



Agricultural Investment Potential of Ethiopia

***Ministry of Agriculture and Rural
Development***

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INTRODUCTION

Ethiopia has huge investment potentials for agricultural development. Currently investment in agriculture sector is found to be more attractive and profitable in diverse sub-sectors ranging from food products, industrial raw materials to bio-fuel. The agriculture sector accounts for 47% of the Gross Domestic Products of the country, provides 85% of employment and 90% of foreign currency earning.

Moreover, the country has huge market potential for crop and livestock produced with comparative advantage to the Middle East, Europe and Asia. For the past five consecutive years the agriculture sector was growing faster with more than 11% average annual growth. In addition of the contribution to the national growth, the growth has triggered to the increase in domestic market has for both livestock and food crops.

This brief document presents the government policy, institutional arrangement for supporting the private sector in agricultural development and also brings a highlight to the major potential sector and sub-sector for the engagement of private sector. It also contains major areas of the country with potential and suitable land for investment.

GOVERNMENT POLICY AND INSTITUTIONAL ARRANGEMENT

Agriculture is the corner stone of the development policy of the Government of Ethiopia. According to the Rural Development Policy and Strategy document, the basic ingredient and resource the country has for the agricultural development is the abundant land and labor. Most of the western lowlands are endowed with water resources and virgin and fertile. Up to recently the areas are not developed due to lack of capital and technology. Therefore, there is strong commitment from the government to make these fertile lands for investment that has the capital and technology to develop.

The Ministry of Agriculture and Rural Development has given the responsibility of providing technical support for private sector in agriculture development to the Agricultural Extension Department through the Private Support Team. The support ranges from providing information, technical support, and facilitation of other public services as long as they are

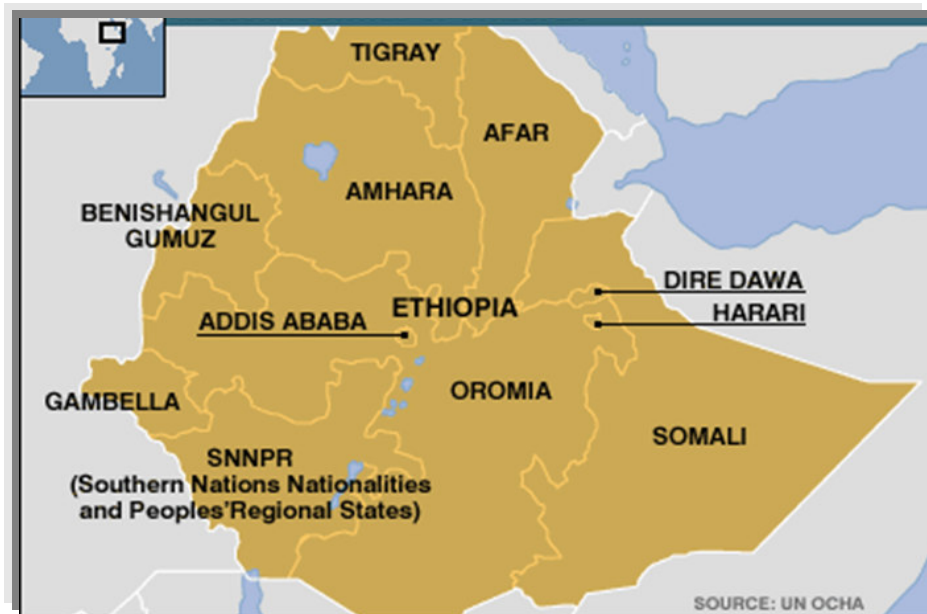
related to the success of the investment project. Depending on the extent of private sector engagement, the support team will also be established at regional and Woreda level. Similarly, the support service will ensure proper utilization of the natural resources and other responsibilities the investment has committed to.

