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Debre Berhan University

**Agriculture and Natural Resources Investment
Potentials Guide, North Shewa Zone, Amhara Region**

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Debre Berhan University, Ethiopia

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ABBREVIATIONS

CSA	Central Statistical Agency
FDI	Foreign Direct Investment
FGD	Focus group discussion
GCP	Ground Control Points
GIZ	German Agency for International Cooperation
GPS	Global Positioning System
SWOT	Strengths, Weaknesses, Opportunities, and Threats
UN	United Nations
USAID	United States Agency for International Development

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1. GENERAL BACKGROUND

Ethiopia is a landlocked country located on the Horn of Africa between 32°58'00" E to 48°00'00" E and 3°25'00" N to 14°55'00" N. Its geographic location, gives the country a comparative advantage and strategic importance as a jumping off point in the horn of Africa¹. Ethiopia stretches over more than 1.1 million square kilometers and has a wide variety of climate zones and soil conditions. The country holds over 110 million population, which is the second most populous country in the region (World Bank, 2020). The country's working-age population, currently estimated at 59 million, and it is projected to more than double until 2050².

After a regime change in 1991, the country's governance structure has been transformed from a unitary to a federal system of government, where the central government oversees ten ethnic based regional governments and two chartered cities. Since then, the country has been experimenting devolution of power into the lower four tiers of government in the state structure. This is a new experience for the country, which was governed by a typical monarch system for centuries. Recently the government has been working closely with multilateral organizations on the transition of the state-led economic development into a private-sector driven model of development. This creates an opportunity to the expansion of private-sector investment and international trade ³.

The government of Ethiopia has implemented various agricultural policies such as Agricultural-Led Industrialization, Sustainable Development and Poverty Reduction Program (1995 - 2005), Participatory and Accelerated Sustainable Development to Eradicate Poverty (2005 - 2010) and Successive Growth and Transformation plans I (2010 - 2015) and II (2015 - 2020) to raise the productivity of Agriculture. Ethiopia is one among few countries has been registering rapid and sustainable decade-long economic growth rates of 10.9% per annum⁴. To sustain this economic growth, the government of Ethiopia has promoted industrialization, and Foreign Direct Investment (FDI). To this end, substantial reforms in many sectors have been made in the last two-three years. These integrated promising efforts lifting the country from being the poorest in the world to becoming a middle-income country by 2025.

¹ GIZ, 2019

² UN, 2017

³ USAID, 2019

⁴ EIC, 2016

1.1 A Brief Description of the Region

Amhara regional state is located in the North Western and North Central part of the country. Amhara is the second most populous region with 21.1 million populations in 2017 with the estimated working ages of the region accounts 56%. The majority (84%) population resides in rural areas and engaged in agriculture. Agriculture is not only remained to be the dominant economic sector in the region but also it is the major source of food, raw materials for local industries and export earnings. The region is comprised of 12 administrative zones, 3 metropolitan cities and 181 districts. The total land size of Amhara region is 161,824.4 sq. km, which has 15% share in the total land coverages of the country. About 43.6% (70,555.26 sq. km) of the land in the region can be cultivated by irrigation and rain-fed agriculture, out of which 1.2 million hectares are potentially producing high crop yield. This indicates that the region has plenty of under-utilized and/or unutilized land conducive for agriculture. The major crops grown in the region are cereals, oilseeds, pulses, vegetables and fruits.

The region has also endowed with diverse agro-ecologies: *Weyna dega – mid altitude* (45.58%), *Dega - highland* (32.02%), *Kola – lowland* (21.95%) and *Wurich- extreme highland* (0.46%). Amhara region is known for country's highest peak Mountain, Ras Dejen, 4,450 meter and lowlands below 500 meter in western parts of the region. This giving a huge potential for production of a variety of agricultural products for export and domestic purposes. Moreover, the abundant water resources from Lake Tana and the rivers found in the region provide immense potential for irrigation development, hydroelectric power generation and fishery development.

Among few comparative advantages investing in Amhara region are availability of fertile cultivable land for agricultural production and Agro-processing for industrial purposes at 11 industrial zonal cities, long rural land lease period up to 30 years, rent free urban and rural land incentives for selected projects such as horticulture and floriculture, priority in servicing investment sites, strategic location to the ports of Djibouti , Sudan and Eritrea, conducive climate, provision of infrastructure facilities by the state, availability of industry villages and parks (with sheds) and availability of Airports.

1.2 Facts of the North Shewa Zone

The Zone covers about of 17,347.19 sq km land size and characterized by four agro-ecologies: such as *Wurich* (>3500 masl) (0.5%), *Dega* (2500 - 3500 masl) (32%), *Weyna dega* (1500 - 2500 masl) (45.5%) and *Kola* (500 - 1500 masl) (22%), which is suitable for various agricultural commodities with different environmental requirements. The zone is divided into 22 districts and 5 city administrations. The zone also includes 446 kebeles (384 rural and 62 urban). Among the districts and city administrations, Minjar Shenkora is the largest area coverage of 1,596.83 sq km, while Ataye city administration is the smallest land coverage of 29.16 sq km. North Shewa Zone owned a total communal land size of 211,311 hectares. Similarly, the area map indicated that the flat land covers 38.86% followed by mountainous (25.89%), uneven (23.40%) and valley (11.85%). Debre Berhan is the capital city of the Zone, which is located at 130 km away from Addis Ababa, the capital city of the country. The number of human populations found in the Zone in 2019 was estimated to be 2,263,097 (17.7% Amhara region population) with the growth rate of 1.6% in 2019. The population density of the Zone was about 130 persons per km².

The access to road has the impact in enhancing or reducing the investment flow in any parts of the country. In the North Shewa zone, the investment sector is increasing year to year, which could be associated with the availability of road access. The road coverage of the zone estimated to be 2,456.32 km. Bassona Werena, Minjar Shenkora, Menz Gera, Menz Mama and Efratana Gidem are the top five districts with better road accesses. With regard to education, in 2011 the number of kindergartens, primary schools, secondary schools, and preparatory schools were 47; 1,070; 61 and 29, respectively with the consistent number of students were 6,085; 398,480; 59,646 and 11,011, respectively.

The zone is gifted with over 39 perennial rivers potentially cultivate wide hectare of lands. In 2010 North Shewa Zone cultivated 71,046 hectares of land through irrigation and produced 12,999,474 quintals of crops (grain crops, vegetables, fruits and spices). The same year the top districts in utilizing land for irrigation were Merhabete (3,015 hectare), Efratana Gidem (5,214 hectare), Kewet (5,124 hectare) Shewa Robit (2,330 hectare), Mida Weremo (2,279 hectare), Antsokiya Gemza (2,118 hectare) and Moretina Jiru (1,847 hectare). The total coverage of tap water supply in the North Shewa is 84.19% (rural 81.21% and urban 97.09%). The remaining 15% of the population in the zone cannot access potable water.

Electric service or supply is one of the most important facilities to attract and establish agricultural investment. Although the electric coverage in the zone has been increasing year to year, currently 42% of the total the areas of the zone have electricity access. The top five electric coverage districts in the zone are Mojana Wedera, Angolelana Tera, Efratana Gidem, Mida Weremo and Bassona Werena. To keep the current high investment flow in the zone and due to the nature of agricultural investment the electric coverage of the zone must be enhanced.

Generally, North Shewa Zone is endowed with favorable agro-ecologies, experienced and cooperative farmers and potential resources. For instance, crop productions such as cereals, pulses, oil crops, and highland and low land fruits, spices and vegetables are widely practiced in the zone for a long time. The Zone has also immense potential for dairy, fattening, beekeeping, and livestock product processing investments. Agriculture, and forestry and its products (such as incense and natural gum) are the major investment opportunities in North Shewa Zone. This fact is confirmed by the investment flow of the zone in the last five years. The zone has been given investment permission for 267 projects with 4.5 million ETB.

Although there are few documents related to investment potential of the country and Amhara region, investment potential of North Shewa Zone was not assessed and documented in the way that adds a value to the investment strategy of the Zone. Besides, the needs for assessing and documenting the untapped investment potential of the zone is increasingly become the agenda of the development practitioners on the region to attract private sector investment into the Zone and to stimulate and maintain economic growth and development activities. Experiences in developing countries showed that investment potential assessment documents are the most critical and entry point for most investors to invest in the area. The results of research and development roadmap need assessment study conducted by Debre Berhan University (DBU) in 2020 also indicated the relevance of such study. Therefore, this assessment study was designed and conducted by the team of experts in DBU in collaboration with experts of zone agriculture and investment offices with the general objective of identifying agricultural investment potentials in North Shewa Zone.

1.3 Objectives of the study

The specific objectives of the assessment study were:

- To assess the agriculture and natural resource investment potentials of the zone
- To locate or map few production and investment potentials in agriculture and natural resources in the zone
- To analyze the SWOT of agriculture and natural resource investments in the zone
- To outline the perception of the community towards agriculture related investment in North Shewa Zone

1.4 Significance of the assessment study

Assessing the investment potential of the zone is pertinent to attract value adding investment flow into the Zone, making proactive investment related decisions by different economic actors and provide the necessary information/input to prepare long-term investment strategy and roadmap and shed light as to how investment sector business leaders can best monitor and manage investment flow in the Zone.

1.5 Scope of the study

This assessment study was targeted on identifying agriculture investment potential of North Shewa Zone. The study was limited and focused on the agriculture sector potential, particularly the dairy, fattening, poultry, vegetables, fruits, cereal crops, forest and other related resources in North Shewa zone.

2. MATERIALS AND METHODS

2.1. Location of the study area

The investment potential study was conducted in North Shewa Zone, Amhara region. Geographically North Shewa Zone is located between 8.38° N to 10.42° N and 38.40° E to 40.30° E (Figure 1). Debre Berhan is the capital town for the zone. It is 130 km and 687 km far from Addis Ababa and Bahir Dar city, respectively.

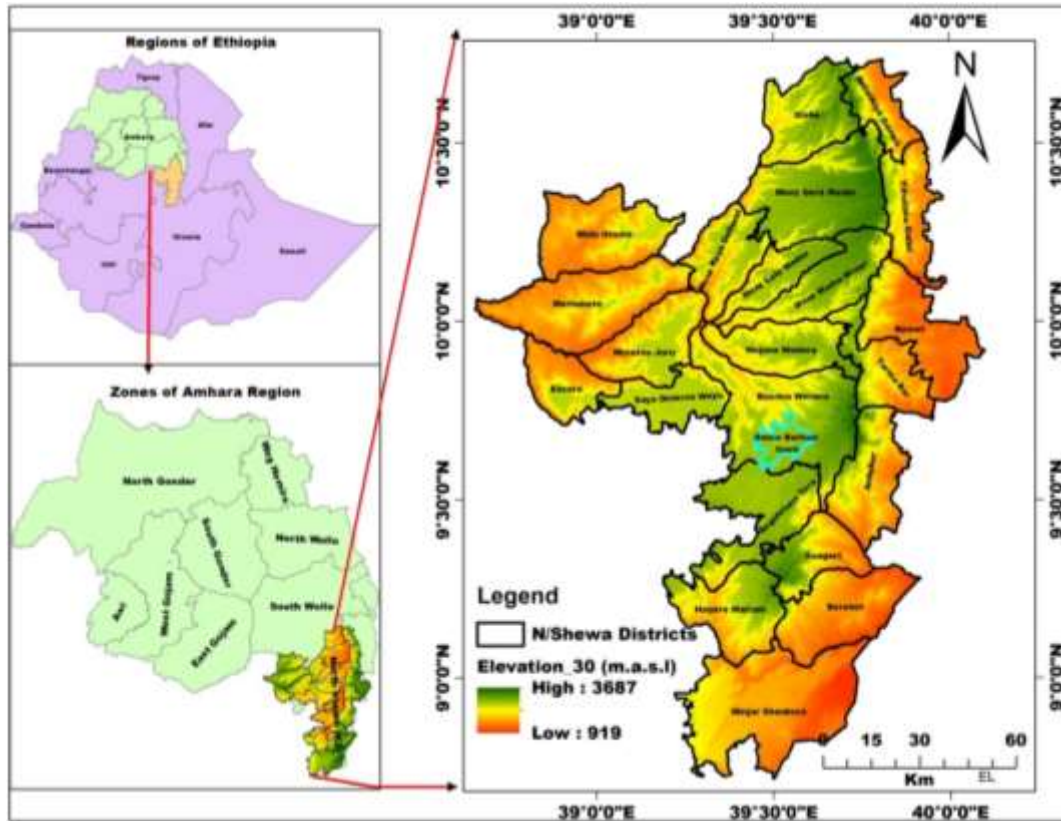


Figure 1.1. Location Map of North Shewa zone

2.2. Data Type and Sources

The source of data for this study comprised of both secondary and primary sources. The primary data was collected using a structured questionnaire. Since it is important not to heavily rely on one data source, given the high likelihood of individual bias and imperfections during data collection, key informant interviews and relevant secondary data sources including reports from the Zone and District Investment, Agriculture and rural development, Trade office, Environmental and land administration offices and Central Statistics Agency were used to augment the primary data. Since it is very difficult to assess every aspect of the resources together with all the details associated with it, the study team was also used data from previous studies conducted by reliable national and international organizations.

