impacts of trainings on returnees. Some colleges do not appear to keep records of if participants of short term trainings found work after (and due to) trainings, while where this happens, it appears to be a survey shortly after training which shows high success as local governments do provide initial effective subsidies to returnee groups- but there is no follow up to determine longer term success rates. Though they have more informal awareness, this results in a focus on activities (number of trainees) over results (opportunities created), which means that market actors such as TVET colleges are unlikely to be focusing their limited resources where of most value – for instance, they will not know which sector trainings are providing best returns on investment. ILO should work with market system actors to improve their measurements systems to move towards results over activities.
3	Short-term	Cross-cutting	ILO should aim to further empower system actors. This is an important principle across these recommendations. An example of how this may look in practice is in work with TVET colleges, rather than directing them to focus support only to certain sectors, colleges should have more freedom to support the sectors that they have identified themselves as having most local potential. However empowering does not mean giving a free rein, and colleges should have to provide a clear rationale for deciding sectors supported. ILO Should support coaching on how to determine sectors to support and provide valuable information to be used in decision making (such as the market intelligence work recommended above).

No	Time period	Value chain	Recommendation
4	Short-term	Cross-cutting	ILO should support returnee system actors, such as TVET colleges, MSE offices and Agricultural Bureaus, to more extensively connect to the private sector e.g. to connect TVET colleges to industry associations or industrial parks to ensure that training is relevant for the skills demanded and that there is a clearer pathway from training to employment. This is noted in more detail for specific sectors where opportunities are higher, but should be a cross-cutting approach.
5	Short-term	Cross-cutting	Islamic financing is at an early stage in Ethiopia, but showing signs of strong growth. Dedebit has Islamic financing windows, but ACSI and OCSSCO do not. This is a significant constraint to returnees accessing microfinance, and ILO should increase efforts to push for such windows. Work here might involve exposure visits between the different MFIs and knowledge sharing on what works. The USAID funded PRIME programme has made significant progress in supporting Islamic finance in Ethiopia and could be a valuable partner.
6	Short-term	Cross-cutting	Access to land is also a significant constraint for most sectors, though larger for some (e.g. construction materials). ILO should work to train local MSE offices on land use planning, share approaches and investigate options with them e.g. warehousing.
7	Short-term	Cross-cutting	ILO should improve networks between returnees. Though such networks are strong in local areas, there is little knowledge sharing and role modelling between returnees in different areas on what businesses they have started, what have worked well and what lessons they have learnt. A returnee event(s) could be held where returnees who have set up successful businesses present what they have done, with the intention that all attending share key insights with more returnees in their localities.
8	Short-term	Cross-cutting	ILO should ensure it has a strong knowledge of relevant work being carried out by other development partners , in particular of the five sectors noted above, in order to be able to link growing returnees businesses to such programmes where other programmes have more resource available than ILO for business expansion.
9	Short-term	Poultry	ILO should consider partnering with ILRI to support the roll out of their egg laying equipment and training to returnees who may be interested.
10	Short-term	Livestock fattening	The capacity of the TVETs can be built to provide skills and training in animal feed formulation – the Livestock and Dairy Research Institute may be suitable partner in building the capacity of the TVETs.





No	Time period	Value chain	Recommendation
11	Short-term	Construction materials	To support skills development there is the need to (a) support the Federal TVET agency to redevelop a professional profile for cobblestone production and other construction material roles (b) check with all TVET colleges that returnee training in all regions is considered valid to work in cobblestone production and (c) ensure TVET colleges are aware of additional training that returnees may need for more senior roles e.g. to be foremen, and are able to direct returnees as appropriate.
12	Short-term	Construction materials	There is little understanding at a more micro-level of the demand for construction materials in different urban areas and the feasibility of production (e.g. local access to raw materials). Such an analysis should be carried out and used to inform the advocacy strategy (see below) and where ILO in particular encourages training in the sector.
13	Short-term	Construction materials	A key constraint to all products is that the local urban area political economy is built around more informal networks that recently returned returnees may lack. This is compounded in the cobblestone sector, where local governments have more specific patronage systems. This will be an on-going challenge regardless, but the ILO does have valuable partners and contacts e.g. woreda, regional and federal TVET, MFI and MSE heads. An advocacy strategy should be developed around how to use these partners to ensure opportunities are available for returnees.
14	Short-term	Construction materials	Though demand is increasing, returnees will be competing with more established businesses. This is healthy, but future business support should look at ways to establish brands/ reputations. One off support funded by ILO could investigate what criteria end buyers look for to feed into this.
15	Short-term	Textiles and garments	To more effectively improve skills, TVETs need to link with the Textile and Apparel Institute, garment colleges and universities so that the current training can be brought up to the levels required at newly established or establishing textile and garment firms. Traditional weaving can be supported by linking up TVET colleges with skilled traditional weavers.
16	Short-term	Textiles and garments	To enable returnees to access employment opportunities, they will need skills and employment mediation with the textile and garments companies. ILO can facilitate access to training opportunities for qualified returnees at garment colleges and facilitate internship and job-placements in the companies, especially in textile companies setting up operations in Mekele.