1. CROP INVESTMENT POTENTIAL

1.1 General

- Out of the total land area /111.5million ha/ of the country about 74.3 million hectare is suitable for annual and perennial crop production.
- Of the total area of the country about 45 % (50.2 million hectares) is highland and the remaining is lowland.
- Of the estimated arable land, around 18 million hectare is currently cultivated under rain fed crops.
- The irrigation potential of the country is estimated to be around 4.3 million hectare.
- Ethiopia produces mainly a variety of cereals, pulses, oilseeds, fruits, vegetable, fiber crops /cotton/, coffee, tea, spices, and other industrial crops.
- Different types of farming system are practiced in the various agro ecologies mainly:
 - ✓ Mixed farming which is predominantly practiced by peasant farmers in the high land and mid high land
 - ✓ The large scale commercial farming system is mostly practiced by private investors.
 - ✓ The pastoral production system is rearing of livestock which is common in the low land areas.
- Although Ethiopia lies within 15 degrees North of the Equator, owing to the moderating influence of high altitude, the country is endowed with moderate temperature and pleasant climate.
- Altitude varies from –125 to 4620 m.a.s.l.
- Annual rainfall varies from 200-2500 mm. The average annual rainfall for the whole country is considered to be moderate by global standards. In most of the highlands, rainfall occurs in two distinct seasons: the “small rains” during February and March and the “big rains” from June to September.

- The average temperature rarely exceeds 20°C (68°F). The sparsely populated lowlands typically have sub-tropical and tropical climates.
- On the bases of the above, the country has 32 major agro-ecological zones.
- Due to the influence of various factors such as topography, climate, etc the country has many soil types, of which Nitosol, Vertisol, Fluvisol and Cambisol, are the most dominant ones.



Map of Ethiopia

1.2. Investment potential of cereal crops

- The major cereals grown in Ethiopia are maize, wheat, barley, teff, millet and sorghum. They are cultivated in highland and mid-highland areas with the exception of sorghum which also grows in lowlands.
- Rice is recently being given emphasis in both research and development.

1.2.1 Rice

- Rice could suitably grow in many parts of the country. The predominant potential areas are:-
 - West central highlands of Amhara Region (Fogera, Gonder Zuria, Dembia, Takusa and Achefer);
 - North West lowland areas of Amhara and Benshangul Regions (Jawi, Pawi, Metema and Dangur);

- Gameblla regional state (Abobo, Etang woredas by utilizing rain forest and irrigation)
- South and south west Lowlands of SNNPR (Beralee, Weyito, Omorate, Gura Ferda, Menit);
- Somale Region (Gode);
- South Western Highlands of Oromia Region (Illuababora, East & West Wellega and Jimma Zones).

1.2.2. Wheat and Barley

- Wheat and Barley are mostly growing in the highlands and mid highland area of the country, which are found in the Oromia Region, specifically in Bale and Arsi Zones and also in some parts of Amhara Region, North Gondar and North Shewa.
- The land being cultivated for barley and wheat in the country is estimated to be 1095436 and 1398215 hectares respectively.
- Though the lands suitable for these crops are occupied and cultivated by small holder farmers, there is a big opportunity for the private sector to be involved in the Agro-industry sector and promote the out growers scheme of development.
- Moreover irrigated wheat development is possible in the Afar, Gambella, SNNPR and Somali Regions.

Table 1. Estimated potential area of Rice

No.	Regions	Area (ha)	Remark
1	SNNP	75000	Rain fed and Irrigation
2	Oromiya	25000	Rain fed
3	Amhara	30000	Rainfed and irrigation
4	Benshangul Gumz	50000	Rainfed and irrigation
5	Gambella	NA	Rainfed and irrigation
6	Soamli	100000	Irrigation
	Total	280000	

NB: These are do not include areas already used by farmers.

1.2.3. Corn

- Corn is growing in the mid highland area of the country, which are found in all the regional government.
- The major corn producing areas are SNNP and Oromiya regions.
- The land being cultivated for corn in the country is estimating to be 1.77 million hectares.
- In oromiya region corn is growing the same belt with coffee there fore the land is high comparative advantage for coffee rather than corn production.