2.2.1. Secondary Data Sources

The collected secondary data included human population size with different age groups, land size and utilization, water sources, metrological data (altitude, rainfall, and temperature), education level, livestock population in species level, agro-ecologies, forest products, and infrastructure access (electric, road and water). In addition, the trends of the major agricultural products production, consumption and market in the last five years in North Shewa zone and potential districts were collected and summarized. The land size coverage trends for each cereal crop, vegetables, fruits, and cultivated forest were gathered. Detailed literature review on selected investment potential of agricultural commodities in North Shewa zone was done.

2.2.2. Primary Data Sources

Key Informant Interview (KII): Key informant interview was done based on semi-structured questionnaire prepared to gather qualitative information from key actors of the agriculture sector and investors who are engaged in agriculture and related investments in the Zone. The main advantage of using a semi-structured interview is that it helps to capture, describe and discuss the respondents' own ideas, opinions and experiences. Twenty selected investment sites were visited and owners were interviewed organized checklists. Prior to the discussion, informed verbal consent was obtained from all participants. Data such as production potential, comparative advantages, challenges, opportunities and treats were collected.

Focus group discussion (FGD): A group of 16 of expert-based discussions with crop, livestock, horticulture, extension and investment office experts at zonal and in selected investments potential districts were conducted to identify and prioritize the major investment commodities and potential districts in agricultural sectors in North Shewa zone. The discussion focused on the challenges, comparative advantages, opportunities and treats of investment in the zone. Pair-wise ranking technique based on potential and accessibility was employed to identify and rank investment potential districts in the zone.

Household Interview: The perception of the communities towards investment flows of the zone or specific districts was explored. A total of 30 farmers were selected purposively in investment operating areas to assess their opinion and ideas about the challenges, opportunities and direct benefits of the investments.

Spatial data analysis and mapping: For analyzing and mapping the current forest cover and potential districts; satellite image, google earth image, GPS collected data, field observation and other secondary data were used. Direct field observation and discussion with zonal and district experts were also conducted to identify the current forest types, coverage and trends. The collected data were converted into maps using ArcGIS and ERDAS Imagine software. Besides, these softwares were used to interpret, analyze and digitize the current forest cover and potential lands for forest investment. GPS collected data was used to collect ground control points (GCP) and digital camera was used to take photographs that help for ground verification.

2.3. Methods of Data Analysis

Both quantitative and qualitative methods of data analysis were employed to analyze the data and present the results of the assessment study. Data obtained from different sources were cross-checked and the final results of the assessment study were presented in tables and figures.

3. AGRICULTURE AND NATURAL RESOURCE INVESTMENT POTENTIALS IN THE NORTH SHEWA ZONE

3.1. Livestock

3.1.1. Situational Analysis of Livestock Sector

Livestock supports the livelihoods of more than 84% of rural people found in the zone. In extreme highland parts of the zone, its contribution to the rural community is very significant. The sector comprises cattle, sheep, goats, poultry, equines and beehives. The data obtained from the zone showed that the trends of livestock population (cattle, sheep, goats and chicken) over the last five years were increasing. For instance, based on the five years data (2008 to 2012 E.C), the cattle, sheep, goat and poultry populations increased by 1.6%, 1.2%, 52.9%, 95%, respectively. Cattle population grew from 1,627,565 to 1,653,055. The sheep population increasing from 1,685,214 to 1,698, whereas, goat population raised from 696,957 to 1,066,268. The chicken populations are also increasing from 1,102,375 to 2,150,000 (Table 1). Similarly, the livestock population in Ethiopia in general and Amhara region in particular has grown significantly over the last decade. Currently the zone has a share of 2.5 vs 10%, 4.2 vs 16%, 2.1 vs 15.5%, and 4.3 vs 12.8% cattle, sheep, goat and poultry population, in Ethiopia and Amhara region, respectively.

The highest livestock populations districts in the zone are Mida Weromo (224,913), Bassona Werana (119,767), Agolelana Tera (112,413), Minjar Shenkora (105,497) and Efratana Gidem (101,390) in cattle, Menz Gera (276,597), Menz Mama (209,406), Agolelana Tera (138,429), Gisherable (133,735) and Mojana Wedera (93,916) in sheep, Bassona Werena (94,918), Efratana Gedim (67,030), Minjar Shenekora (64,168), Ankober (54,493) and Berehet (52,870) in goats, and Minjar Shenkora (217,543), Merahabete (189,746), Menz Gera (175,323), Bassona Werena (168,403) and Agolelana Tera (158,434) in poultry population. Agolelana Tera (27,652), Bassona Werena (19,253), Hager Mariam (8,064), Debre Berhan (3,643) and Moretina Jiru (3,439) are top districts with crossbred cattle⁵.

⁵ North Shewa zone report, 2012

Table 1. Trends of livestock population in North Shewa from 2008 to 2012 E.C.

Livestock	2008	2009	2010	2011	2012	North Shewa	Amhara	Ethiopia
Cattle	1,627,565	1,635,028	1,641,375	1,647,197	1,653,055	1,540,426	16,318,446	65,354,090
Sheep	1,685,214	1,690,270	169,5341	1,695,341	1,698,731	1,917,701	10,386,223	39,894,394
Goat	696,957	786,538	885,544	965,559	1,066,268	820,701	6,883,316	50,501,672
Donkeys	376,632	377,762	378,895	378,895	37,9653	568,261	3,435,729	9,987,762
Horses	55,911	56,079	56,247	56,247	56,360	104,713	461,620	2,111,134
Mules	18,886	18,943	18,999	18,999	19,037	5,548	184,657	352,603
Camels	17,758	17,782	18,964	19,201	19,580	12,764	49,467	7,702,493
Chicken	1,102,375	1,214,318	1,847,663	1,985,687	2,150,000	1,578,906	16,827,119	48,955,675
Bee hives	35,842	35,950	36,058	36058	36,130	82,641	1,353,537	6,958,004
Source: North Shewa zone report (2008-2012)						Source: CSA (2019/20)		

Milk production, consumption and markets: Although the zone is endowed with large livestock resource, the current livestock output of the zone in particular and the country at large is very little. With regard to the trends of milk production (2008 to 2012 E.C), the amount of milk production was increasing from 73,625,000 to 112,393,000 liters⁶. Ethiopia, Amhara and North Shewa Zone holds about 1,249,245; 357,749; 141,208 number of hybrid cattle, respectively⁷. The total number of milking cows in Ethiopia, Amhara region and North Shewa zone was 12,575,143; 2,657,769 and 178,980, respectively with the corresponding daily milk yield of 1.48, 1.30 and 1.57 liters⁸. This shows that average milk production per cow in the zone is higher than average of the region as well as the country. The total annual cow milk production in Ethiopia, Amhara region and North Shewa was 3,895,323,355; 730,420,497 and 66,421,610liters, respectively (Table 2). Debre Berhan (26,000,000), Bassona Werena (22,100,000), Agolelana Tera (19,500,000), Siyadebirna Wayu (13,000,000) and Hager Mariam (10,400,000 liters) are the top milk producing districts in the North Shewa zone⁹.

Out of the total milk production in the zone 33.5% (22,224,670.71 liters) and 4.18% (2,776,423.3 liters) used for household consumption and sale, respectively (Table 2). The rough per capita milk consumption of North Shewa zone is estimated to be 9.82 liters without consideration of butter and Ethiopian cottage cheese¹⁰, which is far below the average per capita consumption of Ethiopia (19.2 kg), Africa (37.2 kg) and WHO recommendations (200 kg). Debre Berhan, Bassona Werena, Angolela Tera, Siyadebirna Wayu and Hager Mariam are the top five milk consumer in the North Shewa zone.

6 North Shewa Report, 2012
 7 CSA, 2019/20
 8 CSA, 2019/20
 9 North Shewa Report, 2012
 10 CSA, 2019/20

Table 2. Production of livestock products and utilization (CSA, 2019/20)

Type of animals		Ethiopia	Amhara	North Shewa Zone	North Shewa Zone: utilization (%)	
					Home consumption	Sale
Dairy	Number of dairy cows	7,150,187	525,187	389,911		
	Number of milking cows	12,575,143	2,657,769	178,980		
	Milk production (liter)	3,895,323,355	730,420,497	66,421,610	33.46	4.18
Chicken	Indigenous laying hens	13,410,657	4,367,410	543,644		
	Exotic laying hens	2,006,602	532,208	110,381		
	Hybrid laying hens	2,586,610	636,929	175,474		
	Egg production: indigenous laying hens	110,569,380	36,801,619	4,426,943		
	Egg production: exotic laying hens	29,808,501	8,754,617	2,051,054		
	Egg production: hybrid laying hens	176,443,288	36,344,226	10,000,916		
	Total egg laying hens	18,003,869	5,536,547	829,499		
	Total egg production	316,821,169		16,478,913	34.86	54.80
	Honey	Number of hives	6,958,004	1,353,537	82,641	
	Total honey production (kg)	150,257,660	17,606,780	794,784	56.74	36.68

Meat production, consumption and markets: The numbers of beef cattle in Ethiopia, Amhara region and North Shewa zone were 740,193; 112,427 and 10,666, respectively. The numbers sheep used for mutton in Ethiopia, Amhara region and North Shewa zone were 1,439,027; 289,463 and 107,383, respectively, the corresponding values of goat was 1,833,944, 375,476, and 126,889, respectively¹¹. In Ethiopia in 2012 the total meat (beef, small ruminants, pig, camel and chicken) consumption was 659,305 tons¹². The production of meat in the North Shewa is increasing and the zone reports indicated that Moretina Jiru, Menz Gera, Bassona Werena, Agolelana Tera and Menz Mama are the largest producer of meat¹³.

Although Ethiopia has the largest livestock inventory in Africa, the country has one of the lowest per capita consumptions of meat in world. The consumption of meat in Ethiopia was 8 kg/person per year in 2012. The consumption of meat in the North Shewa zone shows a positive trend, which might be due to increasing population and income. Debre Berhan, Menz Gera, Bassona Werena, Angolelana Tera, and Menz Mama were the top consumers of sheep meat, while Efertana Gidem, Merahbetie, Shewa Robit and Mida Weremo were goat meat consumers. On the other hand, Debre Berhan, Moretina Jiru, Angolelana Tera, Syidebrena Wayu, and Minjar Shenkora are the largest consumer of cattle meat.

¹¹ CSA, 2019/20
¹² FAOSTAT, 2013
¹³ North Shewa Zone Report, 2012

The number of cattle sold in Ethiopia, Amhara region and North Shewa zone 6,209,042, 1,764,848 and 169,771, respectively with the corresponding numbers for sheep and goats were 7,456,172, 2,502,301 and 339,912; and 8,002,727, 1,624,607 and 125,482, respectively (Table 3). On the other hands, the number of slaughtered cattle in Ethiopia, Amhara region and North Shewa zone were 441,454, 132,639 and 9571, respectively (Table 3). The corresponding values for sheep and goat were 4,539,140; 2,605,873 and 258,160; and 3,497,988, 1,158,349 and 96,623, respectively.

Table 3. Total meat animals, number of sales and deaths

		Cattle	Sheep	Goat	Camel	Chicken
Meat animals	Ethiopia	740,193	1,439,027	1,833,944.00	896,467	
	Amhara	112,427	289,463	375,476	No data	
	North Shewa	10,666	107,383	126,889	No data	
Number of sales	Ethiopia	6,209,042	7,456,172	8,002,727	342,660	13,241,454
	Amhara	1,764,848	2,502,301	1,624,607	No data	5,978,382
	North Shewa	169,771	339,912	125,482	No data	501,749
Number of slaughters	Ethiopia	4,41454	4539140	3,497988	30,005	12,894,275
	Amhara	132,639	2,605,873	1,158,349	No data	6,080,541
	North Shewa	9571	258,160	96,623	No data	665,729
Number of deaths	Ethiopia	3,109,310	5,524,776	7,526,291	216,366	34,706,683
	Amhara	483,529	1,325,357	1,258,211	No data	14,198,426
	North Shewa	34,226	210,589	206,050	No data	1,171,236
Source: (CSA, 2019/20)						

Egg production, consumption and markets: The demand for chicken products is growing quickly in Ethiopia. The Government recently set new targets to bring meat production to 164tons and egg production to 3.9 billion eggs by end of Growth Transformation Plan II (2020) through improved poultry breeds. The total number of indigenous laying hen in Ethiopia, Amhara region and North Shewa zone was 13,410,657; 4,367,410 and 543,644 with the total number of egg production of 110,569,380; 36,801,619 and 4,426,943, respectively (Table 2). The total numbers of laying hybrid chicken in Ethiopia, in Amhara region and in North Shewa zone were 2,586,610; 636,929 and 175,474 with the total number of egg production of 176,443,288; 36,344,226 and 10,000,916 respectively (Table 2), Whereas, the total laying exotic chicken in Ethiopia, Amhara region and North Shewa zone were 2,006,602; 532,208 and 110,381 with the total annual egg production of 29,808,501; 8,754,617 and 2,051,054, respectively (Table 2). Therefore, the total numbers of egg produced in Ethiopia, Amhara region and North Shewa zone were 317, 82 and 16 million, respectively (Table 2). The largest chicken egg producer districts in North Shewa zone were Debre Berhan, Minjar Shenkora, Angolelana Tera and Tarmaber¹⁴.

