

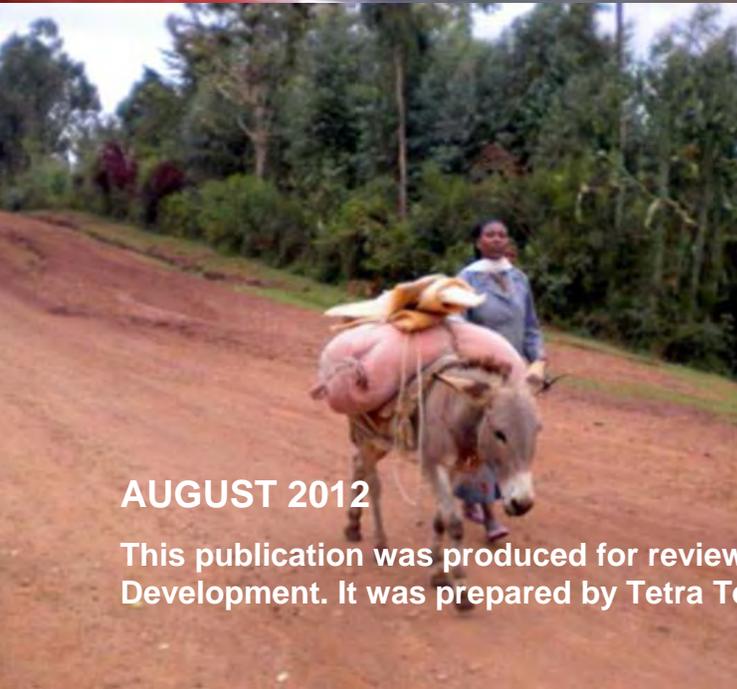


**USAID**  
FROM THE AMERICAN PEOPLE

**ETHIOPIA**

# FINAL REPORT

ANALYSIS OF OPPORTUNITIES FOR RURAL NON-FARM ENTERPRISE DEVELOPMENT AND JOB CREATION IN CHRONICALLY FOOD INSECURE AREAS OF ETHIOPIA



AUGUST 2012

This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech ARD.

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PHOTOS (clockwise from top left):

1. Kebele retail shop, Zuway Dugda woreda
2. Small-scale construction enterprise, Mekele
3. Small-scale manufacturing, Zuway Dugda woreda
4. Farm to market transport, Shebedino woreda

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## *DISCLAIMER*

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# ACRONYMS AND ABBREVIATIONS

ABB	Abay Beshilo Basin
ACSI	Amhara Credit and Saving Institution
AGP	Agriculture Growth Program
AGP-AMDe	AGP- Agribusiness and Market Development
ALT	Assets and Livelihood Transition Office
ATW	Abay-Tekeze Watershed
BGP	Borena-Guji Cattle Pastoral
DA	Development Agents [Ministry of Agriculture]
DECSI	Dedebit Credit and Savings Institution
ETB	Ethiopian Birr
FEED	Feed Enhancement for Ethiopian Development
FGD	Focus Group Discussions
FSP	Food Security Program
FtF	Feed the Future
GDP	Gross Domestic Product
GOE	Government of Ethiopia
GRAD	Graduation with Resilience to Achieve Sustainable Development
GTP	Government of Ethiopia’s Growth and Transformation Plan
HABP	Household Asset Building Program
HAF	Harvard Analytical Framework
IGA	Income Generating Activity
IQC	Indefinite Quantity Contract
KBC	Kedida Badewacheo Coffee
KII	Key Informant Interviews
km <sup>2</sup>	square kilometers
LZ	Livelihood Zone
MFI	Microfinance Institution
mm	millimeters
MOA	Ministry of Agriculture
MOCT	Ministry of Culture and Tourism
MSE	Micro and Small Enterprise
MSEDO	Micro and Small Enterprise Development Office
MYAP	Multi-Year Assistance Program
NFE	Non-Farm Enterprise

NGO	Nongovernmental Organization
NMC	North East Woinadega Mixed Cereal
OAP	Southern Agro-pastoral
PLI	Pastoral Livelihood Initiatives
PS	Private Sector
PSNP	Productive Safety Net Program
RAISE Plus	Rural Agricultural Income and Sustainable Environment Plus
REST	Relief Society of Tigray
RUSACCO	Rural Savings and Credit Cooperative
SMC	Sorghum, Maize, and Chat
SNNP	Southern Nations, Nationalities and Peoples
SNNPR	Southern Nations, Nationalities and Peoples Region
SNSF	Safety Net Support Facility
TSG	Tekeze Lowland Sorghum and Goat
TVET	Technical Vocational Education and Training
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
WALQO	Oromia Credit & Savings Share Co.
WBP	Wheat Barley and Potato
WMS	Welfare Monitoring Surveys

# EXECUTIVE SUMMARY

## OVERVIEW

Ethiopia's rural non-farm enterprise (NFE) sector is significant; participation is increasing and there appears to be myriad opportunities for continued NFE growth. NFE growth, however, is more along the lines of self-employment with few job opportunities from wages. The NFE sector is particularly important for rural women, youth, and poorer households who need a diversification of revenue to reduce risk associated in agriculture. NFEs provide income-earning opportunities as supplemental income to farming households and such revenues offer stability over the inconsistent income streams derived from agriculture. The income generated from NFEs is often seasonal, as farm families concentrate on agricultural production; however, as NFE skills grow, more households increase their participation as they realize more stable revenue generation. There is tremendous heterogeneity in NFE opportunities. Rural markets are small and fragmented, catering mainly to local populations. With improving infrastructure, small market towns develop, commerce increases, markets expand, and NFEs flourish. As the Ethiopian economy develops, the NFE sector will grow and become increasingly important as an alternative employer of labor and source of livelihood in rural areas.

## KEY FINDINGS

The scope of NFE livelihoods in the study area is extensive and very broad; rural residents of every kebele, woreda, and region in the study were engaged in NFE activities. All interviewees participating in the survey from the rural sector were involved in some degree of NFE, especially during the non-farming season. These activities ranged from post-harvest value addition of agriculture products to gold mining.

Lack of access to markets by NFEs was a common theme throughout the study areas. Key factors accounting for weak rural-urban market and labor linkages in study areas evolved around two categories: market linkages within the rural sector, such as between kebele to kebele and kebele to woreda, and linkages between the rural sectors to the major markets in urban areas. Proximity to market roads is a major factor in encouraging NFE activities. Major constraints serving as disincentives for NFEs evolve around infrastructure: poor farm-to-market roads lead to high transportation and transaction costs; lack of skills and cost-effective technologies to engage in NFE; poor communications between production and market on quality demands and pricing; information asymmetry by brokers who control market information and prices; export of raw products, adding to transport costs; and weak value addition in production areas, depriving rural residents of additional income. In areas with poor road infrastructure, transport is often done using animal power; while cheap, it is slow and inefficient.

Creating job opportunities at scale would be primarily achieved through a replication and expansion of currently practiced small-scale NFE activities. Key interventions and strategies that could influence large-scale job creation in the rural sector are twofold:

1. Longer-term, slower-impact activities provide many job opportunities to unskilled and semi-skilled labor, the predominant labor force in the rural sector:
  - a. Infrastructure improvements such as construction of roads, buildings, irrigation canals and expansion of rural electricity and potable water facilities;
  - b. Current or planned private and parastatal plantations for cotton, sugar cane, sesame, or factories (such as abattoirs, tanneries, feed lots, large dairy farms, etc.);

- c. Excavation and adding value to gold, other minerals, and gemstones; and
  - d. Increased incentives for tourism industry investments, including targeting western tourists through high-quality lodging, restaurants, food processing, etc.
2. Shorter-term, quicker-impact activities will provide many job opportunities in the rural sector by providing targeted financial and training support to small scale NFE entrepreneurs who will add value to agricultural produce, provide services, and create small businesses to meet market demands. These more immediate NFE job opportunities can be achieved by working with existing “push and pull” programs (such as the Productive Safety Net Program [PSNP], Agriculture Growth Program [AGP], Graduation with Resilience to Achieve Sustainable Development [GRAD]) and existing institutions (such as the Household Asset Building Program [HABP], Technical Vocational Education and Training [TVET], and Ministry of Agriculture [MOA], among others) at the grassroots level through improved enabling environment policy support, improved access to markets, improved skill training for rural residents, and availability of short-term credit to micro and small entrepreneurs.

Investment in value chain commodities is complicated in Ethiopia, given the state involvement in many parastatals and state-supported cooperatives engaging in agro-processing and sale of agricultural products. Although this offers employment, it can sometimes provide an unfair disadvantage, discouraging competition and private sector investment. Some indigenous middle-scale private investors complained that this unfair competition. Value chains that small-scale private sector investors interviewed during this study said they would invest in NFE activities including in construction; petty trade; agro-processing, particularly in livestock, coffee, and oil seed value chains; tourism; and manufacturing.

Labor force employment, unemployment and migration data are not kept at the regional or woreda levels. The only data available are from the national labor force survey conducted in 2005. The survey states that there is only 2.6 percent unemployment in the rural sector with an urban rate of 20.6 percent. During field visits to the 10 targeted woredas in the rural sector, underemployment and unemployment in the NFE sector was anecdotally reported to be more widespread by the informants interviewed by the three field teams. According to the labor force survey, the absolute number of migrants in Ethiopia was 18 percent; i.e., the percentage of total population migrating into the region from other areas. Among the five regions in this study, the ranking of total population migrating into the respective areas were: Oromia, 19 percent; Amhara, 14 percent; Southern Nations, Nationalities and Peoples (SNNP), 14 percent; Tigray, 21 percent; and Somali, 22 percent. Overall Oromia, Amhara, and SNNP had the largest populations and the largest number of migrants.

The labor market in NFEs is seasonal in many areas and is growing; many self-employed entrepreneurs are involved in it. Most are only doing NFEs part time to supplement inadequate income derived from agriculture. Based upon interviews, the best investment approach to promote NFEs is to provide micro and small entrepreneurs with improved infrastructure support, improved skill training, and increased access to adequate credit. Nearby peri-urban and urban areas provide markets for the farmers to sell their produce and offer their skilled and unskilled labor, providing them with opportunities to buy basic goods and more skilled services. These urban areas support the development of NFEs by informing rural residents, especially youth, of NFE opportunities beyond agriculture. These NFE opportunities are divided into agriculture-related areas, such as agro-processing; and non-agriculture-related, such as skilled and unskilled service areas in petty trading, construction work, manufacturing, and tourism support services, among others.

Existing dynamic or unexploited potential economic bases observed during the study include surplus of underemployed youth ready, willing, and able to travel for work; tourism is under-exploited, with a poor infrastructure and quality standards; geological potential is being privatized by the Government of Ethiopia (GOE) tapping into the potential for mining and processing gold and gemstones; small ruminants could provide a steady supply of fattened animals and hides to meet growing market demands; and agro-

processing sector has a great potential with the introduction of appropriate cost-efficient machines for use by micro and small enterprise (MSE) NFE, which would also increase agriculture productivity and spawning NFEs to provide manufacturing, maintenance, and repair services.

Workforce development investments that increase job opportunities are mainly supported by the public sector. TVET is proactively developing vocational education schools throughout the country to train rural and urban youth in various skills; over 19 courses alone have been developed for the construction sector. The HABP and the MOA are training farming families in more efficient agricultural production ways and in some NFE activities. The Micro and Small Enterprise Development Office (MSEDO) is training youth and women in entrepreneurial skillsets to encourage micro enterprise. There are also private vocational education schools providing training for those who do not get into public vocational education schools.

Key cost-effective NFE activities identified during the study include improving infrastructure (this not only employs rural labor, teaching construction-related skills, it also provides improved roads and expands electricity and potable water utilities, effectively reducing transaction costs and facilitating the creation of NFEs). Cooperatives could be more cost-effective if they provided more comprehensive economies of scale by assisting members to buy inputs in volume and also to consolidate outputs for grading and sale for members at higher market prices. The introduction of simple cost-effective machines would make NFEs much more efficient: small tractors for plowing and transporting produce; other small motorized transportation vehicles; and electric water pumps and agro-processing machinery such as for cotton spinning, oil presses, threshers, de-hullers, hand mills, etc. This would also encourage local business development services in small machinery maintenance and repair.

Women's engagement in non-farm activities in the target study area is very extensive, although often on a seasonal basis. The largest numbers of women involved in NFE activities were involved in petty trading of agricultural produce. The second-largest women's group was shopkeepers; many of the women shopkeepers began their NFEs as petty traders. More women than men interviewed use NFEs as a means to supplement the rural family income. They operate independently, usually keeping the money they earn for use for household needs, including buying food during times of shortage. Due to their obligations to perform domestic chores to maintain the household, women involved in NFEs need to work near or in their homes. Close proximity to roads is therefore very critical for women who lack the mobility that men enjoy. Improved skill training and reduced household chores would also increase women's engagement in NFE activities. Women obtain some skilled NFE training and credit support from MSE and HABP and, to a lesser extent, from Development Agents (DAs), but not to the extent planned in rural areas.

Basic enabling environments in study areas for large-scale NFEs were limited. GOE is creating enabling environments in the rural sector for cooperatives and parastatal-supported microfinance institutions (MFIs). There are few large private sector investments and little evidence of an enabling environment to encourage large-scale private entrepreneurs to invest in the rural sector. As a rule, banks do not invest in remote rural areas, only MFIs. Small-scale investors interviewed said that the enabling environment for them would be improved with the reduction of the various taxes they pay. Another strong enabling environment the GOE offers to NFEs is improving the rural infrastructure, especially farm to market roads. This will increase job opportunities along the corridor for small- and large-scale investment.

Possible job-creation links to other economic growth programs supported by the United States Agency for International Development (USAID) and the GOE are many and diverse, particularly those involving small-scale non-farm entrepreneurs. Through the PSNP DAs, MSEDO and HABP are providing some business planning for NFE; the study recommends ways in which this support can be increased. Under Feed the Future (FtF) programs, GRAD field activities in the study woreda are still ramping up and will provide technical support to create jobs building upon the economic linkages between the urban and rural sectors. The Agriculture Growth Program–Agribusiness and Market Development (AGP-AMDe) is already working with NFEs in the selected value chains providing assistance in food processing and marketing, although its involvement is primarily in urban sectors. Technoserve's program with General

Mills will also strengthen the NFE food processing industry and will add value to locally produced grain and pulse flour through food fortification technologies. The United States Department of Agriculture (USDA)-supported Feed Enhancement for Ethiopian Development (FEED) activities in the livestock sector can be cascaded down to the grassroots levels to impact job creation. Recommendations are made in this report to extend these FtF technical services to the study kebeles and woredas to employ more small-scale NFE. The soon-to-be-awarded USAID-financed livestock cooperative agreement will also provide further job-creation links.

HABP microcredit could better support the rural sector with increased coordination by HABP service providers with the recipients to meet their needs. According to study interviewees, HABP training is not appropriate to meet NFE training and business plan development needs. HABP is not satisfying credit needs in for NFE activities. In addition, women interviewees involved in NFEs said that HABP does not work very closely with them because they do not have PSNP safety net client identification unless they are heads of household.

Section 5.2 of this document addresses USAID’s request to identify “best-bet” activities to support the NFE sector. The following are recommended for quick implementation of FtF-oriented activities:

- Agro-processing to add value to locally produced crops,
- Improving skill training for small and micro entrepreneurs to increase efficiency and revenue,
- Facilitating access to credit and other financial services,
- Improving access to markets and market information,
- Providing support to the livestock sector, and
- Introducing improved appropriate technologies.

**TABLE 1: SUMMARY OF NFE FINDINGS AND RECOMMENDATIONS MATRIX**

Intervention Areas	Constraints and Challenges	Existing Potential/ Opportunities	Recommend Interventions
Awareness and attitudinal change	<ul style="list-style-type: none"> <li>Unaware of private sector (PS) opportunity</li> <li>Unwilling to take risks</li> <li>Youth want office jobs</li> </ul>	<ul style="list-style-type: none"> <li>Many PS opportunities</li> <li>Ready GOE support</li> <li>Some MSE seeking opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Increase business training</li> <li>Identify opportunities</li> <li>Develop business plans</li> <li>Monitor progress</li> </ul>
Access to finance, financial services	<ul style="list-style-type: none"> <li>Poor credit access</li> <li>Poor finance info</li> <li>Not meeting needs</li> <li>Many are ineligible</li> </ul>	<ul style="list-style-type: none"> <li>Ready GOE and donor support</li> <li>HABP, MSED0, and MFIs willing to change</li> </ul>	<ul style="list-style-type: none"> <li>Diversify financial products to cater to NFE needs</li> <li>Increase support to investors; support community-based efforts</li> <li>Train MSEs in business</li> </ul>
Job skills	<ul style="list-style-type: none"> <li>Poor rural skills</li> <li>Little access to training</li> <li>Weak skills, more NFE failures</li> </ul>	<p>TVETs will offer:</p> <ul style="list-style-type: none"> <li>More rural centers</li> <li>More hands-on training</li> <li>More job opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Support rural centers</li> <li>Provide more job skill training</li> <li>Monitor progress</li> </ul>
Agro-processing	<ul style="list-style-type: none"> <li>Produce shipped raw</li> <li>Little added value</li> <li>Insufficient skills to do processing</li> </ul>	<ul style="list-style-type: none"> <li>Adding value results in more jobs</li> <li>Increases revenue</li> <li>Increases efficiency</li> <li>Increases quality</li> </ul>	<ul style="list-style-type: none"> <li>Provide skill training</li> <li>Introduce appropriate technology machinery</li> <li>Encourage private investment</li> <li>Provide market demand information</li> </ul>
Market linkage and market information	<ul style="list-style-type: none"> <li>Producers unaware of market demands</li> <li>Asymmetrical market information</li> </ul>	<ul style="list-style-type: none"> <li>Cooperatives interested</li> <li>Efficiencies of scale</li> <li>Increased revenue</li> </ul>	<ul style="list-style-type: none"> <li>Provide market demand information</li> <li>Quality and quantity</li> <li>Co-ops expand services</li> <li>Woreda supports and monitors</li> </ul>
Policy and regulatory issues	<ul style="list-style-type: none"> <li>Weak PS investment</li> <li>NFE policy supports urban areas</li> <li>Uncoordinated policies in rural sector</li> </ul>	<ul style="list-style-type: none"> <li>Investment capital</li> <li>Huge rural impact</li> <li>GOE aware of weaknesses</li> <li>Improve infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>GOE support to NFE</li> <li>Focus on bottom-up approaches</li> <li>Implement business-friendly rules</li> <li>Listen to MSEs/NFEs</li> </ul>
Gender and youth	<ul style="list-style-type: none"> <li>Weak rural support</li> <li>Youth rural exodus</li> <li>Women risk vulnerable</li> <li>Needs being unmet</li> <li>Overburdened with multiple tasks</li> </ul>	<ul style="list-style-type: none"> <li>Ready GOE support</li> <li>HABP, MSED0, and MFIs willing to change</li> <li>Youth and women ready for opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Monitor impact of GOE rural programs</li> <li>Assist TVET training focus</li> <li>Pay attention to youth and women needs and aspirations in development programming</li> </ul>



# 1.0 INTRODUCTION

Under the Rural Agricultural Income and Sustainable Environment Plus (RAISE Plus) Indefinite Quantity Contract (IQC), the United States Agency for International Development (USAID)/Ethiopia Mission requested proposals of IQC holders for the implementation of a short-term qualitative analytical study to investigate opportunities for rural non-farm enterprise (NFE) development and job creation in chronically food insecure areas of Ethiopia. Tetra Tech ARD, in association with JaRco Consulting, was awarded the task order on February 27, 2012. Due to procurement finalization delays, the study team began field implementation activities in the latter part of March.

Three weeks were spent in Addis Ababa gathering information from donor and implementing agencies involved in rural livelihoods development, and to finalize with USAID the work plan and selection of woredas in the five regions where the study was to be conducted. Field work was conducted from April 16 to May 5 across the Tigray; Amhara; Oromia; Southern Nations, Nationalities, and Peoples (SNNP); and Somali Regions by three sub-teams comprised of two or three members. Each sub-team spent two-to-three days in selected woredas, visiting at least two kebeles in each woreda. In addition, the teams also interviewed private and public sector representatives at the relevant regional and zonal levels. The entire team reconvened in Addis Ababa during the week of May 7 to synthesize study findings and draft this report.

The study team consisted of seven members. The Team Leader, Mr. David Dupras, is a food security specialist of more the 35 years' experience in agriculture and rural livelihoods development. Mr. Tsegahun Tessema, principal of JaRco Consulting, previously was USAID/Ethiopia's Team Leader for its Assets and Livelihood Transition Office (ALT). Mr. Victor Pinga is an Agricultural Economist with over 14 years' experience in food security, rural livelihoods, microfinance, and enterprise development. Mr. Tewodros Yilma has 15 years' experience in agribusiness, business development services, and marketing and value chain development. Dr. Ayalew Gebre is a social anthropologist with 20 years' experience, specializing in pastoral livelihoods, poverty reduction, and women's issues. Mr. Gizachew Getaneh is an agricultural economist and livestock specialist with more than 20 years' experience in agricultural enterprises, value chain analysis, and rural input supply and credit services. Mr. Ali Mekonnen is an agricultural economist with more than 25 years' experience in pastoral livelihoods, livestock marketing, and participatory research approaches.

## 1.1 OBJECTIVE

USAID contracted Tetra Tech ARD to conduct an analytical study of supply and demand in labor markets in both selected chronically food insecure areas currently covered by the Productive Safety Net Program (PSNP) and neighboring food secure areas. The study was to investigate opportunities for increasing the labor demand or creating jobs, including investments in NFEs, the impact of rural-urban linkages in the development of non-farm interventions, and the creation or strengthening of linkages between historically food insecure and food secure or productive areas. Finally, the study was to identify the best pathways or key stimuli to create job opportunities at scale for chronically food insecure households in PSNP woredas.

## 1.2 STATEMENT OF WORK

USAID provided the brief description below in the Statement of Work, included as Annex B:

This procurement consists of hiring a contractor to conduct a study analyzing the non-farm activities households engage and the supply of demand in labor markets in selected chronically

food insecure and food secure areas in order to assess opportunities for improving rural-urban linkages, fostering job-creation, and attracting investment. The study will analyze, but not limited to, the supply and demand in the labor market, identifying opportunities for increasing labor demand and job growth, and ascertaining best-bet pathways and key stimuli to create employment growth at scale in targeted PSNP woredas.

### 1.3 BACKGROUND

Ethiopian farmers have long recognized that altitude, climate, water availability, vegetation, and other physical and biological factors are closely interrelated to agricultural potential and production. Ethiopia has classified its agro-ecological zones into five categories (see Table 2, below). Each zone and sub-zone is further characterized by variations in economic activity, population density, and other socio-cultural attributes such as cropping and livestock-rearing patterns. The dominant agricultural enterprises in all agro-ecological zones are small-scale farms in the highlands and livestock-rearing in the lowlands. There are several large enterprises where government holdings are in the process of being privatized and opportunities for employment and job creation may exist. Current private investments are mainly in the agro-industrial sector, especially on cash crops and livestock production. These are areas of particular interest when identifying enterprise development and job opportunities.

Smallholder crop production marks the alpine, or *wurch*, zone where the majority of agricultural enterprise comprises small-scale mixed farming. Small-to-medium-scale crop/livestock production is found in the most productive zones between 3,200 and 1,500 meters highland (*dega*) and lowland (*woina dega*) zones. While farming is dominated by smallholders due to high population, medium-sized private crop production is growing as a result of the recent privatization of some state farms and the Government of Ethiopia (GOE) investment policy, and medium-to-large-scale dairy farming is found around the larger towns. Small-to-large-scale livestock production is found at the lower altitudes (1,500–500 meters or the *kola* zone), including large-scale ranching, particularly fattening for domestic and export markets.

**TABLE 2. TRADITIONAL ETHIOPIAN AGRO-ECOLOGICAL ZONES**

Zone	Altitude(m)	Mean Rainfall (mm)	Temperature (°C)
<b>Bereha</b> (dry-hot)	500-1,500	<900	>22
<b>Weinadega</b> (dry- warm)	1,500-2,500	<900	18-20
<b>Kola</b> (sub-moist warm)	500-1,500	900-1,000	18-24
<b>Dega</b> (cold - highland)	2,500-3,500	900-1,000	14-18
<b>Wurch</b> (very cold or alpine)	>3,500	>1,000	<10

*Source: Federal Democratic Republic of Ethiopia, 2000*  
 Note: The extreme desert (between 500 to 126 meters) area is not traditionally classified

Although agriculture remains the primary occupation for the majority of the working population in rural Ethiopia, and consequently, the rural economy remains dominated by agriculture, the NFE sector makes considerable contributions to income in rural Ethiopia. Accordingly, participation rates in overall NFEs are rising. A recent study (World Bank 2009) estimates that approximately 25 percent of all households in rural Ethiopia engage in one or more NFEs. The NFE sector is economically important, particularly for female-headed households and chronically food insecure households.

Recent studies also reveal that NFE activity is more prevalent in rural towns, is especially important for women, and is set up by households more as a survival strategy than as an income risk mitigation strategy. According to the World Bank study, NFE activity is highest in rural towns and lowest in remote rural areas. Proximity to markets and roads is also a strong predictor of participation. These facts guided the team’s selection of woredas and kebeles.

Promoting market integration through the formation of urban-rural linkages is particularly promising. This complements the PSNP emphasis on road maintenance and limited road building, thereby raising the

### Important Characteristics of Ethiopia Rural NFEs

- The NFE sector is sizeable, particularly important for women, and plays an important role during the low season for agriculture, when alternative job opportunities are limited.
- Returns to NFE employment are low on average—especially so for female-headed enterprises. Women nevertheless have much higher participation rates than men, which attest to their marginalized position in the labor market.
- Most enterprises are very small and rely almost exclusively on household members to provide the required labor inputs.
- Few NFEs add to their capital stock or increase their labor inputs after startup.
- Local fluctuations in predicted crop performance affect the performance of NFEs because of the predominant role played by the agricultural sector.
- Enterprise performance is also affected by the localized nature of sales and limited market integration for NFEs.

profitability of agriculture and increasing the chances of NFE success. Since the returns to market integration are highest at the lower levels, promoting the concept of “market towns” is a good way to enhance the productivity of the non-farm sector. The fact that markets are localized implies that local shocks to agricultural outcomes will affect the performance of NFEs. Promoting policies that facilitate the integration of markets would make NFEs less dependent on the local rural economy, which may help these enterprises develop beyond supplying a small and volatile local market with low value-added products.

While there are considerable constraints, there are also significant opportunities for regions and woredas to capture their domestic market through the development of NFEs. Opportunities for increased market linkages to urban centers will facilitate the movement of small-scale farmers into the commercial economy, helped by the expansion of roads, power, potable water, and market networks.

This study sought to identify existing NFE activities and to understand the opportunities, constraints, and factors that influence household decisions to

participate in Ethiopia’s NFE sector. It also proposes strategies that strengthen rural-urban linkages, creating linkages between the chronically food insecure and food secure areas of Ethiopia, and promotes economic opportunities through non-farm employment.

### 1.3.1 LABOR FORCE SURVEY

According to the 2005 National Labor Force Survey published by the GOE’s Central Statistical Agency, roughly 33 million out of Ethiopia’s 63 million people were economically active, or were considered to be part of the labor market. Excess labor supply, however, is occurring in urban areas, according to the survey, as urban unemployment is estimated at 20.6 percent while rural unemployment stands at only 2.6 percent. Unemployment for all categories is highest in Addis Ababa (31.2 percent) and lowest in Oromia (4.1 percent), SNNP (3.5 percent), and Amhara (3.2 percent). There are also more unemployed females (7.8 percent) over males (2.5 percent) in the country. The table below summarizes the unemployment rates by region.

