

# On Opportunities and Potential in Ethiopia for Production of Fruits and Vegetable

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## Abstract

Fruits and vegetables provide an abundant and inexpensive source of energy, body-building nutrients, vitamins and minerals. This seminar paper was aimed to recognize opportunities and potentials in Ethiopia for production of fruits and vegetables. Major opportunities and potentials existing in the country for production of fruits and vegetables were reviewed and described. Policies and incentives of the government to attract both foreign and domestic investors engaged in fruit and vegetable production were found to be attractive. Geographic; climatic, soil and water supply potential of Ethiopia for fruit and vegetable production are reviewed. The reviewed paper revealed that Ethiopia has a comparative advantage in production of horticultural commodities due to its favorable climate, proximity to European and Middle Eastern markets and cheap labour. Ethiopia's comparative advantage lies primarily in its abundant, low-cost, disciplined and trainable Labour force and the size of its domestic market and the numerous river basins affording great potential for irrigation and hydropower generation

**Keywords:** vegetable, fruit

## 1. INTRODUCTION

All living creatures, including humans, depend on nature for their food. Humans are not only hunters and gatherers, but also farmers. We live from hunting and fishing, agriculture and animal husbandry <sup>1</sup>.

Fruits and vegetables provide an abundant and inexpensive source of energy, body-building nutrients, vitamins and minerals. Their nutritional value is highest when they are fresh, but it is not always possible to consume them immediately. During the harvest season, fresh produce is available in abundance, but at other times it is scarce. Moreover, most fruits and vegetables are only edible for a very short time, unless they are promptly and properly preserved <sup>1</sup>.

The horticultural sector in Ethiopia is growing strongly. Major part of this growth is created by floriculture investments sector. Recently more and more interest from the Dutch private Sector is shown in the Ethiopian fruit and vegetable sector. Export of fruit and vegetables has been limited but is now growing strongly with new investors coming in. Both in Europe and the Middle East a growing interest exists for products from Ethiopia. Presently, the main export products are fresh beans, strawberries, grapes, tomatoes, peppers and fresh herbs. The Government of Ethiopia gives high priority to the development of the horticulture sector and in 2008 the Horticultural Development Agency has been established with a specific focus to promote and support the further development of the horticulture sector <sup>1</sup>.

Ethiopia has a comparative advantage in a number of horticultural commodities due to its favorable climate, proximity to European and Middle Eastern markets and cheap labour <sup>2</sup>. Ethiopia is one of the countries in Africa which have huge potential for the development of different varieties of horticultural crops. The country is endowed with natural resources in different agro-ecological zones which are suitable for the cultivation of horticultural products. Accordingly, large varieties of flowers, vegetables, fruit and herbs are being grown currently in various areas of the country <sup>3</sup>.

According to recent information obtained from the Central Statistics Authority, the total area under fruits & vegetables is about 12,576 hectares in 2011. Of the total land area under cultivation in the country during the same year, the area under fruits and vegetables is less than one per cent (i.e. 0.11%), which is insignificant as compared to food crops <sup>4</sup>.

## Objectives

To review the government guidelines and strategies of Ethiopia for fruit and vegetable investment

## 2. LITRATURE REVIEW

### 2.1. Fruit and vegetable investment opportunities in Ethiopia

The Government of Ethiopia, in recognition of the role of the private sector in the economy, has revised the investment law over three times for the last twenty years to make it more transparent, attractive and competitive. 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 <sup>4</sup>.

### 2.1.1. Cost of land and utilities

#### 2.1.1.1. Land lease

According to <sup>2</sup>EIA 2012, in Ethiopia, land is public property. Both urban and rural land is available for investment on leasehold basis. Lease right over land can be transferred, mortgaged or sub-leased together with on-build facilities. The period of lease may also be renewed. The rental value and the lease period of rural land are determined and fixed by land use regulations of each regional state. The costs of rural land in four regional states and in Dire Dawa are shown below:

- Oromia.....US\$ 4.02 – 7.71 per hectare per year
- Amahra.....US\$ 6.34 –28.45 per hectare per year
- Southern Nation, Nationalities and People Region...US\$ 2.17 – 6.68 per hectare per year

#### 2.1.1.2. Utilities

Table 7. Typical electricity tariff (\$cents/KWH)

Country	Residential	Commercial
Ethiopia	6.3	7.7
Kenya	23.1	16.1
Tanzania	17.2	14.0

### Telephone

- Fixed telephone.....US\$ 0.011 per six seconds
- Mobile telephone
- Mobile to mobile.....US\$ 0.041 per minute
- Mobile to fixed.....US\$ 0.041 per minute

### 2.1.2. Transport

Road plays a vital role in transporting people and goods in Ethiopia. Cognizant of its cardinal role, the Government has identified the road sector as top priority for public investment and remarkable progress has been made in the expansion of the road network in the country <sup>5</sup>.

