

**Research paper**

# **Feasibility Study on Establishment of Public Enterprises and its Implementation Strategies in West Arsi Zone, Oromia Region**

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Ethiopia in general and Oromia region in particular has huge investment potentials for agricultural development. Investment in agriculture sector of the region is found to be more attractive and profitable in diverse sub-sectors ranging from food products, industrial raw materials to bio-fuel production. Its climate is suitable to grow almost all types of crop. Therefore, using huge surface and ground water, investors can engage in the following Agriculture and related activities. The growing population, urbanization and huge public expenditure created job and market opportunity for expansion of investments in Ethiopia. The legal system also allows new entrants into business to setup manufacturing and agro processing to produce different types of products. The public sector investment opportunity brief highlights for the establishment of different Manufacturing and agro processing are the major ones. This feasibility study was aimed to identify the potential resource, opportunities and challenges for the establishment of public enterprises.

**Keywords:** Feasibility, Opportunities, Resources, investments

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## **INTRODUCTION**

West Arsi Zone is one of Oromiya Regional state territory founded in 1998 E.C of same Districts which was included under Arsi, Bale and East Shewa zones and named after a sub group of the Oromo, who inhabit it. Most parts of the zone have elevations of ranging from 1500 to over 3300m. Shashemene town is the administrative center of the zone it located at 250km from Finfine and the total area of Zone is 12767 km<sup>2</sup> West Arsi Zone is located approximately at a distance of 250km from Finfine. Presently West Arsi Zone has 13 districts, 2 Urban Towns, 324 peasants association and 43 small towns. The Astronomical location of West Arsi zone lies between 6<sup>o</sup> 17' 00" N to 7<sup>o</sup> 42' 35" N Latitude and 38<sup>o</sup> 3' 42" E to 39<sup>o</sup> 45' 58" E Longitude.

Based on the 2007 Census conducted by the Central Statistical Agency of Ethiopia (CSA), this Zone has a total population of 1,964,038, of whom 973,743 are men and 990,295 women. 272,084 or 13.85% of population are urban inhabitants. A total of 387,143 households were counted in this Zone, which results in an average of 5.01 persons to a household, and 369,533 housing units. The two largest ethnic groups reported in West Arsi were the Oromo (88.52%) and the Amhara (3.98%); all other ethnic groups made up 7.5% of the population. Afaan Oromoo was spoken as a first language by 87.34% and 6.46% spoke Amharic; the remaining 6.2% spoke all other primary languages reported. The majority of the inhabitants were Muslim, with 80.34% of the population having reported they practiced that belief, while 11.04% of the population professed Ethiopian Orthodox

Christianity and 7.02% of the population professed Protestantism.

The mean annual temperature of the zone is found between 20-25<sup>o</sup>c in the high land and 10-16<sup>o</sup>c in the low land area. However, there is a slight variation of temperature from month to months. October to May is the hottest months while June to September is the coldest months. Mean Annual Rainfall - for most of the areas, the rainy season starts in March and extends to November with the highest concentration in June, July and August. The number of rainy days varies from highland to Temperate and this number slightly decreases as one goes down to the lowland areas.

Based on the climatologically data available in West Arsi Zone investment office, the mean annual rainfall varies from woreda to woreda. Generally, West Arsi zone receives abundant and well-distributed rainfall both in amount and season, which is conducive for different types of vegetation growth and agricultural activities. On average, the zone gets annual mean rainfall of 1300mm.

West Arsi zone is connected with neighboring zones and region by national or trunk road. The economy of the zone is mainly dominated by Agriculture. The zone is known by Maize wheat and barley production. This study was aimed to identify the feasible investment opportunities in West Arsi Zone of Oromia regional state. Agriculture, Industry and investment offices were addressed to collect available data, and Questionnaire was the primary data collection tool.

## PURPOSE OF THE STUDY

The study was aimed to assess whether west Arsi zone is feasible or not to establish public enterprises and its implementation strategies with the following specific objectives.