¹⁴ North Shewa zone report, 2012

The average number egg-laying period per hen per year is about 5, 10 and 1 for the local, hybrid and exotic breeds, respectively. The average length of a single egg-laying period per hen is estimated to be about 23, 62 and 143 days for local, hybrid and exotic breeds, respectively. The average number of eggs laid per hen per egg-laying period in the country is about 13; 51 and 120 eggs, correspondingly.

Out of the total production of egg in North Shewa zone 34.86% (5,744,549) and 54.80% (9,030,444) used for home consumption and sale, respectively (Table 2). The available data in the zone indicated that the per capita consumption of egg was 2.5kg. The per capita egg consumption of egg in Ethiopia and African average 0.5 and 2.5 kg, respectively. The total numbers of poultry sold in Ethiopia, Amhara region and North Shewa were 13,241,454; 5,978,382 and 501,749, respectively (Table 3).

Honey production, consumption and market: Ethiopia is Africa's largest producer of honey and tenth in the world, with more than five million bee colonies. The country ranks fourth in the world in terms of bee wax production and export. The national honey production was 150 million kilograms with honey was harvested on average 1.73 1.82 and 1.67 times from traditional, intermediate and modern hives, respectively (CSA, 2019/20). The average annual honey produced in Amhara and North Shewa zone were 17 million and 747,784 kilograms, respectively (Table 2). The largest honey producer districts are Eferatan Gidem, Menz Gera, Merhabete, Anstokiy Gemeza and Kewet¹⁵. Out of the total production of honey (747,784 kg) in North Shewa zone 56.74% (450,960.4) and 36.68% (291,526.8 kg) used for home consumption and sale, respectively (Table 2). Angolelana Tera, Menz Gera, Bassona Werena, Eferatan Gidem and Anstokiy Gemeza the top five districts, which market honey. In addition, Eferatan Gidem, Kewet, Merhabete, Anstokiy Gemeza and Menz Gera are top honey consumers¹⁶.

¹⁵ North Shewa Zone Report, 2012

¹⁶ North Shewa Zone Report, 2012

3.1.2. Status of Livestock Investment in North Shewa Zone

The livestock sector is an important part of agricultural sectors for rural Ethiopia and it is potentially the largest rural employer in the Ethiopian highlands including North Shewa Zone. With continued urbanization, growing population size, demand for milk and meat, it is expected that the livestock industry will become a major player in agricultural development and has further potential to contribute significantly towards increased income and employment through investment.

Amhara Region in general and North Shewa Zone in particular has huge investment potentials for livestock development. Out of 1,287 registered investments in NSZ, about 6.8% of the investments are in livestock sector¹⁷. Secondary data currently obtained from the zonal offices shows that about 21 investments currently under operation and another 22 investments on construction in the livestock sub-sector. The majority of the investments are in dairy production and milk processing sectors followed by poultry production and cattle fattening. In terms of the number of livestock investments attracted to the zone, Angolela Tera takes the largest share followed by Bassona Werena and Debre Berhan districts.

¹⁷ North Shewa zone report, 2012

3.1.3. Proposed Investment Potentials Commodities and Districts

Ethiopia envisions becoming a middle-income country by 2025. The three key pillars or dimensions of Sustainable Development Goals (SDGs) to achieve the target are economic (light manufacturing: textile and leather garment), social (education and health), and environmental (sustainable use of natural resources and boosting resilience to adverse impacts of climate change) developments. However, agricultural sector development continues to be the major source of an accelerated economic growth and development of the country. About 11.7 million smallholder households in Ethiopia contributes 95% of agricultural GDP and 85% of employment of the country¹⁸. Livestock production accounts for about 32% of agricultural GDP and draught animal power is critical for all farming systems. Ethiopian agriculture is dominated by subsistence, low input-low output, and rainfed farming system. The use of improved technologies inputs is quite limited despite government efforts to encourage the adoption of modern and intensive agricultural practices.

Investment in livestock agriculture in Ethiopia has the potential to reduce poverty, improve the food security of rural people and make livestock an increasing contributor to GDP growth. The Ethiopia Livestock Master Plan (LMP) targeted to meet to increase meat, milk and egg production by 58, 83 and 828%, respectively in 2020¹⁹. North Shewa zone is a preferable destination for agricultural investment in general and livestock sub-sector commercial farming in particular, which is due to sustainable peace and security; conducive agro-climatic zones for the priority area of cattle, sheep, goats and poultry; high number of active labour force with competitive wage rate; availability of branded Jiru fattened cattle and Menz sheep; large numbers of livestock population with relative higher number of crossbred dairy cattle and sheep; relative better productivity of cattle; strategic location with proximate to central market and Addis Ababa airport and expansion of infrastructures such as road, electric and water in the zone. In addition, the sub-sector requires less land compared to crop, fruits and vegetables to utilize the untapped or under-utilized livestock resources of the zone.

The top five districts for the livestock investment destinations based on few potential indicators criteria are indicated in Table 4. The districts in the Zone have a potential of livestock investment at varying degree although they are not taken into account in the Table 4.

¹⁸ Demese Chanyalew, Berhanu Adenew and John Mellor (2010): "Ethiopia's Agricultural Sector Policy and Investment Framework: Ten-Year Roadmap (2010-2020)"

¹⁹ Shapiro, B.L., Gebru, G., Desta, S., Negassa, A., Nigussie, K., Aboset, G. and Mechal, H. 2015. Ethiopia livestock master plan. ILRI Project Report. Nairobi, Kenya: International Livestock Research Institute (ILRI).

Table 4. Top investment potential districts for different types of livestock

No	Potential Commodity	Investment potentials destination districts	Potential	Market	Rank
1.	Investment in dairying: milk production, processing and heifer Multiplication	Angolelana Tera	H	H	HH
		Bassona Werena	H	H	HH
		Siyadebrina Wayu	H	H	HH
		Debre Berhan	H	H	HH
		Moretina Jiru	H	H	HH
		Hagere Mariam	M	H	MH
2.	Investment in feedlot operation: fattening operations using cattle including weaned calves, and small ruminant	Moretina Jiru	H	H	HH
		Siyadebirna Wayu	H	H	HH
		Minjar Shenkora	H	H	HH
		Kewet	H	H	HH
		Mojana Wedera	M	H	MH
3.	Investment in sheep ranching	Angolelana Tera	H	H	HH
		Mojana Wedera	H	H	HH
		Menz Lalo	M	M	MM
		Menz Gera	M	M	MM
		Menz Mama	M	M	MM
		Menz Keya	M	M	MM
		Gisherbel	M	M	ML
4.	Investment in goat farm	Efratana Gedem	H	H	HH
		Minjar Shenkora	H	H	HH
		Kewet	H	H	HH
		Ankober	H	M	HM
5.	Investment in hatchery operation and poultry farm	Minjar Shenkora	H	H	HH
		Bassona Werena	H	H	HH
		Angolelana Tera	H	H	HH
		Tarema Ber	H	H	HH
		Shewa Robit	H	H	HH
		Hager Mariam	M	H	MH
		Menz Gera	M	M	MM
		Merhabete	M	M	MM
6.	Investment in honey production	Efratana Gedim	H	H	HH
		Ankober	H	H	HH
		Antsokia Gemeza	H	M	HM
		Merhabete	H	M	HM
		Kewet	M	H	MH
		Menz Mema	M	M	MM
		Menz Keya	M	M	MM
		Menz Gera	M	M	MM
Asagirt	M	M	MM		

Note: H - high, M - medium; potential: production, productivity, water, consumption, weather, feed and animal health, number of investments in sector, number of animals, number of improved breeds) and market: road, electricity and market for products.

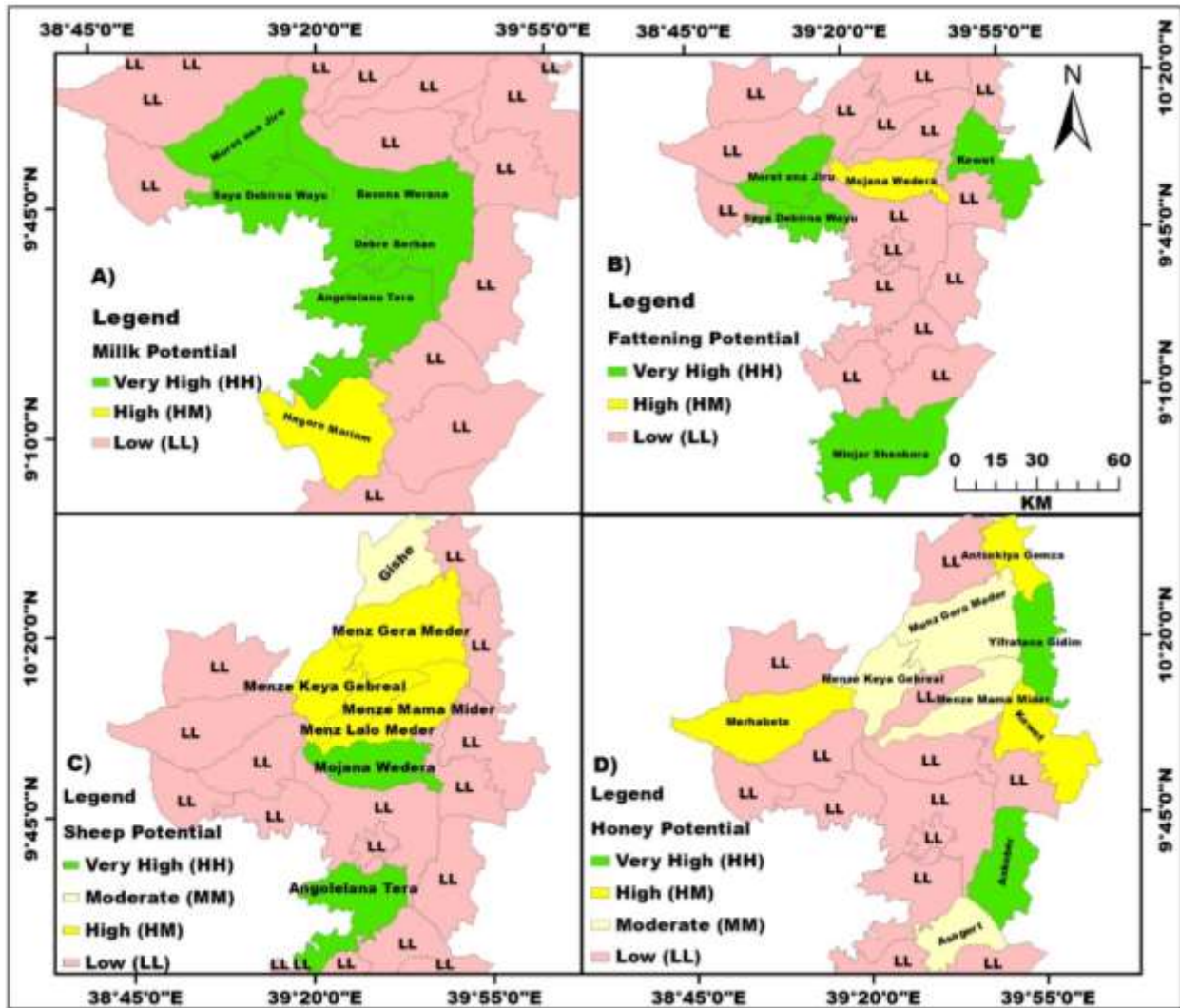


Figure 1. Investment potential districts for A) Milk B) Fattening C) Sheep and D) Honey

3.1.4. Challenges and opportunities of Livestock Investment in North Shewa Zone

Strengths	Weakness
<ul style="list-style-type: none"> • Availability of few successful livestock investment in the zone • The productivity of cattle higher than the region and the country • Availability of cereal byproduct of for animal fed. • Suitable environment condition for livestock. 	<ul style="list-style-type: none"> • Low land compensation fee • Low performance of livestock production investment • Weak investment follow-up and support • Lack of investment promotion office in few potential districts • Shortage of inputs: drugs, improved forage seeds/seedlings, compound feed for different group of animals • Absence of animal feed processing factory
Opportunities	Threats
<ul style="list-style-type: none"> • Location • Availability number of branded menz sheep and Jiru cattle • Better farmers investment attitudes and experiences • Political stability • High political commitment • High human power • Diverse agro-ecology favors livestock production • Expansion of institutions 	<ul style="list-style-type: none"> • Waste management • Displacement

3.2. Grain Crops

3.2.1. Situational Analysis of Crop Sector

Cereal Crop Production: In Amhara region, North Shewa Zone ranks fifth next to two zones of Gojam (East and West) and Gonder (North and south) in cereal crops production (Haimanot, 2011)²⁰. Cereal crops contribute to the largest share of production (91.65%) and area coverage (93.03%) in the North Shewa zone. The remaining shares of production were for horticultural crops (5%), pulse crops (3.3%) and oil crops (0.05%) with consistent area share of 6.0, 0.14 and 1.09%, respectively. The major cereals growing in North Shewa zone are wheat, sorghum, *Teff*, food barley, maize, and malt barley. Among the total cereal crops, 96.84% of the production in the zone covered by wheat (37.88%), sorghum (28.11%), *Teff* (21.08%) and barely (9.80%). Similarly, these four major crops accounts 96.75% of the total area coverage of the cereal crops in mid and highland areas of the zone except sorghum, which grows in the lowlands.