Table 2. Estimated potential area of Corn

No.	Regions	Area (ha)	Remark
1	SNNP	300000	Supplementary irrigation
2	Oromiya	150000	Rain fed
3	Amhara	300000	Rainfed and irrigation
4	Benshangul Gumz	200000	Rainfed and irrigation
5	Gambella	200000	Rainfed and irrigation
6	Soamli	250000	Irrigation
	Afar		
	Tigray		
	Total	1400000	

1.3 Horticulture production

- The total land under fruits and vegetables is estimated to be only about 0.45 million hectares, which is less than 5% of the total cultivated land.
- Among the major fruit crops, the mango, banana, papaya, avocado, citrus spp, grape, and pineapple are the most common tropical and sub-tropical fruit crop cultivated, whereas apple, pear and plum are among the emerging temperate fruits in the country.
- On average more than 2,419,449 tons of vegetables and fruits are produced by public and private commercial farms and small scale farmers, this is estimated to be less than 20 percent of the total crop production.

Table 3. Estimated Potential Area for Horticultural Investment (ha).

No.	Regions	Area	Remark
1	SNNP	346300	Rain fed and Irrigation (Gibe, Omo, Sala, Woito Rivers are sources of Irrigation)
2	Oromiya	150000	Rain fed and Irrigation (Awash, Wabe, Dabus, Guder, Didessa)
3	Amhara	270,000	Grater than 200,000ha based on out growers. /Tana and Abay river are sources of irrigation/
4	Dire Dawa	1000	Based on Ground water
	Total	767300	

1.4. Coffee, Tea and Spices production

1.4.1 Potential Area for Coffee Investment

- In Ethiopia coffee grows in almost all administrative regions, the climatic condition range from the semi-savanna climate of the Gambela plain (500 m.a.s.l) to the continuously wet highland forest zone of the south west (2200 m.a.s.s.l).
- Dominantly coffee grows in highlands ranging from 1500 to 2100 meters above sea level, the ideal soil of the crop is slightly acidic with a PH of 4.5-6.5 and it requires a rain fall range of 1500-2500mm/year with balanced distribution.
- At present about 600,000 hectares of land is under coffee cultivation and this is spread over different growing districts. The largest of these areas lie in south and western highlands of the country.
- Ethiopia has more genetic diversity among its coffee varieties than any other country. Nine different bean varieties are cultivated in the four main growing areas
- All varieties varies with its ecological factors such as rainfall, temperature, shade, altitude and soil give individual bean varieties their unique local character.

Table 4. Estimated Potential Area of Coffee by Region

No.	Regions	Area (ha)	Remark
1	Oromiya	246000	Rain fed
2	SNNP	155000	Rain fed
3	Amhara	5000	Rain fed and Irrigation
4	Gambela	20000	Rain fed
	Total	426000	

Note: The land which is potential for tea plantation is mostly suitable for Coffee and rubber development.

1.4.2 Potential Area for Tea Investment

- The Ethiopian tea is the finest and comparable to better quality teas from other countries. Its conviction is borne out by foreign counterparts who, through studies and tests, have confirmed that the claim was indeed right and that the inherent quality of tea is comparable with the best ones in the world.
- The total area covered by tea plantation in Ethiopia is 2700 ha. (Wushwush, Gumoro and Chewaka).
- Ethiopia produces only black tea type, but it has a potential for all types of tea
- Annual production is 7000 ton of black tea.
- The annual national tea consumption is about 5000 tons.
- The export volume is 30 % (exported to about 12 countries).

Table 5. Estimated Potential Area of Tea by Region (ha).