- To identify availability of natural resources and its utilization to establish public enterprises in west Arsi zone, oromia regional state
- To identify investment opportunities in the whole sector and improving the efficiency of all its elements from meat production, processing, handling, distribution, and marketing.
- To see availability of both domestic and international market for identified feasible investments and sectors in the zone
- To assess the access of infrastructures (road, Electricity, health services, etc) in the study area

## OPPORTUNITY RATIONALE

### Comparative Advantages of the Zone

Its natural resource base, minerals, water resources and different climatic zones make the Zone suitable for the cultivation of different crop types. The Zone also has

higher livestock population in Oromia with a notable infrastructure development, proximity to Hawassa and most regional cities, allowing it to provide investors with unique opportunities.

### Availability of better developed infrastructure

- Availability of investment protection scheme
- Multidirectional roads connects big and smaller towns
- Plots of rural land to be granted free of charge to ventures in areas of health, education, forestry
- Land free of charge for a period of four years for investors invest in cash crops and other plants on a permanent basis
- The availability of dry Port in Modjo and Gelan town for freight accommodation,
- Proximity to Hawassa and Bole International AirPort for exporters,
- Provision of land at very competitive rental price

### Investment Incentives

Ethiopia has proclaimed various regulations that permits investment incentive package so as to encourage the establishment of different private projects. Based on that law every domestic investor or foreign can get incentive provided that the project is eligible for the incentive. The various investment incentive package proclaimed by the government is available on Oromia Investment Commission Web-site ([www.ormiainvest.gov.et](http://www.ormiainvest.gov.et)) and West arsi Zone Investment Office Web-site Web-sitemail.com-westarsizoneinvest@gmail.com

### Lease and Rental Price of Investment Land

Urban Land –According to Oromia Urban land administration, Lease price for investment land is applicable in all towns designated as “lease town”. Based on town’s and land grade, benchmark price for commercial activities per year per m2 is 480.33 to 1011.5 Birr.

- For Hotel services lease benchmark price per m2 of investment land is from 285.5 to 896 Birr
- For industrial establishments of different categories per year per m2 is from 368.48 to 520 Birr
- For Social Services (Education, health, research center, Sport and culture) for per year per m2 is from 255.36 to 693 Birr
- For Real Estate Development per year per m2 is from 176.69 to 840 Birr.

Rural Land - Is based on distance, location and grades of zonal administration. For industrial establishments, rental price of investment land in rural area per year per m2 is

from 0.1 to 0.34 Birr. For agricultural projects, rental price per year per hectare is from 70.40 to 135 Birr.

## MAJOR INVESTMENT OPPORTUNITIES

### Agricultural Sector Investment Opportunities

Oromia region in general and west Arsi zone in particular has huge investment potentials for agricultural development. Investment in agriculture sector of the zone is found to be more attractive and profitable in diverse sub-sectors ranging from food products, industrial raw materials to bio-fuel production. Its climate is suitable to grow almost all types of crop. Therefore, using huge surface and ground water, investors can engage in the following Agriculture and related activities.

**Plant Production/Food crops:** West Arsi is the major crop-producing zone in oromia region. The main agricultural crops include Cereals (Teff, wheat, maize, sorghum, millet, beans, chickpeas, field peas, lentils, soya beans, etc), Pulses, Oil Crops(oil seeds such as sunflower, sesame, linseed, and groundnuts) and the following table:

**Table1.**Major crop production potential in West Arsi Zone

SN	Type of product	Quantity in Quintal
1	Grain crops	10,267,665
2	Pulses	549,999
3	Oil seeds	53,108
4	Vegetables	482,472
5	Root crops	1,946,751
6	Permanent crops	54,591

**Source:** West Arsi Zone Agriculture and Natural Resource Office and CSA, 2019/2020

**Horticulture:**Oromia is considered to be the ideal site for cultivation of different varieties of horticulture agriculture. The great valley area is one of the major horticulture corridor feeding Finfinnee and the central markets.

**Fruits and Vegetable:** The country's majority export of fresh vegetables and fruits are from south west. Popular fruits grown in west Arsi zone include apples, bananas, grapes, oranges, avocados, mangoes, papaya, and strawberries.

**Forest and Forest products:** The zone is cherished with fertile soil and favorable climate for forest development. About 750 hectares of land is readily available for forest development. From these, Nansabo forest is the largest and most preferable for tourism and production of honey and other forest products.

### Dairy and Livestock Business Opportunities

The Zone has about 2,095,221 cattle, 875,734 sheep,239,651 Goats, 227,798 horses, 257,659donkeys731,644 poultry and 34,518 Bee colonies(CSA, 2019/20).