#### 2.1.2.1. Road transport

Addis Ababa, the capital city, is an important regional and international transport hub. The road network radiates from Addis Ababa to regions linking it with important cities, towns, and other economically active centers of the country. International highways also link Addis Ababa and other cities and towns with neighboring countries such as Kenya, Djibouti, Eritrea, Somalia, the Sudan and South Sudan. In 2008/09, the total road network, excluding community roads, reached 46,812 km, out of which 45 percent are Federal roads and the remaining 55 percent are rural roads with annual growth rate of 5.5 percent. Based on the classification of the road network, about 21,172 km are in the Federal network, asphalt road constituted 33 percent and gravel road 67 percent. All-weather rural road grew by 7.1 percent per annum constituting 25,640 km of the total road network in 2008/09. In the same year, the community road, non-engineered road, was 85,767 km <sup>4</sup>. About 71,000 km of new roads, including all-weather roads to virtually all kebele administrations and an expressway linking Addis Ababa to Adama (a key route to facilitate export and import trade) are constructed. Constructing 2,395 km of new railways linking Addis Ababa with Djibouti, linking selected domestic cities, and within Addis Ababa <sup>6</sup>. Road transport is by far the most dominant means of transport in Ethiopia providing for over 90% passenger and freight carriage. Both asphalt and gravel roads radiate from Addis Ababa to main cities, towns and centers of commercial, industrial and agricultural activities. International highways also link Addis Ababa to neighboring countries like Djibouti, Kenya and the Sudan <sup>5</sup>.

#### 2.1.2.2. Air transport

Air transport is an important part of Ethiopia's transport network. Ethiopian Airline, Africa's World Class Airline, which has gained a very good reputation internationally in its 68 years of active services, provides both domestic and international air transport services. It has an outstanding safety records and is one of the few profitable African airlines. Ethiopian services include both passenger and cargo transport in its international flights and domestic routes. It also provides training and maintenance services to more than a dozen other African and Middle Eastern airlines. Domestic flight services are provided through 17 destinations across the country. Ethiopian links the country with over 63 destinations worldwide including Brussels, Frankfurt, London, Paris, Rome, Stockholm, Washington DC, Bahrain, Bangkok, Beijing, Beirut, Dubai, Guangzhou, Hong Kong, Jeddah, Kuwait, Mumbai, Delhi, Riyadh, Sana'a, Tel Aviv, Johannesburg, Nairobi, Lagos, Lusaka, Accra, Dakar and many more big cities in Africa. It is also expanding its international services. Regarding Ethiopian cargo services, it operates over 40 cargo destinations spread across Africa, Europe, Asia and the Middle East via its hub – Addis Ababa, and another cargo hub at Liege <sup>4</sup>.

In addition to Ethiopian, other airlines have flight schedules from and to Addis Ababa and these include such airlines as Emirates, KLM, Lufthansa, Kenyan and others. The passenger terminal at Bole International Airport in Addis Ababa has new and modern facilities providing efficient services to passengers. Ultra-modern

cargo terminal catering to fresh products and a maintenance hangar have also become operational since 2006. This new and modern terminal has the capacity to handle 350,000 tons of cargo per annum. Anticipating the future growth of perishable cargo, Ethiopian has proactively launched an expansion project to construct a new perishable cargo terminal that will be operational within the foreseeable future<sup>4</sup>.

The Ethiopian Government has taken the policy initiatives for the development of the aviation sector in the country. The most significant initiative undertaken by the government is the opening up of air cargo service to foreign investors without any capacity limit and allowing Ethiopian nationals to provide chartered services using aircrafts with a seating capacity of up to 20 passengers<sup>4</sup>EIG, 2012.