The total cereal crops area coverage and production have been increasing from 355,809 hectares in 2008 to 443,396.08 hectares in 2012/13 with the corresponding production amount of 6.19 to 11.23 million quintals, respectively (Table 1). Similarly, the production trends of the major crops namely sorghum and *Teff* have been increasing from 3.3 to 4.0 and 1.9 to 2.9 million quintals, respectively, whereas the production of wheat and maize has been decreasing in same years (Table 2). *Teff* and wheat production in the North Shewa zone accounts to 13.32 and 16.14% of Amhara region, which makes the zone ranked third following East and West Gojam zones²¹. In addition, the zone is also top producer of barley in the region. In addition, malt barley production increased from 0.054 million quintals in 2011 to 0.14 million quintals in 2012.

Moretina Jiru, Merhabete, Minjar Shenkora, Mida Weremo, Bassona Werena, Ensaro, Siyadebirna Wayu, Angolelana Tera, Efratana Gidem and Mojana Wedera contributed to 72.14% of the total cereal crops production in the zone (Table 1). Moretina Jiru, Minjar Shenkora and Siyadebirna Wayu in wheat, whereas Merhabete, Minjar Shenkora and Moretina Jiru in *Teff* are the known producing districts in the zone. The average wheat and *Teff* productivity per hectare are 53.02 and 27 quintals, respectively (Table 3).

²⁰ Haimanot Abiy, Mucbe Shiferaw, Tadesse Belay, Belachew Abelneh, Degu Alem, and Temesgen Alehegn, 2019. Amhara Regional State Investment Road Map.
²¹ Haimanot et al, 2019

Table 1. Grain crops production(qt) and area coverage (ha) (CSA, 2019/20)

Meher crops production in quintals and area in hectares		North Shewa	Amhara region	Ethiopia
Cereals	Area	443,396.08	3,508,380.78	10,478,218.03
	Production	11,231,819.52	93,601,345.80	296,726,476.9
Pulses	Area	110,557.38	667,091.88	1,563,768.72
	Production	2,103,904.77	12,292,550.91	30,051,986.62
Oilseeds	Area	3,594.33	330,010.57	820,792.09
	Production	29,621.48	2,869,631.75	8,421,360.34
Grain crops	Area	557,547.8	4,505,483.23	12,862,778.84
	Production	13,365,345.77	108,763,528.47	335,199,823.90

Table 2. The trends *Meher* season major grain crop production and area coverage from 2008/09 to 2012/13

Grain crops	2008/09			2009/10			2010/11			2012/13 (2019/20)		
	Area	Amount	Productivity (qt/ha)	Area	Amount	Productivity (qt/ha)	Area	Amount	Productivity (qt/ha)	Area	Amount	Productivity (qt/ha)
Cereal crops												
Sorghum	89,710.13	3,361,841.28	37.47	83,938.16	3,523,263	41.98	71,903.92	2,837,063.7	39.46	133,521.03	4,007,443.18	30.0
<i>Teff</i>	103,527.42	1,942,682.40	(18.76)	103,787.82	2,342,608	22.57	119,672.08	2,743,531.5	22.93	153,596.38	2,911,361.61	18.95
Wheat	107,434.65	3,525,376.51	32.81	114,510.43	4,242,778	37.05	117,529.08	4,290,784	36.51	85,332.08	2,448,543.15	28.69
Barley	52,643.38	998,590.69	18.97	46,593.47	1,095,269	23.51	45,592.60	1,031,748	22.63	65,290.07	1,664,620.51	25.50
Maize	7,257.10	223,030.74	30.73	6,510.26	262,413.3	40.31	5,825.95	198,539.1	34.08	5,477.44	196,832.06	35.94
Pulse crops												
Faba beans	38,342.91	507,383.35	13.23	38,853.72	873,882	22.49	39,696.07	783,033.2	19.73	44,509.5	1,036,318.8	23.28
Lentils	28,180.77	481,480.17	17.09	8,511.18	557,372	19.55	24,849.77	340,415.4	13.7	21,747.9	325,053.3	14.95
Field peas	12,019.33	177,903.55	14.8	9,314.47	155,659	16.7	9,623.52	152,136.0	15.81	14,221.2	243,110.2	17.09
Chick-peas	14,440.46	282,771.21	19.58	14,006.48	307,956	21.99	14,495.84	314,806.4	21.72			
Mung bean	16,928.60	194,294.63	11.48	19,218.39	288,229	15	19,398.03	264,713.7	13.65	13,870.9		
Grass pea	2,560.05	38,531.6	15.05	1,961.02	37,945	19.35	1,960.23	42,374.7	21.62			
Oil crops												
Linseed	2,095.50	19,501.45	9.31	1,580.28	14,558	9.21	1,805.98	17,002.10	9.41	2,083.38	16,389.54	7.87
Noug	446.75	3,491.18	7.81	450	4,050	9	442.96	3,886.20	8.77			
Sesame	285.25	2,531.15	8.87	239.5	2,132	8.9	257.75	2,261.80	8.78			
Sufflower	309.75	4,758.5	15.36	158.75	1,664	10.48	182.5	2,121.5	11.62			
Ground nut	0.25	77.5	310	0.75	4.5	6						
Source: North Shewa zone development indicators report (2011)										CSA (2019/20)		

Pulse Crops Production: Amhara region ranks first in pulse crops production of the country. Pulses are the most important crops next to cereals and horticultural crops in North Shewa Zone and the Zone contributed to 25% of pulse crops production in the Amhara Region. Pulse crops production and area coverage are decreasing year to year due to the infestation of insect pest and disease problems in the zone (Table 2). The major pulse crops growing in North Shewa zone are faba beans (38.10%), lentil (22.60%), chickpeas (14.70%), mungbean (11.70%), field peas (8%), grass peas (2%), common beans (1.6%) and fenugreek (1.3%). The major aims of cultivation of pulse crops are for food, cash, feed, and soil fertility enhancement. In the North Shewa zone, the top pulse producing districts are Bassona Werena, Moretina Jiru, Minjar Shenkora, Mojana Wedera, Siyadebirna Wayu, Angolelana Tera, Menze Lalo, Hager Mariam, Mida Weremo and Kewet and these districts contribute about 71.69% of zonal pulse production (Table 3).

Oil Crop Production: In Ethiopia, Amhara region ranks second next to Benishangul Gumuz in oil crop production. North Shewa Zone is suitable for oil crops production, and the major oil crops cultivating in the zone are Noug, Linseed, Sesame, Ethiopian Mustard, and Safflower (Table 2). The top ten oil crop producing districts contribute to 90.42% oil crops in the zone are Bassona Werena, Angolelana Tera, Merhabete, Asagirt, Mida Weremo, Mojana Wedera, Hager Mariam, Menz Keya, Gisherabel, and Moretina Jiru (Table 3).

Table 3. Top ten pulse and oil crops producing district average for 2008 – 2012 E.C

S. N	Cereal crops	Area (ha)	Production (qt)	Share (%)	Pulse crops	Area (ha)	Production (Qt)	Share (%)	Oil crops	Area (ha)	Production (Qt)	Share (%)
1	Moretina Jiru	24,400	1,117,809	10.60	Bassona Werena	1848.801	39617.48	14.53	Bassona Werena	523.6	4859.5	19.24
2	Merhabete	36,839.1	1,023,258.8	9.70	Moretina Jiru	1265.311	27782.46	10.19	Angolelana Tera	457.1	4470.8	17.70
3	Minjar Shenkora	29,668.3	921,147.7	8.73	Minjar Shenkora	1346.097	237 85.58	8.73	Merhabete	401.8	3542.6	14.02
4	Mida Weremo	27,751.3	825,483.7	7.83	Mojana Wedera	743.4429	20458.9	7.51	Asagirt	238.8	2598.2	10.30
5	Bassona Werena	26,512.2	793565.3	7.52	Siyadebirna Wayu	867.5326	19604.32	7.19	Mida Weremo	194.01	1978.9	7.80
6	Ensaro	18,934.4	761,976.5	7.22	Angolelana Tera	749.806	16857.54	6.18	Mojana Wedera	149.4	1886.7	7.50
7	Siyadebirna Wayu	15,437.4	657,075.5	6.23	Menz Lalo	669.27	15383.02	5.64	Hager Mariam	124.2	1147.9	4.50
8	Angolelana Tera	17807.8	514,279.4	4.88	Hager Mariam	803.6909	12504.05	4.59	Menz Keya	125.5	1052.7	4.20
9	Efratana Gidem	14,746.4	499,752.9	4.74	Mida Weremo	614.7274	9730.525	3.57	Gisherabel	140.56	787.26	3.12
10	Mojana Wedera	13,128.6	495,981.1	4.70	Kewet	788.225	9683.734	3.55	Moretina Jiru	42.3	518.05	2.10
	Total	225,226	7,610,330	72.14	Total	9,696.904	195407.6	71.69	Total	2397.27	22842.61	90.42
	Zonal level	362,139	10,548,900.9		Zonal level	15,920.93	272,563.07		Zonal level	2728.5	25261.31	
	North Shewa zone five years average report (2008-2012)											

Marketing of field Crops: Agriculture in general and cereals in particular are the means of livelihood for millions of householders in Ethiopia. The cereal crops market is important given the significant share of cereals in food expenditures of households in low-income countries. Cereals comprise half of consumer food expenditures in Ethiopia, and about 75% of the land area under cultivation. Cereal crops utilized for household consumption, seed, sale, wage in kind, and animal feed. Based on the five years marketing data analyses of the zone about 12.74% of cereal and 37.44% of pulse grain production were marketed. Crop producers provide 27.77, 12.21, 9.95, 9.54 and 8.25% of *Teff*, wheat, sorghum, maize and food barley of their annual production fetch to market, respectively (Table 4). Moreover, 90% of Mungbean, 43.24% of Lentil and 21.24% of Chickpea production has been marketed in the zone. The market shares of *Teff*, wheat and sorghum has increased from 38,965.2 to 62,365.5, 48,411.1 to 51,205.1, and 14,900.8 to 37,999.7 tons, respectively since 2008 to 2012 (Table 4).