**Table 2.** Livestock resource potential in West Arsi Zone

Livestock type	Cattle	Sheep	Goat	Horses	Donkey	Poultry	Bee colony
Quantity	2,095,221	875,734	239,651	227,798	257,659	731,644	34,518

**Source:** West Arsi Zone Livestock and fishery development office and CSA, 2019/2020

### Fishery and Aquaculture

The regions annual fish production potential is estimated at 300 tons. Fish can have produced from regional rivers such Rivers such as Dodolaand lakes like Abijata, Langano, and Shalaare sites for fishery development in the zone. Fish farming can be undertaken in artificial ponds. Opportunities for the construction of aquaculture to produce fresh water fish for local and international markets. Bee keeping and honey processing) is another investment opportunity in west Arsi zone of Oromia Regional State. The investment areas in apiculture include;

- Production of honey and other bee products
- Establishing honey and beeswax processing
- Queenrearing

Manufacturing of beekeeping, processing and packing, equipment and tools

- Development of bee products based cosmetics producing industries.

The major challenges of agricultural input production are;

- √ Inadequate technology
- √ Infrastructure inefficiency

### **Manufacturing and Agro-Processing Sector Investment Opportunity**

**Manufacturing:** The zone has enormous resource base in textile, leather, pharmaceutical, chemical, and engineering industry as well as non-metallic mineral products (glass products, ceramics, building materials), paper and paper product manufacturing and the like.

**Agro-processing:** Processing and preservation of meat and fish products, fruits and vegetables, Production and processing of dairy products, and others. Due its huge agricultural products produced both at small holder farmers and commercial scale, the following Specific opportunities in agro-processing are available. These potentials include:

- Processing and preservation of meat and fish products, fruits and vegetables, coffee, tea
- Production and processing of dairy products; edible oil and Soya milk production
- processing of animal feed, etc
- Manufacturing of food and beverage products (i.e Brewing)
- Livestock products processing
- Fruit and vegetables processing and others

### **Mining Sector Investment Opportunity**

The zone is also naturally blessed with immense mineral resources. Soda ash, construction minerals and other non-metallic construction materials are few major ones available in the zone.

### **Hotel and Tourism service Investment opportunity**

The different mammals of wildlife and bird species, national parks, natural lakes, natural thermal spring, historical places and natural caves are some of the tourist attraction bases of the Zone. These attraction bases have increasingly become popular among investors as they have been investing in construction of hotels, different lodges, parks and incorporated them in their tour operation routes.

### **Infrastructural availability**

- Construction- Modjo-Hawassa highway road under construction crossing the Zone
- Health(General Hospitals, specialized Hospital)
- Education- There are different governmental and nongovernmental training centers
- Electricity
- ongoing development of Industrial Zones

## **MARKET ANALYSIS**

### **Domestic market demand**

Because of urbanization and population increment, the local market demand of products (industrial and agricultural) is increasing. Therefore the public sector which is going to be established in West Arsi zone may get acceptance in local market.

## The Global Demand

Now days, globalization is making the world one village. Ethiopia has different bilateral and multilateral agreements with many countries. Most of our country's products are also exporting to different countries of the world. West Arsi also will get great opportunity of export market specially, for coffee and meat products.

## LABOR AVAILABILITY

The selection of structure of the envisaged project is made based on the existing structure of manufacturing plants operating in the country, the capacity, complexity and technology mix of the plant and assuming that the company shall be managed by the Ethiopian government for some period till it is privatized. Organizational structure principles such as specialization, coordination, and departmentalization are also considered for design of structure that best suits the envisaged project.

**Table 3.** The total human resource availability in the zone is shown in table below.

SN	Level of education	No of unemployed youths	Remark
1	Degree	7,322	
2	Diploma	9,143	
3.	Level 1-5	11,646	
3	Non educated	Not identified	

Source: West Arsi zone Labor and social affair office, 2021

## OTHER SERVICES

- Environmental Impact Assessment is approved by Bureau of Land Administration & Environmental Protection of Oromia and by its structure found at different levels,
- Construction permit is provided by Land Development & Management Agency of respective town administration if the land for which investment is permitted in urban center.
- in rural areas construction permits is provided by respective Zonal Industry and Urban Development Office,
- Trade license is provided by Trade and Market Development Office of the respective town or zonal administration depending on the locations of investment project.