No	Time period	Value chain	Recommendation
17	Short-term	Urban agriculture	The largest issue facing the sector is the lack of land that is available to work with, and the high prices that are available. A short term way to address this could be to continue supporting MSE agencies to make special land available for 'start-up' businesses, where there is some confidence that the business will be sustainable once this ends, while further supporting (e.g. bringing in experts to do some training) business modelling at the MSE agency.
18	Short-term	Agro-processing	Though there are likely to be substantive opportunities in the future, there are currently limited opportunities. As returnees are looking for opportunities now, we suggest that the ILO does not extensively support this sector. However ILO might consider supporting other donors working in this area to leverage their work to focus more on returnees.
19	Short-term	Agro-processing	The access to skills for employment in agro-processing is a key challenge, as TVETs and other rural college do not have capacity for such trainings. If ILO decides to support the sector, this capacity may be addressed by linking the TVETs to institutions such as the Ethiopia Agricultural Research Institute, so that their capacity can be built.
20	Long-term	Cross-cutting	ILO should explore the potential to move away from using upfront grants to facilitate returnee system actors, though it is understood that this may not be possible in all cases due to internal fiduciary constraints. However possibilities includes reforming support to TVET to provide some upfront grant support followed by performance based grants, and providing guarantees to MFIs to prove that returnees are low risk rather than capital support (or having a mix).
21	Long-term	Cross-cutting	Work with MFIs to develop new financial products for returnees, such as training attendance loans (which would also mean less support was needed directly to TVET colleges to support this) and asset financing for equipment and lease purchases.
22	Long-term	Cross-cutting	Returnees also struggle to access microfinance as they are unable to provide needed collateral. ILO should commission research on what options might be available for MFIs to address this, such as insurance for returnees or MFIs, and lessons learnt in other contexts.
23	Long-term	Cross-cutting	ILO should seek to engage further market system actors beyond those it has directly worked with, in particular private sector MFIs and TVET colleges, using information on the anticipated successes from current interventions to help crowd them in.





No	Time period	Value chain	Recommendation
24	Long-term	Poultry	The sector particularly struggles with limited inputs, in their production, distribution and knowledge on their use. This is particularly the case for veterinary products, but also includes limited supply in DOCs and chicken feed. There could be several causes to this, which further studies should investigate. Input suppliers may be unaware of the size of demand in urban areas; they may not be aware of good practice in embedding information sharing and how this can be profitable; that village poultry producers have small flocks and are located in large geographical areas increases high transaction cost; while the limited capacity of input suppliers suggests they would value more direct business support and they face more restrictions in their operations (e.g. import restrictions). The appropriate response will vary with the root cause, but is likely to involve working with input suppliers to increase their capacity and better distribute their products to focal points in more rural areas and embedding information, with the sales point potentially being local shops, cooperatives, development agencies or model farmers.
25	Long-term	Poultry	A specific challenge for poultry is the high mortality rate of birds. Various more exploratory options should be explored in addition to veterinary products. For instance, ILO could work with finance providers, in particular MFIs, to develop insurance products for farmers to hedge against chicken mortality. Separately it could work with diagnostic service providers for rapid detection and control or with vets to develop flock health programmes (vaccination, flock monitoring and recording, surveillance, etc.).
26	Long-term	Poultry	Though less of a priority, ILO could consider ways to work with aggregators or other actors to improve returnee market access. A specific potential intervention is to support planned work by the DOC Company Elren to develop processing facilities for poultry bought from small-scale producers. The company is in particular looking for support in accessing finance, which ILO could assist with or connect the business to other more relevant parties.
27	Long-term	Livestock fattening	ILO should consider working with input suppliers to develop distribution networks within high potential areas. To address the specific challenge in accessing good quality feed, an alternative approach could also be to facilitate some returnees to start MSEs in feed formulation and link with livestock fatteners and poultry producers, or to link the livestock fattening MSEs with agro-industries for better access to by-products that could be used as feed supplements.
28	Long-term	Livestock fattening	As livestock fattening enterprises are informal and small, they are unable to utilize economies of scale in accessing better markets. The appropriate response could include working with MSE agencies and MSE owners to facilitate aggregation of product and business-to-business linkages with larger fattening centres and abattoirs.