No.	Regions	Area	Remark
1	Oromiya	55000	Anfilo, Berbere, Gera, Didu, Ale (10,000ha identified and hand over to interested Companies)
2	SNNP	75000	Gewata, Majii, Masha, Andracha, Decha
3	Amhara	5000	Rain fed and Irrigation (Guanga and Ankasha)
4	Gambela	15000	5000 ha identified and submitted to interested Companies
	Total	150000	

1.4.3 Potential Area for Spices Development

- In Ethiopia, due to the existence of varied agro ecologic conditions and edaphic factors, the country is said to be the origin of few spices and herbs such as Aframomum, coriander, and long pepper. In addition it has been considered to be ideal for the diversification of fenugreek, coriander, black and white cumin and for some aromatic and medicinal plants like holy basil, theme, rue, etc.
- Most of the spices cultivated in Ethiopia are Ginger, Hot pepper, Fenugreek, Turmeric, coriander, Cummins, Cardamoms, Corianders and Black pepper.
- However the cultivation of spice for centuries has predominantly stayed traditional by small scale land holding farmers.
- For the last four years the average land coverage by spices has been 122,700ha and the production reached 244,000 ton/ annum.
- The seed spices potentials area are Amhara and Oromiya regions while for the low land spices dominantly produced and potential in SNNP and Gambella regions;
- In general the total potential for low land spices is estimated to be 200,000ha.

1.5. Potential area for Oil crops, Pulses and Fiber crops /cotton/ Investment.

- Most oil seeds, pulses and fiber crops can be grown in almost all the regions of the country.
- The main oil seeds are Sesame, Niger seeds, Rape seed, Line seed, Ground nuts Saf -flower and Sun flowers.
- The dominant export pulses are Soya beans, Haricot bean, and the highland pulses (Horse beans, Chickpeas, lentil and field peas).
- Cotton is the major exportable commodity fiber crop in addition the potentials fiber crops are Kenaf and Sisal

1.5.1 Cotton Investment potentials

- Major Cotton producing areas are Awash valley, south Omo (Omorate), North west (Humera, Metema, Quara, Belles Valley), Gambella, Tekezze valley, Dabus Valley and Wabeshebele watershed area.

Table 6: Estimated Potential area of Cotton by regions (ha).

No.	Region	Total potential area (ha)	Remark
1	Tigray	269,130	It based on supplementary irrigation
2	Amhara	678,710	5,000ha identified and submitted to interested Companies
3	SNNP	600,930	Specially in Omo -Rate areas based on irrigation
4	Oromiya	407,420	
5	Gambella	316,450	Supplemented by irrigation
6	Benishangul Gumuz	303,170	45,000ha identified and submitted to interested Companies
7	Afar	200,000	Based on irrigation
8	Somali	225,000	Based on irrigation
	Total	3,000,810	

1.5.2 Potential Area for Oil crop Investment

- The oil seeds grown in Ethiopia could be grouped based on their ecological requirements. The major potential areas of oil crops are Humera, Metema, Jawi, Chewaqa and Mankush.

Table 7: Estimated Potential Area of Oil crops by Regions (ha)

No.	Region	Sesame	Other oil crops	Total potential area (ha)	Remark
1	Tigray	71,585	53,753	125,338	Other oil crops includes (Noug, Rape seed, sunflower, Ground nut)
2	Amhara	75,077	465,583	540,660	
3	SNNP	–	4,400	4,400	
4	Oromiya	13,499	171,655	185,154	
5	Gambella	15,000	3,800	18,800	
6	Benishangul Gumuz	28,840	68,6631	715,471	
7	Afar	–	8,000	8,000	
8	Somali	–	3,500	3,500	
	Total	57,339	1,397,322	1,601,323	

1.5.3 Potential Area for Pulses Investment

In Ethiopia pulses can be grown in highland and lowland areas, therefore it is possible to produce in all regions of the country.

Table 8: Estimated Potential Area of Pulse crop by Regions (ha)

No.	Region	Soybean	Other pulses	Total potential area (ha)	Remark
1	Tigray	12,728	7,292	20,020	
2	Amhara	11,703	677,146	688,849	
3	SNNP	12,588	377,117	389,705	
4	Oromiya	23,240	502,991	526,231	Other pulse crops include (Haricot & Horse bean, Chickpea, Lentil)
5	Gambella	NA	NA	-	
6	Benishangul Gumuz	24859	—	24,859	
7	Afar	NA	—	-	
8	Somali	NA	—	-	
	Total			3,274,469	