## FEASIBILITY STUDY ON ESTABLISHMENT OF DAIRY PRODUCTION FARM IN DODOLA WOREDA, WEST ARSI ZONE

### Executive Summary

Oromia Regional State, West Arsi Zone, Dodola District Supply the Dairy Production Farm intends to produce high milk. Milk production will be managed using modern methods from improved milk cows. The cows will be selected from the surrounding, from the localities. Both milk will be supplied to the nearby communities and the town. The area of land identified for the project is about 32,000m<sup>2</sup> and Capital of the project 12,000,000 the

availability of infrastructure, labor force and adequate demand. For the product and many other reasons necessities proposal for the establishment of the plan.

This project will create employment opportunity for 45 individuals from this 30 will be permanent employees while 15 are contractual and other temporary jobs.. It will generate revenue from tax for the area, fill the demand gaps for the products, as it supplies for exporters, it will support foreign currency earning. On top of this, through direct and indirect employment opportunity to the local community; since they are more preferred, women participate more than men; and it also induces learning to the area. Supply of dairy products will substantially stabilize the market, improves availability of the products which then benefiting the community

### Project Description

Dairy products currently sold in the Ethiopian market can be categorized into milk products, such as raw, pasteurized, UHT and powder milk; butter products, such as fermented and pasteurized butter; and other products, such as cottage and other type of cheese, sour milk and yogurt. Among these products powder milk are not produced in Ethiopia at the moment, and are usually imported. Pasteurized (table/bread) butter, yogurt and various type of cheese (apart from cottage cheese) are both imported and locally produced.

Development of successful and sustainable dairy industry will be realized by strategic interventions of the investors in to all parts of possible entry points along the milk value chain especially on the innovation of new

products. Accordingly, several entry points to produce new products can be considered as intervention opportunity in the dairy industry value chain with varied degree of resource requirement and level of competitions.

### Opportunity Rationale

- Increasing population, urbanization and income and trend towards consuming more animal products
- Ethiopia has opted to raise milk production through genetics, feed and health interventions to improve traditional family cow dairy production and expand and improve specialized dairy production units over the GTP II period (2015-2020);

These interventions will result:

The production can substitute for imported milk products and be used domestically for new or additional industrial purposes or exported as milk powder or UHT to raise foreign exchange earnings and stimulate production.

- The promotion on milk consumption by non-government organizations, initiatives by national level projects, demand for dairy products increased significantly. Presence of good government policy is an opportunity, which helps dairy industry to improve its position in the milk value chain.
- Dairy farmers in urban, per-urban and rural dairy production system demonstrated strong interest to expand dairying as one of the means of income generating activity. This is a great opportunity for the entrants to collect and process raw milk into different milk products, and supply for domestic and export markets.
- The future prospect of dairying is bright and much expected to be one of the major targets of the prospective agro-processing industries in the country.
- Possibilities/capacities for improvement are available.
- New product development to increase customer selection.
- Distribution into multiple market channels to reach more consumers.
- There is political stability, conducive investment climate, government policy reforms, and market orientation that is favorable for dairy investment.

### Production and Market Potential

#### Production Capacity

Processing raw milk produces a number of products such as, pasteurized milk, cream, yoghurt, cheese and butter, and investment could be on pasteurizing plants

with a capacity of processing 10,000 litres per day. The processing plant will start production at 75% of its installed capacity, which will grow to 90% in the second year. Full capacity production will be attained in the third year and onwards.

The proposed project will have the capacity of producing 80 milk cows, of these, 30% in the first year, 37% in second year and 100% in the Ten year of operation. Thereafter it will manage full capacity of the project.

#### Market opportunity

The company will sell to individuals, but it will also accept some occasional catering jobs to individuals and companies in the area. We estimate that over 90 percent of our sales will go to individuals (retail customers) and the remaining balance to existing and future businesses (corporate customers). However, it is important to note that, typically, corporate customers make larger orders for their employees' needs or special business events.

- a) Individuals (retail customers) accounting for more than 90 percent of our sales, and
- b) Local businesses (corporate customers) which, in terms of purchase orders, typically make larger orders for their employees and business needs.
- c) Next illustration shows the market segmentation, taking into account, for conservative purposes, only the potential number of individuals that would order milk (about 100 thousand residents, or 10 percent of the population in the city's area, plus 500 businesses), and less than 5 percent average growth rate.