**TABLE 3. CURRENT UNEMPLOYMENT RATE OF POPULATION AGED TEN YEARS AND OVER BY SEX AND REGION: 2005**

Regions	Total Economically Active Population			Total Unemployed Population			Unemployment Rates		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Country Total	33,088,792	17,288,178	15,800,614	1,653,686	427,915	1,225,771	5.0	2.5	7.8
Place of Residence									
Urban	4,340,269	2,131,022	2,209,247	894,177	292,709	601,468	20.6	13.7	27.2
Rural	28,748,524	15,157,157	13,591,367	759,508	135,206	624,302	2.6	0.9	4.6

Regions	Total Economically Active Population			Total Unemployed Population			Unemployment Rates		
Regions									
Tigray	2,074,066	1,045,344	1,028,722	110,711	34,220	76,491	5.3	3.3	7.4
Afar	105,067	59,468	45,599	12,003	3,104	8,899	11.4	5.2	19.5
Amhara	9,084,487	4,824,306	4,260,181	293,367	71,496	221,871	3.2	1.5	5.2
Oromia	12,930,037	6,839,430	6,090,607	533,502	114,889	418,613	4.1	1.7	6.9
Somali	289,279	157,710	131,569	32,080	11,128	20,952	11.1	7.1	15.9
Benishangul-Gumuz	360,947	186,040	174,907	15,734	4,135	11,599	4.4	2.2	6.6
SNNP	6,838,598	3,477,155	3,361,443	241,031	42,933	198,098	3.5	1.2	5.9
Gambella	9,676	4,835	4,841	2,480	688	1,792	25.6	14.2	37.0
Harari	76,744	39,382	37,362	12,899	4,021	8,878	16.8	10.2	23.8
Addis Ababa City Admin	1,161,525	578,485	583,040	361,964	130,228	231,736	31.2	22.5	39.8
Dire Dawa Council	158,366	76,023	82,343	37,915	11,073	26,842	23.9	14.6	32.6

Source: Data compiled from the 2005 National Labor Force Survey

Labor movement between regions, much less between woredas is not well documented. The National Labor Force Survey estimates that among the country's economically active population (workforce engaged or available to be engaged), there are between 1.9 to 2 million migrants nationally. This statistic is not broken down by region however. What the statistics show is that as a percentage of total population (including inactive populations), the Gambella Region, Addis Ababa City, and Dire Dawa City have attracted the most immigrants (37-54 percent) comprising both economically active and inactive populations. The five regions considered in this study—Somali, Tigray, Oromia, Amhara and SNNP regions—all have significant numbers of immigrant populations; however, compared with their population sizes they constitute only 14-22 percent of their total populations which are at the bottom of the assembled statistics below.

**TABLE 4. TOTAL POPULATION AND TOTAL MIGRANT POPULATIONS BY REGION: 2005**

Region	Total Population	Total Migrants	%
Gambella	25,240	13,740	54%
Addis Ababa	2,145,416	928,038	43%
Dire Dawa	314,679	116,950	37%
Afar	211,083	61,950	29%
Benishangul Gumuz	714,051	201,372	28%
Harari	158,267	40,330	25%
Somali	617,225	132,995	22%
Tigray	4,041,192	866,017	21%
Oromia	25,425,872	4,805,218	19%
Amhara	16,292,537	2,278,356	14%
SNNP	13,283,028	1,823,485	14%
Country Total	<b>63,228,600</b>	<b>11,268,457</b>	<b>18%</b>

Source: Data extrapolated from the 2005 National Labor Force Survey

Among the three most populous regions in Ethiopia (Oromia, Amhara, and SNNP), there is significant population movement; however, the situation is no different than the rest of the country. There is outmigration as well as immigration in all regions of Ethiopia. What could be considered noteworthy from the 2005 study are the following:

- The country has a significantly young population with 57.7 percent of the population below 19 years of age.
- More males are economically active than females—86 percent for males and only 71 percent for females. In rural areas, 90 percent of males are economically active while only 75 percent of females are, highlighting the need to increase the economic participation of women.
- In rural areas, 54.6 percent of all employed are unpaid family workers and 74.7 percent are females.
- The dominant industry in the labor market is agriculture, hunting, forestry and fishing (80.2 percent), while the distant second is wholesale and retail trade (5.2 percent) and third is manufacturing (4.9 percent), highlighting the priority need to increase non-agricultural economic activities.
- Unemployment is highest in urban areas (20.6 percent) and among females (7.8 percent in the country, 27.2 percent in urban areas).

### 1.3.2 ENABLING ENVIRONMENT

The business enabling environment is an important aspect of NFE development. The GOE’s Growth and Transformation Plan (GTP) 2010–2014 includes non-farm activities in its strategy:

In addition, those who have very small plots and landless youth and women will be encouraged to engage in non-farm income generating activities with adequate support in terms of preparing packages, provision of skill and business management trainings, provision of credit and facilitating markets, so that they can ensure their food security. (GTP, p.23)

As a crosscutting issue, the GTP encourages the empowerment of landless youth and women. On women, the following are among the plan’s implementing strategies:

- Ensure the economic sector programs and extension packages consider women’s participation.
- Encourage women to increase their income by participating in income-generating activities other than agriculture.
- Promote women’s use of saving and credit services.
- Extend programs that help decrease the work burden of rural women.
- Create conducive environment to enable women’s associations to operate effectively.
- Increase decision-making role of women.
- Mainstream child affairs in other sectors and look for mechanism to strengthen child care and support.

On youth empowerment, the following are among its implementing strategies:

- Improve organizational set up and encourage participation of the youth.
- Improve information exchange and advocacy and create awareness.
- Encourage youth employment creation.

According to the Ethiopia Mission’s Multi-year Strategy (2011–2015), Feed the Future (FtF) will “support agriculture-led growth throughout Ethiopia by strengthening livelihoods and markets... USAID will employ a ‘Push-Pull’ model which seeks to strengthen capacities of vulnerable and chronically food insecure populations to participate in economic activity (‘push’), while mobilizing market-led agricultural growth in high potential areas to generate economic opportunity and demand for smallholder product, labor and services (‘pull’).” FtF Component 2 “Linking the Vulnerable to Market” is to work with PSNP/ Household Asset Building Program (HABP) requiring beneficiaries to graduate from assistance programs to sustainable livelihoods that feature a range of integrated farm and non-farm enterprises.

## 1.4 DEFINITION OF NON-FARM ENTERPRISES

There is a certain amount of ambiguity as to the definition of NFEs. To avoid confusion, the team decided to use the definition developed by Barrett, Reardon, and Webb in their 2001 paper “Non-farm Income Diversification and Household Livelihood Strategies in Rural Africa: Concepts, Dynamics, and Policy Implications:” See Annex G for examples of activities considered.

The most basic classification of activities follows the sectorial distinctions of national accounting systems: primary (agriculture, mining, and other extractive), secondary (manufacturing), and tertiary (services). This leads directly to the distinction between “agricultural” or “farm” income (derived from the production or gathering of unprocessed crops or livestock or forest or fish products from natural resources) and “non-agricultural” or “non-farm” income (all other sources of income, including from processing, transport or trading of unprocessed agricultural, forest and fish products).

The sectorial distinction between farm and non-farm is based only on the nature of the product and the types of factors used in production. It is not based on the location where the activity takes place (in the household, on the farm, in town, or abroad), its scale (whether by an individual or by a factory), the technology used, or whether the participant earns profit or labor income (wages or salary) from the activity. The authors also highlight the fact that agricultural wage employment, although could be off-farm, is still considered as agricultural or farm income, as long as it is involved in the production or gathering of unprocessed crops, livestock, forest, or fish products.

As the purpose of this study was to focus on non-farm or non-agricultural production aspects of rural employment, the team agreed to divide the NFE activities into the following categories: agriculture related, including trading of raw products and simple agro-processing; non-agriculture related, including provision of services such as construction, petty trading, tourism, and transportation; and manufacturing and mining.

## 1.5 METHODOLOGY

As the scope of work stipulated, the work is primarily a qualitative study. Therefore, the team concentrated on a series of interviews, most of which were conducted by three sub-teams during three weeks in the field at the kebele and woreda levels. However, interviews were also held at national, zonal, and regional levels. Among those interviewed at the national level included key donor and GOE informants in Addis Ababa, as well as USAID FtF grant recipients and contractors. These sessions targeted relevant representatives of the Multi-Year Assistance Program (MYAP), PSNP, Food Security Program (FSP), HABP, PSNP PLUS/Graduation with Resilience to Achieve Sustainable Development (GRAD), and Agriculture Growth Program (AGP). In each zone, region, woreda, and kebele, the team members asked interviewees about their knowledge of development programs having an impact on non-farm economic activities, especially those using the “push-pull” model.

From interviews with GOE representatives at the national, zonal, and regional levels, the team was able to obtain a broader perspective of NFE opportunities and was able to identify some policies that are not yet being fully implemented at the grassroots level.

The team was not charged with collecting quantitative data, although they also reviewed available literature in-country. The team then identified criteria to select 10 woredas across the highland, pastoral, and agro-pastoral livelihood regions for primary data collection. The following factors were considered to select the woredas:

- Regional variation: Tigray, Amhara, Oromia, SNNP, and Somali regions are represented in the study with selectively targeted woredas per region. This provides a cross-section of highland, agro-pastoral,

and pastoral areas to enable a substantiated report.

- Livelihood systems: the team selected woredas with multiple livelihood systems as much as possible. In addition, these livelihood zones cover multiple woredas representing a wider type and larger number of households.
- Existence of complementary projects: the teams selected woredas that were targets of projects such as AGP, HABP, PSNP, and Title II, in addition to GRAD.
- The team selected woredas proximate to food secure areas to help investigate the linkages between food secure and food insecure areas, and urban and rural areas.
- The team selected woredas proximate to larger regional, national, and international markets.

Using the above selection criteria and in consultation with USAID/Ethiopia, the following woredas were purposely selected in the five regions:

Region	Admin. Zone	Woreda
Tigray	Southern	Alamata
	North Western	Tselemti
Amhara	Waghemira	Sekota
	South Gondar	Tach Gayint
Oromia	West Hararge	Habro
	Arsi	Zuway Dugda
	Borena	Arero
SNNP	Sidama	Shebedino
	Kembata Tembero	Kedida Gamela
Somali	Shinile	Shinile

Annex C provides the details of the study woredas and location selection analysis.

The study team developed the list of study participants—key informants and targeted types of focus group discussants—to include the following:

- Regional-, zonal<sup>1</sup>-, and woreda-level government and private sector representatives;
- Relevant representatives from USAID grantees and donors, including those from organizations implementing PSNP, AGP, GRAD, and other projects funded by the Donor Working Group;
- Relevant government offices at all levels (federal, regional, zonal, woreda, and kebele); and
- Kebele- and village-level participants which may include business, trade, and farmer associations; rural-urban agro-industries; nongovernmental organizations (NGOs); investors who have established businesses in or have linkages to rural areas; leaders of women’s groups; employers; workers; farmers; livestock herders; laborers; and the unemployed.

The kebeles selected in each woreda for qualitative data collection were purposely chosen based on the criteria pertinent to the study along the lines of existing livelihood systems.

The team finalized and harmonized data and information collection tools during a joint field visit to Sekota woreda during the first week of field work. The team used a mixed-methods approach, triangulating qualitative data from key informant interviews (KIIs), focus group discussions (FGDs), and secondary sources. Both KIIs and FGDs were semi-structured with a range of open-ended questions. Both instruments were used by each of the three sub-teams assigned to cover the remaining nine woredas (each team covering three woredas plus the relevant zonal and regional offices) after the joint exercise in Sekota

<sup>1</sup> With the exception of Tigray Region which does not have zonal offices.

woreda. In addition, team members used direct observation techniques by visiting local markets whenever possible to note the types of NFEs which were available, to understand better the demands of the market towns serving the woreda and adjoining rural sector and the rural-urban linkages.

The study team investigated the cross-section of the community through a complementary gender analysis framework that described what women and men do. The team analyzed how gender influenced the participation of both women and men in non-farm activities, analyzing the division of labor conditions and constraints under which women and men work. The team used the Harvard Analytical Framework (HAF) as a tool to assess the access and control over resources, productive and reproductive activities, and the influencing factors that determine gender differences as well as the causal linkages between these variables with regard to non-farm activities. Understanding the multiple responsibilities of women, including the traditional domestic chores they are expected to perform, and how these responsibilities interrelate with NFE activities are very important. Domestic chores represent opportunity costs keeping women from engaging in income-generating activities (IGAs). Thus, the study team investigated the factors and conditions that increase women's participation in non-farm sector including, but not limited to, their access to and control over resources, roles in decision making and leadership, traditional beliefs and practices in relation to non-farm activities, and the driving force within the households and the communities.

At the conclusion of the three-week field work covering the 10 study woredas, all team members regrouped in Addis Ababa for data analysis and synthesis.

It should be noted that this report is qualitative in nature based on evidence-based research of the three sub-teams' study tours in 10 woredas interviewing over 500 individuals. Even though these woredas are considered good representatives of their respective zones, the conclusions drawn in this report are based upon observations and discussions, mainly with non-farm entrepreneurs; any attempt to extend lessons learned and recommendations beyond these geographic regions is not based on empirical evidence.

### **1.5.1 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH**

This study relied on qualitative data collection through interviews, discussions and review of secondary literature. The scope was broad and the study did not delve into quantitative analysis such as economic or statistical modeling. It also did not conduct any type of value chain analysis targeting a subsector or specific geographic area. Rather it focused on 10 sample woredas which was hoped to be representative of various livelihood zones across 5 regions of Ethiopia. Findings from these 10 woredas may not be considered conclusive nor exhaustive, but only indicative of what may be found in similar livelihood zones and the general situation in some of Ethiopia's rural food insecure areas.

A challenge the study team encountered is the shortage of prior similar research to augment the study findings. The lack of labor and migration data at the local levels presents significant limitations to the task of analyzing in detail the labor supply and demand between woredas, and study interviews only yielded anecdotal information. Finally, the number of woredas covered by the study is only 10 compared with the more than 600 woredas nationwide. The team feels the sample size is too small to generate broad conclusions for the whole set of PSNP woredas, let alone the entire non-farm sector.

Future researchers in NFE development may consider the following:

- Quantitative data collection and analysis to provide additional perspectives to this study, perhaps limited to potential project geographic areas.
- A detailed analysis of select value chains as suggested by this study that have the potential to create jobs, improve food security, and increase rural revenue in potential project geographic areas.

# 2.0 SUMMARY OF FINDINGS IN AMHARA AND TIGRAY REGIONS

The mixed farming livelihood zone has many characteristics in common. However, based on NFE activities, the team has divided the zone into two areas based on their differences, and labeled them as north and south. Distinguishing NFE activity factors characterizing these areas include topography, soil fertility, mineral deposits, rainfall, and population size. The north topography is generally more hilly and rocky with degraded soils, ubiquitous rock terracing, and low fertility caused mainly by erosion. Rainfall in the north is more erratic and generally lower. The NFE exploitable minerals include gemstones and marble. The population size of the north is lower and markets are further apart.

Markets in both areas are small and fragmented but they tend to be more localized in the north. Key NFE activities characteristic of this area include a local market orientation, whereas the south has more of an export focus. While both areas grow cereals, cash crops in the north are mainly plantation oriented, including sesame, cotton, and sugar cane (under development), while those in the south are coffee and chat; animal fattening focuses more on small ruminants such as goats and sheep for local and regional markets and livestock owners are more sedentary than those in the south. Major agro-processing activities have more of a household and local focus than commercial; the cotton value chain provides many small-scale NFE opportunities using traditional technology (such as employing women spinning thread by hand, men weaving on traditional looms and sewing clothes, and women adding value with hand embroidery). Tourism is a big NFE industry in the area with local and international clients visiting mainly historic sites. In the south, tourism plays a smaller economic role and the sites include nature parks.

## 2.1 LIVELIHOOD ZONE (GEOGRAPHY, ECOLOGY, AND EMPLOYMENT)

### 2.1.1 NORTH MIXED FARMING

The woredas considered in this cluster of livelihood zones include Sekota and Tach Gayint in Amhara Region, and Tselemti and Alamata in Tigray Region. The livelihood zones associated with the Taweredas include Abay-Tekeze Watershed (ATW) Livelihood Zone and Abay Beshilo Basin (ABB) Livelihood Zone (Tach Gayint), North East Woinadega Mixed Cereal (NMC) Livelihood Zone and Tekeze Lowland Sorghum and Goat (TSG) Livelihood Zone (Sekota), Raya Valley Livelihood Zone and Raya Valley Livelihood Zone (Alamata) and Adiyabo Lowland Livelihood Zone (Tselemti).

These livelihood zones consist of lowland and midland areas with some highland regions. The topography includes rugged, hills, mountains, and plains. Annual rainfall ranges from 350–840 mm with a bimodal rainy season. However, rainfall is mostly erratic or insufficient except in the Alamata area, which has a relatively better rainfall pattern complemented by irrigation. The soil is predominantly clay loam but a sandy loam alluvial type is found along the rivers.

The farming type is characterized as a mixed farming system involving both crop farming and livestock rearing. The crops cultivated include cereals and pulses such as sorghum, teff, wheat, barley, highland pulses (fava beans, lentils, field peas, haricot beans, chickpeas, and vetch), highland oil crops (noug and flax), and lowland oil crops like safflower. Some of these food crops are also supplied to the market.

Cattle, sheep, and goats (“shoats”) and equines are the main livestock reared. Shoat and cattle sales are the main source of cash income for the middle and better-off households. Cattle and equines are reared for domestic use as draft power (ox, donkey, mule, camel) and milk (cows) and are retained. Shoats are raised mainly for live meat markets and are consumed by the households, usually for special occasions.

While Alamata has relatively better access roads, the distances between markets and general road conditions and connectivity is generally poor, limiting market access of the livelihood zones. This poor road infrastructure and the remote location of the livelihood zones are the major limiting factors that restrict viable trade within, between, and beyond the zones and external markets.

The livelihood zones generally have relatively low population density ranging from 100–200 people per km<sup>2</sup>. Among other main economic activities are the sale of honey (from traditional beehives), sale of firewood, and migration for work. The honey sale is an important income source for households in the better-off and middle-income groups; the firewood sale to the nearby towns and labor migration to nearby areas and large plantations such as Humera are crucial in providing the poor and very poor with cash income. Men and women are involved in firewood collection and sale while men travel to distant areas to find work. Local agricultural work on the basis of crop sharing, draft animal power renting, and (rarely) cash and urban casual labor are also sought by the poorer income groups.

## **2.2 KEY NON-FARM ACTIVITIES**

NFEs are prevalent in the area and are conducted by men and women. All the women and men the team encountered were involved in NFEs—some in addition to agriculture, some instead of agriculture. Many of the youth were involved in NFEs; some as individuals but most were working through cooperatives. The major reason for NFEs, as expressed by interviewees, was to earn income as a supplement to farming as a means of coping with the risks of food insecurity. Production derived from farming, either done by the landless share croppers or landowners, was often insufficient in these PSNP areas to make the households food secure and provide the desired quality of life.

Supplemental income was used to buy needed staples such as soap, canned products, shoes, sugar, salt, etc., as well as agro-processed products such as teff, wheat flour, and legume powder for making *wat* (sauce served with injera). NFE activities were often seasonal; usually during peak agricultural seasons NFEs decline in favor of more agricultural activities. However, in some households, NFEs are slowly replacing agricultural production, partly due to decline of landholding size and landlessness, and partly because family members realized that NFE income is more steady and often more profitable.

### **2.2.1 KEY AGRICULTURE-RELATED NFEs**

In general, there is a dearth of agro-processing in the region. Very little value addition is done to local agricultural products; most are shipped out in a raw state. Interviewees told the team that Development Agents (Das) provide production training and uses of inputs and occasionally advised farmers in simple NFE agro-processing (such as animal fattening and handling of dairy products) but the DAs do not focus on post-harvest processing or marketing. The market orientation is primarily for local and regional markets, relative to the south. Little is exported out of the region and quality standards are poor, best suited for these local markets. Distances between markets are long and the farm-to-market road networks to the kebeles and woredas are generally poor. Large portions of farm-to-market roads are still under construction, especially to Tselemti and Tach Gayint. Brokers trading in the commodities due to high

asymmetry of information misinform the market and control prices, charging a premium for transportation of goods into and out of the woreda and kebele markets.

## **AGRO-PROCESSING BY VALUE CHAINS**

### *Cereals and Pulses*

In these areas, women are very involved in grain processing in kebele and woreda markets. They buy the grain and pulses in rural areas, add value by cleaning and transporting it to kebele and woreda markets, and sell it in small quantities to peri-urban and rural residents. The buyers mill the cereals or split or mill the pulses into flour and powder to facilitate cooking. Flour and powder are sold by women doing petty trading in local markets to farmers. Every kebele has at least one mill, operated primarily by a man. Women in every location manufacture traditional drinks such local beer (*Tela*) and *Tej*, an alcohol made from cereals and hops; the residue from the process is used for animal feed.

### *Cash Crops*

Plantations of cash crops were not produced in Sekota or Tach Gayint but were grown nearby offering employment opportunities. These crops include sesame, cotton, and some sugar cane (still being developed). Each plantation has (or, in the case of the soon-to-be-developed sugar cane, will have) farms and agro-processing plants and serves as major employers for the rural population during the planting, weeding, and harvesting seasons. Cotton and sugar cane are sold in local markets but it was not apparent that any sesame oil was sold locally. The only vegetable oil the team noted being sold in local markets was imported, mainly from Asia.

In the cotton value chain, women buy raw cotton in the weekly markets and sort the cotton by hand. They manually remove the seeds, which are used to make local oil for domestic use, particularly in waxing the *mitad* (injera baking plate made of clay); the cotton is spun into thread by hand in the traditional manner done throughout the region by women; the spools of thread are sold by the women either on consignment or in the local markets to weavers. The weaving is done predominantly by men on traditional looms. Embroidery of the resulting cloth is done by men and women and is sold primarily by women in local markets. Often, brokers buy the finished products on the local markets and transport them to urban centers for retail sales. Male tailors using foot-operated sewing machines are prevalent in every market, making local and imported cloth into clothes, primarily for local clients.

There is a small area of irrigated agriculture in the region; vegetables and maize are grown. Resulting non-farm agro-processing activities are limited to drying red pepper for sale in markets; selling dried, shelled maize; and roasting fresh maize on the cobs; all available in kebele and woreda markets.

### *Livestock*

In this value chain, men are responsible for buying and selling cattle, sheep, and goats. Women keep poultry and sell live birds and eggs; they also keep bees and sell honey. The collection and processing of honey and beeswax includes that from both traditional and improved hives. Both sexes help raise the ruminants. Women focus on small ruminants and men on the larger animals, including cattle, camels, and equines. Dairy products are mainly produced and sold by women. As there are few dairy cooperatives or cold storage facilities, production is limited and mainly for family or small market sales. Animal fattening is a key NFE and is done by both sexes. However, from the interviews, women tended to do more fattening of small ruminants; goats and sheep were preferred over cattle because of lower startup capital.

Markets for the fattened ruminants are primarily local; traders frequently buy in kebele and woreda markets and transport the animals to major urban areas for resale. The major income earners for women are the sale of fattened small ruminants and honey. No wool is sold in area markets, and little is produced from the varieties of sheep raised. The little that is produced is for home consumption. Although Mekele has an extensive cattle value chain including a feed mill, feedlot, export-oriented abattoir, and tannery,

none of the interviewees the team met in the Alamata or Tselemti produced livestock for this market, which was at least three hours by road.

## **KEY NATURAL PRODUCTS**

Natural products are those collected and processed in the area for NFEs, which include the production of charcoal, resin from trees, and locally gathered spices—were collected, refined, and sold. Incense made from the resin in the Amhara Region is widely sold to traders on a commercial basis for religious purposes and for traditional coffee ceremonies.

### **2.2.2 KEY NON-AGRICULTURE NFEs**

#### **SERVICES**

The service sector is a fast-growing part of non-farm activities in the region and includes a variety of sustainable NFE livelihoods.

Construction services are emerging as one of the largest wage-paying employers of rural residents—both on a seasonal and year-long basis. Technical Vocational Education and Training (TVET) is working with various GOE agencies to develop appropriate training programs aimed at teaching mainly rural youth in needed skills. TVET has 19 different training programs in the construction industry beginning with cobblestone manufacture for basic road construction. Students can receive training in road, building, and irrigation canal construction including masonry, welding, carpentry, and general metal work, among others. Unskilled youth are also encouraged and facilitated by various GOE organizations to form construction cooperatives to bid competitively upon and provide contract services for delivery of sand, gravel, and rocks to construction sites.

Commodity trade in general plays a significant role in generating NFE income in the kebeles and woredas. Petty trade of grains, vegetables, and fruit in weekly and permanent open air markets is dominated by women; shops are owned and managed by both sexes with larger, more varied inventories more common in woredas and along major roads. Farmers are the major clients of these NFEs. Often, shop owners belong to cooperatives, taking advantage of economies of scale by buying supplies in volume. Commodity trading has a short-term capital requirement and local cooperatives work with the Micro and Small Enterprise Development Office (MSEDO) to facilitate cooperative members to obtain loans from local microfinance institutions (MFIs). The two regionally based collaborating MFIs are Dedit Credit and Saving Institution (DECSI) in the Tigray Region and Amhara Credit and Saving Institution (ACSI) in the Amhara Region.

Historical and religious tourism have been a dominant industry in the two regions; that said, its infrastructure and orientation is more suited to pilgrims and backpackers than to high-value international tourists. The value chains that support these NFEs are gradually evolving to improve quality in hotels and restaurants, and striving to satisfy international market demands. TVET is concentrating its training in Amhara and Tigray Regions to train local personnel to improve these services. Youth appear to be very receptive to this training and the industry is spawning a number of local hotels, restaurants, bars, and cafés in woredas and some kebeles. These more local NFEs, however, are not up to international standards.

Transportation services are also a growing NFE sector in the area; while the majority of the rural population are pedestrians, kebele-based transportation is of two kinds, animal traction and motorized vehicles. Donkey, horse, and mule carts are common means of transportation in the kebeles available for hire as NFEs for both human and goods transportation. There are few motorized tricycle taxis at the kebele or woreda levels. Trucks are hired and used to transport goods and people to and from kebeles and woredas, and to and from distant urban centers.

Other service sectors providing large employment NFE opportunities in the area include over 3,000 people hired by the three refugee camps in the Tselemti woreda. Small hotels, restaurants, tea shops, and bars are also part of this industry, including the local beer bars.

## **MANUFACTURING**

For the purposes of this report, the processing of raw cotton into thread and the transformation of the thread into cloth on traditional looms is considered agro-processing, not manufacturing. Manufacture and repair of basic farm and household tools and related equipment is a large part of every rural market visited in the area. Creation and repair of wood furniture is also done in local markets. Rural markets also sell homemade pottery used for household utensils. More sophisticated metal and woodwork is done in larger centers by skilled craftsmen and transported to rural markets. MSED0 works with TVET and MFIs to train potential craftsmen in the necessary skills for their trade and to obtain startup loans. In Tigray, MSED0—working in conjunction with DECSI—is encouraging the formation of clusters in Mekele for concrete block making as well as for general metal works. Tigray is considering replication of these clusters on small scales in rural areas.

## **MINING**

With its mainly artisanal traditional operations, mining is not yet a large employer in the area. With strong GOE support, the industry is growing. Marble has been quarried in the areas for millennia and is still being done, but not in the woreda included in this study. However, the quarries still represent employment opportunities. The existence of modern marble factories, such as the one in the Tigray Region, promises a good labor market. Gemstone mining is being supported by TVET with the construction of 17 training centers in Amhara and represents future NFE employment opportunities. Mining for gold and other mineral is done outside of the livelihood zone and men travel from the region to supply unskilled labor for its needs.