Table 4. Cereal and pulse crops marketing from 2008/09 to 2012/13

Types of crops	2008/09		2009/10		2010/11		2011/12		2012/13	
	Marketed	share (%)	Marketed	share (%)	Marketed	share (%)	Marketed	share (%)	Marketed	share (%)
Cereal crops										
<i>Teff</i>	389,651.9	23.77	461,775.6	23.77	536,339.5	23.77	650,587.5	23.77	623,654.7	23.77
Food Barley	104,181.9	8.25	823,83.73	8.25	86,844.18	8.25	84,137.23	8.25	70,487.04	8.25
Wheat	484,111.1	12.21	430,448.5	12.21	499,551.9	12.21	52,2719.3	12.21	512,051.4	12.21
Maize	15,819.15	9.54	21,277.13	9.54	24,939.4	9.54	18,960.4	9.54	19,877.87	9.54
Sorghum	149,007.6	9.95	334,503.2	9.95	335,442.7	9.95	283,649.9	9.95	37,9997.1	9.95
Pulse crops										
Faba bean	7,641.45	17.77	6,813.54	17.77	6,904.31	17.77	7,053.99	17.77	6,709.62	17.77
Field pea	1,436.5	14.97	1,799.3	14.97	1,394.38	14.97	1,440.64	14.97	1,502.09	14.97
Lentil	9,933.79	43.24	12,185.36	43.24	12,328.23	43.24	10,745.04	43.24	9,512.09	43.24
Chickpea	3,517.42	21.24	3,067.15	21.24	2,975.4	21.24	3,078.92	21.24	2,261.38	21.24
Mung bean	16,164.75	90	15,235.74	90	17,296.96	90	17,458.22	90	14,856.13	90

3.2.2. Status of Crop Investment in North Shewa Zone

Ethiopian government has been taking tremendous corrective measure in the last three years to expand investment on agriculture sector. Exploring the trends of investment over years is one way of showing the change of investment in the country in general and North Shewa Zone in particular. Thus, in 2000 E.C the total number of agricultural investment projects got permission in North Shewa Zone was 37, whereas this numbers increased to 239 in 2012 E.C (Table 5). However, the total numbers of investment projects currently in operations are limited to 51, which is 21% of the total agricultural investment projects have been licensed. This indicates that government needs to take a serious follow-up and supports to enable the investment project in to operations. The total capital invested in the zone in the last 13 years was 3.86 billion birr and those investment projects created 5,568 job employment opportunities for the community.

Table 5. Number of Investment and their capital between 2000 and 2012

Year	Project in Production			Number of failed Project	Total number of investment project licensed	
	Quantity	Capital	Employment opportunity		Quantity	Capital
2000	10	10,739,511	802	2	37	54,182,356
2001	18	34,436,778	1066	2	54	131,682,861
2002	2	16,700,000	94	-	2	16,700,000
2003	2	9,000,000	80	-	3	10,175,000
2004	1	2,100,000	15	-	1	2,100,000
2005	2	3,126,200	57	5	9	8,316,200
2006	3	18,000,000	2554	1	6	19,807,530
2007	4	28,970,784	362	3	8	54,028,809
2008	4	54,579,465	252	14	28	317,918,203
2009	2	28,000,000	90	-	35	944,961,838
2010	-	-	-	-	13	286,757,950
2011	3	103,347,597	196	-	33	1,799,356,827
2012	-	-	-	-	10	216,414,787
Total	51	309,000,335	5,568	27	239	3,862,402,361

3.2.3. Proposed investment potentials commodities and districts

Ethiopia's crop agriculture is complex, involving substantial variation in crops grown across the country's different regions and agro-ecologies. Smallholders account for 96% of total area cultivated and generated the key share of total production for the main crops. *Teff*, wheat, maize, sorghum and barley are the five major cereals that occupy almost three-quarters of the total area cultivated²². Amhara region at large and North Shewa in particular have diverse climate and altitude conditions, which are conducive to various agricultural activities including cereal grains. In addition, the zone endowed with several perennial rivers that have a great potential for irrigated agriculture.

The production of cereal grains is increasing year to year, this might be due to availability of suitable environmental condition, soil types, markets, better political commitment to lead the sector, improved technology (varieties, agronomic package, and availability of agrochemicals), and energetic farmers. The numbers of food processing plants are booming in the zone, which create huge opportunities to attract investments on cereal grains production. Therefore, the investors will have better opportunities to enter directly on cereal crop production, establishment of processing plant and through mechanization of the sub-sector (tractors, combines and thrasher services). High potential districts with potential commodities based on different criteria are summarized in the Table 6.

²² Taffesse AS, Dorosh P, Asrat S (2012). Crop production in Ethiopia: Regional patterns and trends. International Food Policy Research Institute (IFPRI)

Table 6. Top investment potential districts for different types of cereal grains

No	Potential Commodity	Investment potentials destination districts	Potential	Market	Rank
	Cereal crops				
1	Teff: production, mechanization, processing	Merhabete	M	H	MH
		Minjar Shenkora	H	H	HH
		Moretina Jiru	M	H	MH
		Mida Weremo	H	M	HM
		Tarmaber	H	H	HH
2	Wheat: production, mechanization, processing	Moretina Jirru	H	H	HH
		Minjar Shenkora	M	H	MH
		Siyadebirna Wayu	H	H	HH
		Mojana Wedera	H	H	HH
		Bassona Werena	H	H	HH
3	Sorghum: production, mechanization, processing	Merhabete	H	H	HH
		Ensaro	H	H	HH
		Mida Weremo	H	M	HM
		Moretina Jiru	M	H	MH
		Efratana Gidem	H	H	HH
4	Food barely: production, mechanization, processing	Bassona Werena	M	H	MH
		Angolelana Tera	M	H	MH
		Menz Gera	H	M	HM
		Hager Mariam	M	H	MH
		Asagirt	H	H	HH
5	Malt barley: production, mechanization, processing	Bassona Werena	M	H	MH
		Angolelana Tera	M	H	MH
		Hager Mariam	M	H	MH
		Asagirt	L	H	LH
		Menz Mama	L	M	LM
		Mojana Wedera	L	H	LH

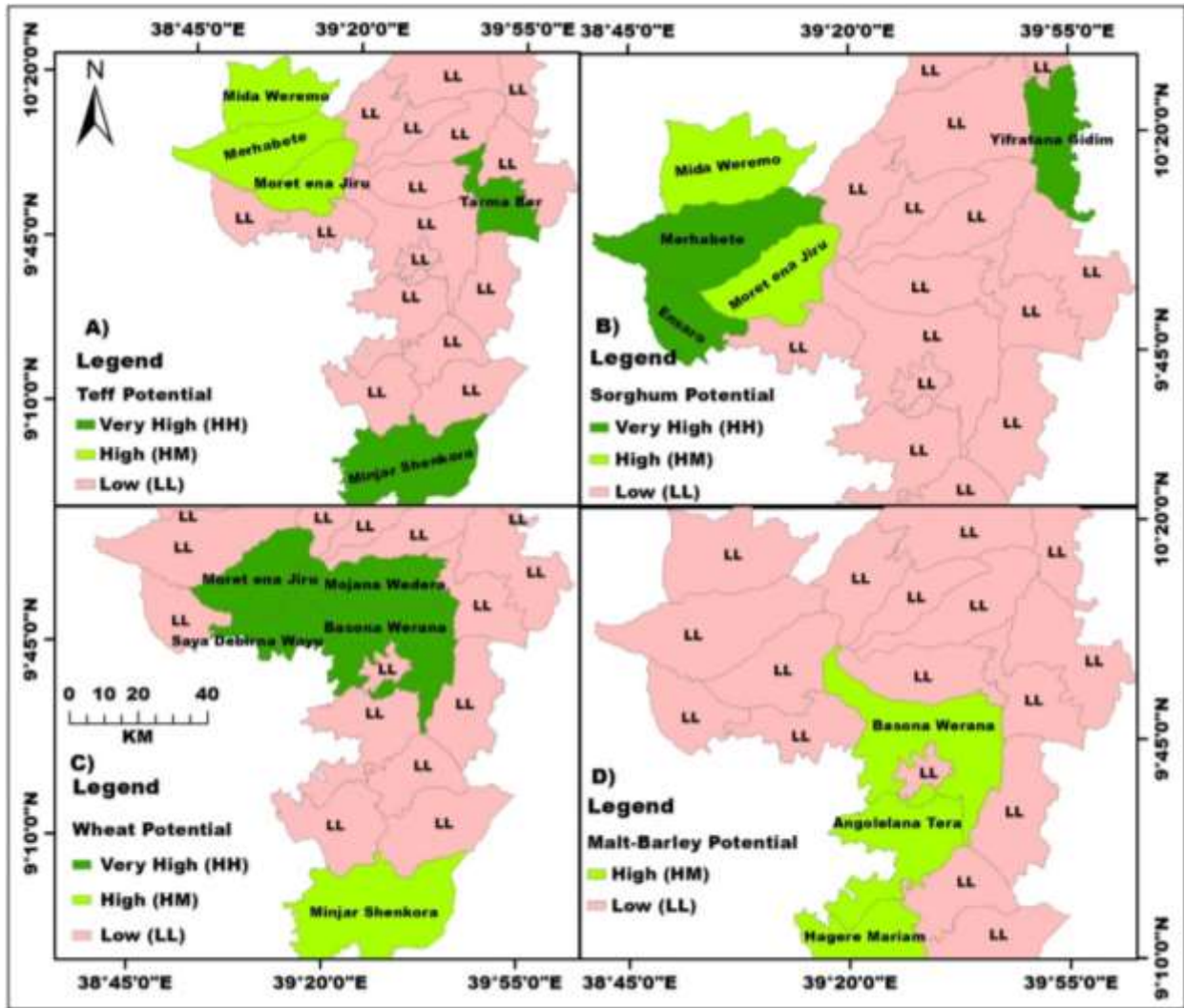


Figure 1. Investment potential map of A) Teff B) Sorghum C) Wheat and D) Malt-Barley

Table 7. Top investment potential districts for different types of cereal grains

No	Potential Commodities	Investment potentials destination districts	Potential	Market	Rank
	Pulse crops				
1	Faba beans: production, mechanization, processing	Bassona Werena	M	H	MH
		Angolelana Tera	M	H	MH
		Menz Lalo	M	M	MM
		Hager Mariam	L	H	LM
		Siyadebirna Wayu	L	H	LH
2	Chickpeas: production, mechanization, processing	Minjar Shenkora	M	H	MH
		Bassona Werena	M	H	MH
		Mojana Wedera	L	H	LH
		Ensaro	L	H	LH
		Moretina Jiru	L	H	LH
3	Lentils: production, mechanization, processing	Moretina Jiru	M	H	MH
		Siyadebirna Wayu	L	H	LM
		Minjar Shenkora	L	H	LH
		Mojana Wedera	M	H	MH
		Menz Lalo	M	M	MM
4	Mungbean: production, mechanization, processing	Kewet	M	H	MH
		Merhabete	M	H	MH
		Moretina Jiru	L	H	LH
		Mida Weremo	L	M	LH
		Ensaro	L	H	LH
5	Field peas: production, mechanization, processing	Bassona Werana	L	H	LH
		Angolelana Tera	L	H	LH
		Gisherabel	L	M	LM
		Hager Mariam	L	H	LH
		Mida Weremo	L	M	LM

Table 8. Top investment potential districts for different types of cereal grains

No	Potential Commodity	Investment potentials destination districts	Potential	Market	Rank
	Oil crops				
1	Linseed: production, mechanization, processing	Bassona Werena	M	H	MH
		Angolelana Tera	L	H	LH
		Asagirt	L	H	LH
		Mojana wedera	L	H	LH
		Hager Mariam	L	H	LH
2	Safflower: production, mechanization, processing	Merhabete	L	H	LH
		Menz Keya	L	H	LH
		Asagirt	L	H	LH
		Mida Weremo	L	H	LH
		Bassona Werana	L	H	LH
3	<i>Nouge</i> : production, mechanization, processing	Merhabete	L	H	LH
		Mida Weremo	L	H	LH
		Moretina Jiru	L	H	LH
		Menz Keya	L	H	LH
		Gisherabel	L	H	LH
4	Sesame: production, mechanization, processing	Kewet	L	H	LH
		Merhabete	L	H	LH
		Mida Weremo	L	H	LH
		Menz Keya	L	H	LH
		Asagirt	L	H	LH
5	Groundnut: production, mechanization, processing	Mida Weremo	L	M	LM
		Antsokiya Gemza	L	M	LM
		Ensaro	M	H	MH
		Berehet	M	M	MM
		Kewet	M	H	MH

3.2.4. Challenges and Opportunities of Crop Investment

Strength	Weakness
<ul style="list-style-type: none"> • Availability of few successful crop investment in the zone • Availability of irrigable land • High numbers of educated youth 	<ul style="list-style-type: none"> • Unattractive land compensation fee • Low performance of crop production investment • Weak investment follow-up and support as a result the investors follow traditional farming • Lack of investment promotion office in few potential districts • Shortage of inputs: improved seeds, fertilizer and pesticides • Lack of improved technologies: tractor, combiner, thrasher • Lack of adequate land for crop investment
Opportunities	Threats
<ul style="list-style-type: none"> • Location • The zone is endowed with branded crops such as chickpeas (Arerti variety), Minjar <i>Teff (Magna Variety)</i> • Better farmers investment attitudes • Farmer experiences on row planting with all necessary inputs • Political stability • High political commitment • High human power • Diverse agro-ecology favors crop production • Expansion of institutions demands of processed products 	<ul style="list-style-type: none"> • Waste management • Displacement

3.3. Horticulture

3.3.1. Situational Analysis of Horticulture Sector

Fruits Production: The share of fruit production in North Shewa zone to the total Amhara region and Ethiopia fruit production was 8.9 and 0.3%, respectively. The main fruits producing in the zone are mango, banana, lemon, orange, banana, avocado and papaya. According to²³ reports the total fruit production and area coverage of the zone were 22,606.3 quintals and 538.8 hectare, respectively (Table 1). Mida Weremo and Merhabete in orange, Merhabete and Shewa Robit in Mango, Efratana Gidem and Merhabete in banana, Moretina Jiru and Merhabete in lemon, Eferatana Gidem and Merhabete in avocado and papaya are the top producing districts in the zone (Table 2).