The demand for the product is filled through supply directly from capital of the west Arsi Zone. As the product is distributed by owner. Because for satisfaction of costumers. However, as the Agricultural sector is now booming across the region. The demand for the product is increasing from time to time. The demand for the product also arises from the expansion of urban center and level of urbanization and in rural area is also used. In Ethiopia, Dairy Production Farm is a common practice in Oromiya, Ethiopia and special attention was given by the government to boost milk supply through Dairy Production Farm. Accordingly, Dairy Production Farm is an increasing business at different scales in Oromiya and all Ethiopia.

Therefore, the proposed project will sustainably encourage manufacturing of dairy products and enhance supply of quality, dairy products, mainly, for the local. Additionally, supply Dairy Production Farm to the surrounding communities and markets with further extending to live animal exporters.

## Projected demand

Demand for standard dairy products from the modern sector is met by domestic production and through imports. The demand for milk depends on many factors including consumer preference, consumer's income, population size, price of the product, price of substitutes and other factors. In general, increasing population growth (as in the following Table) and rising real income are expected to expand the demand for milk and milk products. Therefore, increase in population growth and consumer income in the future is expected to increase the consumption of milk products.

Year	Population in '000' based on current growth rate (2,27%)	Milk production, in million litres based on current growth rate, (4.1%)	Milk available for consumption (68% of the produce) in million litres	Demand for milk, in million litres based on FAO recommendation (62,5kg)	Gap between projected milk available for consumption and demand based on FAO's recommendation in million litres
2011	82 102	3 061	2 081	5 131	3 050
2012	84 335	3 186	2 166	5 271	3 105
2013	86 629	3 317	2 256	5 414	3 158
2014	88 985	3 453	2 348	5 562	3 214
2015	91 406	3 594	2 444	5 713	3 269
2016	93 892	3 742	2 545	5 868	3 323
2017	96 446	3 895	2 649	6 028	3 379
2018	99 069	4 055	2 757	6 192	3 435
2019	101 764	4 221	2 870	6 360	3 490
2020	104 532	4 394	2 988	6 533	3 545

Source: Yilma et al., 2011

The annual demand in Ethiopia for dairy products is increasing. This is as a result of the current high population and future growth trends, a growing number of urban centers and urbanized lifestyles, and finally steadies economic growth rates registered by the country and visible increased income levels of the general population. In Ethiopia, the demand for milk products is increasing while supply is lagging. As a result, imports have surged in recent years, which consist primarily of processed milk, including cheese and milk powder.

## Availability of Infrastructure

The district, Dodola, shares boundary line with Kofele, Adaba, Kokosa, Mena Angetu, Meda Welabu and SNNPRS. The administrative center of the district is Dodola, which is 75km away from the Zonal Capital, Shashemene. It has an area of 1342 sq.km and constitutes 25 rural kebeles and 4 urban kebeles. Supply of underground and surface water is available those are;- Koraa , Wabe , and Logita Lensho are all weather rivers found in the district. It is also known the supply power is insufficient. Mobile network, telephones and other communication channels are also available. The banks, postal services and insurance agencies' are adequately available in work town.

## Project output

The dairy farm investment will offer a wide service of quality milk, as well as it is by product. Plain items on hand, and will be able to provide our customers with various packing, just by before packing them on,

prior to consumption or re-heating. Milk is served at the counter, for Dairy Farm, or delivered to the location indicated in our customer orders. We take orders online, by phone, or at our location. The product are sealed and the packaging will allow our customers to remove individual product from their freezers as they need them. Thus, the customer will be able to pop them into a preheated oven (re-heat instructions are included in the package), or deep-six them for later use. The milk can be delivered not only refrigerated, but also hot, depending on customer preference.

Specifically, as entrepreneur, beyond the return on investment, the project will have the following specific necessity:

- To production and supply quality and healthy dairy products, and contribute to the development goals of the country at large and the region in particular in addressing the ever-increasing demand of agricultural products.

- To serve as the source of government revenue through business income tax and tax from employees' salary
- To contribute its part to the governments necessity of reducing the problem of unemployment through creating employment opportunities to the citizens
- To serve as a demonstration site -center of excellence for the local community, substantiated with provision of trainings and consultancy.