## **2.3 KEY CONSTRAINTS AND CHALLENGES**

As the team conducted its field work, a number of constraints and challenges arose which cut across the livelihood zones; many of these were similar because they had conditions in common inhibiting rural NFE job creation and revenue generation. During the NFE surveys, there were many complaints of high rural unemployment and under-employment and a dearth of job opportunities in the region, particularly among youth. Other major constraints common in the five regions include uncoordinated GOE support to the rural sector, lack of access to credit, lack of job skills and poor job skill training opportunities, lack of awareness of private sector opportunities, poor infrastructure for the rural sector, and poor knowledge of agricultural markets and weak support for agro-processing.

For the Northern Mixed Farming livelihood zone, key constraints are broken down into the following categories: natural, agriculture-related NFEs, services, manufacturing, and mining.

### **2.3.1 NATURAL**

Although the livelihood zones have some irrigation, the majority of the agriculture is dependent upon rainfall. As much of the land is on slopes, evidence of terracing to reduce soil erosion was prevalent. During the time of this survey, the small rainy season had begun and some fields were being plowed by oxen, but the majority of the streams and river beds were dry. Although rudimentary, the major roads were still passable as the rain had not yet transformed them into quagmires. During the rainy season, poor roads are a serious constraint. Consequently, NFE activities were impacted by the trading or transformation of stored agricultural produce and some of the population had left the area to seek employment elsewhere. In those areas that had irrigation, short-season crops were being grown, such as maize, onions, carrots, peppers, cabbages, and tomatoes, all of which were sold by petty traders in local markets.

### 2.3.2 AGRICULTURE RELATED

The majority of the locally produced agricultural crops is locally consumed or has little value added before sale. The reasons for this are manifold, ranging from a poor supporting infrastructure for transportation to better markets, lack of knowledge of market quality requirements to obtain the best prices, lack of skills for processing to meet these market demands, lack of capital to buy appropriate equipment for the transformation, to lack of entrepreneurial know-how. There are also issues with the lack of appropriate equipment to work more efficiently (e.g., mechanical spinners for cotton, improved looms for weaving, small machines for threshing and cleaning grain, access and knowledge of modern animal husbandry techniques and technologies for more efficient value addition, custom tractors for plowing, and small vehicles for transportation of people and goods between kebeles and between kebeles and woreda markets, among others).

### 2.3.3 SERVICES

The lack of marketable job skills in every service area is a key constraint, especially for the youth. Even though many of the young men have 10 years of formal education, they do not have marketable job skills, even in construction, and are obliged to seek work as manual laborers domestically and internationally.

Petty trade in grains and pulses is a rapidly growing industry in the area and faces major constraints of startup and short-term recurrent capital and high transportation costs. The same constraints affect the growing numbers of small retail shops that are springing up in woreda and kebeles and of other small-scale NFE industries.

Historic tourism infrastructure is substandard by most international standards; for generations, historic tourism has traditionally been targeted at catering to pilgrims, not international tourists. Consequently, hotels, restaurants, food and beverage services, and organized tours are “rustic” (i.e., of low quality) and the industry is not as attractive or as profitable as it could be.

The transportation service sector is greatly affected by infrastructure; in this area, major road rehabilitation was under way between Gondar and Axum. The road to Tach Gayint is also in bad shape. Both increase transportation costs for bringing in goods and services and for shipping them out. These remote rural areas are locally serviced by animals both carrying goods and people on their backs or in drawn carts. Larger motorized vehicles are only used to reach distant markets.

Weak public infrastructure is a major constraint; although the rural areas visited all had some access to electricity by the main roads, not all of the homes had electric power. In one kebele in Tach Gayint, the team was informed that only 37 houses out of 2,000 houses have had electricity installed. Those that did seemed to only use it for lighting, not for cooking or for pumping water for domestic use. Consequently, women and children were required to travel long distances daily to seek firewood for cooking or to haul water from creeks or wells for domestic use. This represents opportunity time that women and youth could have spent on more productive, income-generating NFEs.

Another major constraint encountered in the region was weak public sector coordination, even within the woredas, within the food security task forces, and between the cooperatives department, agriculture extension office and MSED0 with regard to NFE development. Often, GOE agents are undertrained in NFE activities and business development plans and the accompanying training are inappropriate for NFE needs.

HABP was designed to engage in NFE development to build the household asset base of the food insecure rural households in food insecure woredas. However, even its senior administrators agree that it has not been effective in achieving all of its objectives, especially in the rural sector. Often, HABP agents are not trained to develop business plans appropriate for non-farm entrepreneurs living at the kebele level.

Inadequate financial support to rural residents engaging in NFEs is a major constraint with multiple facets. Many interviewees complained of limited access to credit or inadequate credit support from GOE agencies, such as MSED0 and HABP, working with MFIs to purchase the necessary inputs for NFEs. The complaints included small and inadequate loan amounts, delays in obtaining loans, requirements to either have collateral or have loan guarantees or to belong to cooperatives, high interest rates, and inadequate follow up by GOE-sponsored agencies.

The high interest rate issue usually was coupled with complaints of escalating costs of food and inputs. The prices of non-farm goods and services at times did not respond as rapidly to the increasing costs of basic food commodities and fuel for transport. These services, especially daily wage labor, lose out to inflation given their decreased value relative to basic needs. Inflation costs in the livelihood zone approach 18 percent, while interest rates for annual loans are around 15 percent for PSNP-related credit. This is effectively a 3 percent loss on each loan and is therefore unsustainable.

The team observed that some cooperatives were often one dimensional; many of those visited in the region mainly functioned to consolidate the purchase of inputs and to obtain GOE-sponsored credit to purchase the inputs. Cooperatives did not function as marketing agents to provide services in value addition or quality control for the sale of agricultural produce, nor did they function to consolidate inputs for sale. It was also noted in the Amhara Region that cooperative members often had little in common, but were joined together so the group could be eligible for credit program, administered by local MFIs.

Weak private sector awareness was a common constraint raised in both public and private sectors. There was a lack of understanding and awareness about entrepreneurship and self-employment. Officials complained that youth did not want to work, or only wanted to work in office jobs or those that provided “get rich quick” opportunities. Interviewees saw the lack of skill training in business skills and entrepreneurship caused them to miss business opportunities and sometimes fail in their attempts to improve their incomes in NFE activities.

The lack of appropriate skill training extends beyond entrepreneurship. There is a general lack of skilled and semi-skilled labor in the rural sector. The training available through TVET is primarily in urban areas and is difficult to reach from the rural areas due to transportation and financial constraints, especially for youth. Women expressed these constraints as well as their lack of mobility, as they must stay near the household to perform domestic chores. The dearth of veterinary services, lack of knowledge of modern animal husbandry techniques, and lack of access to improved feed and health care affect production efficiencies and reduce NFE incomes across the livestock value chain.

#### **2.3.4 MANUFACTURING**

Inadequate credit startup capital from MFIs and commercial banks and a place for small-scale manufacturers to work are major constraints affecting this sector. Other constraints include a lack of skills and business acumen to operate efficiently shops that make or repair farm equipment, kitchen utensils, furniture, or other small-scale manufactured items.

#### **2.3.5 MINING**

The current artisanal state of mining for and processing of minerals in the area does not lend itself to providing many job opportunities, although the new marble factory will hire and train people in its urban location. Although TVET is training youth in mining and processing gemstones, there is little evidence of this potential industry in the visited locations during this study tour.

### **2.4 KEY OPPORTUNITIES**

There are two important considerations in the analysis of key opportunities. The first is ways to improve rural incomes to the widest effect in the targeted woreda communities, which often involves NFEs

practiced by the largest number of micro and small entrepreneurs. The second is scalability. As woredas such as Tach Gayint and Tselemti have a relatively little large-scale private sector investment, poor infrastructure and scattered markets, it will be harder to identify NFEs which can be easily scaled up to provide increased employment.

#### **2.4.1 KEY AGRICULTURE-RELATED OPPORTUNITIES IN NFES**

Representatives of the Relief Society of Tigray (REST) report that a large private sector Egyptian poultry firm is finishing its feasibility studies on investing in Alamata to establish a large chicken hatchery to provide day-old chicks for the growing market. Should this investment occur, a number of on- and non-farm jobs would be created not only in managing the poultry farm and incubation units, but also in the production of feeds appropriate for the different ages of the chicks, complimentary veterinary suppliers and service providers, chick outgrowers, manufacture of feeders and drinkers to support the small poultry operations, and significant agro-processing and quality control for egg and meat marketing. REST stands ready to provide credit and technical input to the small-scale producers and non-farm entrepreneurs.

Agro-processing holds a critical place in NFE general income in the north, as agriculture production is still the principal livelihood for the majority of the rural residents. Efforts could be made working through the GOE to encourage more small- and large-scale investment in agro-processing small entrepreneurs to add value to local crops and to sell these transformed products locally, regionally, and nationally rather than exporting raw material. Coupled with this investment would be appropriate training of potential NFEs to be better aware of market demands within the commodity value chain to obtain the highest possible prices. This includes an understanding of market quality and timing demands and the steps required to achieve these standards.

Examples of this increased market awareness appropriate to the north include improved storage of perishable crops, such as dairy and poultry products, vegetables, and fruit; refining and packing of honey products; and preservation and handling of raw hides and skins, among others.

For non-perishable products, such as in the cotton value chain, traditional cotton spinning and weaving could be more efficient with simple TVET-designed machines. In the livestock value chain, NFEs involved in fattening could be taught animal husbandry techniques to increase efficiency, including preventative veterinary medicine and the formulation of improved feed using locally available feedstuff. In addition, these fattening operations could be better organized to buy these feedstuffs in volume and to market and sell them through competitive means to obtain the best market prices.

#### **2.4.2 KEY NON-AGRICULTURE NFE OPPORTUNITIES**

##### **SERVICES**

###### *Construction*

TVET is working with the Bureau of Rural Roads and Urban Development, Industry, and Trade Offices at various levels to develop 19 categories of construction training curricula. The five-year plan of the Tigray Region is dedicated to developing more formal training centers and informal adult skill training facilities at the kebele level to provide skill training to rural residents, especially focused upon youth and women. This could be replicated in the rest of the regions. The training ranges from basic to the more sophisticated, including certification courses in welding and other skills that will allow qualified graduates to meet international standards for work outside of Ethiopia.

###### *Trade*

Petty traders and small shopkeepers would benefit by receiving training in market economics and business management including commodity quality standards, market price information, market timing, and bookkeeping for the various commodities in which they deal, including basic supplies, live animals, grains, pulses, onions, and honey. MSED0, in conjunction with GRAD and AGP, could develop business

and training programs to tailor appropriate training to sensitize these Micro and Small Enterprises (MSEs) better in understanding market quality demands and competing in the private sector market.

### *Credit*

During discussions with DECSI personnel in Tigray, the team learned the MFI was aware of the constraints in the rural sector with credit and that DECSI was changing its approach to provide more opportunities to small entrepreneurs; especially women. The key to the DECSI approach is to provide better access to credit at the kebele level by hiring more female agents to better work with women involved in trade, including fattening of livestock. DECSI is willing to provide more short-term credit for trading and for animal fattening to women as individuals as well as through groups. It will also ensure that each local credit committee has at least one woman and one youth on the five member group. Additionally, as DECSI is funding aspects of the large-scale livestock value chain operations in Mekele, the MFI will work to encourage livestock fattening borrowers in Alamata and other woredas to consider selling produce and buying feedstuff from the commercial businesses.

REST, under GRAD funding, is in Alamata conducting off-farm assessments to study current IGAs and to identify opportunities for micro entrepreneurs to their productivity. REST will then provide technical advice and access for these NFEs to credit, working with GOE agencies and the MFIs.

### *Tourism*

In conjunction with the Ministry of Culture and Tourism (MOCT), TVET is revising its training programs to prepare its students better to meet international quality standards. In addition, MOCT is coordinating with regional tourist bureaus in Amhara and Tigray to develop programs to improve the quality of services in hotel, restaurants, and tour operators to meet the standards expected of destination tourists.

### *Transportation*

MFIs such as DECSI are prepared to work with MSED0 to extend longer-term credit for the purchase of small motorized vehicles such as Bajaj for transportation of goods and people in the rural sector, between kebeles, and between kebeles and woredas.

## **MANUFACTURING**

Working with MSED0 and TVET and other such development programs, MFIs are also willing to provide crafts skills training and credit to startup small entrepreneurs to repair and manufacture farm equipment, for metal and woodworking facilities, and for small vehicle repair. MSED0 is working with TVET to conduct appropriate training programs for these small entrepreneurs and has developed some model “clusters” to provide working locations for similar industries to shape ideas and resources. The team visited clusters for concrete block making in Sekota and Mekele and a large metal working/blacksmithing cluster in Mekele. Both facilities are successful working models appropriate for replication in rural and urban centers.

## **MINING**

TVET is building 17 gemstone lapidology training centers in the Amhara Region to train up to 25 students every six months in mining and processing gemstones to international quality standards. A number of these centers are operational and graduates are obtaining credit to develop cooperatives to mine and process gemstones.

## **2.5 RECOMMENDATIONS**

### **2.5.1 GENERAL RECOMMENDATIONS**

There are myriad opportunities for increasing labor demand and job creation in the selected woredas of the north mixed farming zone. Most of these opportunities involve improving the access to better infrastructure and credit as well as the skill sets of small entrepreneurs to improve their incomes and

efficiencies of their NFE activities. In pursuing these private sector opportunities, many of these small entrepreneurs will abandon farming to embrace NFEs as they realize more stable incomes and improved living standards and quality of life.

Not many of these opportunities in this region are “scalable” or will generate a large number of jobs until the rural sector attracts more private and public sector investment. Current candidates for scalable opportunities in the livelihood zone include improved animal fattening which is livestock processing, the construction sector, and tourism. Animal fattening is the preferred NFE for small entrepreneurs, as livestock can be fattened in a short period of time, usually three to four months, generating significant non-farm income for male and female entrepreneurs. The upcoming parastatal sugar cane operation in Tigray Region is expected to provide jobs for 80,000 workers on the farm and in the factory. By concentrating on providing quality services, the private sector investors in these industries will provide numerous sustainable wage earning jobs in the non-farm sector for the future.

### **2.5.2 ENHANCING RURAL-URBAN LINKAGES**

The key to enhancing the linkages between rural and urban areas is to improve access to markets, encouraging trade between the two areas. A crosscutting solution to enhance these linkages is by improving infrastructure—such as transport, power, and access to water—which will provide sustainable support to rural employment in a number of ways. Providing farmers and brokers with roads and transport services to market reduces transportation costs and thereby transaction costs for consumers and traders in both the rural and urban markets. It also provides multiple job opportunities in construction, transportation repair and servicing, commerce, and the public and private sectors.

### **2.5.3 ENCOURAGING AGRO-PROCESSING**

A key element to the success of sustainable NFE development and growth is to encourage adding value to agricultural produce rather than shipping it out in a raw form. This is true of small-scale producers as well as the plantations. For instance, rather than shipping out oil seeds such as sesame and import edible oils, the Amhara and Tigray Regions could be a net exporter of processed vegetable oil to the country and to eastern Africa, a regional net vegetable oil importer.

### **2.5.4 CAPACITY DEVELOPMENT**

Providing applied skills training that will give rural residents marketable skills will expand their skill sets and job opportunities, especially youth and women. Training will increase their awareness of private sector opportunities, teach them business management skills and operational efficiencies, and encourage them to take calculated risks to explore NFEs as self-employed entrepreneurs. This improves incomes and quality of life while providing food security. TVET is expanding its program to provide more hands-on training to its targeted students in a variety of service areas, working in conjunction with MSED0 and the MFIs.

### **2.5.5 FINANCIAL SUPPORT**

Expanding access to credit to NFEs in the livelihood zone and making it more dynamic, flexible, and responsive to the needs and situations of the individual borrowers as well as to groups, will encourage small entrepreneurs to invest time and money in new NFE opportunities. HABP, MSED0, DECSI, and ACSI are providing effective but limited support to NFEs. DECSI and ACSI, two of Africa’s largest MFIs, need to invest in and enhance their existing products in response to the emerging demands and develop more dynamically differentiated MFI products tuned toward promoting NFEs. They are both seeking opportunities to expand beyond their regions; with this increased competition, they could provide better financial services to their clients, large and small. (NB: According to the Micro-Banking Bulletin of April 2006, ACSI is the largest MFI in Africa by numbers of borrowers and DECSI is the second largest; the Gross Loan Portfolio ranks ACSI as the sixth largest and DECSI as seventh.)

# 3.0 SUMMARY OF FINDINGS IN OROMIA AND SNNP REGIONS

## 3.1 LIVELIHOOD ZONE (GEOGRAPHY, ECOLOGY, AND EMPLOYMENT)

### 3.1.1 SOUTH MIXED FARMING

The woredas considered in this cluster of livelihood zones include Habro and Zuway Dugda in the Oromia Region, and Shebedino and Kedida Gamela in the Southern Nations, Nationalities and Peoples Region (SNNPR). These livelihood zones are typically in midland areas with some lowland and highland areas. The topography includes a rolling landscape of hills, mountains, valleys, and flatlands. Annual rainfall ranges from 500–800 mm to 700–1200 mm; however, it is mostly erratic or insufficient and only certain pockets of areas in Habro, Shebedino, and Kedida Gamela enjoy relatively reliable rainfall. The region has a bimodal rainy season ranging from March to May and June to August.

This group of woredas is classified as a mixed farming system with the cultivation of cash and food crops and livestock rearing. Significant cash crops include chat and coffee, while food crops are maize, barley, teff, haricot beans, wheat, sorghum, and (to a lesser extent) yams, taro, and sweet potatoes. Enset, another food crop, is mainly grown in SNNPR. These food crops are also produced for the market. Livestock are cattle, goats, sheep, donkey, horses, and (to a limited extent) chicken. Livestock fattening is a primary occupation. Fruits (avocado and pineapple) and vegetables (shallots, cabbage, garlic, and peas) are also produced in the area.

Market access is considered relatively good with major highways accessible to all woreda centers. Roads from kebeles to woreda centers, however, are variable. Major cities such as Dire Dawa, Adama, Shashemene, and Awassa are relatively accessible to the woreda centers. Because of cash crop cultivation, significant livestock production for the market and relative accessibility, there is a high reliance on markets.

Shebedino and Kedida Gamela have high population densities (more than 500 people per km<sup>2</sup>), as does Habro (242 people per km<sup>2</sup>). Soils are relatively fertile, hence the high population densities and land fragmentation. Coffee dominates the first two woredas, which generates a lot of employment and in-migration during the harvest season (September–December). Habro has more chat than coffee. While chat is harvested year-round, due to its high perishability, it is grown close to major markets or good roads.

There is high seasonal and permanent labor movement both out- and in-migration, the latter is especially true for coffee during the harvest season. Most households engage in crop, livestock, and/or livestock product (butter) sales. Poorer households engage in casual labor whether locally or migratory, firewood collection, and small-scale petty trade.

## 3.2 KEY NON-FARM ACTIVITIES

Most rural households engage in some form of non-farm activity and their dependence on non-farm sources of income varies according to rainfall. In years of good rain and extensive agricultural production, non-farm income is less important than their cash crop and livestock incomes. The reverse is true during periods of insufficient rain where non-farm sources of income gain importance.

### 3.2.1 KEY AGRICULTURE-RELATED NFES

The bulk of non-farm activities in this mixed farming livelihood zone revolve around agricultural processing and marketing. The predominant NFE value chains are livestock, grains, coffee, and chat.

#### AGRO-PROCESSING BY VALUE CHAINS

##### *Cereals and Pulses*

There is some small-scale processing of enset, maize, wheat, barley, pulses, and spices in the area; much of it is done by small flour mills located in kebeles and woreda. Some of the grain is processed into local beer usually by women using local barley and hops.

##### *Livestock*

Most common and important in terms of income is the fattening of cattle, sheep and goats. This is a preferred high-profit activity among many rural households where they keep the animals in pens close to their homes for three-to-four months to get ready for the market. Processing dairy into butter and cottage cheese is another agriculture-related non-farm activity. Beekeeping and the processing of honey and derivatives such as honey wine is also an important non-farm activity in terms of income that it brings to households engaged in the activity. The use of modern beehives is being promoted by local agriculture development offices; both men and women keep bees.

##### *Cash crops*

Currently there is limited processing of Arabica coffee apart from cleaning and drying coffee cherries, as the majority of hulling, sorting, grading, and bagging are done in central mills through the government commodity trading system. Chat processing, on the other hand, involves packing for local markets, and sorting and repackaging for external markets.

##### *Natural Products*

A few households are engaged in charcoal production, and collection and trade of firewood.

### 3.2.2 KEY NON-AGRICULTURAL NFES

#### SERVICES

Non-agriculture related non-farm activities involve the construction trades—carpentry, metal works, masonry, cobblestone production, mixing cement, and delivery and spreading of gravel and sand. Cottage industries include pottery, blacksmithing, leather works, and tailoring which is normally done in markets. A popular enterprise is the production and trade of local brews/drinks such as *tella*, *araki*, *ceqa*, and *borde*.

Petty trading of commodities is a significant NFE involving men and women. It thrives in areas of high crop production with good accessibility to markets, i.e., it is especially dynamic along major roads. Commodities traded include livestock, grains, coffee, fruits, vegetables, spices, and last but not least, chat. Petty trading during market days is common especially among poorer households who return the borrowed capital with interest at the end of the day.

The sale of consumer goods and operating in small retail shops in kebeles and the woreda is a popular non-farm activity. The size and scope varies, however, depending on the distance to markets, with those

closer to markets and population centers by good roads obviously gaining advantage in terms of business demand or volume. Retail shop owners sometimes operate tea/coffee shops and sell donuts and other snacks. Transport services (donkey for cargo, horses for humans) are also profitable given the importance of transportation. However, the majority of farmers walk to and from rural markets.

Other NFEs in the service sector include hair/beauty services, bars, restaurant or cafeteria operations, house or room rentals, or hotel operation (especially for teachers and health workers).

### **MANUFACTURING**

Typical NFEs in the livelihood zone include small-scale farm and household tool metal work manufacture, electronics repair especially of mobile telephones, and the collection of used metal and plastic for recycling or reuse. There are NFEs involved in carpentry for the manufacture of furniture as well as blacksmiths involved in making kitchenware and mechanics repairing small machinery.

### **MINING**

There are no significant mining activities in this livelihood zone but it is a growing industry in other areas of Oromia, offering significant employment opportunities.

A common non-farm employment source, however, is the migration of rural labor to large cities both domestically and abroad, and as such, remittances are playing an increasing role in the local economy. Among the Kembata people in Kedida Gamela, a stated constraint for those left behind is the lack of contacts or friends living in the cities, especially in South Africa, so that they too can migrate.

## **3.3 KEY CONSTRAINTS AND CHALLENGES**

In the mixed farming system in the south livelihood zone, the constraints and challenges facing NFE activities are summarized broadly under natural, agriculture-related NFEs, services, and manufacturing.

### **3.3.1 NATURAL**

The natural environment presents an often ignored factor in the development of NFEs. Naturally endowed geographies that have well-developed agricultural sectors, whether actual or potential, naturally derive significant income from the agricultural sector. NFEs that naturally develop are agriculture related, such as crop and livestock processing and trading. The challenge that arises is the covariant relationship between the rainfall-dependent agriculture sector and the agriculture-based non-farm sector. Both depend on good rainfall and when there is insufficient rain or a drought, both sources of income are affected. The challenge is to overcome the dependency on rainfall whether through irrigation, product transformation, or preservation and storage. Since all these were limited in the study woredas visited, especially at the kebele level, the challenge of rainfall dependency is pervasive.

Insufficient access to potable water was a constraint often heard from women, who unfortunately hold the responsibility within the household to collect it, beginning at the tender age of 10. Some households reported allocating 1.5 hours each day just to complete this task, even at night, as they have had to collect potable water from the next woreda, often causing conflicts with households within that woreda. Apart from the time burden imposed on women further limiting their opportunities for non-farm activities, lack of water severely restricts the opportunities for water consuming industries such as vegetable and fruit processing, not to mention the inadequate sanitation and health risks that lack of adequate water entails.

### **3.3.2 AGRICULTURE-RELATED NFE**

Despite its rich agricultural production, many of the commodities produced are transported out of the area in a raw state. There is limited value addition and processing done in kebeles. Goods sold in woreda markets are in very small quantities in unprocessed or semi-processed form. Due to small land sizes, production volumes are little and households have even less marketable surpluses. Marketable surpluses

are not agglomerated but instead sold from small sacks or containers by individual household members. Products are sold raw and undergo limited or no value addition. Significant volumes of commerce in the area of agriculture—crops, livestock, fruits, and vegetables—and mineral products are exchanged with little or no value addition.

For those who are already engaged in NFEs, owners have poor marketing knowledge and lack market information. It was observed that commodities sold often were not differentiated according to quality, with the exception of high-value commodities such as coffee and chat.

### **3.3.3 SERVICES**

Weak financial support to the NFE sector, especially at the kebele level, was the primary constraint most often cited by study participants. In rural areas the available credit for those wishing to start or invest in a smaller-scale enterprise is largely from MFIs operating in the region and village-level saving and credit associations. In the study woredas, MFIs observed to be active are Omo Microfinance, Wisdom Microfinance, and Oromia Credit & Saving Share Co. (WALQO). Among the constraints mentioned by study respondents were the small loan sizes (<1,500 ETB), “high” interest rates (15–18 percent), short repayment periods (<12 months), and limited presence in kebeles. The larger MFIs discriminate against rural borrowers by charging them higher interest rates (5 percent more in WALQO) than urban-based borrowers, leading to the perception among women in kebeles that these larger institutions have a predominantly for-profit rather than pro-development orientation.

There are several well-functioning village savings and loan associations owned and managed by women and previously supported by local NGO efforts. They present an alternative delivery mechanism for financial services at the kebele level, however they are severely constrained by their limited operating capital, often less than 200,000 ETB or less than US \$12,000, which is not enough to adequately service the financial needs of more than 200 members in some associations. The most common loan size is only 1,000 ETB, or less than \$60 when the ideal loan size for an adequately sized NFE, according to respondents, such as animal fattening, should be up to 5,000 ETB (around \$300). These amounts are available through the zonal branch of the regional MFIs; however, women in kebeles shun the inconvenience of travel and high transportation costs, and higher interest rates charged by larger MFIs.

The development of NFEs is very much related with the availability of infrastructure such as roads, electricity, and communications. NFE development is highly correlated with increase in population densities and therefore consumer demand—in short, urban development. In the study woredas, rural households located far from major urban centers, markets, and roads exhibit limited participation in non-farm activities. Notably, poor or lack of roads between rural kebeles and markets, and between rural kebeles and urban centers increase the costs of transport and communication. In Kedida Gamela woreda for example, the contribution of non-farm activities to household incomes in two study kebeles where one is remote and the other accessible is estimated at 10 percent and 60 percent, respectively. In short, geographic accessibility is a strong predictor of level of non-farm activity.

Poor farm to market roads is an obvious constraint, especially in the more geographically isolated kebeles. Even accessible kebeles linked only by dirt roads become impassable during the rains. This results in high transportation costs and infrequent and limited volume transportation available from kebele to woreda centers and markets. Poor roads add to transactions costs, and reinforce information asymmetry between traders and producers. Kebele dwellers have weak bargaining positions relative to traders who hold the key transport equipment and access to information, leading some to point out the excessive profit-making of traders as a cause for concern.