#### 2.1.2.3. Sea port

In order to ensure efficient, cost effective and reliable import and export movement of cargo to and from the sea ports of neighboring countries, the government has established the Dry Port Service Enterprise. The Enterprise is currently operating two dry ports which are located at Modjo, in the Oromiya Regional State, and at Semera, in Afar Regional State. Addis Ababa, the capital city, is linked by road to the port of Djibouti, at the Gulf of Aden. The port of Barbara in Somaliland and Port Sudan are other external trade routes that provide services for export-import trades of the country. Another potential port accessible to Ethiopia is Mombassa in Kenya.<sup>4</sup>

#### 2.1.3. Markets

Fresh and processed Fruits and vegetables have a large domestic market in Ethiopia, significantly higher than the exported volumes. The size of the Ethiopian population is currently estimated at about 80 million. This is a strong indication of the existence of large potential demand for fresh fruit and vegetable crops in the country. The other customer of Ethiopian fresh fruits and vegetables is processing plants, i.e., wineries, tomato processing plants and vegetable canning factories which require grapevine, tomato and various types of vegetables for processing. Processing of fruit juice into concentrate near the source of the fruit either for export markets or to the local manufacturers is also an area of investment available in the country<sup>2</sup>.

Ethiopia exports fresh fruits and vegetables to the international markets. The major markets for Ethiopian fresh fruits and vegetables are the European Union, the Arab countries and the regional markets. Ethiopia is very well known in some parts of Europe especially for her green beans, climbing beans, cut flowers, okra, melon and passion fruits. Thus, there is a reliable demand for these Ethiopian products during a particular period and a great volume is re-exported. Therefore there is strong business image for Ethiopian vegetables and flowers in the European markets. The demand for Ethiopian wine is also high both in domestic and export markets. Currently, the winery receives fresh grapes from Guder, Nura Era, Merti and Zewai Vineyard. Grape production in a great volume for the domestic winemaking plant is, therefore, an attractive area of investment in the country<sup>22</sup>.

Ethiopia is exporting the majority of its horticultural products to EU, however, it is exporting its high quality flowers, fruits, vegetables to more than 100 market destinations throughout the world among which Netherlands, Germany, Saudi Arabia, Norway etc<sup>3</sup>.

#### 2.1.4. Labour

Horticultural farming is high labour-intensive, requiring 32 to 34 laborers per hectare per day. Since Ethiopia has abundant supply of unskilled labor at Birr 20-30 (US 1.17- 1.76) per day<sup>2</sup>EIA, 2012.

#### 2.1.5. The investment policy

To encourage private investment, the Ethiopian Government has developed a package of incentives under Regulations No.84/2003 for investors engaged in new enterprises and expansions, across a range of sectors<sup>2</sup>.

Foreign investors can invest alone or in partnership with domestic investors

- No restrictions on equity ownership in joint venture (JV) Investment
- Required to have investment permit from EIA

Required to allocate minimum capital

- USD 200,000 for a single investment project
- USD 150,000 for joint with a domestic investor
- USD 100,000 for technical consultancy if wholly owned or
- USD 50,000 jointly with a domestic investor

#### 2.1.6. Investment incentives

According to , special loan is provided through the Development Bank of Ethiopia (DBE) and the bank has the following credit policy:-

- Interest rate is fixed at 7.5% per annum. However, this could vary from time to time.
- The Bank shall give its clients maximum grace period that involves the period up to the commencement of operation. Maximum allowable grace period is fixed at three years.
- All fixed asset of the project shall be held as collateral or loan security of the project.
- The debt / equity ratio requirement shall be 70 / 30 for newly starting projects. However, for ongoing projects which include expansion of existing projects, ratio shall be 60 / 40.

- Loan repayment period is determined taking into account the profitability and debt servicing capacity of the borrowing concern as well as the economic life of major investment items, with the maximum repayment period of 10 years.
- Full repatriation of profits, dividends, principal and interest payments on external loan etc. out of Ethiopia in convertible currency
- The right to employ expatriate experts and management staff
- Bilateral Investment Promotion & Protection Treaties with 30 countries
- Double taxation avoidance treaties with 18 countries
- Customs duty exemption on imported capital goods, construction materials, and spare parts worth up to 15% of the value of imported capital goods
- Income tax exemption (2 to 9 years)
- Loss carry forward (for half of income tax exemption period)
- The incentive policy does not discriminate between domestic & foreign investors <sup>4</sup>