²³ CSA 2019/20

Table 1. Trends of main season horticultural production of the zone, the region and country

Production in quintals and area in hectares		North Shewa	Amhara region	Ethiopia	North Shewa	Amhara region	Ethiopia	2008	2009	2010	2011	2012
Vegetables	Area	1,815.4	4,122.78	239,609.8	1,438.3	75,516.7	238,564.07	6,584.3	23,967	18,547	17,271	1,480,212
	Production	100,049	1,522,944.8	8,126,248.7	78,469.6	1,614,500	8,767,390.6	553,578.3	2,509,151	2,208,900	2,652,459	564,452
Root crops	Area	11,901	40,888.31	229,079.3	5,253.2	37,198.91	248,357.5					
	Production	1,693.9	5,480,980.3	46,305,689.8	No data	4,563,454	46,542,860					
Fruits crop	Area	642.5	4,505.34	107,890.60	538.8	4,844.4	116,284.6		9,106.5	11,592	12,431.2	331.65
	Production	32,464	249,108.8	7,923,665.02	22,606.3	253,685.5	8,436,238.6		1,644,756	1,673,729	1,646,186	30,490.8
Coffee	Area	694.7	8,803.63	700,474.7	692.7	10,601.9	758,523.3					
	Production	2335.5	29,362.7	4,690,911.2	2,350.7	43,416.1	4,825,695.7					
Hops	Area	1,976	23,034.2	31,366.7	2,760.6	26,197.8	34,494.9					
	Production	10,555	225,978.9	400,736.1	25,314.9	246,113.5	419,345.9					
		CSA (2016/17)			CSA (2019/20)			North Shewa zone report (2012 E.C)				

Table 2: Production status and top five producer districts for each fruit (quintals)

	Districts	Orange	Districts	Coffee	Districts	Mango	Districts	Banana	Districts	Sugar cane
1	Mida Weremo	14,960	Eferata Gidem	905	Merhabete	25,348	Efratana Gidem	34,485	Efratana Gidem	114,000
2	Merhabete	6,642	Antsokiya Gemza	467	Shewa Robit	14,826	Merehabete	15,153	Tarmaber	51,279
3	Kewet	3,658	Kewet	270	Efratana Gidem	6,380	Kewet	5,017	Berehet	12,675
4	Antsokiya Gemza	1,880	Mida Weremo	295	Antsokiya Gemza	4,736	Berehet	3,937	Ensaro	3,992
5	Ensaro	1,533	Merhabete	258	Kewet	4,280	Antsokiya Gemza	1,450	Hager Mariam	3,287
	Districts	Lemmon	Districts	Papaya	Districts	Avocado	Districts	Apple	Districts	Terengo
1	Moretina Jiru	27,734	Eferatana Gidem	5,070	Eferatana Gidem	4,600	Angolelana Tera	2,166	Antsokiya Gemza	562
2	Merhabete	7,005	Merehabete	3,024	Merhabete	3,073	Tarmaber	1,138	Menz Keya	170
3	Shewa Robit	2,000	Berehet	2,825	Antsokiya Gemza	2,010	Menz Mama	360	Menz Mama	70
4	Minjar Shenkora	1,501	Minjar Shenkora	2,480	Minjar Shenkora	537	Bassona Werena	315	Bassona Werena	60
5	Menz Keya	144	Antsokiya Gemza	1,402	Shewa Robit	454	Menz Gera	201	Mojana Wedera	24

Vegetable's production: The main vegetables cultivating in the North Shewa zone are onion, garlic, potato, tomato, beetroot and cabbage. The zone produced 78,469.61 quintals of different vegetables in 1,438.3 hectare of land. The highest vegetable production registered in zone was onion followed by carrot and garlic (Table 3). Eferata Gidem in onion, cabbage, beetroot and collard green (*Habesha gomen*), whereas Bassona Werena in carrot and potato, and Merhabete in pepper and Mojana Wedera in shallot and garlic are the highest producer districts of the zone (Table 4).

Table 3: The trends each vegetable production status of top five producer districts

No	Vegetables	2008		2009		2010		2011		2012	
		Area (ha)	Amount (qtl)	Area	Amount	Area	Amount	Area	Amount	Area	Amount
1	Onion	8,756.1	1,457,014	11,418.2	2,101,536	39,990	11,061.46	196	7,777.4	10,766.4	1,693,180
2	Carrot	238	347,73.75	60,530.7	337.2	140	274.29	175.49	257.9	1612	193,334
3	Garlic	2,010	152,511.3	212,828.3	2,740.8	3,447.9	33,224	79.54	2,830.5	1,536	6668
4	Pepper	2,115.6	100,419.1	1,964	42,730	6,480	1,930.85		1,896.5	1,532	71,733
5	Tomato					613.12	2,350	201.47	664.39	1,046	130,459
6	Potato	1,570	223,796.4	1,570	273,796	1,760	1,593.3	153.6	1,683.96	997	166,233
7	Cabbage	404.73	52,229.4	557.16	9,1187	393.85	2020	161.85	414.068	673.13	88,453.4
8	Shallot									489.5	22,855
9	Beetroot	178	23,117	243.3	48739	285.39	1,800	181.027	273.323	340.9	64,411
10	Collard									238.5	15,004
	Zone	6,584.3	553,578.3	148,022	564,452.8	18,547	220,8900	23,967	2,509,151	17,272	2,652,459

Table 4: Top five producer districts for each vegetable (quintals)

	Districts	Onion	Districts	Carrot	Districts	Garlic	Districts	Pepper	Districts	Tomato
1	Eferata Gidem	731,363	Bassona Werena	118,260	Mojana Wedera	28,687.5	Angolelana Tera	31,720	Eferata Gidem	191,110
2	Kewet	336,990	Angolelana Tera	100,957	Bassona Werena	23,332	Hager Mariam	18,284	Merhabete	32,724
3	Shewa Robit	191,066	Debre Berhan	70,135	Angolelana Tera	18,446	Merhabete	3,132	Kewet	15,528
4	Antsokiya Gemza	141,666	Menze Mama	40,650	Hagre mariam	12,088	Mida Weremo	2,587	Antsokiya Gemza	15,289
5	Minjar Shenkora	619.7	Mehabete	2,727	Minjar Shenkora	18,957	Asagirt	3,011	Bassona Werena	4,508
	Districts	Potato	Districts	Cabbage	Districts	Shallot	Districts	Beet root	Districts	Collard
1	Bassona Werena	60,700	Eferata Gidem	76,700	Merhabete	9,000	Eferata Gidem	35,120	Eferata Gidem	7,220
2	Mojana Wedera	29,670	Merhabete	10,998	Mojana Wedera	7,544	Angolelana Tera	13,630	Merhabete	6,440
3	Angolelana Tera	21,564	Angolelana Tera	10,244	Bassona Werena	6,970	Bassona Werena	4,550	Angolelana Tera	2711
4	Eferata Gidem	21,525	Bassona Werena	5,764	Hagre Mariam	5,190	Ankobere	1,930	Bassona Werena	2,205
5	Menz Mama	14,737	Anstokia Gemeza	1,367	Angolelana Tera	2,700	Shewa Robit	907	Kewet	1,144

Spices, beverage and stimulant crops production: Spices are one of the main food's ingredients of Ethiopian dishes. However, no organized data on spices production and area coverage were available in the zone. Based on the available data black cumin, white cumin and coriander are produced in Bassona Werena and Minjar Shenkora. The average productivity of black cumin, white cumin and coriander were 8.82, 10.8 and 13 quintals per hectare, respectively.

The productions of beverages in the zone are restricted to coffee, hops and thyme. Although thyme is widely marketed and produced in the zone, no concrete evidence of production and productivity report is available in the zone. The zone produced 692.8 quintals of coffee on 2,350.73 hectares of land²⁴. Coffee cultivates in the lowland areas of the zone and the top five producers of the crops are Efratana Gidem (905 quintals), Antsokiya Gemza (467 quintals), Kewet (270 quintals), Mida Weremo (295 quintals) and Merhabete (258 quintals) with consistent area coverage of 181, 117, 45, 39 and 37 hectares, respectively.

Marketing of horticultural crops in zone: Data were not obtained for the market share of fruits, spices, beverages and flowers from North Shewa zone trade office. Hence, the data source from CSA (2008-2012) indicated that orange is largest market share of fruits followed lemon and mango. In addition, Guava, papaya and banana are marketed fruits in the zone although the shares were minimal compared to other fruits.

Onion, potato and garlic are the major vegetables with largest market share in the zone. The other marketed vegetables such as tomato, Ethiopian cabbage, green paper, beetroot, switchyard and carrot are very low.

The market share of beverages crop such as hops and coffee was not identified at zonal level due to informal marketing nature of the commodities at small-scale level. Consequently, it is difficult to get the share of market by these commodities at zonal level. In addition, few investments are available on flowers production in the zone, which targeted to international market as a result there was no clear report about the market share of these flowers in the zone.

²⁴ CSA, 2019/20

Table 5. The trends of market share of horticultural crops in the zone

Horticultural crops		2008	2009	2010	2011	2012
Fruits	Banana	4929.08	5030.67	12098.74	4929.08	2456.61
	Guava	30.75	21.00	20.75	30.75	114.8
	Lemon	5224.62	7312.24	26548.83	5224.62	5396.62
	Mango	118.91	5124.24	28763.96	118.91	160.2
	Orange	3261.12	4769.7	51778.1	3261.12	160.2
	Papaya	39.75	760.76	31133.96	39.75	157.5
Vegetables	Beet root	65.6	1045.8	3340.3	65.6	4650
	Carrot	9.00	24.12	6094.8	9.00	865.8
	Ethiopian cabbages	1271.7	878.4	2790.2	1271.7	1218
	Garlic	17,053	27,082	142,131	17,053	7,414.3
	Green peppers	8,234	15,182	13,009	8,134	3,364.1
	Head cabbages	8,534.5	3,860.8	18259	8534.5	137.25
	Onion	301,716	528,551	522,957	301,716	187,306
	Potatoes	4207.4	7534	316582	4207.4	1550.5
	Red peppers	7385.5	901.41	17558	1397.5	328.16
	Sweet potato	725.22		7727.8	14.76	748.00
	Swisc hard	0.1	292.68	182.42	0.1	9.00
	Tomatoes	14,408	9851.9	26942	14408	3528.6
Beverage crops	Coffee	418.88	537.05	2250.32	418.88	347.84
	Hops	20.18	3060.95	51558.5	2152.2	7598.75

Source: North Shewa zone trade office report (2012)

3.3.2. Status of Horticulture Investment in North Shewa Zone

North Shewa has a comparative advantage in a number of horticultural commodities due to its favorable climate, proximity to central markets and availability of manpower. Although most of the investments are belongs to manufacturing companies, the zone has recorded substantial investments in Agriculture. The total horticulture investment in operation and pipeline in the zone are 90. With regard to the status of the investment, 22 are in operation, 2 are in the pipeline, whereas, the remaining 8 projects were failed and 49 investment projects status still unknown in the zone. The majority of the investments (39) are belonging to fruits and vegetables, and others are integrated farming (36), highland fruits (8), flowers (1), and spices (2). The top horticultural investment destinations are Efratana Gidem (20), Mida Weremo (13), Bassona Werena (12), Debre Berhan (11), Anoglelena Tera (10), Antoskiya Gemza (5), Merhabete (4), Ensaro (3) and Menz Gera (3) (Table 6).