### Raw Materials and Inputs

The principal raw material required for the production of pasteurized milk, butter, cheese and cream is raw milk. In addition, small quantities of coagulation enzymes and salt are also required for the production process. The raw (whole) cow milk and salt are available locally while the coagulation enzymes have to be imported. The auxiliary materials required for the envisaged plant comprise packing materials like plastic bags, glycine paper and carton box. The plastic bags and carton boxes can be acquired from the local market while the glycine paper has to be imported.

### Environmental Impact

Construction of effluent treatment plant is necessary in case of multiproduct large size plants for treating the effluents before discharging for proper disposal. The milk processing plants has to be hygienically designed and easily cleaned to prevent contamination of products by insects, birds, rodents or microorganisms. The dairy products plant does not have any pollutant emitted from the production process, except the washing water, which has to be connected to appropriate sewerage line to get rid of. Thus, the envisaged project is environment friendly.

### Project Cost Summary

#### Project economics

Total land area required is 5000 m<sup>2</sup> out of which 500 m<sup>2</sup> are built up area. The construction cost of buildings and civil works at a rate of Birr 6000 per m<sup>2</sup> is estimated. The total investment requirement is estimated at approximately Birr 11,441,572. The plant will create employment opportunities for 30 individuals and provide steady and secure income for dairy producers (out-growers). The project is financially viable. The project NPV & BCR shows that its acceptability and Profitability. Thus, investing on dairy processing in Ethiopia is a profitable business for the investors.

## FEASIBILITY STUDY ON HOTEL AND RESORT INVESTMENT IN NAGELLE ARSI DISTRICT, WEST ARSI ZONE, OROMIA

### Executive Summary

Hotel and Resort opportunity project prepared contains the brief introduction of the project area. The size of land identified for the project is about 9 hectares and Capital of the project 141,000,000.00 the availability of infrastructure, labor force and adequate demand. for the service and many other reasons necessities proposal for the establishment of the plan.

The project will create employment opportunity for 158 individuals, including current employees, from this 65 will be permanent employees 58 while are contractual and 35 temporary jobs.

The government both local and regional are very keen to support the project as private sector development in the region are recognized to contribute in creating ample jobs, creating and saving foreign currency, brining technological knowhow and highly revenue for country Government. To earn much from the service, its quality in appearance and test should remain attractive and competitive service in the country.

Nagelle Arsi district of west Arsi zone of Oromia region is located in nearby Batutown at about 180km away from Fifiye. The area is found near to the main road extended to Addis Ababa and Shashamane hence there is no problem with regard to access to road. It is also known the supply power is sufficient. Supply of underground and surface water is available. Mobile network, telephones and other communication channels are also available. The banks, postal services and insurance agencies' are adequately available in the district.

### Project Rationale

The Resort industry in Ethiopia has got a long history. Tourism is an opportunity that Ethiopia shares with African states, also in all direction of the Oromia regional state. The quality and distribution of well standard, tourist class hotel service provision is in its very minimal stage. One of the repeatedly alleged problems related to tourism and other big events in the country is that of the unavailability of good standard Resort. The problem is severe particularly in remote areas that are declared as tourist sites and where a number of travelers are. The demand for the service is filled through supply directly from *Negelle Arsi* District in the Resort, As the service is distributed by owner. However, as the service sector is now booming across the country.

### Project Output

In the country one part of tertiary sector Hotel resort are



generating most of their business from domestic and local tourists, business persons business men guests and leisure's travelers etc. The services given by these centers should be better quality and facilitates to their customers. So this project favorable site and its proximity and the demand for the service due to various factors necessitates the establishment of the project in the area. Community at large, public sector and private sector are excessively utilizing resort across the country.

In general Two Star Resort is necessary to develop a chain of environment friendly hotel with full fledged facilities to provide all the amenities that also enables promote the locality. The specific **necessity** beyond its business **necessity** of generating revenue to the investor, are to:

- Create new travelers and tourists facilities for sustainable socio-economic development of the area;
- To set up a quality by which individuals can participate in this traditional invite ventures and contribute to the growth of the country's economy.
- Attract conference tourism and tourists without affecting the natural resources;
- To create direct and indirect employment opportunities both at the pre-operation and operation phases
- Derive profit to the promoter through its services and tax revenue to Oromia region through business profit and other taxes.