No	Time period	Value chain	Recommendation
29	Long-term	Livestock fattening	Lessons from PRIME show that providing business grants to livestock fattening enterprises to increase their scale may be a good way of increasing MSEs capacities in meeting the quality and quantity of livestock demanded in the market. Care though would be needed to ensure market distortion is minimal.
30	Long-term	Construction materials	This assessment did not look at equipment challenges in depth, but some were noted, including access to finance for larger equipment, poor quality equipment needing to be regularly replaced e.g. chisels and hammers, and the emergence of new equipment that could be more efficient but needs testing e.g. light machines for stone-breaking. ILO should carry out an assessment on equipment demands and potential on the market, to be followed by linking up relevant actors as appropriate and potentially co-funding early prototyping. The focus should be on higher output rather than labour savings.
31	Long-term	Construction materials	Access to finance is a significant challenge. Though a crosscutting issue across sectors, equipment and land needs in construction are larger than other sectors studied here. ILO should analyse whether MFIs could increase loan size or commercial banks decrease loan size. ILO should explore ways to work both with MFIs and commercial banks, and provide limited support, e.g. a guarantee, to validate that businesses are viable. Asset financing seems to have been started by MFIs in ACSI, which ILO could promote to other MFIs both for equipment and for property.
32	Long-term	Construction materials	For cobblestones, a key barrier to increased demand and sector sustainability is the lack of demand from the private sector. This is likely down to several things. One, the high price of cobblestones. World Bank attempts to forge competition between providers is making progress, but is slow due to local government political economy issues. Beyond the points on political economy above, this is probably beyond the scope of the project. Other reasons are more amenable, notably, two, that local enterprises may not be aware of the benefits likely to them if their neighbourhoods are cobbled i.e. more footfall, more customers, housing value increasing... ILO could support local governments, the World Bank and cobblestone enterprises to develop evidence-based promotional materials and share these with relevant community groups/potential buyers e.g. hotels. Thirdly, cobblestones in a street or square will benefit multiple enterprises. Each may not want to pay for them, so ILO could support community coordination to develop mechanism for group purchasing/cost sharing. This is already starting in some areas e.g. in some cities around Ethiopia, kebele associations have started fundraising for cobblestone roads.





No	Time period	Value chain	Recommendation
33	Long-term	Construction materials	No associations were noted for construction material producers. This could be due to specific barriers in the sector, but is more likely due to coordination failures in a fairly new sector. ILO could explore interest in such an organisation in some of the larger producers. However establishing such an association could be very heavy handed and may be more of a long-term goal – to be carried out by sector actors themselves if they see the value. Initial steps could involve supporting local institutions to organise local fora for producers to come together e.g. local university construction departments
34	Long-term	Textiles and garments	Considering that there a number of textile manufacturing companies setting up operations in different parts of Ethiopia (for example, MAA, Velocity, Itaca etc. in Mekelle), there is anticipated large demand for middle level technicians and operators. Further, it is expected that textile and garments will be the dominant sector in the IAPs (key informant estimates up to 80%). However, training colleges are not adequately prepared to meet this demand – they lack adequate teachers and technology and are not aware of skills needs of the companies. ILO should consider supporting the garment and TVET colleges in assessing the skills needs of the emerging industries and addressing ways of access to improved technologies and equipment in colleges.
35	Long-term	Textiles and garments	Returnee MSEs face the challenge of ‘missing markets’ or a coordination problem – potential start-ups will require simultaneous investments in other MSEs, as the production of any good requires diverse complementary inputs and services, which are other firm’s outputs. In particular, ILO can facilitate the entry into rural markets of suppliers of equipment and technology.
36	Long-term	Urban agriculture	More long term ways to address land issues include working with finance providers, in particular MFIs, to develop asset-financing packages (or other products) to help producers pay leases.
37	Long-term	Urban agriculture	Another approach would be to focus on one of the root causes of the problem, that urban planners and decision makers are unaware of the importance and extent of the positive impact of urban agriculture. This suggests supporting urban agriculture units to make the case more thoroughly, through evidence based advocacy, exposure visits, etc.
38	Long-term	Urban agriculture	Though not a severe challenge, access to inputs is an issue that is worth reviewing. Urban agriculturalists seem to at times be able to buy inputs in their localities, but at other times they need to head to large urban areas (in particular Debre Zeit) to buy inputs there (or ask agriculture extension offices to do this for them). It is unclear why this is and what products this is for. The project should analyse this, and then likely work with input suppliers to better develop their distribution chains and embedded knowledge to other urban areas using focal points such as shops, farmer agents or (jointly with extension services) model farmers.