In addition to poor kebele to woreda market roads, adequate storage structures are lacking both in production centers and market centers. Kebele dwellers walk to markets during market days and would rather sell their products (grains, animals, etc.) at low prices near the end of the day and buy their

necessary provisions than return with unsold products. If the producers are able to store their goods in markets, they will not have to accept low and predatory pricing by traders and urban dwellers. Apart from secure storage structures, market infrastructure itself is severely lacking. The study team witnessed and experienced a regular market day in Leku, Shebedino woreda center, where the rains and the uncovered market and resulting mud may not have been an inconvenience to rural dwellers already used to it, but it certainly did not help the sanitary condition of the fruits, vegetables, and grains being sold that day, or the potential spread of disease among the thousands of people present. Small-scale entrepreneurs often complained of the lack or high cost of stalls or work places in market centers and in the markets themselves.

Weak job skills and inadequate training play a major role in increasing rural employment and incomes in the rural sector. Human capacity in NFE development refers to entrepreneur skills, financial literacy, and marketing knowledge. The skill gap or inadequate entrepreneur skill is one consistently mentioned constraint during the study. Respondents unanimously mentioned the lack of entrepreneur skills affecting the engagement in NFEs. Marketing knowledge and working toward meeting customer needs and demands is low. Related to the skill gap is inadequate awareness of NFE opportunities. This was consistently mentioned by woreda and zonal officials, and the lack of awareness of entrepreneurship and private sector development is apparent even among the university-educated and those serving in responsible public positions.

### **3.3.4 MANUFACTURING**

Related to entrepreneurship skills, technical skills to produce non-farm products are also lacking. When the team interviewed the co-owner of a successful woodworking and metal works shop located in a woreda center, she mentioned the lack of good crafts people, discounting the availability of TVET graduates whom she said lacked the practical skills. While this is certainly the view of only one business owner, practical technical skills are important whether in woodworking, metal works, masonry, beekeeping, or any type of commodity processing and value addition.

## **3.4 KEY OPPORTUNITIES**

It was clear from consultations made by the study team the growing importance of non-farm activities in proportion to agricultural activities, and the importance in ensuring fair distribution of resources. The proportion of importance of the non-farm activities varies between 10 percent of household incomes deep in the rural areas far from infrastructure, market and demand areas, and 60 percent in areas with better access to market and urban centers. Besides improving livelihoods, non-farm income sources provide opportunities for fairer income distribution as the principal beneficiaries of non-farm interventions could be the resource-poor, and especially the landless including women and youth.

### **3.4.1 KEY AGRICULTURE-RELATED OPPORTUNITIES IN NFEs**

Several non-farm activities were identified by the survey areas in the region that would have scalable opportunities for growth. Based on the potential resource availability, experience, traditions, potential economic impact on the participating households, and the prevailing demand for products, the following potential NFEs were identified by value chains:

- Processing and sale of cereals and pulses;
- Processing and sale of fruits and vegetables;
- Processing and sale of flowers;
- Fattening of livestock, mainly shoats and cattle;
- Processing and sale of dairy and dairy derivatives;
- Fish processing and sale in the Rift Valley areas;
- Processing and sale of cash crops such as coffee, chat, and spices;

- Processing and sale of enset and cassava; and
- Processing and sale of honey.

### 3.4.2 KEY NON-AGRICULTURE NFE OPPORTUNITIES

Opportunities may be viewed from the perspectives of potentials in non-farm activities, the evolving market orientation of rural household members, the availability of infrastructure and communication facilities, and the increasing level of urban-rural linkages. Other non-agriculture related NFE activities which were considered to offer the best opportunities to provide increased rural income and employment include:

#### SERVICES

- Petty trading of grains and pulses in local markets;
- Trading and export of livestock through trekking or trucking;
- Processing and sale of sand and stone to support infrastructure development; and
- Transport services using horse and donkey drawn carts.

Factors contributing to this growth in NFE include:

#### *Infrastructure*

This part of Ethiopia has a strategic location and better access to infrastructure. The expanding road network and means of transport, communication facilities such as cell phone, and electricity have wider implications in the development of non-farm activities. The relatively flat topography of the area contributes to the easy access to markets, infrastructure, and communication facilities. Several markets are serving the community in the area. At the woreda level, there exists on average at least one primary market held twice a week and more than four small markets distributed in the rural areas. Many of the rural kebeles have a market where the community exchanges goods and commodities in small quantities.

#### *Rural-Urban Linkage*

It is quite developed in the study areas which may be displayed through the level of exchange of commodities and technology, and high movement of labor. The community has increased perception of the importance of non-farm activities as a result in improving livelihoods. Traders purchase agricultural goods from the farm gate or bush market and transport goods using motorized transport or pack animals. Consumer and industrial goods meanwhile are sold at rural villages and small towns. Farm households are increasingly buying goods and services in towns, making the linkage between rural and urban centers stronger and more robust.

#### *Evolving Market Orientation*

During discussions with woreda and kebele study interviewees, it was apparent that community members already possess an increasing market orientation. Community members work or participate in non-farm activities as cooperative members or through private enterprises. With the passage of time, participation of the community and the proportion of income derived from non-farm activities will only increase. From experience, interviewees have emphasized the potential capacity of non-farm activities in quickly changing the livelihoods of participants. During the survey, most of the successful model farmers who have been participating in non-farm activities are both the young women and men ranging between 25 and 35 years of age.

#### MANUFACTURING

Key activities that have growth potential in the south livelihood zone include:

- Cottage industries such as pottery, blacksmith, and traditional leather works;
- Metal and woodworks; and

- Vehicle and equipment repair.

## **3.5 RECOMMENDATIONS**

### **3.5.1 ENCOURAGING VALUE ADDITION**

As the livelihood zone has little value addition to its agricultural produce, development efforts should be made to encourage and promote the transformation of raw products into semi-processed or processed goods. There is an NFE opportunity to add value and improve income of participants. The activity may have multifaceted advantages of enhancing quality of products and services, extending the shelf life and marketability of primary products, and improving the bargaining power of producers and brokers while meeting market demands, as well as provide employment opportunities.

### **3.5.2 EXTENDING GOE SUPPORT**

Government support and incentives can influence the ability of an individual or community to benefit from non-farm activities. Through better policy coordination, non-farm activities can be promoted, particularly scalable opportunities that can create jobs for the growing youth population. The GOE at all levels should better coordinate its policies among all of its agencies, especially at the kebele and woreda levels. KIIs and FGD interviews revealed a lack of information sharing between members of some woreda food security task forces, especially regarding NFEs. GOE staff at the woreda level should increase communication with local residents on ways to support all aspects of the rural sector including infrastructure (roads, power, and communications) to generate sustained economic activities in the countryside, whether in agriculture, NFEs, or other sectors.

### **3.5.3 INSTITUTIONAL INNOVATIONS**

The GOE livelihood zone strategy supports the growth of NFEs by encouraging producer or marketing cooperatives. Forming associations and cooperatives has several advantages through development of economies of scale by improving the bargaining power of members, lowering transaction costs of member inputs and outputs producing quantity and quality of products to meet market demands, and providing quality control information to improve grades and standards.

### **3.5.4 CAPACITY DEVELOPMENT**

The capacity gap in local vocational skills and employment market needs is a major challenge in fostering NFEs. TVET and other agencies in the livelihood zone should study the skill gaps of entrepreneurs engaged in NFEs and extend relevant training to develop the needs practical and marketable skills, such as business management, literacy, agro-processing, etc.

In the livelihood zone, MFIs and rural savings and credit cooperatives (RUSACCOs) provide the majority of financial resources to the local non-farm entrepreneurs, in spite of their limited organization capacity and resource limitations. Development efforts that increase the capacities of these organizations to provide viable credit to NFEs would provide more resources to allow NFEs to foster and create more employment opportunities.

# 4.0 SUMMARY OF FINDINGS IN PASTORAL AND AGRO-PASTORAL WOREDAS

## 4.1 LIVELIHOOD ZONE (GEOGRAPHY, ECOLOGY, AND EMPLOYMENT)

### 4.1.1 PASTORAL AND AGRO-PASTORAL

The pastoralist and agro-pastoralist livelihood areas considered in this study include Arero in Oromia Region and Shinile in Somali Region. In total, Ethiopia contains a population of roughly 12 million pastoralists and agro-pastoralists throughout six regions of the country. These pastoral and agro-pastoral communities are primarily found in the marginal border areas of Afar, Somali, Southern Oromia, Southwest SNNPR (South Omo zone), Western Gambella, and the western areas of Benishangule Gumuz. Generally, these areas fall below 1500m in altitude and are classified as arid or semi-arid (annual rainfall <700mm). Although pastoralist and agro-pastoralist livelihoods depend primarily on livestock rearing, the majority of herders do not live primarily off of milk and meat. Rather, most pastoralist and agro-pastoralist households use the income gained from their livestock to purchase grains that make up much of their diet. When income gained from livestock is insufficient, poorer households collect and sell firewood, charcoal, gum, incense and other locally available resources to supplement their income. Moreover, substantial seasonal fluctuations in rainfall and frequent droughts in pastoralist and agro-pastoralist areas have significant implications for livestock conditions and milk production, forcing many households to supplement their income through NFEs.

Of the total national livestock population, pastoral and agro-pastoral areas account for 20 percent of cattle, 25 percent of sheep, 73 percent of goats, and nearly 100 percent of camels.<sup>2</sup> The livestock population from pastoral and agro-pastoral livelihood system makes an important contribution to the overall economic activities of the country, providing a significant supply of beef and mutton for domestic consumption as well as generating foreign exchange through live animal, and frozen and chilled meat exports.

Pastoralist communities derive their livelihoods predominantly from scale livestock and livestock products (e.g., meat, milk, hides and skins from cattle, camels, sheep and goats), moving from place to place in search of pasture and water within a delimited area. These communities naturally vary in their

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<sup>2</sup> Federal Democratic Republic of Ethiopia, 2003

level of mobility—from being semi-sedentary to highly mobile—depending on the prevailing rainfall conditions. In general, goats and camels are the most ubiquitous and important, followed by sheep and cattle.

Agro-pastoralist communities derive a significant proportion of their livelihoods from agricultural products, while continuing to rely primarily on sales of livestock and livestock products. Some household members may largely move with their livestock, while others (mainly women, children, and elders) live permanently near cropping areas. Major agricultural products in agro-pastoral areas include sorghum, maize, fruits, and vegetables (especially tomato and onions), while livestock again consist of goats, camel, cattle, and sheep. For those households and communities with access to irrigation, these agricultural products play a significantly more important role in their livelihood activities. Nevertheless, the harsh environmental conditions generally require these irrigated households and communities to continue to retain an important dependence on livestock to sustain their livelihoods.

#### **WOREDAS VISITED**

The specific pastoralist and agro-pastoralist livelihood areas considered in this study include Arero woreda in Oromia Region and Shinile woreda in Somali Region. As part of the Arero, Dire and Miyo pastoral livelihood zone, Arero woreda is found in the central and southern parts of the Borena zone in Oromia. As of 2007, Arero's population was 48,126 (24,281 males and 23,845 females), of which 45,122 (22,737 males and 22,385 females) lived in rural areas.<sup>3</sup> The topography is mainly flat with shrub vegetation predominating in most areas of the woreda, although sizable areas of grassland are also present. Receiving between 340–600 mm of annual rainfall, the livelihood zone has two rainy seasons; the main rainy season runs mid-March to May and a short rainy season runs from September to mid-November. The primary livelihood activity in Arero is livestock rearing, with most households depending on communal grazing lands. The town of Moyale is the main livestock market, although nearby woreda towns also serve as important markets. In general, however, Arero suffers from relatively poor accessibility to markets, in part due to poor transportation infrastructure.

Composed of 12 kebeles, Shinile woreda contains both pastoralist and agro-pastoralist communities, for a total population of roughly 67,000 (36,716 males and 30,284 females) of which the vast majority live in rural areas. Like Arero, the majority of households in Shinile depend on livestock as their primary livelihood activity, although the production of maize, sorghum, and tomatoes is becoming an increasingly important livelihood activity for agro-pastoralist communities in the southern part of the woreda. Of a livestock population reaching over 230,000, approximately 59 percent are goats, 21 percent are sheep, 12 percent are camels, 6 percent are cattle, and 2 percent are donkeys (used for transporting goods). The woreda is relatively flat, though punctuated by rocky hills in certain areas, and receives an average annual rainfall of less than 600 mm. The towns of Dire Dewa are the primary local markets for livestock and other goods, while the woreda's close proximity to Dire Dawa, Djibouti, and Somaliland give it relatively strong accessibility to larger markets.

## **4.2 KEY NON-FARM ACTIVITIES**

Given the strong dependence on livestock in pastoral and agro-pastoral zones, the most important non-farm livelihood activities revolve around livestock trading and related activities. However, some areas are also endowed with valuable natural resources—such as gold, stone for construction, and gum and incense—which can be exploited to increase income gained from NFEs. The primary non-farm activities in pastoral and agro-pastoral zones are described in detail below. Although agro-pastoralists derive an important part of their livelihoods from agricultural goods, the primary NFEs are generally identical to that of pastoralists.

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<sup>3</sup> Federal Democratic Republic of Ethiopia. 2006.

## 4.2.1 KEY AGRICULTURE-RELATED NFES

### AGRO-PROCESSING BY VALUE CHAINS

Cereals and pulses are mainly produced and marketed in the agro-pastoral zone, but other than commodity trading, do not represent a significant number of NFE jobs, as there is little value addition.

High-value horticultural crops, especially tomatoes, are grown commercially in the region in the irrigated areas; a large volume is exported to Djibouti and Somaliland. There are no other significant cash crops produced in this area.

As can be expected, the largest commodity sold is livestock. There are two discrete value chains within this NFE commodity sector – livestock trading and sales of livestock products.

Livestock trading is the primary NFE activity carried out in pastoral and agro-pastoral areas and is almost entirely undertaken by men. Livestock trading consists mainly of camels, cattle, and small ruminants (goats, sheep, and heifer/calves). Typically, collectors (i.e., small traders) purchase livestock from weekly market towns in rural kebeles and woredas, often travelling deep into remote rural areas to buy livestock at the *kraals* of pastoral households. The collectors then hire trekkers/herders (almost always men) to transport the livestock over long distances to major livestock markets and sell to primary livestock traders in these markets. In turn, these primary livestock traders supply the livestock to domestic and international slaughterhouses/abattoirs, fattening sites and so forth. Hence, the main actors in the livestock market value chains in pastoral and agro-pastoral areas generally include the pastoralists, local collectors/brokers, trekkers, wholesale traders, fatteners, meat processors, and exporters of live animals and frozen/chilled meat.

Livestock brokering is exclusively undertaken by men, serving as middlemen between the pastoralists and primary livestock traders. The brokers charge a fixed price for each animal sold, with the broker fee based upon the type of livestock (cattle, camel, sheep, and goats) rather than on a fixed percentage of the sale price. There is thus no incentive for the broker to sell the cattle at higher prices in the belief of the pastoralist, since they receive a fixed income per cattle type. Rather, they are interested in the volume of livestock sold.

Livestock products in the pastoralist and agro-pastoralist areas generally are an important value chain and an integrated part of the immense potential for NFE revenue generation and employment—particularly milk from camels, cattle, and goats. Relatively high milk yields during the rainy season provide opportunities for women to collect and process milk for sale at large markets with high demand for milk and milk products, such as in Yabello, Moyale, and Dire Dawa. In addition, there is a strong demand for camel milk in Somaliland and Northern Kenya, which is amplified when there are camel milk shortages in these countries. Milk collection and trading is fully undertaken by women, either as individuals or in groups. Typically, women collect milk from the village and transport it to nearby towns and larger markets where they can get better prices. Additionally, due to its high shelf life (10–12 days), camel milk is transported to the Kenyan and Somaliland borders. Milk collection and sales peak during the rainy seasons since livestock yields are substantially increased during this time.

### NATURAL PRODUCTS

Firewood collection for sale and charcoal production are non-farm activities practiced widely by many pastoralists and agro-pastoralists as an important source of household income. Due to high demand for firewood and charcoal across the country, as well as in Djibouti, charcoal has become an important commercial commodity that is transported by vehicle to major cities across the country. In addition, men transport and sell charcoal and firewood to nearby cities by transporting via camels. The collection of firewood is often undertaken by women, while the production of charcoal is mainly done by men. Agro-pastoralists—especially those households and communities with access to irrigation—produce charcoal primarily during the non-farming season, while pastoralists collect firewood and produce charcoal

throughout the year. Although often accounting for the largest source of household income for agro-pastoralists during the dry season, firewood collection and charcoal production merely supplement annual income for these communities. For pastoralists, on the other hand, these activities are a primary source of annual income, particularly during the dry season. Although the GOE tries to control this activity, it is unsustainable in many areas and causes permanent environmental damage, especially to the soil, which is more exposed to erosion.

The collection of gum and incense from certain trees in pastoralist and agro-pastoralist areas is generally practiced through natural exudation, damaging the gum trees. The collected incense and gum are usually sold in small towns and nearby villages to local traders, who sell the gum and incense to higher-level traders, who then sell to traders in Addis Ababa.

The collection and processing of incense and gum is seasonal, occurring primarily during the dry season when livestock production decreases. Nevertheless, there are some pastoralists who engage in the collection, processing, and sale of gum and incense on a fulltime basis to sustain their livelihoods, thereby serving as their primary source of income. In general, the collection of incense and gum is merely used as an important supplementary means of income for households during the dry season.

When incense and gum are collected, both male and female household members travel to the nearby bush areas where the resources are available (often several hours walking distance) and stay for between three to five days to collect the gum and incense from the trees. Incense and gum are available in abundance in Arero woreda and a belt around Moyale. In a number of areas, cooperatives have been established to buy and sell gum and incense in larger quantities. However many of these cooperatives currently lack the capacities to play an important role in the gum and incense markets, which has allowed private traders to monopolize the trade. Although the cooperatives frequently lack the finance to purchase the goods in bulk from producers, their inefficiency is often blamed on the inefficiency of cooperative managers, who are also members of the kebele administration in many cases.

#### **4.2.2 KEY NON-AGRICULTURAL NFES**

##### **SERVICES**

Petty trading is an important NFE that many women engage in as a fulltime livelihood activity, rather than just a complementary activity to pastoralism or agro-pastoralism. In particular, the sale of grains, pulses, chat, and other consumable goods (e.g., clothes, salt, maize flour, sugar, rice, cooking oil, pasta, tobacco, and spices) are a major source of income for women, especially in places where gold is excavated by traditional means due to the increased purchasing power of men from gold excavation. These goods are traded both in major markets in the woreda capital and small markets in local villages. In fact, due to high purchasing power of people resulting from gold excavation, some local village markets are bigger than major markets in the woreda capital. For instance, one of the biggest markets in Arero woreda is found in a kebele in which gold mining is a major source of income, providing households with significantly higher purchasing power. The majority of the people involved in petty trading in pastoralist and agro-pastoralist areas are women, although some men are also involved.

The number of people in pastoralist and agro-pastoralist areas engaged in wholesale trade is very small. In general, it is undertaken by men with the financial resources to buy consumer goods in large quantities from larger towns and cities and sell them to retail traders in woreda and rural towns. A growing number of men and women are engaged selling consumer goods in small retail shops in woredas and kebeles to satisfy the household needs of farmers and pastoralists.

The diversity of services provided in pastoralist and agro-pastoralist areas tends to be relatively small, with goods transportation and mobile phone charging services being observed as the most prominent in Arero and Shinile woredas. Transportation services for goods are predominantly provided by men, with motorbikes and donkeys being the most ubiquitous means of transportation. Individuals who own

motorbikes and donkeys transport goods, especially chat and other consumable food items, from the woreda capitals to local markets.

Commensurate with the rise in the number of mobile phones held by individuals in pastoral and agro-pastoral areas, mobile phone charging services are becoming an increasing source of income for some households. Both men and women engage in providing mobile phone charging services to supplement household income, using small generators to provide electricity where it is not available. In urban areas, three birr is generally charged, while five birr is charged in the rural areas.

#### **MANUFACTURING**

The production of soap and lotions was observed in Fuda kebele (Arero woreda), undertaken by a group of men and women that were established as cooperatives by an NGO. Currently, the soap is sold locally in Arero and Yabello towns. The production of soap is undertaken by hand, using aloe extract—which is abundantly available in the woreda and improves the soap quality and marketability—and chemical inputs supplied from Addis Ababa.

In addition, every marketplace has a collection of farm and household tools and utensils manufactured by local and itinerant blacksmiths and metal workers, and furniture made by local carpenters.

#### **MINING**

Some pastoralist and agro-pastoralist areas are endowed with significant gold and precious stone deposits, resulting in the rise of mining as an important non-farm source of income. In particular, gold excavation and, to a lesser extent, precious stone extraction was observed in Arero woreda at sites known as Wayu Boda, Okote, and Ankere. In addition, there are a number of gold mining sites in the neighboring two woredas. These sites border Guji woreda (Oromia Region) and Gebra woreda (Somali Region), and are a source of conflict at times. Both men and women are involved in the mining activities, with women undertaking washing and sieving activities while men excavate the gold and precious stones. As a whole, men account for the lion's share of the work and the resulting income.

During the extended dry season when pastoralists and agro-pastoralist have to complement their household income due to dwindling livestock yields, mining becomes a central livelihood activity in places where gold and precious stones are available. In these areas, men and boys leave their settlements and animals in the care of their wives to work at the excavation sites for extended periods of time. Laborers sell the gold they excavate at low prices to a group of people who occupy the area as a cooperative. In turn, the cooperative sells the gold at higher prices to larger organized business groups.

In addition to gold, emeralds are excavated at a place known as Wab in Arero woreda. The excavation of emeralds is a strenuous activity and is carried out almost exclusively by men. Laborers organize themselves in groups to excavate the material, which they then sell to traders coming from Addis Ababa. Due to its labor-intensive characteristics, large numbers of people are attracted to these sites from other kebeles in Arero woreda in addition to other woredas and regions. Although gold and emerald excavation is undertaken throughout the year, the peak labor season runs from January to March, corresponding with dwindling livestock yields in the dry season.

### **4.3 KEY CONSTRAINTS AND CHALLENGES**

As described above, rural households in pastoral and agro-pastoral areas engage in a relatively limited variety of NFEs, primarily focused on livestock trading; milk processing and trading; petty trading; and (where available) mining of gold, precious stone excavation, and gum and incense collection. However, households face various constraints and challenges for each of these major activities, which must be properly addressed to enhance the development of the non-farm sector. This section presents a brief summary of the major constraints and challenges in relation to the primary NFEs identified in the course of the investigation.

### **4.3.1 AGRICULTURE-RELATED NFE BY VALUE CHAIN**

#### **LIVESTOCK**

Livestock trading is a crucial livelihood activity in pastoralist and agro-pastoralist areas, yet it faces five major constraints: (1) lack of trust between livestock suppliers and buyers, (2) lack of market information for livestock suppliers, (3) high trade fees, whether formal or informal, (4) high vulnerability to drought, and (5) an invasive tree species.

First, in many areas, the lack of trust between livestock suppliers (the pastoralists and agro-pastoralists) and livestock buyers (brokers and traders) is a serious constraint that inhibits the magnitude of livestock exchanges. In this investigation, pastoralists and agro-pastoralists reported instances in which brokers and traders breached agreements to pay livestock suppliers for livestock purchased on credit. As a result, livestock suppliers have become more hesitant to sell their livestock in large quantities to brokers and traders, which of course inhibits the scope of livestock transactions.

Second, pastoralists and agro-pastoralists often lack access to up-to-date market information. Although brokers and traders appear to have clear and effective channels for communicating livestock demands and prices, this information often does not reach livestock suppliers in a timely fashion. As a result, livestock suppliers often do not know which livestock will fetch the highest price at certain markets on certain days, thus resulting in failure to maximize their income from livestock trading.

Third, high service charges imposed on livestock trade—especially in relation to exports—tend to reduce the legal sale of animals to external markets. While officially there is no export tax on commodities including livestock, the study team encountered and verified reports of “service charges” as much as 550 Birr per head which may very well be an unofficial or informal tax. Regardless of official policy, these costs incentivize livestock smuggling, which have resulted in the confiscation of livestock at international borders.

Fourth, pastoralist and agro-pastoralist areas are highly vulnerable to droughts, resulting in the reduction of the supply of livestock due to water scarcity and the reduction of available pastureland for grazing. Moreover, high vulnerability to drought leads many pastoralists to keep their livestock as a form of insurance against impending droughts, rather than selling when prices are high and risking the subsequent loss of their entire livestock population.

Fifth, in some areas—such as Shinile woreda—an invasive species of tree is encroaching on important grazing lands and consuming large amounts of available water. Moreover, the tree species is poisonous to animals, limits access to grazing lands, and reduces the size of available grazing lands. In turn, the size of livestock herds is substantially affected, which reduces the resulting magnitude of livestock trade.

Milk processing and trading is an important NFE in most pastoralist and agro-pastoralist areas, with products being supplied to large domestic markets in Ethiopia, as well as markets in northern Kenya and Djibouti. However, in many areas, milk processing is undertaken using traditional means that tend to be less sanitary than more recently developed methods. As a result, traditionally processed milk has a much shorter shelf life, thereby restricting the scope of markets that can be accessed and the overall magnitude of trading. In other words, the failure to add more value to milk products by using improved milk processing technologies is a constraint that greatly limits the overall quantity and quality of milk products sold and the resulting amount of income obtained.

#### **NATURAL PRODUCTS**

The collection, processing and trading of gum and incense face two important constraints: (1) the relative inaccessibility of the trees that produce these resources, and (2) the low quality of gum and incense products. First, the trees from which gum and incense are collected are often several hours walking distance from the pastoralist and agro-pastoralist community, which restricts the overall supply of these

products in markets. Second, the quality of gum and incense products is generally quite low due to the use of traditional production methods, resulting in low prices. For instance, during processing, dirt, bark, and dust are often not separated from the gum and incense and the resulting poor quality gets lower prices in the market.

### **4.3.2 KEY CONSTRAINTS IN NON-AGRICULTURAL NFES**

#### **SERVICES**

Four overarching constraints affect the development and income generation of NFEs in pastoralist and agro-pastoralist communities: (1) lack of access to financial services and shortage of start-up capital, (2) lack of relevant training and skills, (3) inter-group conflict, and (4) poor transportation infrastructure.

First, the scarcity of savings and credit establishments and other financial institutions in rural areas results in an acute lack of access to financial services and shortage of start-up capital. As a result, market entry and business expansion are substantially hindered for all NFEs, particularly those activities requiring relatively large initial investments (e.g., purchasing livestock, acquiring improved technologies for milk processing and gum and incense production, buying consumable goods in bulk). Women engaged in these activities are particularly affected by this constraint.

Second, a lack of relevant skills training in business management, accounting, and marketing as well as skills for improving the quality of products restrict the benefits that households and communities gain from NFEs. TVET provides vocational training in many woredas and a range of NGOs and government offices provide business and financial management training to organized cooperatives; however, relevant applied training to improve skills nevertheless appears to be substantially under-supplied for rural communities.

Third, inter-group conflicts are common in a number of pastoralist and agro-pastoralist areas, due to disagreements over land use, access to resources (especially water), and a general lack of tolerance between different tribes. These conflicts frequently result in the displacement of local communities and the destruction of assets, which results in substantial uncertainty for local communities over the security of their land and other assets. As a result, these communities become less likely to invest in new businesses, expand NFEs, or strengthen market networks.

Fourth, poor physical transportation infrastructure—such as the lack of all-season roads and the currently dysfunctional Ethio-Djibouti railway line—increases the transaction costs of supplying goods to domestic and international markets, particularly Djibouti and Somaliland.

#### **MINING**

The mining sector in the area primarily functions in a traditional artisanal manner and is very inefficient. Gold and salt are mined traditionally, as small-scale operations. Although its relatively underdeveloped methods of extraction, and the state of market networks benefit some local employment, there is a vast employment potential if the resource can be better exploited through the use of improved technologies.