#### **2.1.7. Other Services provided in the behalf of Investors**

- Execution of investors' requests for land required for their investment projects
- Execution of investors' residence permits
- Execution of investors' requests for approval of environmental impact assessment studies conducted on their investment projects
- Execution of investors' requests to acquire
- water, electrical power and telecom services <sup>4</sup>

## **2.2. Potential of Ethiopia for vegetable and fruit production**

### **2.2.1. Geography**

Ethiopia is twice the size of France and 27 times the Netherlands. Ethiopia is a country of great geographic diversity. The topographical differences result in different climatic zones which make Ethiopia an attractive country for different kinds of agricultural production systems. About 60% of the surface is suitable for agriculture. Also the amount of land which can be irrigated is large, but at the moment only a small part is actually utilized. Ethiopia is endowed with abundant agricultural resources. It is characterized by diverse physical features that allow the country to be divided into 18 major agro-ecological zones and 62 sub-zones, each with its own physical and biological potential. Given this diversity, there are major agricultural investment opportunities in the cultivation of cash crops and horticultural products <sup>1</sup>.

The geographical differences result in three climatic zones:

- Cool zone, above 2400 meters, day temperatures ranging from freezing to 16°C
- Temperate zone, 1500 – 2400 meters, day temperatures from 16 – 30°C
- Hot zone, below 1500 meters, day temperatures above 27°C <sup>1</sup>.

### **2.2.2. Climate**

Ethiopia's agro-climatic conditions make it suitable for the production of a broad range of fruits, vegetables as well as cut flowers. The range of altitude, temperature and soil variability of the country has created an enormous ecological diversity and a huge wealth of biological resources. In other words the wide range of ecological conditions that prevail in the country have created a favorable habitat for diversified forms of life including plants, animals and microorganisms <sup>5</sup>.

### **2.2.3. Water supply**

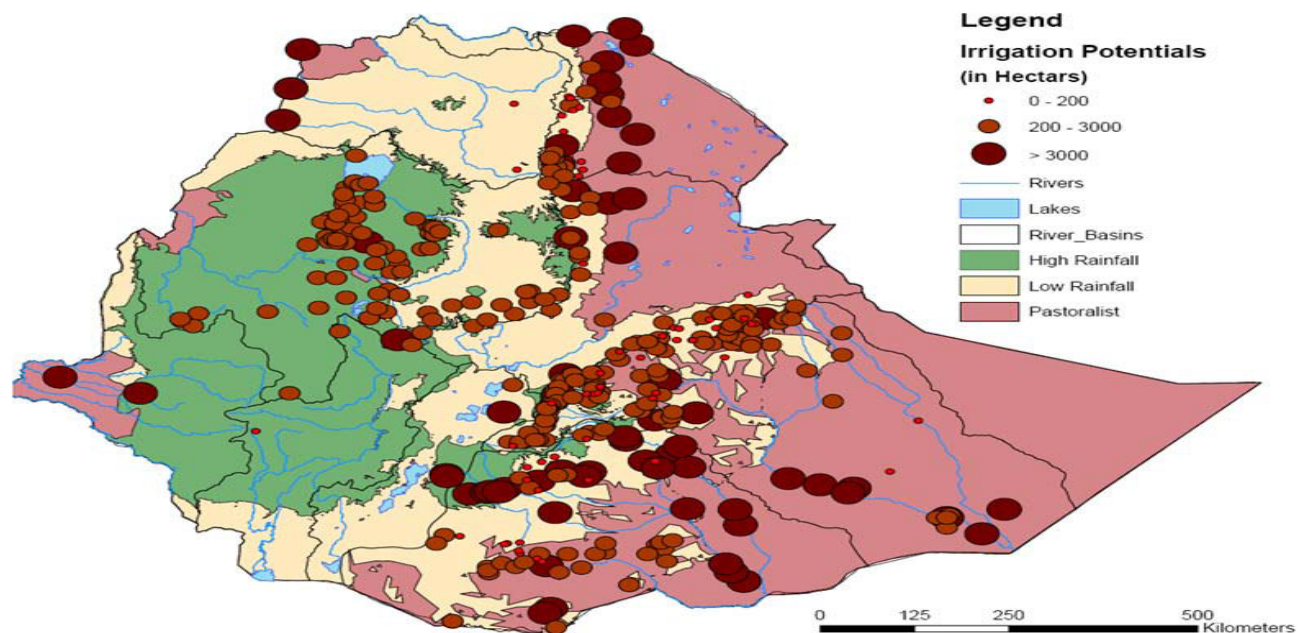
Ethiopia has huge run-off and ground water potential. However, it utilizes a small portion of these resources <sup>4</sup>. Ethiopia is endowed with abundant water resources. A large number of rivers flowing on either side of the rift valley form a drainage network that covers most of the country. Most of the rivers that carry the water resources, however, end up in neighboring countries hence making them international or Trans boundary Rivers. The total surface water resources of Ethiopia, coming from the country's twelve river basins, are estimated to be in the order of 122 billion cubic meters per year. With regard to ground water resources, the true potential of the Country is not yet known, however it is widely reported that Ethiopia possesses a ground water potential of approximately 2.61 billion cubic meters <sup>7</sup>. 2009/10/MoARD reported the government's strategy primarily focuses on water utilization at household level including traditional irrigation practices and water harvesting helping farmers build small and medium scale irrigation schemes on cost recovery/sharing basis, and construction of some multipurpose dams, that would support large scale irrigation. <sup>7</sup>Overview of Ethiopian investment policy, 2013 aimed to expand the water supply infrastructure to cover 99% of the population and the drilling of some 3,000 water wells per year.