No	Time period	Value chain	Recommendation
39	Long-term	Urban agriculture	A particular challenge on the input supply side is the lack of equipment and training available on more intensive approaches more appropriate for operations on small areas. More information is needed on what techniques would be most valuable and who could potentially supply them. ILO should commission a study to explore this, and then work with input suppliers (equipment and information) to develop distribution models to reach returnees. Intermediaries are likely to be needed to reach scale, with for instance TVET colleges buying and renting out equipment to returnees.
40	Long-term	Urban agriculture	Despite some attempts in the past, there are no associations of urban agriculture producers. This seems particularly concerning as the enabling environment for urban agriculture is very challenging and a clear voice from producers would hold some weight. However the small size and dispersed nature of producers make such a network particularly challenging. ILO could explore potential models that might work and interest in such an organisation in producers. However establishing such an association can be very heavy handed and may be more of a long-term goal – to be carried out by the sector. Initial steps could involve supporting local institutions to organise local fora for producers to come together.
41	Long-term	Agro-processing (if the sector is supported)	To access to employment in the future, ILO would need to support the returnees in mediating employment opportunities in the IAIPs and newly establishing LMPs.
42	Long-term	Agro-processing (if the sector is supported)	MSEs engaged in agro-processing face challenges in access information and skills, supply challenges, financing for start-up and growth, and infrastructure and appropriate technologies. While ILO is addressing financing and access to infrastructure such as workspaces by working with the MSE agencies, access to technology and equipment may be addressed by supporting private service providers to link up with the identified MSEs.
43	Long-term	Agro-processing (if the sector is supported)	The producers of raw materials for processing, rural farmers, face challenges in access to inputs, extension services and improved technologies. While the government is addressing some of these challenges, ILO can work with input providers to set up distribution channels in the rural areas.
44	Long-term	Agro-processing (if the sector is supported)	Finally, opportunities exist for returnees in primary production of agricultural produce needed by the agro-processors. However, their capacity is limited by low productivity, post-harvest losses and logistic difficulty to reach markets. ILO can consider working with lead firms interested in setting up agro-processing facilities that can work with producer unions that will aggregate the supply.



11. Annexes



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11.1. A: Value chain selection criteria, weighting and sub-questions

Cluster	Criteria	Weighting	Sub-question
Relevance to target group	1. Current presence of returnees in the sector	2	How many male returnees are engaged in the sector?
Relevance to target group	1. Current presence of returnees in the sector	2	How many female returnees are engaged in the sector?
Relevance to target group	1. Current presence of returnees in the sector	2	What roles do they have?
Relevance to target group	2. Nature of participation of poor in the sector	3	Opportunities in sectors
Relevance to target group	2. Nature of participation of poor in the sector	3	Pathway to opportunities
Relevance to target group	2. Nature of participation of poor in the sector	3	Does the sector provide a good income? Is there a quick and high return on investment?
Relevance to target group	2. Nature of participation of poor in the sector	3	Is there income security?
Relevance to target group	2. Nature of participation of poor in the sector	3	Is there scope to progress in the sector over time e.g. expanding business or seniority?