1.6 Rubber, Palm oil and other crops

- Rubber is the commercial plant grown in large scale. It can be grown in hot tropical humid and sub tropical humid climatic zone. Moderate acidic to acidic soil is suitable to grow rubber. The southwestern part of Ethiopia is highly potential area for rubber plantation.
- Oil palm is a perennial tree, which gives a higher yield of oil per unit area than any other oil seed crops. The plant can be grown in tropical and subtropical hot humid climatic conditions.
- It can be grow in a wide range of tropical soils, but many of the soils used for the crop have a pH of 4-6. Oil palm can cultivated through irrigation and rain fed.
- Jatropha is a wild plant which grows in different countries and including Ethiopia. It is a drought resistant perennial shrub, growing well in marginal soil. It can be grown in different regions of the country.
- The country has huge potential to cultivate large scale plantation to produce varying products from cosmetics to petroleum.

Table 9 Estimated Potential areas for Rubber and Palm oil by Region (ha).

No.	Region	Potential areas		Remark
		Rubber	Oil palm	
1	SNNP	150,000	300,000	<ul style="list-style-type: none"> • >150,000ha is based on irrigation for oil palm in Omo watershed area. • 85,000ha identified and given (leased)to interested Companies
2	Oromiya	-	50,000	The palm area is also suitable for rubber
3	Gambella	50,000	100,000	<ul style="list-style-type: none"> • The oil palm land also suitable for rubber • 53,000ha identified and given (leased) to interested Companies
	Total	200,000	450,000	

2. LIVESTOCK INVESTMENT POTENTIAL

- Ethiopia has diverse agro ecology and climate, which create favorable condition for commercial production of all types of livestock species with rich breed diversity.
- The contribution of livestock sector to the GDP is up to 20%, without taking into consideration its contribution in terms of farm power and transport. In addition to these economic benefits, rural communities use livestock for cropping with drought situations. They increase their livestock sell in drought situation than in normal circumstances to buy food grains and other consumable that are basic for survival.
- Despite all the socio-economic benefits, what the livestock sector provides is so far below the potential.
- The pastoral areas have been the major traditional suppliers of livestock for export and to some extent they also have been supplying oxen to the mixed agriculture areas for the purpose of farm power.
- There is a high market potential for livestock products both in the domestic and international markets.
- The geographic location of the country is located close to the Middle East, Europe as well as Central and West Africa, where there is reliable demand for livestock products.
- Generally concomitant to the above is the government investment policy, which is conducive providing various incentives.

Table 10: Summary of National and Regional State Livestock Populations for 2006.

Region	Cattle	Sheep	Goats	Horse	Asses	Mules	Camel	Poultry
Tigray	2,622,166	813,546	2,399,808	1,894	387,389	7,901	32,777	3,131,239
Addis Ababa	26,266	11,052	4,079	437	6,078	364	0	22,156
Afar	2,152,725	2,570,713	4,467,901	914	208,230	3,080	873,493	22,253
Amhara	10,077,301	7,530,518	4,856,472	289,895	1,513,891	102,580	14,678	9,400,917
Gambell	140,061	50,647	57,633	346	332	-	-	269,355
Benshangul-Gumuz	350,390	68,931	314,277	-	39,923	1,501	-	635,634
Dire Dawa	38,439	54,173	124,094	-	10,083	-	6,409	49,157
Harari	37,395	4,501	32,782	-	6,985	-	-	33,329
Oromiya	18,247,970	8,084,573	5,383,640	969,037	1,911,225	166,921	121,970	12,226,799
SNNP	8,043,173	3,403,098	2,054,080	307,104	302,798	61,135	-	6,391,051
Somali	1,386,903	802,869	7,102,281	48	156,994	609	141,708	94,819
National	43,122,789	30,620,445	26,797,047	1,569,677	4,543,928	344,091	2,466,407	32,276,709

Source:- Livestock Development Master Plan Study, Nov. 2007

2.1. Potential Investment Area for Meat production

- Ethiopia has favorable agro-ecology for meat production. Livestock products have high market in Middle East, Central and West African countries as well as in the domestic market, and that creates conducive environment for investment.
- The local communities could be involved in the production of meat animals (beef, sheep and goats) as out growers to supplement the production from investor's ranch.
- The animal markets are growing in areas they cover and requirements to meet stringent SPS standards.