Ethiopia has abundant annual rainfall and other significant water sources that with careful planning, infrastructure development, and resources could be developed for irrigation and other development needs <sup>8</sup>.

#### **2.2.3.1. Rainfall in Ethiopia**



Rainfall is the ultimate source of water in Ethiopia, with surface water, ground water, and other water sources fed by rain. To understand the country's irrigation potential, it is important to understand these water sources. Ethiopia has significant rainfall<sup>8</sup>. Based on grid-based average annual rainfall and the land area, the study estimates that Ethiopia receives about 980 billion (~1 trillion) cubic meters (m<sup>3</sup>) of rain a year. Ethiopia is divided into 32 major agro-ecological zones (AEZ) based on temperature and moisture regimes classification data. These 32 AEZs can be classified further into three primary zones within Ethiopia. This classification mirrors that found in the Rural Development Policy and Strategy 2001 and the Plan for Accelerated and Sustained Development to Eradicate Poverty (PASDEP). The three zones are: high rainfall areas, moisture deficit zones, and pastoralist zones. Figure 1 shows these three zones, based on rainfall and evapo-transpiration



**Figure 1. Legend irrigation potentials in hectares**

Source: IWMI

**High rainfall zone.** Covers 24 percent of land, 43 percent of population, and 51 percent of permanent crop output. In these areas, rainfall tends to exceed 800 mm/year. Typical development is mixed crop-livestock systems, though crops dominate. The land is not particularly vulnerable, nor is it very productive. Here, irrigation would be supplementary to produce a second crop and increase productivity. Note that despite significant rainfall in this zone, the rainfall is highly variable, and occurs in a limited period of the year.

■ **Moisture deficit zone.** Covers 32 percent of land, 47 percent of population, and 39 percent of permanent crop output. Rainfall is generally lower than 600 mm/year. Rainfall is highly variable, and the land is moderately to highly degraded. Production is typically mixed crop and livestock, with crops dominating. These areas are often vulnerable and degraded, and constrained by low productivity and overpopulation. Here, irrigation could secure food production, improve livelihoods, and increase food resilience.

■ **Pastoralist zone.** Covers 44 percent of land, 10 percent of population, and 10 percent of permanent crop output. Except in the west part of the country, rainfall is lower than 600 mm/year. Pastoralist, livestock-based and non-sedentary lifestyles prevail, and these areas are constrained by vulnerability and low livestock productivity. Irrigation would create livelihood options and increase food resilience.