## **4.4 KEY OPPORTUNITIES**

Overall, the constraints and challenges listed above are by no means intractable, providing ample opportunities to enhance NFEs in pastoralist and agro-pastoralist areas. Below, the potential opportunities available for the development of NFEs to employ an increasing local workforce and contribute to the income growth of the rural population are described.

## 4.4.1 KEY AGRICULTURE-RELATED NFE OPPORTUNITIES

### LIVESTOCK VALUE CHAIN

#### *Milk Processing and Trading*

Many pastoral and agro-pastoral areas possess immense potential for the production and processing of livestock products. In particular, high milk yields during the rainy season provide opportunities for women to collect and process milk for sale at large markets. For instance, Borana zone is known for livestock breeds with high milk yields, providing strong opportunities to enhance market networks and add value through improved technologies. With improved milk processing technologies that increase the shelf life of milk products, milk producing areas have the potential to create linkages with larger markets that were previously inaccessible due to shorter product shelf lives. In particular, there is high demand in northern Kenya and Somaliland for camel milk from Borana and a range of areas in the Somali Region that are home to large camel populations with high milk yields (e.g., Babilie, Gursum, and Fafan). Moreover, local women with the experience and knowledge of managing household milk production can be organized and trained in new technologies and business management to add value to their products and, ultimately, obtain more NFE income.

#### *Meat Processing*

Many pastoralist and agro-pastoralist areas—such as Borana zone and much of Somali Region—are known to possess abundant livestock resources, particularly cattle. Currently the majority of the meat processing value chain exists outside of these areas. Hence, there are significant opportunities to bring meat processing activities—such as slaughtering and packing—into these areas in order to add value to livestock products for domestic and international markets. Due to the close proximity to international markets with rapidly growing demand for meat products—such as Djibouti, Somaliland, Saudi Arabia, United Arab Emirates and other Middle Eastern markets—there is a large untapped potential to export processed meat from Somali Region. In line with this, the Ethiopia Sanitary Phyto-sanitary Livestock Meat Marketing, a USAID/Ethiopia-supported project, has been working closely with the Ethiopian meat and meat product exporting industries and with the Ministry of Agriculture to improve competitiveness and raise hygiene and quality standards to international requirements. Similar initiatives could improve the sale of meat to the international markets.

#### *Livestock Trading*

Again, owing to the presence of abundant livestock resources, there are strong prospects for the growth and expansion of livestock trade to the benefit of pastoralist and agro-pastoralist communities. In particular, by increasing market information access for the pastoralists and removing international trade barriers, livestock suppliers will have the opportunity to benefit substantially more from livestock trading. Moreover, possibilities exist for adding value to livestock by providing technical support to livestock suppliers on fattening and related activities. By empowering livestock suppliers through skill trainings and the supply of appropriate technologies, NFE productivity and trade of fattened livestock can be significantly increased in domestic and international markets.

#### *Hides and Skins Collection, Preservation and Trading*

It is clear that the pastoralists/agro-pastoralist primarily depend on milk and milk products for their household consumption, followed by goat and sheep meat and for special occasions beef; the hides and skins are sold in weekly urban markets. In addition, town residents in pastoral and agro-pastoral areas, mostly along the highways, consume goats, sheep, and cattle. A recent study conducted by ACIDI/VOCA<sup>4</sup> indicated that the normal off-take rate of Yabello and surrounding areas was 22 percent; Dirre, 23 percent; Dolado, 22 percent; Dolobay, 17 percent; and Moyale, 18 percent; mainly sourcing from

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<sup>4</sup> ACIDI VOCA. 2007. "Pastoralist income diversification."

pastoralist family diets, hotels/restaurants, butchers, and cooperatives. Furthermore, this study reported that about 85 percent of the hides and 60 percent skins are from family production, while 15 percent of hides and 5 percent of skins are from butchers, and 35 percent of skins were from hotels/restaurants.

Thus, the abundance of livestock resources in pastoralist and agro-pastoralist areas also provides the opportunity for the production and processing of hides and skins, an industry which appears to be substantially underdeveloped. Hence, enhancing the trade of cured and preservation of hides and skins could generate an important source of NFE income and create subsequent linkages to the local manufacture of a range of leather and related products (e.g., shoes, jackets).

#### *Honey and Wax Production and Processing*

Currently, honey and wax are produced and processed on a small-scale level in different areas of the Borana zone and Somali Region, although the proximity of these areas to international markets provides a strong opportunity for increasing production for export. Adding value to these products through the introduction of improved technologies for refining and packing and subsequently scaling up production, could help honey and wax production become an important NFE in pastoralist and agro-pastoralist areas.

#### **HORTICULTURAL CROPS VALUE CHAIN**

High horticultural crop yields (particularly tomatoes) in a number of agro-pastoral areas in the Somali Region provide substantial potential for tomato processing and packaging activities directed at large domestic and international markets (e.g., Djibouti and Somaliland). If the irrigation infrastructure could be expanded, more horticultural crops could be produced, processed, packaged, and sold by small entrepreneurs.

#### **NATURAL PRODUCTS**

##### *Gum and Incense Collection and Selling*

Gum and incense are among the most important NFE natural products found in certain areas of the Borana zone (Wachilie) and Somali Region (Afder, Liben, and Wareder zones). The collection, processing, and sale of these products currently provides a means of supplementary income for the local communities, yet the prices that producers obtain for their products remain low as a result of poor quality. Potential exists for improving the quality and quantity of gum and incense products by improving access to production sites so that public transport could be used to and from the production site. In addition, revenue could be increased with the introduction of improved practices and quality standards at each stage of the production process (collection, drying, sifting, grading, packing, etc.) and subsequently scaling up of production and trading of these goods.

### **4.4.2 KEY NON-AGRICULTURE RELATED NFE OPPORTUNITIES**

#### **SERVICES**

Many interviewees involved in petty trading in local markets and those selling merchandise in small shops feel they could greatly expand their operations and inventory with increased access to short-term credit. Currently those using market day funds pay exorbitant daily rates for small amounts of capital, limiting their purchasing power. Others have to obtain long-term credit from MFIs, which limits timely availability of needed funds in sufficient amounts needed for petty trading.

Improvements in transportation infrastructure including farm to market roads, expansion of the rural electrical grid, introduction of potable water in market towns, and installation of livestock watering facilities would reduce transaction costs and increase rural commerce and revenues.

Skill training, especially in entrepreneurship, coupled with the development of relevant business plans will provide opportunities for small NFE business people to increase their operational and management efficiencies and earn more money.

## **MINING**

Currently, gold excavation serves as an important source of income during the dry season for pastoralists and agro-pastoralists in areas where it is available. However, given the relatively underdeveloped methods of extraction and the state of market networks that benefit locals, there is vast employment potential if the resource can be developed and utilized by organizing the local people to manage it through the use of improved technologies. Private investment ventures should also be encouraged to develop the reserve, as long as these ventures ensure local people benefit in good measure as an employee workforce or as suppliers.

Rich salt deposits exist in some areas, such as the Afder zone of Somali Region. If improved extraction technologies can be introduced through private investment, then these deposits may provide significant employment opportunities for local communities.

## **4.5 RECOMMENDATIONS**

Given the constraints and opportunities listed above, a variety of actions can be taken to enhance the benefits that pastoralist and agro-pastoralist households obtain from NFEs. The most significant of these actions—as uncovered throughout the course of this investigation—are listed below as recommendations for strengthening NFEs in pastoralist and agro-pastoralist areas.

### **4.5.1 STRENGTHENING NFES IN PASTORAL AND AGRO-PASTORAL AREAS**

#### **INVEST IN CONFLICT MITIGATION STRATEGIES**

Local authorities should be more involved in conflict mitigation strategies that provide avenues for peaceful resolution of conflicts and promote inter-group tolerance. Many communities are displaced regularly, facing substantial uncertainty over the security of their assets. This inhibits local communities from strengthening urban-rural market linkages and deters private sector players from investing in non-farm activities.

#### **INVEST IN TRANSPORTATION INFRASTRUCTURE**

Public investments should be made in improving the transportation infrastructure as well as transportation options, e.g., improving roads as well as encouraging the supply of motorized transportation options for more efficiently bringing goods and people to markets. Currently, the vast majority of livestock are transported on the hoof and many goods are transported by donkey or on foot on poor quality roads; this increases the time taken for agriculture brokers to respond to market fluctuations, increases transportation and transaction costs, and reduces the weight of livestock.

Investments should be made in irrigation, potable water, electricity and other important inputs for increasing the extent of NFEs in agro-pastoralist areas. Consistent electricity is a crucial requirement for the uptake of improved processing technologies and the establishment of many downstream processing activities. Improved irrigation infrastructure will enhance the productivity of farms in agro-pastoralist areas, thereby allowing agro-pastoralists to enhance NFEs associated with agricultural products. Improved access to potable water would allow more efficient use of household labor, decreasing the amount of time household members would need to devote to water fetching chores, permitting them to engage in revenue-generating activities.

#### **ENCOURAGE PRIVATE INVESTMENT**

Due to information and coordination externalities that prevent private investors from recognizing and benefiting from potential investment opportunities, public authorities should promote private investment in industries and sectors in the woreda with high growth potential. For instance, as described above, meat, milk product, and gum and incense processing all represent substantial opportunities for NFE development, yet they remain largely untapped by private investors.

## **ENHANCE ACCESS TO START-UP CAPITAL AND FINANCIAL SERVICES**

The provision of financial services and start-up capital by MFIs, including savings and credit associations and other financial institutions, should be encouraged to facilitate creditworthy activities in the livelihood zones as they enhance the growth of NFEs, and increase the uptake of improved technologies. GOE policies effecting credit should be examined, looking at neighboring countries for inspiration. For example, almost none of the NFEs encountered during the survey have checking accounts; money transfers are normally done in cash. The largest denomination in Ethiopia is 100 ETB. Meanwhile neighboring Kenya is using its mobile telephone technology to transfer funds for NFEs through Mpesa.

### **4.5.2 AGRO-PROCESSING RELATED NFES AND MINING**

#### **LIVESTOCK VALUE CHAIN**

##### *Improve Access to Market Information among Livestock Suppliers*

To address the market information asymmetry between livestock suppliers and buyers, investments should be made in improving access to market information for livestock suppliers, such as establishing a ‘livestock exchange’ where market information is clearly communicated to all interested parties, or through the strengthening of information communications technology (especially mobile phones). Woredas with the highest potential for increasing livestock marketing activities should be the primary targets of these investments.

The existing livestock marketing cooperatives and unions in pastoralist and agro-pastoralist areas should be strengthened since these institutions can play an important role in facilitating access to bigger markets and increasing access to market information for livestock suppliers. These institutions need to be supported with access to finance and skill building so that livestock suppliers can be directly linked to major urban markets and their vulnerability to the manipulation of brokers and middlemen reduced.

##### *Encourage Private Investment in the Establishment of Meat Processing and Related Activities*

The largely unexploited potential that pastoralist and agro-pastoralist areas hold for livestock production and marketing—particularly in the Somali Region—warrants the establishment of large-scale meat processing plants. Hence, private investments in meat processing plants should be encouraged in order to increase the value added to livestock in these areas.

Additionally, private investment should be encouraged in the strong, yet underexploited potential for hides and skins processing activities.

##### *Increase Trust between Livestock Suppliers and Buyers*

To address the lack of trust between livestock suppliers and buyers in the current livestock trading system, financial transactions should be institutionalized through intermediaries that are able to provide guarantees that all interested parties will hold up their side of the bargain. The Ethiopian Development Bank and commercial banks (both private and government) should be financial intermediaries in loaning to cattle traders at reasonable interest rates. In addition, an institution similar to commodity exchange and the Ethiopian Livestock Trade Association could be an option for providing market information as well as to act as an intermediary between the buyer and seller. Furthermore, encouraging the establishment of grassroots-level livestock trading company will have significant impact on narrowing the trust gap between buyer and supplier. As an example, Utuba Gumi International Trade Share Company, in Borena, has 55 members of different groups (pastoralists, livestock traders and community leaders) as shareholders, which also fosters vertical integration to increase the reliability of supply. In other words, such an institution would strengthen the contracting system for economic exchanges, which is of course central to facilitating the growth and scale-up of market activities. Moreover, such an institution could address market information failures by providing a platform through which all parties could be provided with equal market information.

### *Organize and Strengthen Women's Groups and Cooperatives*

Given the high milk yields in a number of pastoralist and agro-pastoralist areas, measures should be adopted to organize and strengthen women's groups, cooperatives, and unions so that they can effectively manage milk collection and processing centers and meet market demands. This may be facilitated through the provision of much-needed skill trainings and credit facilities, which could be offered by HABP.

### *Encourage the Uptake of Improved Milk and Milk Product Processing Technologies*

As described above, there is a strong potential to add value to milk and milk products through improved processing technologies. With improved milk processing technologies that increase the shelf life of milk products, milk producing areas can create linkages with larger markets that were previously inaccessible due to shorter product shelf lives. In addition, creating linkages with existing traders or with milk and milk product distribution centers in nearby big cities, and creating a linkage with milk collection and processing centers should be an integral part of the strategy in improving the uptake of milk and milk products and expanding it with a multiplier effect to other towns. Hence, local women that are primarily involved in milk production should be trained in improved processing technologies to add value to their products and linked to the potential market, ultimately, to obtain more NFE income.

## **NATURAL PRODUCTS VALUE CHAIN**

### *Encourage Eradication of Invasive Tree Species*

Encourage eradication of the invasive tree species—which was observed in Shinile woreda—to improve grazing area and herd sizes, land for agriculture, and subsequent livestock trading activities. Moreover, eradication of this tree species can serve as a supplementary source of non-farm income in itself, providing the opportunity to increase firewood and charcoal production without damaging native vegetation. As a corollary, the planting of appropriate indigenous tree species should be encouraged to help prevent erosion, increase carbon sequestration, and protect the soil and ecology.

### *Enhance Gum and Incense Marketing and Production*

Gum and incense production, processing, and marketing, which remain rudimentary to date, can be enhanced to be more sustainable and generate higher NFE revenues. For instance, initial efforts to organize pastoralists in gum and incense producing areas so that they can strengthen linkages with larger markets in Nazaret and Addis Ababa should be strongly encouraged. In addition, formal private sector investment can be encouraged to enhance production and marketing of the products.

Given the low prices that producers of gum and incense products currently receive due to the low quality of these products, investments should be made in fostering the improved knowledge of market standards and the uptake of improved production practices and quality standards at each stage of the production process (collection, drying, sifting, grading, packing, etc.). Skill training of collectors would not only increase efficiencies and quality but also preserve the ecosystem permitting a sustainable harvest.

## **MINING**

### *Introduce Improved Mining Technologies and Organize Laborers*

Methods should be sought for ensuring that existing gold and precious stone reserves—which are presently excavated by traditional means—are managed through the introduction and application of improved technologies. Such technologies can improve the overall productivity of excavation as well as the prices that laborers and cooperatives receive for their products. In addition, these more modern techniques help to preserve the environment and prevent or reduce degradation of the ecosystem.

Private investment in gold mining should continue to be encouraged and laborers should be organized into cooperatives or unions to facilitate market linkages and improve the productivity of mining activities. However, the institutional environment for private investors and cooperatives must be carefully managed to ensure laborers receive substantial benefits for their work.

# 5.0 KEY RECOMMENDATIONS

Detailed recommendations are contained in each preceding chapter corresponding to the livelihood zone. There are myriad recommendations for increasing labor demand and job creation in the selected woredas of this study. Most of these opportunities involve providing basic services to the rural sector to strengthen the rural-urban linkages such as improving infrastructure, access to credit and markets, and training of small entrepreneurs in the rural sector to improve their food security, incomes, and efficiencies of their NFE activities. In pursuing these private sector opportunities, many of these small entrepreneurs will probably abandon farming to embrace NFEs as they realize more stable incomes and improved living standards and quality of life.

Not many of these opportunities in this region are “scalable” from the sense of the existence of big companies employing a large number of wage earners. These jobs will not be generated until the rural sector attracts more private and public sector investment. The key to increasing sustainable rural employment is to promote increased investment by the private sector because the private sector understands market dynamics and is always seeking ways to satisfy them. The key private sector players now in the targeted areas of this study are the MSEs, yet many do not fully understand market demands nor are they aware of the potentials of the private sector, or have access to the support they need to flourish. These MSEs are prevalent throughout the study target area.

As is apparent from the above analyses, there are many crosscutting activities, constraints and recommendations in common across the livelihood zones. As a case in point, all livelihood zones in the targeted woredas have NFE activities that add value to livestock, employ MSE in construction and petty trading; all of which constitute major sources of non-farm activities and employment. The majority of the constraints, opportunities, and recommendations apply to all of the study target areas.

## 5.1 CROSSCUTTING RECOMMENDATIONS

This section provides the general recommendations for all livelihood zones visited in the course of this study. The following section contains more concrete, actionable recommendations that could be more rapidly implemented through existing FtF projects; however, if a project design is the objective, feasibility studies will be required.

### 5.1.1 ENCOURAGE ADDING VALUE TO LOCALLY PRODUCED CROPS

During the field study, the majority of locally produced crops, ranging from grains and coffee to livestock products, were shipped in a raw form out of local markets. The GOE should encourage adding value by NFEs to locally produced crops to increase job opportunities and rural revenue. This support can come in a variety of ways such as better access to credit, and improved market information exchange, infrastructure, and skill training. Through its AGP-AMDe and GRAD projects, USAID can provide technical assistance to add value, especially to targeted value chain crops such as coffee, honey, maize, sesame, and wheat.

### **5.1.2 PROVIDE TRAINING TO IMPROVE SKILLS**

NFE interventions should provide appropriate and sustained training on business management, accounting, marketing, and relevant technical skills for enhancing NFEs through local training structures (e.g., TVET, HABP, MSEs, DAs). Given the high potential to add value to many products produced in pastoralist and agro-pastoralist areas—such as livestock, milk products and gum and incense—trainings on improved technologies and the marketing of these products are of particular importance.

Zonal and woreda experts should be capacitated to provide effective monitoring and auditing services for cooperatives engaged in mining and other non-farm activities to ensure effective business management by the cooperatives.

### **5.1.3 STRENGTHEN RURAL-URBAN LINKAGES**

The key to strengthening the linkages between rural and urban areas is to improve access to markets, encouraging trade between the two areas and generating non-farm employment opportunities. A crosscutting solution to enhance these linkages is by improving infrastructure such as transport, power, and access to water which will provide sustainable support to rural employment in a number of ways. Providing farmers and brokers with roads and transport services to market reduces transportation costs and thereby transaction costs for consumers and traders in both the rural and urban markets. It also provides multiple job opportunities in construction, transportation repair and servicing, commerce, and the public and private sectors. Having access to markets increases investment potential in farms as well as NFEs, putting assets to productive use. Income generated in either enterprise increases diversification, thereby reducing risk, and increases food security.

### **5.1.4 INVEST IN PHYSICAL INFRASTRUCTURE AND TRANSPORTATION**

Public investments should be made in improving the physical transportation infrastructure as well as transportation options, such as improving roads and encouraging the supply of motorized transportation options to bring goods to markets more efficiently. Currently, the vast majority of livestock are transported on the hoof, and many goods are transported by donkey or on foot on poor quality roads; this increases the time taken for agriculture brokers to respond to market fluctuations, increases transportation and transaction costs, and reduces the weight of livestock during travel.

Public investments should also be made in irrigation, potable water, electricity and other important inputs for increasing the extent of NFEs in agro-pastoralist areas. Consistent electricity is a crucial requirement for the uptake of improved processing technologies and the establishment of many downstream processing activities. Improved irrigation infrastructure will enhance the productivity of farms in agro-pastoralist areas, thereby allowing agro-pastoralists to enhance NFEs associated with agricultural products. Improved access to potable water would allow more efficient use of household labor, decreasing the amount of time household members would need to devote to water fetching chores, permitting them to engage in revenue-generating activities.

### **5.1.5 ENCOURAGE PRIVATE INVESTMENT**

Due to information and coordination externalities that prevent private investors from recognizing and benefiting from potential investment opportunities, public authorities should promote private investment in industries and sectors in the areas with high growth potential. Opportunities exist across value chains and various NFE activities, according to the livelihood zone.

### **5.1.6 ENHANCE ACCESS TO START-UP CAPITAL AND FINANCIAL SERVICES**

The provision of financial services and start-up capital by MFIs, including savings and credit associations and other financial institutions, should be encouraged to facilitate creditworthy activities in the livelihood zones as they enhance the growth of NFEs, and increase the uptake of improved technologies. GOE

policies effecting credit should be examined, looking at neighboring countries for inspiration. For example, almost none of the NFEs encountered during the survey have checking accounts; money transfers are normally conducted in cash which is cumbersome given that the largest denomination in Ethiopia is 100 ETB. Cashless mobile telephone technology to transfer funds can be supported to ease the flow of financial transactions.

### **5.1.7 IMPROVE COORDINATION BETWEEN GOVERNMENT OFFICES**

There is a lack of coordination between government offices on all levels in a variety of ways. As one federal official said, the levels of coordination “are not well institutionalized.” Ministry of Agriculture DAs focus on farm activities and are not well trained in adding value or supporting NFEs. MSED0 works under HABP but their personnel also lack skills to support NFEs on the kebele or “the grass roots level.” In NFE support programs, MSED0, HABP, MFIs, and DAs are all supposed to coordinate activities at kebele, woreda, regional, zonal, and national levels—yet the officials the team talked to complain of miscommunication and confusion. This is impacting PSNP recipients as well as most existing and potential NFEs in the rural sector. In addition, a wide range of goods and services (e.g., construction material, desks for schools, and gabions for erosion control) are often purchased by local government offices from outside of the locality, even when they can be sourced locally. Hence, a strategy for improving the coordination of supply and demand of locally produced goods between relevant local organizations should be designed and implemented.

### **5.1.8 IMPROVE ACCESS TO MARKET INFORMATION**

To address the market information asymmetry between commodity suppliers and buyers in the various value chains, public investments should be made in improving access to market information for the public where market information is clearly communicated to all interested parties, or through the strengthening of information communications technology (especially mobile phones). Woredas with the highest potentials for increasing various marketing activities should be the primary targets of these investments and the woreda MOA office should have overall responsibility for the collection and distribution of relevant market data to the woreda residents.

### **5.1.9 ENCOURAGE ENVIRONMENTAL PROTECTION**

The GOE should continue to support protection of the environment through its various programs such as protection of the watershed through control of livestock grazing, construction of watering stations, terracing, contour plowing, restrictions on slashing and burning, tree planting, cost-efficient and environmental safe uses of agricultural inputs, improved charcoal stoves, etc. The environmental awareness should continue to be promoted at the earliest levels in schools and through woreda food security task forces.

### **5.1.10 SUPPORT THE DEVELOPMENT OF GROUPS WITH COMMON PURPOSES**

The GOE is encouraging the development of groups to take advantage of economies of scale. This should continue but the government would achieve more sustainable results if these groups were organized for common purposes, such as milk producers, grain traders, and even metal workers as is evidenced by the MSED0 cluster approach in Tigray. This support would be facilitated through the provision of much-needed skill trainings and credit facilities.

### **5.1.11 INTRODUCE IMPROVED TECHNOLOGIES**

The survey team members observed inefficient traditional technologies still in use across the study zones. Although this may employ a number of people, many of these technologies are ancient, inefficient, and dangerous to the environment. Examples include animal traction, hand spinning of cotton, artisanal mining, milk processing, cooking on firewood, etc. These traditional technologies are hundreds or

thousands of years old, carry inherent health and economic risks, and are inappropriate for efficient use of household labor and revenue generation. Interviewees are interested in investing in labor-saving technologies as they appreciate their income-generation value. TVET representatives said they have developed more appropriate, labor-saving technologies (e.g., spinning wheels, improved looms for weaving, simple machines for making concrete blocks for construction, improved tools for blacksmiths, improved charcoal stoves, foot pumps, etc.). TVET supports the use of small machines to better use time and energy of the workers, freeing them up to make money engaging in further NFE activities. For example, more machines mean more skilled workers to manufacture, maintain, and repair the machines, creating new sources of employment.

Encouragement in such low cost and appropriate technologies can improve the overall productivity of the rural sector as well as provide myriad job opportunities for the rural poor while providing them with sustainable sources of income. In addition, these more modern techniques help to preserve the environment and prevent or reduce degradation of the ecosystem.

## 5.2 THE WAY FORWARD

There are a number of recommendations above that are related to infrastructure which will take a longer time to achieve. This is especially true of government sector investments such as expansion of the electric grid, installation of potable water, or construction of farm to market roads and irrigation canals. It is also true for attracting private sector investors, e.g., improving tourist infrastructure to attract high-value tourists and large-scale investments to develop commercial farms. In addition, changing GOE policies takes time (e.g., redesigning HABP to provide programs to extend its credit program to non-heads of household). We recommend the following as “best-bet” activities to provide actionable interventions to strengthen the vitality, income generation, and job creation of the non-farm economy, especially as it involves current and planned FtF programs:

- Adding value to locally produced crops (agro-processing),
- Improving skills training for small and micro-entrepreneurs,
- Facilitating access to credit and other financial services,
- Improving access to market information,
- Supporting the livestock value chain, and
- Introducing improved appropriate technologies.

### 5.2.1 AGRO-PROCESSING

Each zonal activity chapter above reports on myriad potential agro-processing opportunities related to its livelihood zone. One of the principles of agro-processing is to sensitize the producer and broker to market demands, especially *quality differentiated prices* (i.e., markets will pay more for products that best meet market demands).

Through its FtF-supported programs, USAID can build upon the comparative advantages of several of the AGP-AMDe and GRAD woredas in this study to promote IGAs, such as adding value to local produce by NFEs, thereby increasing employment and improving food security. By its grassroots development of NFE business plans, the GRAD project in Alamata, for example, will provide its beneficiaries with better access to credit, improved market information exchange, and skill training appropriate to address market demands in a variety of value chains. As Alamata has a large irrigated perimeter, this support could entail assistance in the horticultural value chain ranging from custom plowing to market price information sharing. The AGP-AMDe project will build upon opportunities in the target value chains of wheat, maize, honey, sesame, chickpea, and coffee. Processing of wheat, chickpeas, and maize into flour and the pressing of sesames into oil can be expanded using low-cost machinery, increasing small-scale NFE employment and income generation.

## **POTENTIAL NFE ACTIVITIES TO ADD VALUE TO AGRICULTURAL PRODUCTS/AGRO-PROCESSING**

- Drying produce to better preserve and meet market demands—cereals, coffee, fish, etc.;
- Cleaning produce to better preserve and meet market demands—cereals, coffee, eggs, meat, etc.;
- Grading produce—markets pay premiums for quality (i.e., price and market differentiation);
- Storing produce to preserve for better market conditions—cereals, coffee, hay and straw, etc.; and
- Transforming produce to meet market demands—processing and packaging of farm produce for retail sale: ruminant and poultry meat, charcoal, butter, cheese, honey, incense, etc.

### **5.2.2 IMPROVING SKILLS TRAINING FOR MSEs**

During field interviews, many MSE said they lacked training to improve the efficiency of their NFEs (e.g., women are still spinning cotton by hand, weavers use ancient looms designs, petty traders separate and sort grains and pulses by hand, animal fattening operations are unsure of feed formulae to fatten animals more efficiently, brick makers use old molds, blacksmiths use traditional tools, small shopkeepers need modern business management techniques, etc.). Donors could quickly address these NFE demands through existing programs and projects using off-the-shelf extension packages to teach interested MSEs on ways to improve efficiencies and revenue generation. As discussed, TVET has developed improved but appropriate technologies to improve NFE efficiencies. The MOA has developed numerous extension packages to teach NFEs how to improve livestock fattening operations through balanced nutrition and improved animal health. The MOA DAs also have extension bulletins addressing ways to improve a variety of agro-processing systems, including informing NFEs on the value of quality-based price differentiation. Working with several donor projects, HABP is developing training modules to address grassroots needs of MSE in a variety of subjects, including business plan development, bookkeeping, inventory control, etc. By focusing on meeting the skill training needs and wants of small NFEs through existing programs and projects, donors and the GOE could quickly provide the necessary training and achieve quick impacts on improving NFE efficiencies, creating jobs and generating more income in the rural sector.