Areas that investors could be directly involved in meat production are the following (refer Table 9);

- Beef fattening in modern ranches,
- Sheep and goat fattening in modern ranches,
- (meet (beef, mutton, and chicken) processing in modern abattoirs,
- Modern live animal transport service.

2.2. Potential Investment Area for Apiculture

- The country is endowed with mosaic of climate owing to its diverse agro-ecology and hence very diverse botanical base that supports high population of bee colonies and, this entails that at country level, bee forage is available throughout the year.
- The northern western part of the country that is renowned for its organic coffee and spices is also a potential for producing organic honey and other bee products that could fetch premium price in the international market.
- The current annual production of honey and beeswax of the country is estimated at 43.7 thousand tones and 3,600 tones respectively. This provides a high investment opportunity in all aspects of the development of this untapped sub-sector vis-à-vis production, collection, processing and marketing. In relation to this, the demand for the bee queen is consistently increasing providing an additional dimension for investment.
- Production of organic honey and/or honey that has a special flavour/aroma, for instance, in the wild coffee growing areas, would also provide a comparative advantage in the niche market.
- The country is certified to export to the EU market that has given a chance to the developing countries.

The investment areas in apiculture include the following

- Production of honey and other bee products;
- Establishing honey and beeswax processing and packing plants;
- Queen rearing;
- Manufacturing of beekeeping, processing and packing equipment and tools;
- Development of bee products-based cosmetics producing industries.

2.3 Potential Investment Area for Hides and Skins processing

- In general about 61% of the export earning from the livestock sector in 2005/2006 (1998 Ethiopian) came from skins and hides.
- The skin of some of the breeds of the Ethiopian sheep and goats has a unique quality that is very much sought for in the international market for making designer gloves.

- The establishment of Leather and Leather Products Technology Training Institute (LLPTTI) with the objective of providing training service to private sector will generate skilled manpower resources for the industry.
- Investment areas in this sub-sector are the following.
 - Sheep and goat production for the primary objective of producing skins that fetch premium price in the international market;
 - Skins and hides processing (establishment of tannery);
 - Leather products development;
 - Establishing export abattoir.

2.4. Potential Investment Area for Dairy development

- The per capita milk consumption of the country is about 32lt which is low compared to the potential as well as that of many African countries. There is a very high demand for milk and other dairy products in the domestic market. In addition to this, there is readily available market in the neighbouring countries such as Djibouti and Somalia.
- With nearly 2.5 million heads, Ethiopia ranks third in camel population. In the face of the demand for camel milk for food and for medicinal purposes, the premium price available in the international market for dairy products from goats' milk, the potential for camel and goat dairy development is immense.
- The development prospect in the dairy sub-sector would not be limited to dairy production (cattle and camel).
- There is a huge demand for improved breeds of cattle specifically pure and cross bred in-calf heifers of Holstein /Friesian in the urban and peri-urban areas of the country.
- Apart from the limited interventions made by the government through projects, a private institution specializing in producing and supplying pure or cross bred in-calf heifers is yet to be established.
- The Artificial Insemination (AI) service provided by government is far below being satisfactory. While a few private AI service providers operate individually, their service coverage is limited to Addis Ababa.

- Therefore, the supply of in-calf heifers and provision of artificial insemination service is a virgin area that has a potential for investment.

The investment areas in the dairy sub-sector are summarized below.

- Cattle milk production and processing;
- Camel milk production and processing;
- Provision of AI service;
- Production of pure exotic or cross bred in-calf heifer.

2.5. Potential Investment Area for Poultry development

- The demand for poultry in the domestic market is so high that despite the market demands in the neighbouring countries like Djibouti and Sudan poultry products have not been exported yet.
- A low input technology that enables rural house holds to raise day old chicks has been developed locally and is already very popular among the poultry farming house holds.
- So far commercial poultry producers frequently import either fertilized eggs or day-old-chicks for both their own farms and for distribution to household farmers.
- Therefore, in addition to production of broilers and egg for consumption either in the domestic and the export market, there is an investment opportunity in supplying the urban and rural house holds with day old chicks.