Table 6: Status and types of horticulture investments in the zone

Districts	No of investment	Status of the investments				Investment commodities							
		Failed investments	Investment in the pipeline	Investment in operation	Unknown	Fruit and Vegetables	Spices	Flower	Highland fruit	Agro-processing	Seedling	Mixed or combined	Oil
Efratana Gidem	20	1		5	5	8	1	1				11	
Mida Weremo	13			7	6	3				1		9	
Debre Berhan	11	1	1	1	7	4			5			2	
Bassona Werena	12	3	1	2	5	8				1		2	1
Angolelana Tera	10	2		1	7	8	1		1				
Antsokiya Gemza	5			2	3	2						3	
Merehabete	4			1	3						1	2	
Ensaro	3			1	2	2						1	
Menz Gera	3				3							2	
Kewet	2				2	1						1	
Shewa Robit	2			1	1	1						1	
Ankober	2			1	1	1						1	
Siyadebirna Wayu	2				2				2				
Moretina Jiru	1				1							1	
Minjar Shenkora	1				1							1	
Menz Mama	1	1				1							
Total	92	8	2	22	49	39	2	1	8		1	37	1

3.3.3. Proposed investment potentials commodities and districts

The production of horticultural crops in the zone is much less developed than the production of other crops but the zone has huge potential for the development of wide varieties of horticultural crops, and the sector is increasing year to year. Ethiopian government has recognized the role of the private sector in the economy of the country; as a result, the investment law has changed recently to attract the investments. The major positive changes regarding foreign investments have been introduced through investment Proclamation No.280/2002 and Regulations No.84/2003. As a result of the implementation of the above-mentioned policies and strategies, agricultural and industrial production, investment and export trade are growing steadily from year to year both in terms of variety and volume. With this stand, the major horticultural commodities and districts potential for investments are organized in the Table 7.

Table 7. Investment potential commodities and districts

No	Potential Commodity	Investment potentials destination districts	Potential 1	Market	Rank
1	Fruits: orange, lemon, mango, banan, avokado, grape, papaye, apple	Mida Weremo	H	M	HM
		Efratana Gidem	H	H	HH
		Antoskiya Gemeza	H	H	HH
		Shewa Robit	H	H	HH
		Merhabet	H	M	HM
		Ensaro	H	M	HM
		Kewet	H	H	HH
2	Vegetables: cabbages, garlic, onion, tomato, potato	Efratana Gidem	H	H	HH
		Kewet	H	H	HH
		Angolelna Tera	H	H	HH
		Antoskiya Gemeza	H	H	HH
		Mojana Wedera	H	M	HM
		Bassona Werena	H	H	HH
		Merhabet	M	M	MM
3	Beverage: coffee	Efratana Gidem	H	H	HH
		Antoskiya Gemza	H	H	HH
		Kewet	M	L	ML
		Mida Weremo	M	L	ML
		Merhabete	M	L	ML

Potential: food value, weather, commercial value, land, irrigation access, irrigable land, production, productivity... **Market:** market accessibility, road

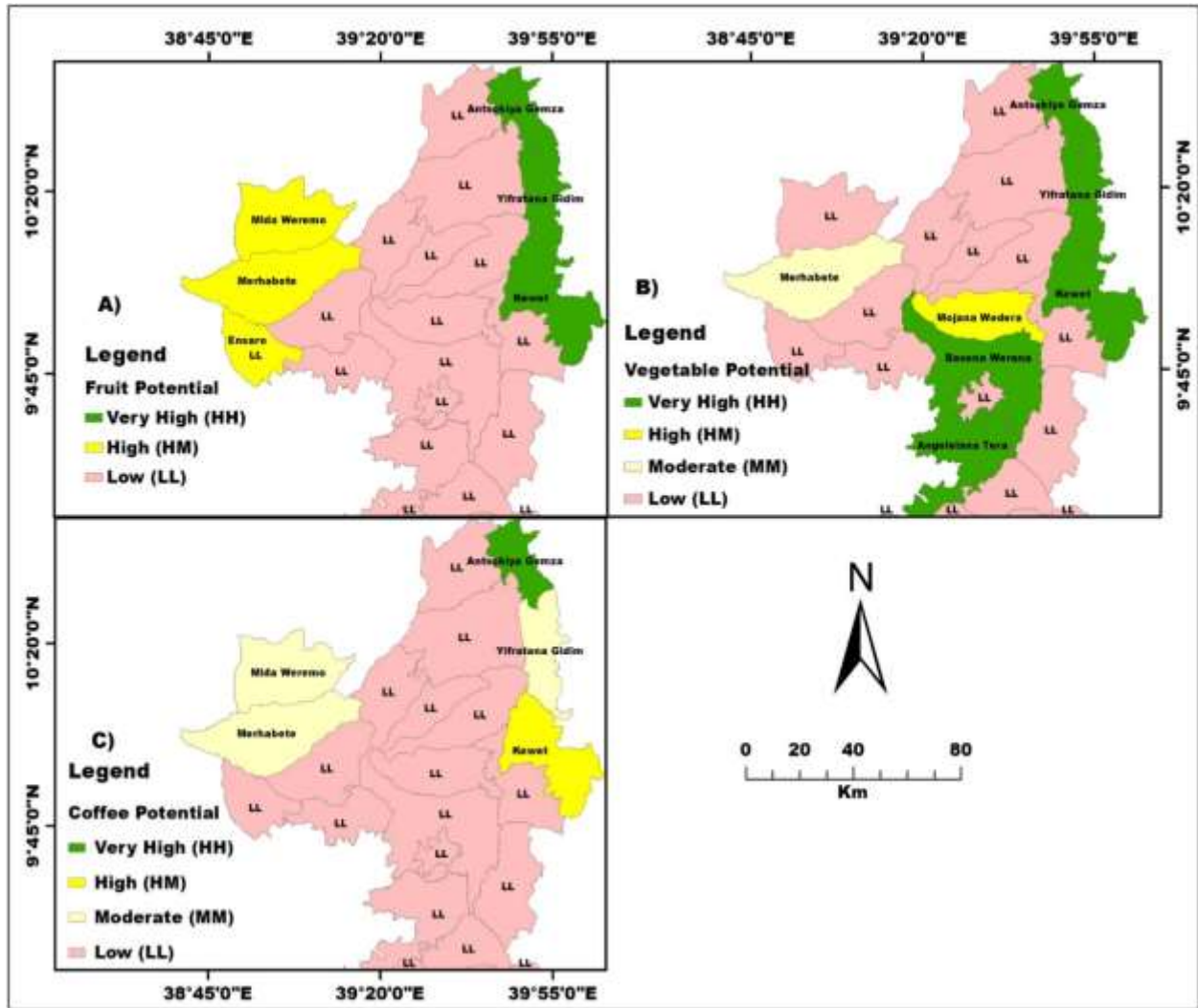


Figure 1. Investment potential map of A) Fruit B) Vegetable C) Coffee

3.3.4. Challenges and opportunities of Horticultural crop Investment in the Zone

Strength	Weakness
<ul style="list-style-type: none"> • Availability of irrigable land • Availability of experienced farmers 	<ul style="list-style-type: none"> • Low land compensation fee • Weak performance of horticulture production investment • Weak investment follow-up and support • Lack of investment promotion office in few potential districts • Shortage of inputs: improved fruits and vegetables seeds, seedlings fertilizer and pesticides • Lack of improved technologies: tractor, • Lack of cold storage
Opportunities	Threats
<ul style="list-style-type: none"> • Proximity to central market • Better farmers investment attitudes and experiences • Political stability • High political commitment • High human power • Diverse agro-ecology favors horticultural crops • Expansion of institutions • High demands of horticultural crops 	<ul style="list-style-type: none"> • Waste management • Displacement

3.4. Natural Resources

3.4.1. Situational Analysis of Natural Sector

North Shewa zone has total forest coverage of 151,865.30 ha, of which 75,823.07 ha is natural forest and 76,042 ha is man-made forest. North Shewa zone accounts 17.6% of the region. In the zone most natural forests are found in Minjar Shenkora, Menz Gera and Merhabete districts, whereas, man-made forests are found mainly in Bassona Werena, Menz Gera, Tarmaber and Menz Mama Districts. In addition, about 5000 ha of natural gum and incense are found in Merhabete and Mida Weremo districts. Based on North Shewa Zone investment and agricultural office data, the top ten forest producer districts are Minjar Shenkora (29,678 ha), Menz Gera (27,050ha), Bassona Werena (18,627.2ha), Merhabete (14,514ha), Mida Weremo (12,748.7ha), Tarmaber (11,326ha), Gisherabel (11,277ha), Ankober (9,064ha), Menz Mama (8,801.5ha) and Efratana Gedim (8,778.4ha) (Table 1).

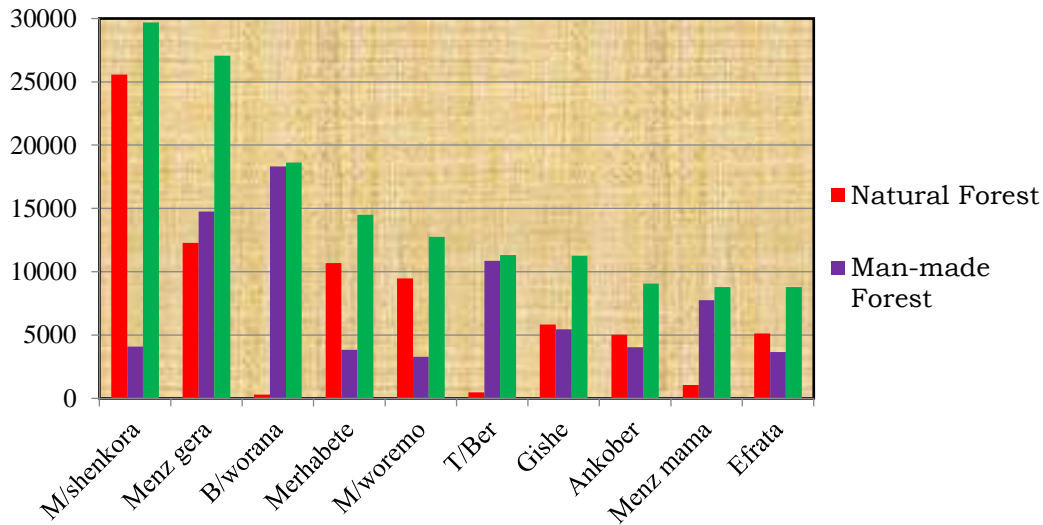


Figure 4.1. Top ten forest producer districts at North Shewa zone

Table 4.1: Top ten forest producers of North Shewa Zone (hectare)

S/N	District	Natural Forest					Man-made Forest					Overall total	Rank
		Govt Forest	Community forest	Different institute forest (Church, Mosque etc)	Private forest	Total	Govt Forest	Community Forest	Different institute forest (Church, Mosque etc)	Private forest	Total		
1	Bassona Werena	298.9	0	5.5	0	304.4	3410.7	312.15	79.5	14520.5	18322.8	18627.2	3
2	Ankober	4739.1	0	10.5	268.3	5017.9	252.9	415	21.5	3356.7	4046.2	9064.1	8
3	Tarmaber	193.6	81.1	56.25	142	472.9	4341.3	136.75	28.08	6347	10853.	11326.1	6
4	Efratana Gidem	0	3068.8	605.75	1445	5119.6	0	1579	276	1803.8	3658.8	8778.4	10
5	Gisherabel	0	1937	397.7	3495	5829.7	0	772.9	239.4	4435	5447.3	11277	7
6	Menz Gera	265	12006	15	0	12286	186	8572	1415	4591	14764	27050	2
7	Menz Mama	0	265	321	471	1057	828.3	1651	735.2	4530	7744.5	8801.5	9
8	Minjar Shenkora	14.5	23248.6	229.9	2083.9	25577	1990.3	889.6	323.3	898.1	4101.3	29678.3	1
9	Merhabete	0	8396	517	1770	10683	0	2265	284	1282	3831	14514	4
10	Mida Weremo	0	6684.8	949.3	1841.6	9475.6	0	790.5	181.5	2301.1	3273.125	12748.7	5
	Total	5496.6	55687.4	3107.9	11516.8	75823.1	11009.5	17383.9	3583.5	44065.3	76042.2	151865.3	

Trends of forest coverage, marketing and consumption of forest: Five years' forest data from 2008 to 2012 was collected from North Shewa Zone investment and agricultural offices. The collected forest data include community forest, government forest, private forest and institute forest. The forest coverage trend of North Shewa zone from 2008 to 2012 indicated that private forest was increasing at an increasing rate followed by community forest. Thirdly, institutional forest coverage has also showed an increment. The state or government forest coverage on the other hand showed a constant coverage throughout the study period (Figure 3). There is no recorded forest market and consumption information in any of the concerned organizations and investment office. However, as observed from the field visit the currently available forest investment products have been mostly utilized and marketed for local firewood and charcoal consumption.