### **5.2.3 ENHANCING ACCESS TO CREDIT AND OTHER FINANCIAL SERVICES**

Lengthy requirements and delays in obtaining loans and the lack of adequate loan amounts to meet small private sector needs were crosscutting complaints among NFEs in all 10 woredas surveyed for this report. This information was confirmed during discussions with GOE and MFI representatives at the woreda, regional, zonal, and national levels. Through its various FtF projects, USAID could increase access to financial services to small non-farm entrepreneurs. GRAD proposes to make credit more accessible by targeting agricultural value chains such as livestock, including poultry and animal fattening. It will encourage expatriate capitalists to invest in the poultry industry in Alamata. World Vision in Alamata is designing IGAs to provide better access to credit, targeting women, with a special focus on providing credit for women doing petty trade. An independent feasibility analysis is needed to ascertain the cost-effectiveness of various interventions, beyond what has been done by MFIs and various GOE organizations.

## **POTENTIAL NFE QUICK IMPACT ACTIVITIES WITH IMPROVED ACCESS TO FINANCIAL SERVICES**

### *Agriculture Sector*

- Petty traders of commodities: cattle, sheep and goat fattening; aggregation, cleaning and sales of cereals and pulses, etc.; and
- Input providers: tree or plant nurseries, improved seed production, tree pruning and grafting, veterinary services, pesticide/herbicide spraying, custom plowing, land preparation, custom harvesting, pick up and grading of production, marketing of production, grain milling, coffee de-hulling, roasting and trading, feed formulation for livestock, livestock products transformation [dairy, butchery, egg grading, etc.].

### *Rural Non-Agriculture Sector*

- General service sectors: small shop retailing, tailoring, hair stylists, computer operators and repair services, bakery, catering, shopkeeping, transportation, general commerce, local beer making, etc.
- Tourist-based service sectors: hotel services, food processing, beverage making, handicrafts, baskets, weaving, pottery, sculptures, etc.
- Construction sector:
  - Groups formed to provide unskilled labor: earth moving and grading, painting, well digging; and
  - Vocational training for semi-skilled labor: welding, equipment operation and repair, iron work, carpentry, masonry, plumbing, electrical, etc.

#### **5.2.4 IMPROVING MARKET INFORMATION**

By working through its FtF projects such as GRAD and AGP-AMDe, USAID has the mechanisms in place to widely disseminate accurate and timely market information to producers and non-farm entrepreneurs. The team recommends building up the capacity of the woreda MOA office to collect and disseminate market prices and market demands for product quality. AGP and GRAD can work at the woreda level to assist in collecting and posting this data in accessible locations and in disseminating the information as a part of each project's post-harvest extension packages. In addition, in its support of business development services, GRAD will be providing business planning technical support to small entrepreneurs who will invest their time and money in NFEs such as grain trading and cattle fattening, both of which are dependent on access to accurate market information.

#### **5.2.5 SUPPORTING LIVESTOCK VALUE CHAIN**

The livestock value chain in particular could provide a quick impact to employment, food security, and income generation throughout the study area, as livestock are important in all livelihood zones. See Annex H for details.

The AGP-AMDe, FEED, and GRAD implementing teams—in coordination with other donor activity teams in the livestock sector—provide integrated support to the livestock value chain. A quick impact on revenue generation to NFEs involved in small-scale livestock fattening and general livestock product trading would be the development of a common, openly shared market information system. This support to the NFEs should include market information for livestock inputs and outputs available for purchase or sale in the region, such as the Mekele purchase prices for feeder cattle and sales prices of livestock feed.

#### **5.2.6 INTRODUCING IMPROVED APPROPRIATE TECHNOLOGIES**

Many traditional technologies are inappropriate for NFE development. Their use encourages the status quo and discourages investment in more efficient, labor saving, cost-efficient technology, which also generates IGAs. By working with TVET, USAID's FtF projects, such as GRAD and AGP-AMDe, could introduce new low-cost technologies that would increase income generation among NFEs. TVET-trained DAs could be exposed to the various locally available technologies to save labor for farmers as well as NFEs living in the rural sector. Examples include rototillers, simple locally manufactured machinery for cleaning grains; shelling maize; de-hulling coffee, groundnuts and sorghum; threshing wheat and other grains; pressing seed oil, etc. More of these machines mean more skilled workers in the NFE sector to manufacture, maintain, and repair the machines, creating new sources of employment. Such technologies can improve the overall productivity of the rural sector and provide sustainable sources of income.

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# ANNEX B. STATEMENT OF WORK

## **Analysis of Opportunities for Rural Non-Farm Enterprise Development and Job Creation in Chronically Food Insecure Areas of Ethiopia**

### **I. Background**

Chronic poverty and food insecurity remain pervasive in much of Ethiopia. Despite record rates of economic growth in recent years, the depth of poverty in rural Ethiopia remains alarming. Thirty-eight percent of rural households still live below the food poverty line. Most of these households are engaged in subsistence farming on small plots of degraded land (0.5 hectare and less per Household) that are subject to weather fluctuations. Rural livelihoods in Ethiopia remain extremely vulnerable to shocks. There has been a general decline in per capita food production as high population growth rates have contributed to a decline in farm sizes, while environmental degradation has increased. Rural landless and near-landless households depend heavily on non-farm income sources.

Even though agriculture remains the main source of income and employment in most rural areas of Ethiopia, the importance of non-farm income is undeniable. The non-farm economy includes all rural economic activity outside of agriculture: self-employment, wage employment, full-time, part-time, formal, informal, seasonal, and episodic non-farm production. Despite the persistent image of Africa as a continent of “subsistence farmers,” non-farm sources may already account for as much as 40-45% of average household income and seem to be growing in importance (Bryceson and Jamal, 1997; Reardon, 1997; Little et al., 2001).

Ethiopia is one of the least urbanized countries in the world with an urban population of 15%. Linkages between urban and rural areas are very weak. The country’s agro-industrial sector, which could create labor opportunities for farm households during the agricultural slack season, is under-developed. Without well-developed urban areas linked to national and international markets, sustainable agricultural system development is unattainable. Given the pressure on agricultural land, urban centers serve as critical links in the intensification of agriculture by creating markets and providing opportunities for diversification and non-farm employment.

The New Coalition for Food Security, which was formed in 2003, was a landmark in the evolution of approaches to address food insecurity in Ethiopia. Since 2005, the Government of Ethiopia (GoE), in collaboration with Donors, has been implementing the Food Security Programme (FSP) to move households into food security.

The core components of the FSP are: the Productive Safety Net Programme (PSNP), Household Asset Building Programme (HABP), Complementary Community Investments and Resettlement. These components of the FSP are in line with the GoE’s Growth and Transformation Plan (GTP) and the Comprehensive African Agricultural Development Program, which are designed to bring sustained food security in Ethiopia.

Well-coordinated concerted efforts in promoting non-agricultural activities are required in order to bring about income diversification for resource-poor households. Proposed interventions could include: 1) supporting alternative or supplementary income sources from non-farm activities; 2) increasing market

effectiveness, 3) providing credit services through micro-finance institutions; 4) the establishment of marketing cooperatives to increase sale prices; and 5) the provision of training.

USAID/Ethiopia's Feed the Future (FtF) Strategy **Core Component 2 “Linking the Vulnerable to Market”** is to support the development of sustainable livelihoods among chronically food insecure households in targeted *woredas*, in order to spur their graduation from PSNP and to strengthening the earning capacity of households from both their own production and non-farm income-generating activities. The PSNP/HABP (FSP) requires that beneficiaries graduate into sustainable livelihoods that feature a range of integrated farm and non-farm enterprises.

**Strengthening rural-urban linkages and create economic linkages between the chronically food insecure regions of Ethiopia and the Productive Ethiopia through non-farm employment are critical activities:**

- **Development of urban centers:** urbanization is crucial to ease the pressure on rural lands, absorb excess/slack labor force due to population growth, and contributes to the growth of the agricultural sector.
- **Help the poor to fill the food gap:** food insecurity results from the mismatch between inconsistent farm income streams and continuous consumption requirements of households.
- **Farm investment:** finance the purchase of farm inputs necessary to increase food production.
- **Allow efficient use of household labor:** labor issues arise due to the seasonal nature of agricultural work.
- **Risk reduction:** income derived from agriculture is inherently high-risk due to climatic factors, price fluctuations, pests, and diseases.
- **Asset improvement:** put assets to productive use. Cash income obtained from diversification may be used to invest in, and improve the quality of productive assets.
- **Environmental benefits:** potential environmental benefits could be realized through investments to improve the quality of the natural resource base. The potential also exists to reduce the time spent exploiting natural resources.
- **Gender benefits:** diversification could improve the independent income-generating capabilities of women, which, in turn, would likely improve the care and nutritional status of children since a high proportion of cash income in the hands of women tends to be spent on family welfare.

## II. Objective

USAID is interested in conducting an analytical study of supply and demand in labor markets in both selected chronically food insecure areas currently covered by the PSNP and neighboring food secure areas. The study will also investigate opportunities for increasing the labor demand or creating jobs, including investments in non-farm enterprises, the impact of rural-urban linkages in the development of non-farm interventions, and creating or strengthening linkages between historically food insecure and food secure (or productive areas). Finally, the study should identify the best pathways or key stimuli to create job opportunities at scale for chronically food insecure households in Productive Safety Net Program (PSNP) *woredas*.

## III. Statement of Work

This procurement consists of hiring a contractor to conduct a study analyzing the non-farm activities household engaged and the supply and demand in labor markets in selected chronically food insecure and food secure areas in order to assess opportunities for improving rural-urban linkages, fostering job-creation, and attracting investment. The study will analyze, but not limited to, the supply and demand in the labor market, identifying opportunities for increasing labor demand and job growth, and ascertaining best-bet pathways and key stimuli to create employment growth at scale in targeted PSNP *woredas*.

### **The types of questions this analysis would answer:**

- What is the scope/extent of non-farm livelihoods in the study area?
- What key factors account for weak rural-urban linkages in Ethiopia?
- Where and what types of key interventions should be designed that could influence large-scale job creation and opportunities for interdependent relationships between enterprises in order to create market dynamism? What generic strategies could be used to promote non-farm investment?
- Where in the value chains/commodity subsectors should investors (NGOs, private firms, government) focus their efforts to bring about the most feasible and effective means of promoting rural nonfarm activity?
- Size and scope of the labor market in the non-farm employment? What is the best investment approach to promote the non-farm labor market?
- How does nearby urban development affect non-farm activities and the labor market?
- What are the existing dynamic economic bases and the unexploited potential in these areas that could promote non-farm enterprises?
- Are there workforce development investments (e.g. vocational training in processing plant machinery operation) that could be made to increase the job opportunities of the target labor pool?
- What are the key cost-effective non-farm interventions that could trigger up- or down-stream potentials? The small size of many rural non-farm enterprises, particularly those accessible to the rural poor, results in both high transaction costs relative to larger firms and low absolute gains for small enterprises.
- How strongly women engage in non-farm activities? How independent are women in their income-generating capabilities, which, in turn, would likely improve the care and nutritional status of children? How could their engagement be diversified and improved?
- Are there basic enabling environments in the specified areas for large scale non- farm investments? Is basic infrastructure (roads, power, and communications) in place or under development to attract investors? Does greater physical access to market consistently improve non-farm earnings?
- How would the establishment of large firms affect and or benefit the existence of small non-farm enterprises?
- What are possible job-creation links to other USAID programs and GoE programs in economic growth?
- What are the best ways to link the HABP microcredit component with agribusiness market expansion projects in order to stimulate rural non-farm economies?

### **IV. Requirements**

Due to the complex and intensive nature of such a study, the considerable variability of local economies within Ethiopia, and the limited resources available to conduct the study, the consultant would be required at the outset to advise on the selection of best-bet, sufficient woreda sample size, for the study—to

include woredas from the highland pastoral, and agro-pastoral areas—which would enable to derive substantiated conclusion/report.

The consultant would work with Regional governments, USAID and other USAID-funded projects like Productive Safety Net Program (PSNP)/Multi-Year Annual Program (MAYP) [sic], PSNP PLUS/Graduation with Resilience to Achieve Sustainable Development (GRAD) to select those PSNP woredas and associated neighboring food secure areas that offer the most promise for synthesizing a best-bet approach in investments for rural non-farm enterprise development and job creation. In addition to the final report, the consultant will draft a concept note that designs possible program strategy for non-farm investment.

The period of performance for this work is 3 months. The completion data of this task order is June 15, 2012.<sup>5</sup>

## **V. Deliverables and Duration**

The Contractor will deliver a final report (max. 45 pages) to USAID and will be expected to perform the following:

1. The contractor submits a work plan and location selection analysis and the recommended sites for final approval by COR on April 6, 2012.
2. By May 15, 2012 the contractor submits draft report to COR for comment and conduct presentation on the preliminary findings according to the proposed outline of draft report to USAID.
3. USAID/Ethiopia and other relevant stakeholders will provide comments on the draft within ten working days.<sup>6</sup>
4. A revised and final report is due to USAID/Ethiopia on June 15, 2012. Five bound copies and an electronic copy (Microsoft Word and Excel) of the report with its annexes should also be submitted.

## **VI. Links to Relevant USAID and non-USAID Projects**

Study would be linked to other USAID-funded projects like PSNP Plus/GRAD, and Pastoral Livelihoods Initiatives (PLI) II to identify and select PSNP woredas and associated neighboring food secure areas that offer the most promise for synthesizing a best-bet approach in investments for rural non-farm enterprise development and job creation.

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<sup>5</sup> The dates above reflect changes approved by USAID under the Modification of Contract Amendment/Modification No. 1 dated May 30, 2012.

<sup>6</sup> Additional comments were received from USAID/Ethiopia and other relevant stakeholders on July 10, 2012, and responses to those comments are included in the revised Final Report as Annex J.

# ANNEX C. WOREDA SELECTION ANALYSIS

Region	Woreda	Current Program					Livelihood Zone	Location Selection Analysis
		AGP	GRAD	PSNP	HABP	Title II		
Tigray	Alamata	X	X	X	X	X	<ul style="list-style-type: none"> <li>Raya Valley Sorghum and Teff</li> <li>Tsirare Catchment</li> </ul>	<p>In this woreda there are 2 livelihood zones which extend across 3 neighboring woredas (Ofa, Endamehoni and Alaje). With the exception of Alaje woreda, the 2 neighboring woredas have been implementing all programs (AGP, GRAD, PSNP, HABP and Title II). In addition, Alamata is bordering with 4 of the PSNP woredas from Amhara regional states including Kobo, Gidan, Gaza Gibla and Sekota.</p> <p>The potential non-farm activities in this woreda include salt extraction during the dry season, employment opportunity as “camel drivers,” and seasonal labor.</p>
	Tselemti			X	X	X	<ul style="list-style-type: none"> <li>Adyabo lowland</li> <li>Middle Tekeze</li> </ul>	<p>This woreda has 2 livelihood zones. The Middle Tekeze livelihood zone is common to 5 woredas. In addition, this woreda neighbors Kafta Humera woreda, which is known for the production of sesame and sorghum. Large-scale farms provide demand for labor.</p>

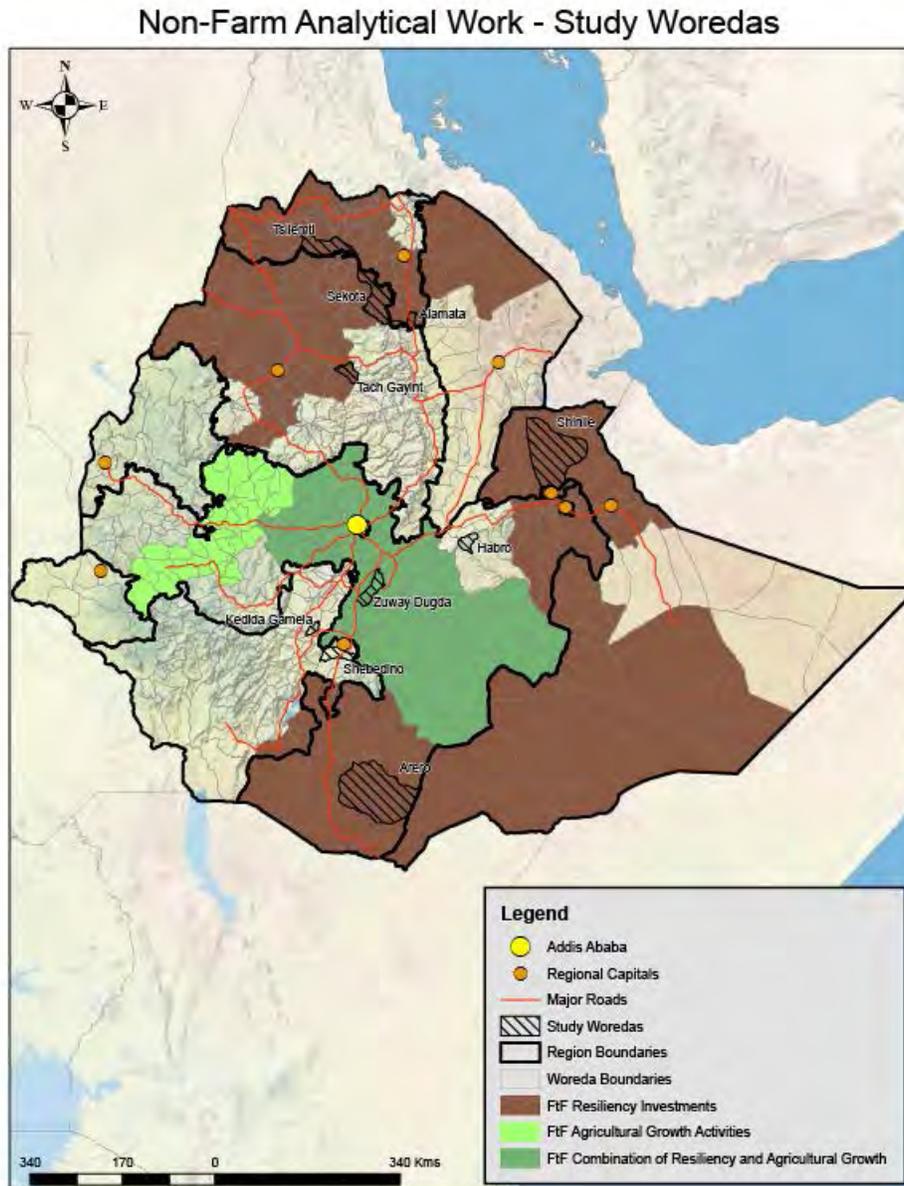
Region	Woreda	Current Program					Livelihood Zone	Location Selection Analysis
		AGP	GRAD	PSNP	HABP	Title II		
Amhara	Tach Gayint			X	X	X	<ul style="list-style-type: none"> <li>Abay Beshilo River Basin (AAB)</li> <li>Ababy Tekeze Watershed (ATW)</li> </ul>	This woreda has two livelihood zones including AAB and ATW. AAB livelihood zone is common to 8 woredas; while ATW livelihood zone shared by large number households across 20 woredas in the Amhara Region, which are a mix of food secure and food insecure woredas. In addition, this woreda is in close proximity to one of the AGP woredas Lya Gayint. There is significant labor movement to Metema and Humera during the summer for harvesting sesame.
	Sekota			X	X	X	<ul style="list-style-type: none"> <li>Tekeze Lowland Sorghum and Goat (TSG)</li> <li>North East Woinadega Mixed Cereal (NMC)</li> </ul>	<p>In this woreda there are 2 livelihood zones including TSG and NMC. The TSG livelihood system is common for households residing across 11 woredas including (Ebenat, E. Belesa, W. Belesa, Wagera, Janamora, Sahla, Zekuala, Abergel, Lay Gayint, Dabat and Debark), while the NMC livelihood system is practiced by households in 6 woredas including Bugna, Lasta, Gidan, Gaza Gibla, Dehana and Abergele. In addition, this woreda borders Alamata woreda (AGP and GRAD) in Tigray Region.</p> <p>Sekota town serves as the woreda and zonal capital and significant volumes of commerce are exchanged with the highlands, with noticeable rural – urban linkage.</p>

Region	Woreda	Current Program				Title II	Livelihood Zone	Location Selection Analysis
		AGP	GRAD	PSNP	HABP			
Oromia	Habro			X	X		<ul style="list-style-type: none"> <li>Sorghum Maize and Chat (SMC)</li> <li>Wheat Barley and Potato (WBP)</li> </ul>	<p>This woreda has 2 unique livelihood systems including Sorghum, Maize and Chat (SMC) and Wheat Barley and Potato (WBP). The 2 livelihood zones are one of the most common livelihood zones in Oromia. In line with this, SMC is common in 7 woredas while WBP is common in 17 woredas.</p> <p>The households depend on agriculture as a source of livelihood supplemented by other income generating activities such as trade and casual labor. The woreda is densely populated and cultivation is by using hand hoes.</p> <p>The woreda is accessible to major urban centers such as Harar and Dire Dawa, and also accessible to highways and the railway radiating from Addis Ababa.</p>
	Zuway Dugda		X	X	X		Rift valley Maize and Haricot bean	<p>This woreda has 1 livelihood zone which is common in 16 neighboring woredas. The woreda is located few kilometers off the main road to Hawassa.</p> <p>The woreda is located in the central Oromia and Central Rift Valley Region.</p> <p>The agro-ecology is characterized as lowland.</p> <p>Salt-mining, fishing and hot springs as important potential non-farm activities.</p> <p>Agriculture is the principal livelihood source of both crops and livestock. Crop production is rain-fed and the major crops growing in the area are maize, haricot bean and teff. Maize is the staple food. Oxen are used for traction.</p> <p>Major markets are located in the neighboring urban centers of</p>

Region	Woreda	Current Program					Livelihood Zone	Location Selection Analysis
		AGP	GRAD	PSNP	HABP	Title II		
	Arero			X	X		<ul style="list-style-type: none"> <li>Southern Agro-pastoral (OAP)</li> <li>Borena-Guji Cattle Pastoral (BGP)</li> </ul>	<p>Shashemene, Ziway, Meki and Adama.</p> <p>The 2 livelihood zones extend to the neighboring woredas. The BGP livelihood zone extends to 12 woredas while the OAP livelihood zone extends to 14 woredas. Principally households depend on livestock mainly cattle, sheep and goats. Water is a scarce resource. It follows that migration in search of water and pasture is the most noticeable coping mechanism.</p> <p>Households depend on livestock as the source of livelihood and income and are supplemented by crops. Dairy and dairy derivatives are primarily produced for household consumption and the excess allocated for sale and which is the domain of women.</p>
SNNP	Kedida Gamela			X	X		<ul style="list-style-type: none"> <li>Badewacho-Alaba Maize</li> <li>Kedida Badewacheo Coffee (KBC)</li> <li>Hadiya – Kembata Cereal</li> </ul>	<p>The 3 livelihood zones that exist in this woreda extend to 9 of the neighboring woredas.</p> <p>Households practice mixed farming system of both crop and livestock production. The woreda is one of the densely populated in the region with the resulting small land holding. Some of the households cultivate perennial enset and coffee; the former is used as staple food and the latter used as cash crop and most of the produce allocated for sale.</p> <p>Households in the better off and middle wealth groups earn additional significant income from sales of fattened beef and general cattle, and petty trade. The poor and very poor depend on income obtained from casual labor in local areas or seasonally migrate to other labor demanding farms and urban areas.</p>

Region	Woreda	Current Program					Livelihood Zone	Location Selection Analysis
		AGP	GRAD	PSNP	HABP	Title II		
	Shebedino	X	X	X	X	X	<ul style="list-style-type: none"> <li>• Sidama Coffee</li> <li>• Sidama Gedio Highland Enset and Barley</li> </ul>	Although this woreda has 2 livelihood zones, the Sidama coffee livelihood is shared by households in 9 woredas. This livelihood system attracts seasonal migrant workers from neighboring livelihood zones for coffee harvesting and processing, as these are labor-intensive operations.
Somali	Shinile			X	X	X	<ul style="list-style-type: none"> <li>• Pastoral Livelihood</li> <li>• Agro-pastoral Livelihood</li> </ul>	<p>The pastoral and agro-pastoral livelihood zones are present with the opportunity to have the contrasting evidence. Increasing number of households pursue irrigation induced agro-pastoral systems.</p> <p>Location is in close proximity to Dire Dawa as a market destination of livestock, crops and vegetables. Studies have also evidenced the increasing influence of the town in affecting lifestyles with enhanced rural-urban linkages and high influx of rural people to the town. Households keep shoats, camel and cattle and cultivate crops mainly sorghum and vegetables.</p>

# ANNEX D. MAP OF STUDY WOREDAS



# ANNEX E. LIST OF PERSONS MET AND INTERVIEWED

## ADDIS ABABA

Dr. Mulugeta Berhanu	Liaison and Focal Person for USAID programs	REST
Mohammed Kebede	Partnerships and Off-farm Livelihoods Advisor	CARE
Jay Banjade	GRAD Chief of Party	CARE
Haile Dolango	GRAD Coordinator	Catholic Relief Services
Ahmed Mohammed	Rural Livelihoods Advisor	Canadian International Development Agency-ECCO
Asfaw Abebe	Director of Regional Capacity Building	FEMSEDA
Laketch Mikael Imru	Senior Rural Development Specialist	The World Bank
Tim Durgan	Chief of Party, AMDc	ACDI/VOCA
John 'Bick' Riley	Country Representative and COP, FEED	ACDI/VOCA
Mr. Yonise Hassan	HABP Program Coordinator	FFSO
Dr. Danganchew Mamen	Technical Advisor	FFSO
Mark Carrato	Deputy Office Chief, Economic Growth & Transformation	USAID
Cullen Hughes	Team Leader FtF and Agriculture Development Office, Economic Growth and Transformation	USAID

## TIGRAY REGION

G/Giorigis Tsadik	Agriculture and rural Development Office Head	Tselemti
Desit Geberu	Micro and Small Enterprise Development	Tselemti
Hadigo Tesfayie	Cooperative Promotion Office	Tselemti
Haile Tesfahun	HABP	Tselemti
Berhe Kassawi	Shoe repairer	Maytseberi
Giday Asssefa	Kebele Chairman	Mayhami
Embaye Kiros	Agricultural Extension Agent	Maytseberi
Abebe Giday	Industry Extension Agent	Maytseberi
Nigussie Mesfine	TVET Extension Agent	Maytseberi
Alem Tadesse	Merchandise Trader	Maytseberi
Rehima Ada	Embaba Food processing Cooperative	Maytseberi
Enanu Twledem	Embaba Food processing Cooperative	Maytseberi
Muluwork Kidanemariam	President, Tigray Regional Chamber of Commerce and Sectoral Association	Mekele
Mulu Andualem	Secretary General, Tigray Regional Chamber of Commerce and Sectoral Association	Mekele
Sahleselassie Teka	Head, Tigray Region, TVET Bureau	Mekele

Tilahun Tarke Weldu,	Head, Tigray Region Trade, Industry and Urban Development Bureau	Mekele
Taju Mohammed	Head, Mekele Micro and Small Enterprise Development Office	Mekele
Zeru Asfeha	Marketing Process Owner, Mekel Micro and Small Enterprise Development Office	Mekele
Assefa Tegegn	Head, Mekele, Trade, Industry and Urban Development Bureau	Mekele
Gidey Tesehayie	President, Mekele Women Entrepreneurs Association	Mekele
Atkilit	G/Manger, Dedebit Saving and Credit Associations (DSCI)	Mekele