The following are the investment areas in poultry.

- Day-old chick production and marketing;
- Table egg production and marketing;
- Fertilized egg production and marketing;
- Broiler production and supply;
- Poultry meat processing.

2.6 Potential Investment Area for Animal Feed production

- Fattening and modern dairy development is growing fast leading to the increased demand for fodder and industrial animal feed.
- Considering the availability of abundant water, a climate favouring a year round plant growth and irrigable land, there is a potential for investment in fodder production.

- The other type of animal feed that has not been developed yet and which could be produced for domestic and export market is bagged hay. This kind of green fodder preparation is easier to store and transport and prevents wastage.
- Crops such as **yellow maize and soybean** that are required as inputs for concentrate production are abundantly grown in the country.
- There is only one industry whose target product is soybean oil. The by product of this factory which is the soybean cake has been found to contain 48% protein. This cake is an indispensable input for concentrate production.
- Therefore, there is an investment opportunity in soybean and yellow maize processing and/or concentrate production to supply both the domestic and the export market.
- The available identified investment area for soybean is Tigray 12758 ha, Amhara 11703ha, Oromiya 23240ha, SNNP 12588ha, and Benishangul-Gumuz 24859ha.
- The suitable area for yellow maize is similar altitude (1000-1800m asl) climate and soil as with coffee, sorghum and maize production area.
- Alfalfa is one of the important forages, which has ample market in dairy development. The favourable altitude is 1200 - 2400masl and requires irrigable area with fertile and black soil. The Afar, Somali, Oromiya, Amhara regions have sufficient suitable irrigable area along the rivers for alfalfa production.

The following are some of investment areas in animal feed production.

- Fodder production (bailed or bagged);
- Concentrate production (with or without soybean processing);
- Alfalfa production;
- Soybean and yellow maize production and processing.

2.7 Potential Investment Area for Fishery & Aquaculture

- Ethiopia's potential for fisheries development is limited to its freshwaters and most of the lakes that are located close to urban areas.
- Unfortunately the river line fisheries are under-exploited while commercial aquaculture is yet to be practised.
- Ethiopia is one of the few countries processing indigenous Nile Perch (*Lates niloticus*). Nile Perch is found in two Rift Valley lakes (Abaya and Chamo) and in

the Baro, Akobo and Omo rivers. Besides having the rare fish (Nile Perch), they have many other fish species like Mormyrids, Lung fish, Catfishes, etc. that are suitable for sport fishing. These rivers are also navigable and favourable for water sports.

- The presence of the three national parks between the lakes mentioned above and the Omo River, renowned for the number of endemic birds and mammals they support, makes investing in water sports and sport fishing and associated facilities on the river more attractive.
- Brown Trout and Rainbow Trout have also been introduced into the rivers found in the Bale highlands. Again the rivers that have the two trout species are in the Bale national park and not far from the Sof Omar Cave.
- The diverse agro-ecology, abundant water resource, land that can be acquired easily and the presence of several rivers supporting diverse fish species are ideal for water sports and sport fishing, investment of aquaculture.

2.8 Potential Investment Area for Sericulture

- Sericulture is another investment area in Ethiopia. While production of cocoons from both mulberry and castor is growing fast, the development of the technology to process the cocoon is currently underway.
- The interest of the rural population, which is often under employed, to consider cocoon production as a livelihood alternative is very high.
- This indicates that there would be a sustainable high demand for silk worm seed (egg) Therefore, there is investment opportunity in collection and processing the cocoon into yarn for either export or to further add value on to it by using it in textile production.
- The supply of vigorous silkworm egg is also another area that could be considered by investors.

Some of the areas of investment in sericulture are:-

- Collection and processing of cocoon;
- Silk based textile production;
- Silk worm seed production ;
- Production of cocoon processing (yarn production) equipment.