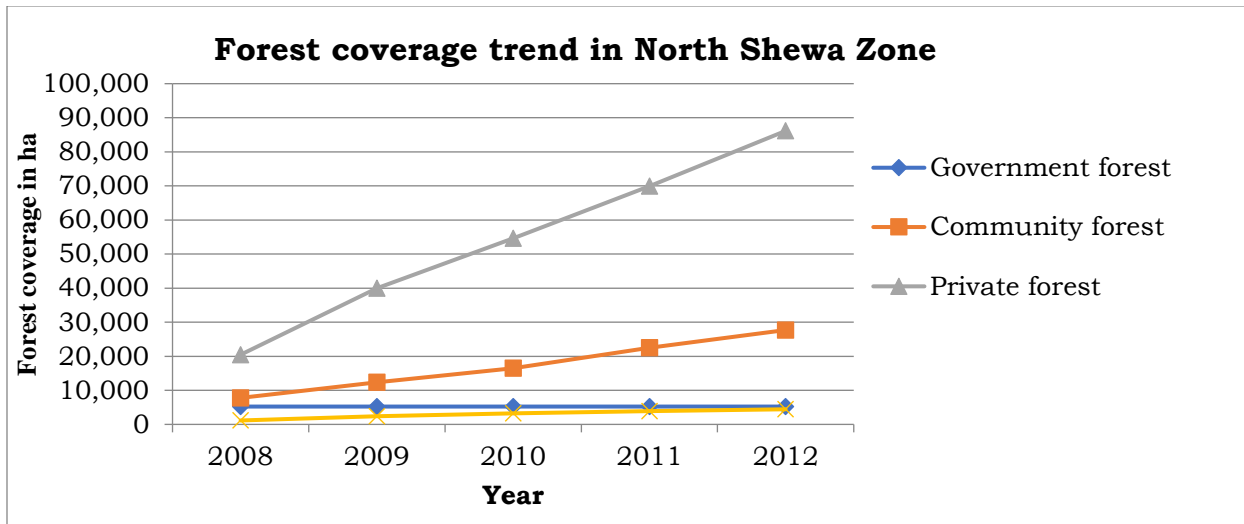


Figure 2. Forest coverage trend in North Shewa zone from 2008 to 2012

3.4.2. Status of Forest and Forest Related Investment in North Shewa Zone

The zone has identified 2,190 hectares of land for investment purpose, from this 711 ha is already transferred to different investors for different investment commodities²⁵. However, only 88 investors are registered for agriculture, among these seven investors are working on forest investment (Table 2).

Table 2. Current Forest Production Investment on pipeline

No.	Name of districts	# of forest investments on pipeline	Types of forest investment	Year of establishment	Full capacity	Existing capacity	Remark
1	Ankober	2	Forest development a/cooperative	20/04/2001	100,000	100,000	
			D Y field Mixed agriculture PLC.	13/09/2001	5,000,000	5,000,000	
2	Ensaro	1	Tsega and his families Forest development PLC	18/04/2008	10,000,000	10,000,000	10ha
3	Angolelana Tera	2	Zenebech Abebe Forest development	23/03/2001	516,492	516,492	5ha
			Ketema Mekashs Forest development	23/03/2001	1,221,548	1,221,548	3ha
4	Tarmaber	1	Kassaye Eshete Forest development	1/11/2000	400000	400000	

(Source: North Shewa Zone Investment and Environment and Land Administration Offices)

²⁵ North Shewa zone Investment, environment and land administration office 2020 report.

3.4.3. Proposed investment potentials commodities and districts

The Ethiopian government has expressed renewed interest in attracting foreign investment to the nation’s forestry sector through its Forest Development, Conservation and Utilization Proclamation (Proclamation No. 542/2007). However, limited capacity to manage administrative and regulatory elements of foreign investments, pervasive tenure uncertainty and rural livelihood insecurity all point to the need for caution as the government proceeds with land deals involving forests²⁶. Hence, forest sector investment in Ethiopia becomes financially unattractive for domestic investors, but foreign investors are perceived as having securer rights in comparison to domestic investors, giving them a comparative advantage. Besides, there is unwillingness of domestic investors to invest in forest resources for a number of reasons: length of time for return on investment, insecure land tenure and disputes with local people. Therefore, there are very few forest investments in Amahara region in general and in North Shewa zone in particular. However, North Shewa zone has high potential for forest investment. Based on the forest coverage and other access criteria eight forest investment potential districts are indicated in Table 3.

Table 3. Top investment potential districts for forest and forest product

No	Potential Commodities	Investment potentials destination districts	Potential	Accessibility	Rank
1.	Forest Production	Minjar Shenkora	H	M	HM
		Menz Gera	H	M	HM
		Bassona Werena	H	H	HH
		Merhabete	H	M	HM
		Mida Weremo	H	M	HM
		Tarmaber	H	H	HH
		Gisherabel	H	L	HL
		Ankober	H	H	HH
2.	Natural Gum and Incense	Merhabete	H	M	HM
		Mida Weremo	M	M	MM

Note: H - high, M - medium; **Potential:** production (forest coverage), availability of permanent nursery site, number of investments on pipe line, and **Accessibility:** road, electricity and market for products.

²⁶ Kathleen Guillozet and John C Bliss (2013). Household livelihoods and increasing foreign investment pressure in Ethiopia’s natural forests. Land Deal Politics Initiatives (LDPI) Working Paper 3.

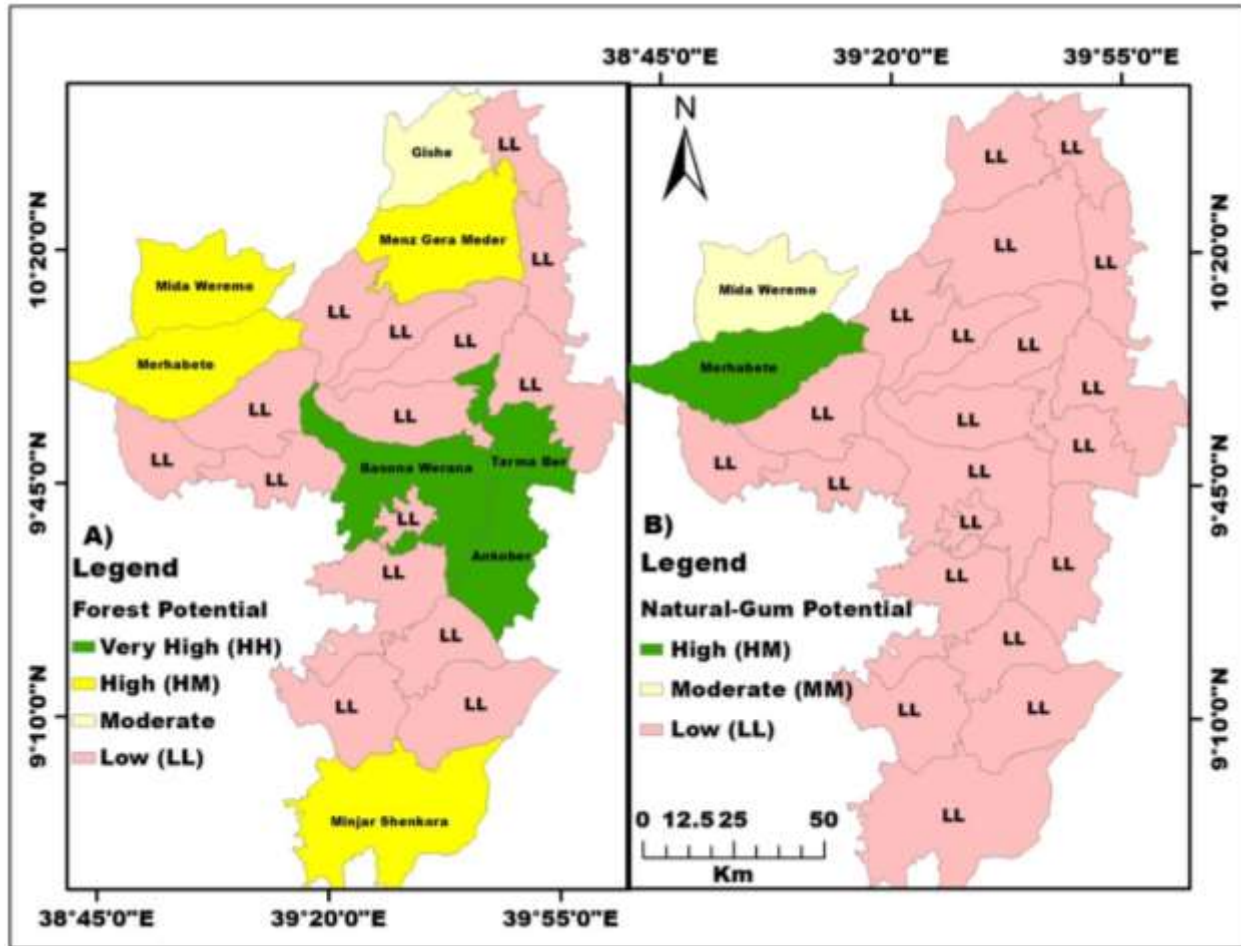


Figure 3. Investment potential map of A) Forest B) Natural Gum

3.4.4. Challenges and Opportunities of Forest Investment in North Shewa Zone

Forest coverage in Ethiopia in general and in the highlands of Ethiopia such as North Shewa Zone in particular has seriously decreased. This in turn will reduce the forest investment expansion and will affect the income that will be generated from the sector. Besides, forest investment has many challenges and opportunities in North Shewa zone, and these factors are assessed using SWOT analysis tool (Table 4).

Table 4. SWOT of Forest investment in North Shewa

Strength	Weakness
<ul style="list-style-type: none"> • Existence of high motivation and positive attitude across all the concerned bodies to facilitate forest investment • Availability of land and manpower for forest investment 	<ul style="list-style-type: none"> • Lack of clear guidelines for forest investment • Lack of responsible investment office in some districts • Irregular follow up on forest investment • Weak performance of previous forest investment • Lack of nearby and improved market • Weak linkage with the rural communities • Lack of awareness
Opportunity	Threats
<ul style="list-style-type: none"> • Location of the zone, it is near to the capital city of Ethiopia, • It has peaceful environment • Availability of suitable climate, soil and wide ecology 	<ul style="list-style-type: none"> • Negligible land compensation • Weak enforcement capacity • Existence of negative image on farmers' attitude towards forest investment • Displacement

4. FARMERS PERCEPTION TOWARDS INVESTMENTS IN NORTH SHEWA ZONE

The farmers in the study districts demands for value added agricultural investments targeted to enhance the livelihoods of the community. Farmers encouraged the investors change himself and the community. Farmers believed that they cannot change by themselves, rather than the technologies introduced through the investors. Investors should introduce tractors, trashers, combiners besides construction of river canal and school for children and creating jobs for youths. Farmers are cooperative to leave their valuable land free of charge for one or two years with their initiation as far as the projects benefits the community and themselves.

Farmers, however, reported that except displacement of the farmers on their productive land, investors who engaged on the agricultural investments in their surrounding did not performing well as compared to their expected plan. Farmers also noted that the investors are not producing different from farmers interims of type of crops, yield and technologies even the investors cultivating crops without good agronomic practices such as weeding and row planting. Famers conclude that the current production status of agricultural investment is lower than farmers' production. The farmers supported with necessary inputs and extension services with promotion of cluster farming they are promising to produce more and more. Moreover, few of the investors expanding the land through clearing of communal forest, which will cause for global warming and these farmers, raise a question why land is given to investors.

The farmers in the zone holding small land size which cannot fulfill the food demands of their family as a result the famers rent in land to meet the food requirement. Most of the communal grazing lands are giving to investors therefore no extra land for unemployed youths. In addition, farmers are dependent on oxen instead of tractors, this mean that farmers require grazing land to accommodate larger numbers of ox to cultivate more land. On the other hands, land compensation fee is not justifiable or attractive with current economy of the country especially farmers with extended family size and even it lacks consistency from place to place. Farmers are not technically equipped to manage fees received from land compensation since their specialization is farming. Therefore, government looking for other mechanisms related to land administration to bring win-win approaches between farmers and investors to register sustainable growth, developments and peace in the zone.

5. CONCLUSIONS

North Shewa zone is endowed with favorable agro-ecologies, perennial rivers, potentially irrigable land, better road and electric access besides high political commitments of the zone to invest in any sub-sectors of Agriculture (livestock, cereal crops, horticultural crops and natural resources). These facts are confirmed by the investment flow of the zone in the last five years. However, the zone has not assessed and documented the untapped investment potentials of the zone in way that adds value to the investment strategy of the zone. Therefore, to attract and manage value adding investment in zone, the major agricultural investment potential commodities and districts in each sub-sectors were identified in the current study. The major investment potentials in the livestock subsector are dairy, feedlot, small ruminants and poultry and apiculture, whereas *Teff*, wheat, sorghum, barely (food and malt) and fruits and vegetables are potential investment commodities of crop. The zone has also potential for forest products such as gum and incense.