## AMHARA REGION

Aweraris Chanie	Head, Head, WADO and Chairman, WFSTF,	Tach Gayint
Ato Assefa Gete	Head, Livestock Development Process, WADO	Tach Gayint
Asechalew Wendmagegn	Head, CPO, WADO	Tach Gayint
Mesfin Aleme	Development Agent	Tach Gayint
Berhanie Negash Tegign	Private Businessman	Tach Gayint
Ebabyte Banteder	MSEPO	Tach Gayint
Teraw Abate	MSEPO	Tach Gayint
Demelash Werku	MSEPO	Tach Gayint
Getenet Tataw	MSEPO	Tach Gayint
Kefyalew Gelaw	MSEPO	Tach Gayint
Ayichesh Wendifera	MSEPO	Tach Gayint
Chalie Fissaha	MSEPO	Tach Gayint
Beletech Takele	MSEPO	Tach Gayint
Yabibal Addis	Head REMSDA	Bahir Dar
Getachew Ayenew	President ACCSA	Bahir Dar
Tilahun Arega	Deputy Head, Amhara TVET Bureau	Bahir Dar
Nigist Alemayehu	President, Amhara Women Entrepreneurs Association	Bahir Dar
Tilahun Ayalew	G/Manger , Amhara Women Entrepreneurs Association	Bahir Dar
Solomon Kassaw	Woreda Director of Tourism	Tach Gayint
Tilahun Anega Kassa,	Deputy Director, TVET	Bahir Dar
Ato Endalkachew Wolde	Coordinator, Woreda Food Security Work Process	Maylomi kebele, Sekota woreda
Ato Ayalew Teshome,	Development Agent	Maylomi kebele, Sekota woreda
Ato Mebratu Asefa,	Model Household Head and Trader of Artisanal Products and Raw materials	Maylomi kebele, Sekota woreda
Yemiarew Asefa	Deputy Coordinator of the Woreda Food Security Work Process.	Maylomi kebele, Sekota woreda
W/ro Belaynesh Ageze,	Member of the Woreda Food Security Task Force	Maylomi kebele, Sekota woreda
Mr. Nigisu Abera	Maylomi kebele Chairman	Maylomi kebele, Sekota woreda
Mr. Adugn Benenu	Maylomi EPRDF Chairman	Maylomi kebele, Sekota woreda
Mrs. Debesu Chirkos	Maylomi kebele Women's Affairs officer	Maylomi kebele, Sekota woreda
Mr Tesfaye Teshome	Manager, Sekota Agriculture and Rural Development Office	Sekota town

Ato Aklilu	Head, Woreda MSED O Sekota	Sekota town
Mr. Mulugeta Negate	Food-related products officer, Municipal MSE Development Office Sekota	Sekota town
Ato Abebe Belete,	Assistant Dean, Technical and Vocational Education and Training Institute	Sekota town
Ato Indalkachew	Food Security Coordinator	Sekota woreda
Abdi Teshome	Development Agent	Hamusit kebele Sekota woreda
Dejen Temare	Development Agent	Hamusit kebele Sekota woreda
Melkam Abebaw	Development Agent	Hamusit kebele Sekota woreda
Kes Alamirew Tsegaw	Model Farmer	Hamusit kebele Sekota woreda

## OROMIA REGION

Ato Alemayehu Hilemichial	Planning Expert in the Pastoralist Office	<b>Arero woreda</b>
At Dereje Hirpo	HABP Agri-business Development officer	Arero woreda
Ato Dadi Waqo	Save the Children US, Satellite Office Acting Coordinator	Arero woreda
Ato Hussien Boneya	Secretary of Sochi Gudina Gum and Incense Cooperative, Wachille Woreda	Wachille woreda
Ato Billalo Guye	Livestock Trader, Alona Woreda	Alona woreda
Ato Aberra Abebe	Project Officer, Livelihood and Building Resiliency, Action For Development (AFD) Field Coordination Office	Arero woreda
Ato Bogale Mulugeta	Micro and Small Enterprise Development office, Woreda Head	Arero woreda
Ato Jarso Gerbecha	Natural Resources Extension Agent	Arero woreda
Ato Dube Gobena	Saving and cooperatives promoter, Borena Zonal Pastoral office	Moyale
Ato Boda Gemata	Micro and Small Enterprise Development Office, Borena zonal expert	Moyale
Ato Jatani Warrio	Woreda Cooperative Head	Arero woreda
Ato Mengistu Abera	Zonal PSNP focal person	Moyale
Ato Derara Goba	Zonal Investment office	Moyale
Wagane Negawo	Woreda Enterprise Scale-Up Expert	Arero woreda
Abshiiro Ibrahim	Assistant Head Veterinary	Arero woreda
Mammed Agno	Woreda, Head, Food Security Technical Assistant	Arero woreda
Mamush Biru	Cooperative organizing expert, Small and micro enterprise office	Habro woreda
Amhed Hassen	Head of co-operative office, MOA	Habro woreda
Tzita Lema	Mulit-purpose co-operative organizer, MOA	Habro woreda
Fera Asres	Woreda PSNP technical assistant	Habro woreda
Minihal Yilma	Woreda HABP M&E Expert	Habro woreda
Tigist Aseged	Acting Head of Woreda MOA	Habro woreda
Kebed Geba	Zonal HABP expert	West Haraghe
Ato Tadesse Rorissa	Zuway Dugda Food Security Process Owner	Zuway Dugda
Ato Nigussie Kursa	Head, Zuway Dugda Agriculture and Rural Development	Zuway Dugda
Ato Worku Gaddisa	Zuway Dugda HABP Promoter	Zuway Dugda
Ato Habtamu Baruda	Zuway Dugda HABP Promoter	Zuway Dugda

Ato Mohammed Aliyi	Zuway Dugda Coop Auditor	Zuway Dugda
Ato Kampucha Mohammed	Zuway Dugda Coop Promoter	Zuway Dugda
Mr. Ahmad Badaso	WALQO Ogolcho Branch Manager	Zuway Dugda
Mr. Muluken Tesfaye	Woreda Market and Extension Services Officer	Zuway Dugda
Mr. Ahmad Edao	Woreda Manager	Zuway Dugda
Mr. Hajji Ejaro	Woreda Assistant Manager	Zuway Dugda
Mr. Abdisa Dadafo	Vice Manager of Zonal MSE Office	Asela City
Mr. Gaddisa Urgeysa	Activity Scaling-up Export, Zonal MSE Office	Asela City
Mr. Adugna Desselegne	Capacity Building and Marketing Process Owner, Zonal MSE Office	Asela City
Ato Lulseged Shiferaw	Head, Livestock Agency, Arsi Zone,	Asela City
Ato Hussen Mohammed	Early Warning Officer, Arsi Zone	Asela City
Ato Abera Nigussie	Agriculture and Rural Development, Delegate	Asela City
W/ro Haregewoin Andarge	Agriculture and Rural Development, Extension Officer	Asela City
Ato Abdella Dekebo	Head, Arsi Zone Cooperative Promotion Office	Asela City

## SNNP REGION

Ato Ganta Gamma	Head, Food Security Case Team Coordinator	Awassa City
Ato Ayneaddis Zeru	Regional Food Security Officer	Awassa City
Ato Tagesse Sadore	Regional HABP Contact person	Awassa City
Ato Samuel Tsegaye	Regional Food Security Officer	Awassa City
Ato Meskele Ayele	Regional Cooperative Promotion Officer	Awassa City
Ato Teshome Dessie	Regional Cooperative Promotion Officer	Awassa City
Ato Membero Belay	Sidama Zone Early Warning and FS Officer	Awassa City
Ato Birhanu Gizaw	Sidama Zone Early Warning and FS Officer	Awassa City
Mr. Tsegaye Burako	Regional HABP Capacity Building Officer	Awassa City
Mr. Wondimu Kidanu	Regional HABP M&E Officer	Awassa City
Mrs. Beletu Sima	REMSEDA Training Officer	Awassa City
Ato Memru Moke	Head, Shebedino Woreda ARD Office	Shebedino woreda
Ato Daniel Ligussie	Shebedino Woreda Early Warning and FS Officer	Shebedino woreda
Ato Agemja Habiso	Shebedino Woreda HABP Coordinator	Shebedino woreda
Mr. Dawit Dankeka	Shebedino Woreda Development Agent	Shebedino woreda
Selamawit Anceqo	M&E Officer	Shebedino woreda
Ato Abeham Ledamo	Head, Shebedino Woreda Industry Office	Shebedino woreda
Ato Ilala Egato	Shebedino Woreda Enterprise Development Coordinator	Shebedino woreda
Petros Hebisso	Model Farmer in Shebedino Woreda, Dobe Negasha Kebele	Shebedino woreda
Mrs. Kuribachew Haile	Shebedino Woreda Gender and Social Development Coordinator	Shebedino woreda
Mr. Alemaayehu Debba	Cooperative Development Officer	Shebedino woreda
Mr. Atnafu Arsicha	Cooperative Promoter	Shebedino woreda
Mrs. Konijit Yela	Cooperative Promoter	Shebedino woreda
Mrs. Atenesh Getachaw	Cooperative Promoter	Shebedino woreda
Ato Alemu Tirore	Extension and Communication Officer, Kedida Gamela woreda	Durame town

Ato Tilahun Bejiga	HABP M&E Officer, Kedida Gamela woreda	Durame town
Ato Ambaye Petros	Food Security Officer, Kedida Gamela woreda	Durame town
Matios Aloto	Member, Taza Traditional Black Smith Producers Association, Kedida Gamela woreda	Durame town
Ato Tamine Noramo	Chair, Taza Traditional Black Smith Producers Association, Kedida Gamela woreda	Durame town
W/ro Abaynesh Admassu	Omo Micro Finance, Kedida Gamela woreda branch	Durame town
Ato Addise Ajamo	Head, Cooperative Promotion Office	Durame town
Mr. Mengistu Assefa	Kembata-Tembero Zone EW/R/FS Process Coordinator	Durame town
Mr. Abel Abera	Branch Manager, Wisdom Microfinance Durame Branch	Durame town
Mr. Mulunhe Teffera	Kembata-Tembero Zone Enterprise Officer	Durame town
Mr. Muluneh Haile	Kembata-Tembero Zone Investment Coordinator	Durame town

## SOMALI REGION

Abdi Awel	Zonal Trade, Transport and Industry Office Head	Shinile
Adil Kassim	Acting woreda Head, Livestock and crop rural development office	Shinile
Abdusemed Umer	Livestock expert	Shinile
Gulelat Melaku	Natural Resources Development Agent	Shinile
Abdu Wassa Ahmedu	Social Development Capacity Building	Shinile
Hassen Mohammed	Livestock Expert	Shinile
Hies Harbi	Capacity building and Strengthening one stop center process head, Micro and Small Enterprise Agency	Jijiga
Ahmed Malen	Livestock, Crops, and Rural Development Bureau	Jijiga
Mussa Yesfu Ahmed	PSNP Acting Technical Assistant	Jijiga

# ANNEX F. FOCUS GROUP DISCUSSION PARTICIPANTS

## TIGRAY REGION

Woreda: Tselemti	Kebele: Mayhami
Bizen Tesfayie	Nigussie Kassa
Werkie Byene	Tashu Negash
Berhaie Gebru	Tiku G/Kidan
Tseheray Bayou	Adissu Rara
Taddess Haile	Werash G/Yohanes
Dehas Sishay	Mulegeta Beyene
Neruma Iberahim	Aseferom Desta (Aleka)
Abeba Berhie	Girmay Adane
Mashem Mulualem	Molla Webetu
Tsiray W/Mariam	Zenebe Tfrra
Yebahernesh Addisu	Aberah Wona
Nigist Geberie	Yigzaw Zewedu (Aleka)
Shewayie Geberkidan	Ethiopia Meneigistie
	Zaf Aberha
Mekurahatem Hadash	Kadira Zeynu
Yigzaw Zewedu	Mulalem Alemu (Aleka)
Adissu Mesfin	Giday Desalegn
Fisah Menegistu	Yeshi Beyene
Chalie Girmay	Koria Berhiun
	Shanbel G/Eyesus
Berhane Feredu	Hagos Wese (Aleka0
Asfaw Belayneh	Gidey Assefa

Woreda: Tselemti	Kebele: Maytseberi
Hidgo Tshayu	Mulu G/Mariam
Zemicahel Negash	Birhanu Tesfa Hunegn

Woreda: Alamata	Kebele: Waja Tim
Fantanesh Assefa	Amare Beday
Romana Nuru	Abebe Becaris
Makia Tadesse	Messevet Dessale
Enanu Debash	Enau Molla
Chele Tukuye	
Truset Melku	
Shiwaye Fanta	
Kerima Mehomed	
Azmera Tsegay	

Woreda: Alamata

Kebele: Wajaj and Timuga

Abebe Kassaw	Eyasu Kasew
Aref Hiale	Abera Belay
Demar Legesse	Mogos Asmarae
Solomon Aberha	Asfaw Nigussie
Wale Allelegn	Nigussie Tebeje
Solomon Gidey	
Terraw Berhe	
Jemal Mohammed	

## AMHARA REGION

Woreda: Tach Gayint

Kebele: 13

Malve Endep	Aregash Adebaby
Zereb Endshaw	Banchalem Tsehaynew
Denaye Gesesew	Asenta Mitku
Fasila Andarge	Wuste Gelaw
Zebegnash Mite	Desoda Barye
Yeshitimset Belachew	Enaney Ferede
Zerete Teshages	Mukete Kassaw
Shebedog Walelgn	Azengu Achenef
Tsega Kebede	

Woreda: Sekota

Kebele: Maylomi

Entenu Ageze	Abebu Gelle
Alef Misgie	Ayehush Misso
Adanu Chanie	Kiros Gebre

Woreda: Sekota

Kebele: Hamusit

Anguwach Atena	Lijalem Wonde
Zebenay Shibesh	Adane Berihun
Demeku Derba	Alemitu Girma
Shewaye Kassahuen	Wondmagegnehu Gelan
Asrese Chane	Getahun Endalew
Misawe Kassahun	Misgan Getahun

## OROMIA REGION

Woreda: Zuway Dugda

Kebele: Burqa Lemafa

W/ro Kedija Habtamu	Ato Ababali Geda
W/ro Zeyni Shumi	Ato Biftu Edeo
W/ro Rukia Kedir	Haji Gemmechu Dedefo
W/ro W/ro Chaltu Usman	Ato Hussien Jewaro
W/ro Ayu Genna	Ato Fayissa Kello
W/ro Tarikua Tafesse	Ato Jemal Ali Basha
W/ro Amina Aman	Ato Shalo Bati
W/ro Ajjo Bekera	Ato Kedu Bullisa
W/ro Lomi Tuffa	Haji Mohammed Dudisso

Woreda: Zuway Dugda

Kebele: Ubo Baricha

Tayiba Alfadyi, Farmer	Nuri Gabawoo, Kebele Manager
Safriya Gudatoo, Livestock trading	Abushi Bora, Farmer
Yeshi Mokoni, Petty trading	Huseen Gamada, Farmer

Zeynu Hedatoo, Grain trading	Fayisoo Abatu, Farmer
Asha Nagoo, Tea shop owner	Ahmad Hadji Edoo, Farmer
Badhatu Iresoo, Cafeteria	Kamal Hadji Muhammad, Farmer
Jawaree Sayida, Grain trading	Ragasa Fayisa, Farmer
Fatuma Edor, Tea shop owner	Mamudoo Hadji Huseen, Farmer
Damitu Edoo, Petty trading	Huseen Abati, Farmer
Bashuu Kadir, Petty trading	Gabi Idrisi, Farmer and tea shop owner
Fatuma Bonsoo, Grain trading	Aman Waqoo, Farmer and shoat trader
Grisha Shanu, Livestock trading	Nuraa Godana, Kebele Development Agent
Hawaa Tolola, Dairy products	Dasisoo Shafu, Farmer
Zeyini Tola, Dairy products	Midhasoo Rafisoo, Farmer
Rahima Gamachu, Petty trading	
Makida Janoo, Cattle fattening	
Yemiwadish Badhadha, Grain trading	

Woreda: Habro		Kebele: Legebera	
Mohamed Amin		Hardo Nure	
Keder Nure		Baharo Waya Musa	
Hmeza Mume		Muketar Jemalo	
Amed Awel		Abdurezake Mume	
Mehamed Hmide		Teha Muse	
Halima Teha		Halima Gemal	
Kerina Usman			
Isha Abdulkerim			
Momo Abdula			
Hawa Mume			

Woreda: Habro		Kebele: Gadis	
Fuade Ahemed		Sada Umer	
Samu Adem		Sheto Amyu	
Abdulkerim Ahemed		Kusubeya Hseno	
Jemal Mehamed		Amina Beker	
Umere Mehamed		Zeyeni Yusuf	
Mehamed Musa		Meymuna Sied	
Hardo Nure		Jemal Haliyo	
Umer Fure			
Ahemed Eseyo			
Jemal Adem			
Ahemed Ebro			

Woreda: Arero		Kebele: Wachile	
Ato Sorra Boru		Rofo Bule	
Ato Wakela Agersu		Hawaya AbaRobo	
Ato Bonjela Bidu		Jilo Burgi	
Ato Hussien Jellu		Hululi Guya	
Ato Boneya Jillo		Melch Gedecha	
Ato Sorra Boru		Tadicho Goloicho	
Jarso Wachile		Beguja Sora	
Ibrahim Aragaw		Dadi Muga	
Adagi Asen		Dalcha Goya	
Tumata Tadleila		Wolodo Wayo	
Daid Boru		Kubsa Goda	
Mesle Doye			

## SNNP REGION

Woreda: Shebedino

Kebele: Dobe Negash

Aberash Shone	Simon Wayu
Abebech Matios	Petros Hebisso
Aregash Ashongqa	Gelfeto Weysso
Birtukan Banitu	Tutemo Tumicho
Hewantu Samuel	Muse Kiya
Genet Dewale	Suleyman Kedir
Worke Wotero	Siraj Safo
Manitu Yakob	Mesfin Kintissa
Genet Dawit	Kayesso Kefale
Tirunesh Matios	Uressa Worana
Kibnesh Gelcha	Shone Adole
Bogalech Borsemu	Hayisso Hatessa
Argemo Shumbalo	Birhanu Hamito
	Ahmed Tunga

Woreda: Shebedino

Kebele: Sedeka

Bizunesh Ufala, Shop owner,	Gatiso Wondimu, Peasant Assoc Chair
Aberash Melikamu, Women's Affairs Leader	Beteka Humuoro, Kebele Chair
Magtu Yukula	Bekele Baremga, Savings and Credit Chair
Samitu Fenosa	Belguda Rikiwa, Farmer
Britukani Kana	Samuel Rikiwa, Farmer
Nigsti Utala	Belay Batiso, Student/Farmer
Meseret Legese	Ayalew Rikiba, Farmer

Woreda: Kedida Gamela

Kebele: Dega Kedida

Aberash Ayele, Government staff in Culture and Tourism Office	Ato Desta Habisso
Margrita Birhanu, Injera maker	Ato Shiferaw Belete
Mebrat Wondemu, Flour trader	Ato Belachew Bachore
Fanety Fanose, Tea shop owner	Ato Tadele Kebede
Amarach Alamu, Animal fattening	Ato Ermias Ergamo
Alemetu Damese, Butter trader	Ato Desalegn Herego
Bogalech Dageso, Animal fattening	Ato Elias Takisso
	Ato Simon Mandore
	Ato Tagesse Tolge
	Ato Berisso Zeleke
	Ato Fanos Ersemmo

Woreda: Kedida Gamela

Kebele: Sheshera

Lafame Gidebo, Widow	Ato Tadele Senbeto
Amerach Awul, Widow	Ato Yohannis Abiyo
Aberech Abere, Wife	Ato Ayele Adem
Amerach Legamo, Wife	Ato Daniel Delilo
Zenebech Haile, Wife	Ato Abebe Gute
Shita Alemu, Wife	Ato Mustefa Ahmed
Tamene Woya, Wife	Ato Reman Ibro
Todelech Desalegne, Wife	Ato Ergalo Ersedo
Murede Bekele, Wife	Ato Admassu Ukune
Behida Muriye, Wife	Ato Samuel Awona
Aster Bemuti, Wife	Ato Jemal Mirkena
Womo Bejigo, Wife	Ato Takele Deribew

## SOMALI REGION

Woreda: Shinile

Kebele: Beraq

Adina Hamed	Muse Dire
Fatuna Gama	Abudlahi Muse
Hassan Mohammed	Mohammed Jama
Fatuma Siede	Musa Abedose
Fatuma Gire	Abdulahi Mohammed
Umer Ralay	
Mohammed Muse	
Muse Rahim	

Woreda: Shinile

Kebele: Degajebis

Medino Yussef	Aden Usman
Kadija Osmi	Abdi Hassenabdi
Isha Abdullahe	Gire Hussein
Shakuri Yussuf	Ibrahim Hush
	Mohammed Fara
Tayiba mainerere	Arab Ahamij
Jama Ali	Limi Ali
Mohammed Bure	
Hussein Yonis	

# ANNEX G. TYPES OF NON-FARM ACTIVITIES CONSIDERED

## INTRODUCTION

During the initial meetings, the team realized the definition of Non-Farm Enterprise Activities was vague and needed to develop examples of what would be considered before beginning field work. Based on literature review and discussions, the team developed the following parameters.

## DEFINITION OF NON-FARM ACTIVITIES

Using the Barrett, Reardon Webb reference report definition for Farm and Non-farm activities, page 6:

This leads directly to the distinction between “agricultural” or “farm” income (derived from the production or gathering of unprocessed crops or livestock or forest or fish products from natural resources) and “nonagricultural” or “nonfarm” income (all other sources of income, including from processing, transport or trading of unprocessed agricultural, forest and fish products).

## AGRICULTURE SECTOR RELATED

### *Adding Value to Agricultural Products/Agro-Processing*

- Drying produce to better preserve and meet quality demands—cereal, coffee, fish, etc.
- Cleaning produce to better preserve and meet demands—cereal, coffee, eggs, etc.
- Grading produce— Market pays premium for quality, i.e., price and market differentiation
- Storing produce to preserve for better market conditions—cereals, hay and straw, etc.
- Transforming produce to meet market-demands—drying and packaging of farm produce for retail sale, charcoal, butter, cheese, honey, incense, etc.

### *Agriculture Service Providers*

- Input providers; tree or plant nurseries; improved seed production; tree pruning and grafting; veterinary services, pesticide/herbicide spraying; custom plowing, land preparation; custom harvesting; pick up and grading of production; marketing of production; grain milling; coffee de-hulling, roasting and trading; feed formulation for livestock; livestock products transformation [dairy, butchery, egg grading, etc.]

## RURAL NON-AGRICULTURE SECTOR

- General Service sectors: petty trading of commodities; small shop retailing; tailoring; hair stylists; computer operators and repair services; bakery; catering; shop keeping; transportation; general commerce; local beer making; etc.
- Tourist-based Service sectors: hotel services; food processing; beverage making; handicrafts; baskets; weaving; pottery; sculptures; etc.
- Construction sector:
  - Unskilled labor: earth moving and grading; painting; well digging;

- Semi-skilled labor: welding; equipment operation and repair; iron work; carpentry; masonry; plumbing; electrical; etc.
- Mining: Minerals such as gold, gemstones, salt, etc.
- Manufacturing: manufacturing, servicing and repair of tools and equipment for farms, households and small-scale industries such as mills, threshers, etc.

# ANNEX H. POTENTIAL LIVESTOCK VALUE CHAIN ACTIVITIES

The pastoral and agro-pastoral areas of Ethiopia are known to abound with livestock resources; however, the livestock value chain is also important for food security and income generation in the mixed farming zones. In fact, study reports indicate that the country accounts for the largest livestock population in Africa. According to Catley (2009), the country's pastoral regions are home to 9.3 million cattle (30 percent), 12.4 million sheep (52 percent), 8.1 million goats (45 percent) and 1.8 million camels (close to 100 percent) of the total national populations of these animals.

Adding value to livestock products is a major non-farm activity. The enormous wealth generated by livestock products plays an important role in the national economy both in terms of GDP and export earnings. The livestock sector provides a significant volume of milk, butter, eggs, meat and skins for domestic consumption, besides generating foreign exchange through the export of live animals and frozen and chilled meat as well as cured hides.

Although the pastoralists raise a variety of stock, pastoral households do not live off their livestock products alone. Instead, they use the income from the sale of livestock and livestock products to purchase grains, which have increasingly become an important aspect of their diet. As the findings of this analysis reveal, livestock and milk marketing and trade are gaining importance as main nonfarm enterprises in the pastoral and agro-pastoral areas, in which a growing number of local people are becoming involved, and thereby manage to earn significant income to sustain their households. In light of this, the discussion of the way forward for the nonfarm enterprise development in pastoral and agro-pastoral areas of the study focuses on setting out the opportunities for up-calling nonfarm enterprises in terms of job creation, source of income, sustainability prospects, gender dimension and the involvement of youths.

To achieve a quick impact, it is recommended that USAID consider using its current FtF projects as mechanisms to provide job-creating, income generating opportunities for non-farm entrepreneurs involved in the livestock sector. The following activities could be incorporated into the FtF supported GRAD, AGP-AMDe and FEED projects, as well as the upcoming livestock cooperative agreement. In addition, additional NFE support is possible through current GOE and donor-funded livelihood projects such as FSP and its core PSNP and HABP components.

## **1. Livestock marketing and trade**

Numerous livestock market channels exist around the country, namely: Livestock trade within the livelihood zone, national domestic trade to key urban centers outside the region, regional cross-border trade between neighboring countries, and overseas exports of live animals and meat to the Middle East. In general, livestock trade is however fraught with a number of constraints. The foremost include (i) poor infrastructure, mainly roads, (ii) lack of access to market information for livestock producers (iii) critical shortage of start-up capital and financial services, (iv) the absence or weak organizational state of livestock market groups.

### **1.1 Infrastructural development**

Live animals, consisting mainly of cattle, camels and shoats, are exported through official as well as unofficial market channels originate mainly from the pastoral and agro-pastoral areas. In recognition of this fact, there is a strong case for government, private and donor investment on market-related infrastructural development in the pastoral lowlands. Obviously, efficient livestock marketing requires the necessary infrastructure (main and market feeder roads, transport services, feed and water facilities, shade, fencing, and ramps in markets). Such infrastructure is of paramount importance to allow the flow of animals from the farm gate area to the primary, secondary and terminal markets.

### **1.2 Improved market information system**

Livestock market research, promotional activities and information systems are vitally important to livestock trade if the enterprise is to expand and flourish to the benefit of the livestock producers. Presently, due to the insufficient market information, the livestock markets located at different points in the market chain are loosely integrated, making it difficult for the pastoralists to obtain timely information on the current demand and price of animals at domestic and foreign markets. Hence, it is appropriate to establish a market information system based on pertinent research outputs and the use of information technologies whereby livestock producers can have easy access to the market information they need.

In respect to this, livestock marketing and promotion may be carried out by organizing workshops, seminars and trade fairs, through the distribution of brochures and the use of the media.

### **1.3 Establishing and strengthening livestock marketing groups**

Equally important as infrastructure development is the organization of livestock marketing groups. In present circumstances, most livestock raisers are small scale producers. To ensure high marketing effectiveness, it is necessary to establish producers' organizations and strengthen those already existing. This enables them to capture economies of scale in marketing.

In this respect, it is recommended to organize producer marketing groups, such as cooperatives and unions especially for small scale NFEs involved in animal fattening. These structures can be instrumental in facilitating access to bigger markets and up-to-date market information.