Table 11. Summary of livestock investment potential area by regions, zones and number of Woredas.

Region	Cattle/Beef development		Sheep & goat		Dairy		Apiculture	
	Zone	Woreda (No)	Zone	Woreda (No)	Zone	Woreda (No)	Zone	Woreda (No)
Tigray	Eastern	4	Southern	4	Southern	3	Southern	5
	Western	3	Eastern	4	Eastern	2	Eastern	3
	North west	3	Central	5	Central	3	Central	8
			North west	4	Western	3	Western	9
Afar	Zone 1	6	Zone 1	6				
	Zone 2	1	Zone 2	2				
	Zone 3	3	Zone 3	3				
	Zone 4	3	Zone 4	2				
	Zone 5	2	Zone 5	2				
Amhara	W/Gojam	5	W/Gojam	4	W/Gojam	4	W/Gojam	10
	S/Gonder	6	E/Gojam	6	E/Gojam	6	E/Gojam	9
	N/Gonder	5	Awii	5	Awii	3	Awii	3
	S/Wello	7	S/Gonder	7	S/Gonder	3	S/Gonder	7
	Oromiya	4	N/Gonder	8	N/Gonder	6	N/Gonder	14
	N/Shewa	10	Wage Himra	3	N/Wello	4	N/Wello	5
			N/Wello	8	S/Wello	4	S/Wello	11
			S/Wello	13	Oromiya	3	Oromiya	1
			Oromiya	4	N/Shewa	4	N/Shewa	2
Oromiya			N/Shewa	11			Waghimra	3
	North west Shewa	8	North west Shewa	8	North Shewa	9	S.west Shewa	3
	W/shewa	6	W/shewa	6	Nwest Shewa	4	W/shewa	8
	E/Wellga	5	E/Wellga	6	W/shewa	6	E/Wellega	12
	E/Shewa	7	E/Shewa	7	E/Wellga	5	W/Wellega	17
	W/Hararge	5	W/Hararge	5	E/Shewa	5	Arisi	9
	E/Hararge	14	E/Hararge	14	W/Hararge	2	Bale	12
	Arisi	5	Arisi	5	E/Hararge	6	Jimma	12
	Bale	4	Bale	4	Arisi	7	Ilu ababora	12
	Gujji	4	Gujji	4	Bale	5	Gujji	5
Somali	Borena	5	Borena	5	Jimma	3	Borena	5
	Afder	4	Afder	4				
	Gode	5	Gode	5				
	Shinile	5	Shinile	5				
	Kebridahar	4	Korahe	4				
	Warder	4	Warder	4				
SNNPR	Jijiga	3	Jijiga	3				
	Sidama	4	Sidama	4	Sidama	8	Sidama	5
	Gedeo	3	Gedeo	3	Gedeo	3	Gedeo	8
	Wlaita	4	Wlaita	5	Wlaita	3	Wlaita	4

Region	Cattle/Beef development		Sheep & goat		Dairy		Apiculture	
	Zone	Woreda (No)	Zone	Woreda (No)	Zone	Woreda (No)	Zone	Woreda (No)
	Hadiya	3	Kefa	2	Kefa	1	Kefa	10
	S/Omo	4	Kembata Tembaro	4	Kembata Tembaro	3	Kembata Tembaro	2
	Bench maji	4	Hadiya	4	Hadiya	4	Hadiya	5
	Gamogofa	4	S/Omo	4	S/Omo		S/Omo	5
	Special Woreds	2	Bench maji	4	Bench maji	1	Bench maji	5
			Gamogofa	4	Gurage	3	Sheka	3
			Special Woreds	2			Gamogofa	8
							Dawro	4
Benshangule-Gumuz	Metekel	5	Metekel	5			Metekel	6
	Asosa	2	Asosa	5			Asosa	3
			Maokomo	1			Kamashi	4
			Kamashi	1				
Gambella			Gambella	3			Zone 1	2
							Zone 2	3

Source: The respective Development and Marketing Plan, 1994.