## Market opportunity

### Current Market for the Service

Availability of market for the planned project across the zonal administration and adjacent areas are very critical to make decision on the establishment of the project. As indicated above, the demand for this service or Resort is very high, because quality of service customer satisfaction and sustainability of Security is selective in zonal, Regional and Country. However consumption of the service is high. This demand is now fulfilled. So that the establishment of this particular project contributes in fulfilling the resort demand and good service supply gap.

## FEASIBILITY STUDY ON ESTABLISHMENT OF COFFEE PROCESSING PLANT IN NENSEBO DISTRICT, WEST ARSI ZONET

### Executive Summary

Wet Coffee processing opportunity project Planned to process and supply high quality coffee to the international market. It will mainly use raw coffee-cherry from own

farm and supply high quality coffee. It also uses buys and process raw coffee from surrounding coffee growers. It will be believed to contribute for the country's foreign currency earning through the supply of quality coffee supply to the international market.

The area of land identified for the project is about **13,000m<sup>2</sup>** and Capital of the project **17,000,000.00** the availability of infrastructure, labor force and adequate demand. For the product and many other reasons necessities proposal for the establishment of the plan. The project will create employment opportunity for **80** individuals, including current employees, from this 12 will be permanent employees **25** while are contractual and **43** temporary jobs.

It will generate foreign currency through exporting quality coffee and also revenue as tax from the business and employees. Change in local community of coffee growers' livelihoods due to increased income and fair pricing for their produce and increased women participation since they are more capable in sorting, cleaning coffee, etc,

### Description of the project

The mean annual temperature of the zone is found between 20-25<sup>0</sup>c in the high land and 10-16<sup>0</sup>c in the low land area. However, there is a slight variation of temperature from month to months. October to May is the hottest months while June to September is the coldest months.

Mean Annual Rainfall - for most of the areas, the rainy season starts in March and extends to November with the highest concentration in June, July and August. The number of rainy days varies from highland to Temperate and this number slightly decreases as one goes down to the lowland areas.

Based on the climatologically data available in our office, the mean annual rainfall varies from woreda to woreda. Generally, West Arsi zone receives abundant and well-distributed rainfall both in amount and season, which is conducive for different types of vegetation growth and agricultural activities. On average, the zone gets annual mean rainfall of 1300mm.

West Arsi zone is connected with neighboring zones and region by national or trunk road. The economy of the zone is mainly dominated by Agriculture. The zone is known by Maize wheat and barley production

### Market analysis

Wet Coffee processing is available not only in the zone, but also in all direction of the oromia regional state. The demand for the product is filled through supply directly from NasaboDistrict as the product is distributed by owner. However, as the Industrial sector is now booming across the country. The demand for the product is increasing from time to time. The demand for the product

also arises from the expansion of urban center and level of urbanization and in rural areas particularly, processing such agricultural products to add value on exports. Hence, the main objective of the project is processing of increased volume of wet coffee and supplying high quality coffee for the export market so that earn profit as an entrepreneur and foreign currency for the country.

Coffee is one of the most important traded commodities in the world. The sector's trade structure and performance have large development and poverty implications, given the high concentration of production by small-holders in poor developing countries

Availability of market for the planned project across the zonal administration and adjacent areas are very critical to make decision on the establishment of the project. As indicated above, the demand for Coffee processing is

very high because quality of coffee is selective in zonal, Regional, neighbor zonal, Country and Globally. However consumption of the product is high. This demand is now fulfilled through the owner supplying the product to the market distributed from the district. However, supply of coffee production can fulfilled from the owner Coffee Plantation farm.

The proposed project plant will have capacity of processing, on average, 600,000kg of processed coffee annually which will be undertaken during the harvest season of coffee. Hence, the production program is projected on the basis of the market forecast and the plant capacity. As the promoter has sufficient capital, it is planned to achieve 80% of its capacity in the first year, 90% in the second year and 100% in the third year and thereafter. Production plan of the project is presented below:

**Table 1:** Projected demand of the product

No	Products	Products demand per year in ton									
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1	Processed coffee /production/ in kg	60	66	72	79	87	96	106	116	128	141

### Availability of Infrastructure

The district, Nensebo, shares boundary line with Dodola, Adaba, Kokosa, Mena Angetu, Meda Welabu and SNNPRS. The administrative center of the district is Werka, which is 134 km away from the Zonal Capital, Shashemene. It has an area of 1692sq.km and constitutes 19 rural kebeles and 2 urban kebeles. Supply of underground and surface water is available those are; -Belechu, Bedesa, Hodema, Katimera, Halila and Hamile are all weather rivers found in the district. It is also known the supply power is insufficient. Mobile network, telephones and other communication channels are also available. The banks, postal services and insurance agencies' are adequately available in worka town.