### **1.4 Access to financial services**

The provision of financial support in the form of seed money and start-up capital acts as a catalyzing factor to strengthen marketing groups, cooperatives and unions so that they can manage to become key players in the market chain. Moreover, capital is crucially important for all the livestock marketing actors in the value chain, which opens up an opportunity for the financial institutions such as MFIs and commercial banks to provide loans at a reasonable interest rate and contribute to the development of livestock marketing. These conditions promote building trust between livestock suppliers and buyers, increasing the size of livestock flow to the central market and smoothing out the transaction process. Currently a number of MFIs are providing short-term loans to small scale NFEs involved in animal fattening, but more access to credit is needed.

## **2. Milk processing and trading**

By and large, pastoralists use the bulk of the milk they produce for household consumption. Still, milk remains the largest single source of income for the households as they sell what is left of their consumption at the market. Moreover, milk marketing is characterized by informal trade limited largely to pastoral towns and settlements. Despite surplus production in times of good rains, only a small percentage of milk yields are preserved as cheese or ghee, with most of it consumed fresh or left for the calves.

Milk processing and trading stands out as an important non-farm enterprise in pastoral and agro-pastoral areas, with products supplied to nearby domestic markets in Ethiopia, as well as markets in Northern Kenya and Djibouti. However, milk processing is generally performed by women using traditional means that tend to be unsanitary. As a result, traditionally processed milk has a much shorter shelf life, which restricts the scope of marketing and volume of trade. In other words, the failure to add more value to milk products by using improved milk processing technologies is a constraint that greatly limits the overall quantity and quality of milk products sold and the resulting amount of income obtained.

As income levels and urbanization grow in Ethiopia and linkages between the urban and rural sector expands, the demand for milk is likely to grow significantly. Being livestock rich, pastoral areas are expected to supply the milk to meet the growing demand. In order to live up to these expectations, it is necessary to introduce and apply improved milk collection and processing technologies. To do so, women need to be organized in producer marketing groups in order to have better access to finance and the relevant training to purchase and efficiently utilize modern milk processing and cooling equipment. Such technical support and capacity building will enable women groups to collect raw milk from the surrounding pastoral villages and deliver it to a processing center which will produce fresh table butter, cream, cheese and yoghurt to be supplied to the markets in the nearby towns.

In due course, this will forge and strengthen the urban-rural market linkages between raw milk suppliers and the NFE milk collection and processing women groups. In turn, the supply of processed milk products takes the linkage one step forward in the market chain from the processing groups to urban retailers of fresh table butter, cottage cheese, cream and yoghurt, and the urban consumers. Ultimately, the series of linkages will create an opportunity for the milk yields from pastoral and agro-pastoral households to become a national commodity of high commercial value. The cumulative effects of the value adding processes and market linkages is likely to contribute to the expansion and growth of the milk processing and trading enterprise, enabling women groups to transform themselves into cooperatives and unions which operates large-scale milk collection and processing factories.

# ANNEX I. SUMMARY OF GENDER AND YOUTH IN NON-FARM ENTERPRISES

## INTRODUCTION

Although a number of NFE activities engaged in by women and youth are specific to their livelihood zones, there are many common themes cutting across LZs and regions. As the above chapters have provided details of these activities, this section will only summarize the key cross-cutting themes.

## SUMMARY OF KEY NFE ACTIVITIES

Many of the NFE skills women are using are based on cultural and domestic chores they perform for their households. These skills are considered to be of no economic value as they are traditionally part of household chores. Their involvement in NFEs arises from the following:

- Supplemental income to bridge the revenue gap between farm revenue and household needs;
- Risk reduction- NFEs providing a diversified, often more stable income source less dependent upon the vagaries of weather, diseases and pests typical of agriculture; and
- Independent income-generating capabilities.

## AGRO-PROCESSING BY VALUE CHAINS

**Livestock:** women feed and care for all domesticated livestock but traditionally they have the principal responsibilities for dairy cattle, small ruminants, poultry, and honey bees. Women add value to the animal by-products in NFE activities by simple agro-processing, e.g., making butter from milk; fattening shoats for slaughter; cleaning and marketing eggs; cleaning honey and beeswax; etc.

**Cotton:** in the north, women spin cotton thread by hand from raw cotton, consolidate it in spools and sell the spools to weavers to be made into traditional cloth clothes. After weaving, women buy back the cloth and hand-sew the cloth strips together to make clothes and embroider the cloth. Women also make oil from cotton seeds that they extract from the raw cotton.

**Cash crops:** women perform key agro-processing functions by cleaning, drying and quality control selection for a number of principal cash crops, including coffee and chat, as well as similar work for those crops that are sold commercially, in some areas, as a cash crop. An example of these include: tomatoes, onions, peppers and fruit.

**Natural products:** women perform most of the collection of natural products and add value through their transportation, cleaning and processing. These include such items as tree resin converted into incense, wild fruits, berries spices and herbs, etc. Youth often collect firewood for sale in local markets.

## NON-AGRICULTURE RELATED NFES

### *Services*

**Trading:** petty trade in local markets is the predominant NFE in the rural sector and is the most ready to scale up. Women provide the majority of the petty trade services dealing mainly in agricultural produce

and add value with their labor to clean, transport and sell. Examples of these commodities sold by women include: whole and split grains from various cereals and pulses; hops; malt; and drying peppers. In addition, many women graduate from petty trading to open small shops in kebeles and woreda to sell basic household products such as soap, candles, shoes, tomato paste, sugar, salt, etc.

Tourism: important NFE activities in this sector, as defined by TVET, include not only historic and nature tourism but also food processing and preparation; restaurants; hotels; local beer making - many of these activities are the purview of women;

Construction: to earn wages, many women are providing their services as unskilled labor in various aspects of construction. They are mixing cement, hauling sand and gravel and other materials for road, building and irrigation canal infrastructure construction and repair.

Transportation: women's roles in providing transportation services are largely unpaid. Women serve as principal transporters of firewood and water as a part of their domestic chores, and carry petty trading goods to market, usually by foot. Nevertheless, women are positively affected with improvements in infrastructure and transportation as their NFE incomes will increase from improved efficiencies.

#### **SUMMARY OF KEY NFE CONSTRAINTS AND CHALLENGES**

Access to credit is a common cross-cutting concern. Even though women are the preferred borrowers by programs supported by both the GOE and MFIs, the most consistently cited constraint by women to their development in non-farm enterprises is lack of access to timely and meaningful capital. Many women are not eligible for HABP credit because they are not heads of households under PSNP rules and do not have client cards. Some women joined cooperatives in order to obtain loans through the group. Some were turned down for loans because they lacked appropriate skills. Some did not have the collateral or savings to qualify for loans. In some cases, women could not access credit because the savings account is in their husband's name.

Lack of appropriate job skills was the second most cited constraint. Domestic skills such as food preparation, cotton spinning and hand sewing do not provide women with many marketable skills necessary to start sustainable NFEs. Women want skills training in literacy, bookkeeping, hair dressing, animal fattening, food processing, grain storage and timing for trading commodities and basic entrepreneurship. Even though TVET provides training to women and men for skill improvement, many women cannot leave their rural residences to attend trainings in urban areas for cultural reasons. In addition, women complain that they lack appropriate areas to work together when they do leave home to work on NFEs.

Opportunity Costs: overall, women across the livelihood zones need relief from domestic chores which act as constraints to their active participation in NFE activities. These chores represent real opportunity costs as women do not have the opportunity to make money from NFEs while performing unpaid domestic labor. Some of these chores could be considered as potential NFE such as gathering firewood, collecting water, caring for children, preparing meals, etc. In addition, an improvement in infrastructure would also alleviate some of the time burden women devote to their household activities: improved farm to market roads; improved irrigation and access to potable water; more access to electricity and techniques on how to use it more efficiently; more widespread medical clinics so they do not have to travel so far to get medical attention for their families, among others.

#### **SUMMARY OF KEY NFE OPPORTUNITIES**

The above clearly articulated strategies provide the impetus to provide a focus on women and youth when promoting NFEs. Various GOE organizations are targeting support to women as a means of encouraging them to improve their income generating opportunities, and by extension, by improving their welfare increasing the chances for improving the health and nutrition of children. MSED is offering skills

training programs for women and are assisting them to develop appropriate business plans. MSED0 is expanding its services to the kebele level.

Microfinance institutions such as DECSI and ACSI are allocating up to 60% of their microcredit funds for women because they are considered good credit risks as they repay loans. Although DECSI has realized this target for the urban areas they are not able to do so in rural areas. To address this shortfall, DECSI is hiring female agents and deploying them into kebeles and training them to focus on women as potential borrowers.

MFIs are also considering changing lending criteria to permit more of the type of credit needed by women borrowers. DECSI representatives said that the majority of rural women borrowers make the most income as petty traders of various commodities, and from animal fattening. DECSI will change loan terms and offer credit worthy rural women three month to six month terms for these types of loans rather than the more traditional one to three year terms.

### **SUMMARY OF KEY NFE RECOMMENDATIONS**

**Access to credit:** according to rural women interviewed, if they had more access to credit and other financial services they would invest more heavily in the following NFEs, by priority: petty trading, animal fattening, poultry and bee hives. Market town women would increase their inventories in their small stores.

The provision of working capital for women and youths in the form of savings and credit organizations should be increased in order to encourage their involvement in NFEs on a larger scale. The GOE should continue and expand its support to women and their access to credit, business plan development, and skills training; diversify loan products appropriate for NFEs such as trading and animal fattening operations.

**Improved infrastructure:** efforts are being made to improve rural infrastructure. These efforts should continue, as budgets permit. By prioritizing infrastructural support to alleviate the time burdens of rural women, they would be more available to engage in NFEs, thereby increasing rural employment and income generation. Often time consuming domestic chores serve as opportunity costs depriving women of the education, time and energy needed to increase NFE income earning activities. Infrastructural support to extend and rehabilitate irrigation and other water point sources will impact women who due to their lower propensity to migrate, remain near their farms and are heavily involved in irrigated short season crops such as vegetables, which in turn are fed to vulnerable children to improve their diets. Surpluses are sold in local markets by the women as part of their petty trade NFE.

**Skills training:** provide more opportunities at the local level for education and support to women to help them obtain cost efficient techniques and technology to facilitate their NFE income earning potential. Gender awareness and women empowerment programs should be implemented to address cultural taboos restricting women from participating in NFEs. Help women overcome perceived cultural barriers including entrance into male dominated professions such as weaving, machine sewing, etc. It is essential also to enhance women and youth capacities in business management and entrepreneurship know-how and skills, with a view to ensuring that they perform and benefit to the desired extent.

**Economies of scale:** the GOE is supporting the creation of groups with similar interests into associations and cooperatives in order to benefit from economies of scale in production and marketing. Given their relative immobility due to their need to be near their homes, women are more likely to organize themselves into associations with common interests. As such they would better benefit in reduced prices for inputs and increased marketing power for the sale of products. In addition, this formation serves as an efficient platform for training in a variety of subjects ranging from literacy, to skill training to improved household health and nutrition.

Encourage private entrepreneurship: while the GOE has a policy to organize women and youths into cooperatives and business associations, this may not be effective as often people with dissimilar backgrounds are grouped together. GOE policy makers should consider ways to encourage the nascent entrepreneurs of Ethiopia to engender a better awareness of private entrepreneurship and make more efforts to provide support by improving access to credit and savings facilities and to encourage active private women and youth involvement in NFEs.

# ANNEX J. RESPONSES TO STAKEHOLDER COMMENTS

**On the “Analysis of Opportunities for Rural Non-Farm Enterprise Development and Job Creation in Chronically Food Insecure Areas of Ethiopia” under Contract No. EDH-I-00-05-00006, Task Order No. AID-663-TO-12-00001, provided by Tetra Tech ARD**

The following comments were received by Tetra Tech ARD from USAID on July 10, 2012, incorporating comments from other stakeholders that reviewed the final report dated June 2012.

## **GENERAL COMMENTS**

**Comment 1:** Employment opportunity and the supply and demand of the labor market between chronically food insecure woredas and the productive/surplus producing woredas are the core components of the study. However, the report does not discuss this adequately. The extent/ magnitude of seasonal labor migration in all areas, pastoral as well as non-pastoral, is not elaborated to give sufficient understanding of the labor market, the rural urban linkage and also the potential for employment. Is there a nation-wide or region by region labor survey? How employment outside of agriculture rising?

### **Response 1:**

- a. According to the final, mutually agreed upon work plan, the 10 selected woredas were all in chronically food insecure areas. It was mutually agreed by USAID and Tetra Tech ARD that there would be no visits to productive/surplus producing woredas. During interviews with respondents from kebeles, woredas, regions and zones, questions were asked regarding the linkages between the subject woredas and the nearby more productive communities. From these interviews it is apparent that labor migration for non-farm economic activities are not to the surplus woredas which mostly have seasonal agricultural or farm labor demand, but to large urban centers. Answers to these inquiries are summarized and incorporated in the revised final report in each regional chapter.
- b. As a qualitative report based primarily on interviews with key individuals and focus groups, the team was not in a position to quantitatively measure the magnitude of seasonal labor migration. The rural non-farm employment at scale will happen as more processing industries are located in rural areas; otherwise it will happen through the expansion of the industrial and services sectors, which occurs mostly in urban areas. The report does provide anecdotal information from interviewees at kebele, woreda, regional, and zonal levels; this information is contained in the regional chapters. Rural labor force data is not collected by any of the GOE offices at any of the levels the team visited.
- c. The most recent nationwide labor force study was conducted by the GOE Central Statistical Agency in 2005 (the report was released in 2006). The gist of this research is contained in the revised final report, although the age of the study also calls into question its relevancy for this report. According to the 2009 World Bank study (see Bibliography), participation rates in non-farm enterprises are rising as suggested by Welfare Monitoring Surveys (WMS). However, there were no concrete statistics on this available in the woredas the study team visited. This has been added as a limitation to the study.

**Comment 2:** Annex E listed people/organizations communicated/interviewed at different levels. If the annex is an exhaustive list, we found the zonal discussion is limited to only one region, the regional discussion, especially in Bahir Dar, is limited few desks?, BoARD [sic] not included, no regional discussion held in Oromiya as well as the actual individuals beneficiaries interviewed in each woreda/region is limited to one- model farmer (no discussion with landless youth, other groups) and FGD discussions not conducted [sic]. This, USAID believes, limit the robustness of the analysis.

**Response 2:** Annex E has been revised to include individuals mistakenly left off in the original version. While the meetings with zonal officials were not a part of the original scope of work, the team made every effort to meet with zonal officials. There were no zonal officials available to meet with the team in Amhara and Tigray regions. None of the woredas in Amhara had zonal representatives in Bahir Dar. During the trip to Bahir Dar, BoARD officials were in meetings to prepare for annual PSNP strategy sessions, but the team did meet with numerous MOA representatives at the woreda and kebele levels. In addition, while in Bahir Dar, the team met with representatives from the regional MSED0, women entrepreneurs, regional Chambers of Commerce, and TVET. The TVET representative is the secretariat for the regional council, and in that capacity, he provided an overview of the big picture in the region, and was particularly relevant for NFE skills training. On the other hand, discussions at the zonal level were conducted in the Arsi, West Hararghe, and Borena zones in the Oromia Region; Sidama and Kembata-Tembero zones in SNNPR, and Shinile zone in the Somali Region. Three zones were covered in the Oromia Region and the interviews there provided more relevant information for the woredas included in the study. Oromia regional officials were unavailable to meet with the study team given the time constraint upon return to Addis Ababa. The results of the many interviews are incorporated into the regional chapters and influenced the recommendations.

Focus group discussions (FGDs) were conducted in the kebeles and woredas; the list is provided in Annex F. Thirty-five participants were interviewed during the FGDs in Amhara. The respondents included youth and women. All of the youth participating in the interviews were presumed to be landless as they were heavily involved in NFEs as a major source of revenue.

**Comment 3:** As mentioned in our initial comment, the recommendations provided are higher/macro level general (except the way forward). Lower level recommendations, for instance, how the HABP credit money can be creatively be used to expand NFEs – like simple technologies for agro-processing and adding value, how MSED0 could be strengthened so as take the initiative for NFE expansion at grass root level etc. would have been more practical.

**Response 3:** After receipt of the USAID comments of May 31, 2012, the team revised the report to respond to those comments by providing elements of a bigger picture as well as more actionable activities for quicker implementation. In response to these comments, the team added more details on quicker impact possibilities in the Executive Summary and in Recommendations (The Way Forward).

## **SPECIFIC COMMENTS**

Below are major gaps identified under most of the questions, that are expected to be analyzed and recommend the way forward.

**Comment 4:**

<b>The types of questions this analysis would answer</b>	<b>Positive comments</b>	<b>Limitations</b>
What is the scope/extent of non-farm livelihoods in the study area	The document identified a number livelihoods options	<p>Inadequate analysis on scope/extent of non-farm livelihoods by different groups (such as rural communities vs. urban people, smallholder farmers and landless youth).</p> <p>How many people can each livelihood option absorb? How viable are the livelihoods options? Can the identified current NFE activities be scaled up with some minimal/reasonable support from donors, NGOs or government? How can it be done?</p>

**Response 4:**

The report deliberately did not report on different groups interviewed other than in Annex I. Rather, the team did a synthesis and summary of over 60 FGDs and 400 key informant interviews (KIIs). The team primarily interviewed NFEs in rural communities and smallholder farmers as the study scope is “rural non-farm,” not urban. Youth and women were interviewed as key informants and as members of focus groups. Few people from urban areas were interviewed; the FGD and KII focus was on the rural poor in kebeles and woredas.

Estimating labor absorption rates would delve into quantitative analysis requiring economic or statistical modeling which is outside the scope of this qualitative study. The revised final report recommends this as a potential future study. The scale-up question on current NFE activities was already tackled throughout the report. The revised methodology section of the report better describes the limitations of the study.

**Comment 5:**

<b>Question types</b>	<b>Positive comments</b>	<b>Limitations</b>
Where and what types of key interventions should be designed that could influence large-scale job creation and opportunities for interdependent relationships between enterprises in order to create market dynamism? What generic strategies could be used to promote non-farm investment?	The discussion is very general	Though It is important to have a list of the NFE livelihoods options and discuss, there is a gap in identifying to what extent each livelihoods support different groups of people at large scale? It is also important to consider the timeframe: whether each livelihood could be supported at a time or indifferent period (short-term, medium term or long-term)?

**Response 5:**

As the focus of the study was at the kebele and woreda levels and data there are minimal, we cannot generalize the extent our findings in 10 woredas to represent all (over 600) woredas in Ethiopia. Discussions with regional and zonal authorities corroborated our findings of various NFE livelihoods.

Investigating the differential impact of various livelihood strategies across various population groups is outside the scope of the study, with exception of a special emphasis given to women and youth—for which a special section was devoted (Annex I). Likewise, the short-, medium-, and long-term differentiation of opportunities or potentials for support were not part of the scope of work. Our findings show that there is no single NFE that can generate large-scale job creation; however, there is potential to create large job opportunities through a number of small-scale NFEs as described in the regional chapters. In the revised final report, we recommend more specific studies such as value chain studies that would tackle, in depth, specific non-farm subsectors targeting specific geographic areas for production, with due consideration for the input supply and end markets of these products which could be in regional or national market centers.

**Comment 6:**

Question types	Positive comments	Limitations
Size and scope of the labor market in the non-farm employment? What is the best investment approach to promote the non-farm labor market?	-	Little discussion or case study on the level of investment. The supply and demand for labor discussion not fleshed out in the report. New initiatives like AGP would have been discussed at zonal/regional level so as to analyze how such programs affect the labor movement from chronically food insecure areas to surplus producing areas. The analysis on the rural urban linkage, new towns developments and their importance for labor flow, especially for landless youth, is not included in the report. Some of the livelihoods options are demanding huge investment or large investors/ How are these linked to the poor people (small holders farming communities and unemployed youth)?

**Response 6:**

The results of the 2005 National Labor Force Survey does not report on size and scope of the labor market in non-farm employment and the data is not collected by the GOE at any level that the team could find. The survey reported on major industrial divisions (agriculture, hunting, forestry and fishing; retail trade; manufacturing; etc.) and relevant statistics have been added to the report (Section 1.3.1). It must be stressed that seasonal labor movements from food insecure areas to surplus producing areas are mostly for farm, not non-farm work. New initiatives such as the AGP are too new to produce any impact on processing or non-farm employment creation. Zonal and regional officials highly recommended focusing on processing industries to promote non-farm job creation; however, the location of these industries as well as non-agricultural industries such as manufacturing and services are determined by business criteria such as accessibility to markets and access to basic services such as water and electricity. Remote, rural, and food insecure woredas do not benefit while they remain inaccessible and lacking in basic services.

The final report states that as there are few large private sector employers investing in the 10 targeted woredas. The GOE generates the majority of jobs in these woredas, hiring unskilled and semi-skills laborers for infrastructure construction. There is a large supply of mainly unskilled labor available in the

targeted woredas, with only anecdotal reports on migration in and out of the areas, depending upon the season and region. By volume, the largest private sector investors are small- and micro-entrepreneurs that are investing time and money on a small scale, creating products to improve their incomes and standards of living.

Case studies were not a part of the scope of work for this report; therefore, none were included. The results of the FGD and KIIs interviews are summarized in the livelihood chapters of the reports, including meetings with regional and zonal officials. Annex I of the report consolidates information obtained from women and youth from all livelihood zones to better represent their activities, food security needs, and concerns. As previously mentioned, no empirical data on labor movements was kept or was available in the zonal, regional, or woreda levels; all information on the subject from these meetings was anecdotal and is contained in the report.

**Comment 7:**

Question types	Positive comments	Limitations
Where and what types of key interventions should be designed that could influence large-scale job creation and opportunities for interdependent relationships between enterprises in order to create market dynamism? What generic strategies could be used to promote non-farm investment?	More information	Not clearly discussed whether the large scale job creation opportunities are out there in the short run or in the long run.

**Response 7:**

Please refer to the response provided for Comment 5 above.

**Comment 8:**

Question types	Positive comments	Limitations
Where in the value chains/commodity subsectors should investors (NGOs, private firms, government) focus their efforts to bring about the most feasible and effective means of promoting rural nonfarm activity?	A lot of information	For better clarity, It is good to summarize in table form (similar to table 1).

**Response 8:**

The report recommends a series of value chain analyses be conducted specific to the primary geographic area and commodity subsectors being targeted. Our short-term qualitative study only identified general value chains in each region, especially as they might be involved in non-farm enterprises. We did identify those with the most potential to affect the MSEs in the kebeles. No analysis was made of cost-effectiveness, however. We recommend that existing projects conduct thorough value chain analyses. For example, under GRAD, we understand that SNV has conducted several studies of various commodities. A

thorough review of these studies would facilitate activities that could more readily impact small entrepreneurs in the NFE sector.

**Comment 9:**

Question types	Positive comments	Limitations
How does nearby urban development affect non-farm activities and the labor market?	Information is available	Not clear. Existing practice and lessons from the micro and small enterprise (MSE) strategies and interventions could be considered (if the consultants are supporting what is going on). If not, a new possible strategy could be discussed.

**Response 9:**

Urban “pull” influences rural NFEs to “push.” MSEs are the non-farm dynamos at the grassroots level. The report identified smallholders involved in NFEs as the major source of investment in the rural sector, given the dearth of large-scale private sector investment, and the best potential for rural employment.

Urban areas are the major sources of demand for rural products, therefore rural MSEs should pay attention to this market demand, their product specifications, timing, etc. The study does not espouse rural to urban migration as there is already significant urban unemployment. The growth potential is in rural-based industries that will respond or have good linkages with stable market demand, which could be urban, regional, national, or international.

**Comment 10:**

Question types	Positive comments	Limitations
What are the existing dynamic economic bases and the unexploited potential in these areas that could promote non-farm enterprises?	-	Not clearly articulated. Unexplored [sic] potential could be analyzed in line with the scope/extent of non-farm livelihoods, size and scope of the labor market and the overall opportunities.

**Response 10:**

The livelihood chapters of the final report identify under- and unexploited potential non-farm enterprises (e.g., agro-processing throughout the value chains, tourism and minerals in the north, livestock, gum, resin and mining in the south, among others).

**Comment 11:**

Question types	Positive comments	Limitations
How strongly do women engage in non-farm activities? How independent are women in their income-generating capabilities, which, in turn, would likely improve the care and nutritional status of children? How could their engagement be diversified and improved?	Information available	Limited discussion how to improve women engagement, productivity in their NFE. This could have been linked to the overall human development agendas.

**Response 11:**

From our observations and interviews, women and youth are heavily represented in the non-farm enterprise sector in all ten woredas. Access to credit, markets, and appropriate training in a variety of desired skills would greatly increase their income-generating capabilities. Annex I of the final report is devoted to NFE activities conducted by women and youth as extracted from each regional chapter.

**Comment 12:**

Question types	Positive comments	Limitations
Are there basic enabling environments in the specified areas for large scale non- farm investments? Is basic infrastructure (roads, power, and communications) in place or under development to attract investors? Does greater physical access to market consistently improve non-farm earnings?	Well-covered	It is necessary to discuss the implication to the poor people.

**Response 12:**

During field observations and in discussions with small private entrepreneurs, the team concluded that there is a weak enabling environment for large-scale private sector NFE investment. This is contained throughout the final report. Large non-farm investments were not observed other than GOE and donors in the ten woredas in our study area. There were small-scale investments, however. The final report states weak infrastructure acts as a disincentive for investment; it also states greater access to markets improves NFEs. Because our study focused on some of the poorest woredas and kebeles in Ethiopia, interviewing ordinary household members from some very remote kebeles, the recommendations necessarily discuss the implications of the enabling environments as it impacts the rural poor.

**Comment 13:**

Question types	Positive comments	Limitations
How would the establishment of large firms affect and or benefit the existence of small non-farm enterprises?	-	More analysis is required (possibly by taking cases)

**Response 13:**

Large firms may or may not benefit small non-farm enterprises depending on the nature of the large-small firm relationship and whether large firms are seen by small firms as partners or competitors. Large firms may be customers, suppliers, distributors, or buyers of products of small enterprises and based on their relationship, large firms may benefit or hurt small non-farm enterprises. A large firm providing cheaper inputs to a national retail outlet for small enterprises is an example of a beneficial partnership, while a large firm producing the same products as small enterprises at lower cost is an example of challenging competition for small enterprises.

The final report states that large firms such as in livestock, mining, and sugar cane, among other sectors, generate significant employment for surrounding communities. How they affect small non-farm enterprises requires a larger set of data for any rigorous analysis. To adequately answer this question, sufficient research requires in-depth consideration of the many cases under various environments, and to draw trends and parallels between them, not simply a case study or two which will only feature limited scenarios and possibly misleading conclusions. We recommend that an analysis of a specific value chain provide insights into the large firm-small firm relationships of the particular subsector in a specific geographic area. Only then can meaningful comparisons be made.

**Comment 14:**

Question types	Positive comments	Limitations
What are possible job-creation links to other USAID programs and GoE programs in economic growth? What are the best ways to link the HABP microcredit component with agribusiness market expansion projects in order to stimulate rural non-farm economies?	covered	The discussion is not as such critical? Need to reflect how best the HABP resources be used to limit the impact of lack of financial capital for NFE development and recommend way forward.

**Response 14:**

The final report made observations and recommendations on ways the team saw to improve HABP's performance in the visited woredas (e.g., Sections 2.3.3, 5.1.2, 5.1.7, 5.2.2, and Annex I). A more exhaustive study by donors and the GOE is first needed to review and evaluate how HABP has been utilizing its resources and assess its interim results. It was the study team's observation through interviews at the zonal, woreda, and kebele levels that HABP, despite all intentions, has not been able to release as many loan funds through its partner microfinance institutions as it had planned to disburse in rural areas. In order to recommend how HABP resources may be best utilized to ease the lack of financial capital for NFE development, it is necessary to conduct this interim assessment which is beyond the scope of this study.

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