Cluster	Criteria	Weighting	Sub-question
Relevance to target group	2. Nature of participation of poor in the sector	3	Does the value chain provide good opportunities for women? Is there gender discrimination?
Relevance to target group	2. Nature of participation of poor in the sector	3	Are working conditions good e.g. is it safe? Is it considered unpleasant work?
Relevance to target group	3. Appropriateness of sector for returnees	2	What skills and experiences are needed to work in the sector?
Relevance to target group	3. Appropriateness of sector for returnees	2	Do returnees have appropriate skills and experiences for the sector?
Relevance to target group	3. Appropriateness of sector for returnees	2	How easy is it for returnees to acquire skills needed? How should they do this?
Relevance to target group	3. Appropriateness of sector for returnees	2	What assets (including more informal, such as networks) are required to work in the sector?
Relevance to target group	3. Appropriateness of sector for returnees	2	Do returnees have appropriate assets for the sector?
Relevance to target group	3. Appropriateness of sector for returnees	2	How easy is it for returnees to acquire assets needed? How should they do this?
Relevance to target group	3. Appropriateness of sector for returnees	2	Do returnees want to work in the value chain? What do they want to do?
Relevance to target group	4. Differences for potential migrants	2	Do potential migrants have more experience, skills, assets or inclination to work in the sector than returnees?
Opportunity for inclusive growth	5. Likelihood of sector growth	3	What is the overall size of the market in Ethiopia in value of output and employment levels?
Opportunity for inclusive growth	5. Likelihood of sector growth	3	What is the past and forecast growth trajectory of the value chain in Ethiopia?

Cluster	Criteria	Weighting	Sub-question
Opportunity for inclusive growth	5. Likelihood of sector growth	3	What is the overall size of the market in target regions in value of output and employment levels?
Opportunity for inclusive growth	5. Likelihood of sector growth	3	What is the past and forecast growth trajectory of the value chain in target regions?
Opportunity for inclusive growth	5. Likelihood of sector growth	3	What are the significant economic trends in the sector? Can these be leveraged or would they pose a risk to intervening?
Opportunity for inclusive growth	6. Scope for improving target group employment in the sector	3	Is there under or over supply of labour/ service?
Opportunity for inclusive growth	6. Scope for improving target group employment in the sector	3	Is the sector labour intensive?
Opportunity for inclusive growth	6. Scope for improving target group employment in the sector	3	What is the opportunity creation potential based on current demand, industry growth and labour intensity? (base answer on questions asked above)
Opportunity for inclusive growth	6. Scope for improving target group employment in the sector	3	What types of opportunities will be created- functions (e.g. mason or road layer) and type (e.g. wage labourer or enterprise)? (base answer on questions asked above)
Opportunity for inclusive growth	6. Scope for improving target group employment in the sector	3	Are new opportunities likely to be accessible for returnees? (base answer on questions asked above)
Opportunity for inclusive growth	6. Scope for improving target group employment in the sector	3	Geographic areas- rural vs urban and three regions
Feasibility to stimulate change	7. Willing and able market actors	4	Are there firms providing or potentially providing opportunities to returnees? How could these be supported to improve opportunities for returnees?





Cluster	Criteria	Weighting	Sub-question
Feasibility to stimulate change	7. Willing and able market actors	4	Are there government programmes providing or likely to provide direct opportunities to returnees? How could these be supported to improve their offer?
Feasibility to stimulate change	7. Willing and able market actors	4	Are there training providers providing or potentially providing capacity building to returnees? How could these be supported to improve opportunities for returnees?
Feasibility to stimulate change	7. Willing and able market actors	4	(If applicable) Are there employment mediators providing or potentially providing relevant services to returnees? How could these be supported to improve opportunities for returnees?
Feasibility to stimulate change	7. Willing and able market actors	4	Are there finance providers providing or potentially providing relevant services to returnees? How could these be supported to improve opportunities for returnees?
Feasibility to stimulate change	7. Willing and able market actors	4	Are there firms or organisations providing or potentially providing relevant services to returnees e.g. inputs, information? How could these be supported to improve opportunities for returnees?
Feasibility to stimulate change	7. Willing and able market actors	4	Are there government programmes providing or likely to provide relevant services to returnees? How could these be supported to improve their offer?