#### 1. The necessity of the product

Coffee is the major export product of the country. In addition to the current efforts underway to increase the supply and improve the quality of coffee, Ethiopia is highly encouraging investment in the area, particularly processing such agricultural products to add value on exports. Hence, the main necessity of the product is processing of increased volume of wet coffee and supplying high quality coffee for the export market so that earn profit as an entrepreneur and foreign currency for the country. Specifically,

- To generate foreign currency for the country through supply of quality exportable product
- To serve as the source of government revenue through business income tax and employees' salary
- To contribute its part to the governments objective of reducing the problem of unemployment through creating employment opportunities to the citizens
- To improve market access to the local farmers growing coffee which support maintaining competitive price of coffee in the area.
- Contribute to the development goals of the country at large and the region in particular.

#### 2. Project potential

Regarding potentialities of the zone, the zone has high potential. Coffee remains the single most important cash crop as it is the major foreign exchange earner. The country is still Africa's leading producer of Coffee Arabica. West Arsi zone being the largest producer of coffee in the country and having broad genetic diversity amongst its coffee varieties is the number one pick for coffee plantation in Nesebo district. The favorable agro-climatic conditions in the Zone offer excellent opportunities for production and processing of coffee for both export and domestic consumption.

There is high production of coffee for both local consumption and export. Nansabo district, which is found in the Southeastern part of the zone, is known for its quality organic coffee production. The district has a great opportunity to invest in coffee plantation development as well as coffee pulping machineries.

### 3. Government support for private sector development

The government has a great ambitious to transform the country in terms social and economic development. To achieve this achieve development of private sector is given due attention as one of the engine of economic development in addition to the development effort undertaken by government and community at large.

With regard to private sector development is concerned, the government considered as the main and irreplaceable agent to bring foreign currency, create sample employment opportunities, increase income through taxation, achieve technological transfer and increase production. To achieve these objectives the local government in particular and regional state in general are keen to provide all rounded support to private developers. Preparation of investment land, facilitating the acquisition of license and other services are some of the support provided by regional government and local administration. Depending on the type of project, the regional government also provides grace period for lease payments. The local government also works to facilitate permission of bank loan based on the regulation.

### 4. Organization and human Resource

The selection of structure of the envisaged project is made based on the existing structure of manufacturing plants operating in the country, the capacity, complexity and technology mix of the plant and assuming that the company shall be managed by the Ethiopian government for some period till it is privatized. Organizational structure principles such as specialization, coordination, and departmentalization are also considered for design of structure that best suits the envisaged project.

### 5. Implementation Schedule

The implementation schedule covers the activities starting from the project evaluation and approval up to and including the trial-run and commissioning. It is envisaged that the complete implementation program requires a total of 36 months from the date of approval of the project and financial arrangement.

The total cost of project follow up and office running cost for the whole project implementation period is estimated at Birr 10,738,410.

### 6. Financial and Economic Analysis

According to the projected income statement, the project will start generating profit in the first year of operation. Important ratios such as profit to total sales, net profit to equity (Return on equity) and net profit plus interest on total investment (return on total investment) show an increasing trend during the life-time of the project. The income statement and the other indicators of profitability show that the project is viable. The project can create employment for 636 persons. In addition to supply of the domestic needs, the project will generate Birr more than 23 million in the first year of operation in terms of tax revenue. The establishment of such factory will have a foreign exchange saving effect to the country by substituting the current imports and future potential of export of the products.

The total capital costs for such a plant will be around ETB 38,004,098. The plant is expected to provide an employment to 45 people with an annual labor cost of ETB 5, 129,657. To produce coffee (6.2 Tons), the plant would require Tons of raw coffee. From an income of around ETB 392 Million in the first year of operation, we expect the total income of the plant to reach 604 Million by the six year of operation.

The project is financially viable with an internal rate of return (IRR) of 29 % and a net present value (NPV) of Birr 235,377,692 Birr discounted at 5%

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