Cluster	Criteria	Weighting	Sub-question
Feasibility to stimulate change	7. Willing and able market actors	4	Are there available scale agents – e.g. Government Ministries, sectorial or business association – that could be leveraged? How could these be supported to improve opportunities for returnees?
Feasibility to stimulate change	8. Conduciveness of political economy	2	To what extent has the government prioritised the sector?
Feasibility to stimulate change	8. Conduciveness of political economy	2	What are the major government policies which influence this sector? How enabling is the business environment?
Feasibility to stimulate change	8. Conduciveness of political economy	2	Are there any further major political economy issues/ potential obstacles?
Feasibility to stimulate change	9. Likelihood of distortion	1	Which relevant other donor programmes are present, where, and what are they doing/ funding?
Feasibility to stimulate change	9. Likelihood of distortion	1	Do they present opportunities for collaboration, would they be a “threat” or neither?





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C: List of organisations and people met⁶

-  Addis Ababa Urban Agriculture Unit, Alemayehu Taye
-  Adi Gudem woreda BoLSA, Brhan
-  Adi Gudem woreda Bureau of Agricultural Affairs, Abraham
-  Adi Gudem woreda Dedebit Credit and Savings Institution, Abraham
-  Adi Gudem woreda MSE agency, Haftu,
-  Adi Gudem woreda TVET college, Mahari (Dean)
-  Association of Ethiopian MFIs, Betelhem
-  Ataye woreda Amhara Credit & Savings Institution, Manager, Lemlem Adane (Manager), Yergalem
-  Gucher (SCRSO) and Girum Ayene
-  Ataye woreda MSE agency, Merete Yohanis (Head), Bogale Abebe and Endale Asfaw
-  Ataye woreda, Returnee
-  Ataye woreda TVET college, Haile Abate (Dean), Edris Seid and Abeje Temtime
-  Elere Farm, Fanta Terefe (Manager) (see Ethiopia Poultry Producers Association)
-  Ethiojobs, Hilina Legsese
-  Ethiopian Horticulture Development Agency, Dr. Solomon Amedetsion
-  Ethiopia Poultry Producers Association, Fanta Terefe (Chairman) (see Elere Farm)
-  Federal TVET Agency, Getiye
-  Federal MSE Development Agency, Demelash
-  ILO, Ephrem Getnet, Aida Awel and Nadja Nutz
-  ILRI, Siboniso Moyo and Solomon Gizaw
-  Maychew TVET college, Haftu (Dean) 7
-  Mekele Garment College (and former Manager MAA Garments), Getahun Legesse (Dean)

⁶ Keeping records of all people met was not easy, for instance as people came and left meetings, did not provide surnames or titles. This was especially problematic in meeting returnees. As such, there are some data gaps in the list presented here.

⁷ This TVET college performs the training for Raya Azebo woreda



-  Mercy Corps, Netsaleem Bahiru, Abdillahi Fara and a colleague
-  Mersa woreda ACSI, Welie Neg (Head)
-  Mersa woreda MSE agency, Desalegn Maeregu (Head) and Deputy
-  Mersa woreda, Returnees, Askale and others
-  Mersa woreda TVET college, Alamu (Dean)
-  Ministry of Urban Development and Housing Construction, Tarekegn
-  Oromia Chamber of Commerce, Demenish (Secretary General)
-  PEPE, Tesfaye Bekele
-  Raya Azebo woreda Dedebit, Welday (Manager)
-  Raya Azebo woreda, Kahsu Kiros and Zeleke Tesfaye (returnees)
-  Raya Azebo woreda MSE agency Baracki (Head)
-  Sherka Woreda BoLSA, Fatuma Kemal (Head) and a colleague
-  Sherka woreda MSE agency, Messeret (Deputy Head) and colleague
-  Sherka woreda OCSI, Mesfn (Head)
-  Sherka woreda TVET college, Challa (Dean) and a colleague
-  Sherka woreda TVET office, Abebech (Head)
-  SNV, Yetnaye Girmaw and colleague
-  Tigray Chamber of Commerce, Ato Brhan (General Secretary)
-  Tigray Regional State TVET Office, Tesfaye (Deputy)
-  Tigray Urban Agricultural Unit, Tadesse
-  UNIDO, Chiara Scaraggi and Aurelia Calabro
-  Weaving microenterprise in Merhoni (Raya Azebo), Abdikadir (Owner)
-  World Bank, Dinkneh Tefera



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