#### 2.2.3.2. Surface water

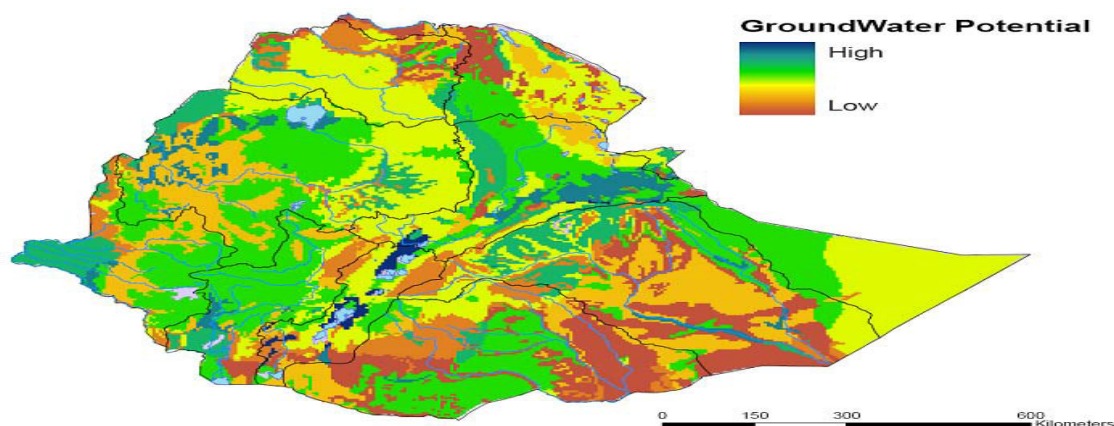
Ethiopia has 12 river basins that provide an estimated annual run-off of ~125 billion m<sup>3</sup>, with the Abbay basins (in central and northwest Ethiopia) accounting for ~45 percent of this amount. While much of this run-off could be used for irrigation or other purposes, Ethiopia has limited water infrastructure to use this surface water<sup>8</sup>.

#### 2.2.3.3. Ground water

Given the hydro-geological complexity and costs, Ethiopia has barely exploited its groundwater resources, especially for agriculture. Research in this area is relatively new and initial estimates of groundwater potential vary from 2.6 to 13.5 billion m<sup>3</sup> per year. Local experts' advice and test drillings for pioneering projects suggest that the potential could be much higher. Figure 2 maps the preliminary ground water potential of Ethiopia based off of elevation, aquifer productivity, and moisture availability<sup>8</sup>.

Ground water in Ethiopia can be used for irrigation in multiple ways, such as deep and shallow wells from underground aquifers. Compared with other sources of irrigation, groundwater as a resource for agricultural development offers a number of advantages, including:

- Reliability of the water source, since it has a naturally renewable capacity if water is not extracted above certain thresholds
- On-demand water supply through natural water storage
- Domestic water source, with no trans-boundary considerations
- Availability in many places, e.g., in highlands, steep terrains, inland valleys, and plain areas
- Relative constancy of supply, which can help to buffer the high variability of surface water resources.



**Figure 2. Ground water potential**

Source: IWMI

Table 8. Ground water potential in the 3 Ethiopian zones

Zone and ground potential	Available water (BM3)	Irrigation potential (ha)
Zone 1 high potential	1.06	211,386
Zone 1 medium potential	0.83	137,636
Zone 1 low potential	0.23	32,317
Zone 2 high potential	0.63	126,806
Zone 2 medium potential	0.49	81,542
Zone 2 low potential	0.23	32,317
Zone 3 high potential	1.56	311,808
Zone 3 medium potential	0.85	141,989
Zone 3 low potential	0.63	90,081
Total	6.5	1,165,881

Source: IWMI

### 2.2.3.2.1. Irrigation Potential in Ethiopia by River Basin

The study estimates that total irrigable land potential in Ethiopia is 5.3 Mha assuming use of existing technologies, including 1.6 Mha through RWH and ground water. This means that there are potential opportunities to vastly increase the amount of irrigated land<sup>8</sup>.

Table 9. Irrigation potentials by river basins

Basin	Catchment Area (km <sup>2</sup> )	Irrigation potentials (ha) (Respective recent master plan studies)			
		Small scale	Medium scale	Large scale	Total
Abay	198,890.7	45,856	130,395	639,330	815,581
Tekeze	83,475.94	N/A	N/A	83,368	83,368
Baro-Akobo	76,203.12	N/A	N/A	1,019,523	1,019,523
Omo-Ghibe	79,000	N/A	10,028	57,900	67,928
Rift Valley	52,739	N/A	4,000	45,700	139,300
Awash	110,439.3	30,556	24,500	79,065	134,121
Genale-Dawa	172,133	1,805	28,415	1,044,500	1,074,720
Wabi-Shebele	202,219.5	10,755	55,950	171,200	237,905
Danakil	63,852.97	2,309	45,656	110,811	158,776
Ogaden	77,121	-	-	77,121	-
Ayisha	2,000	-	-	2,000	-
Total	1,118,074.53	3,731,222		1,118,074.53	3,731,222

Source: IWMI

### 2.2.4. Existing Irrigation Development

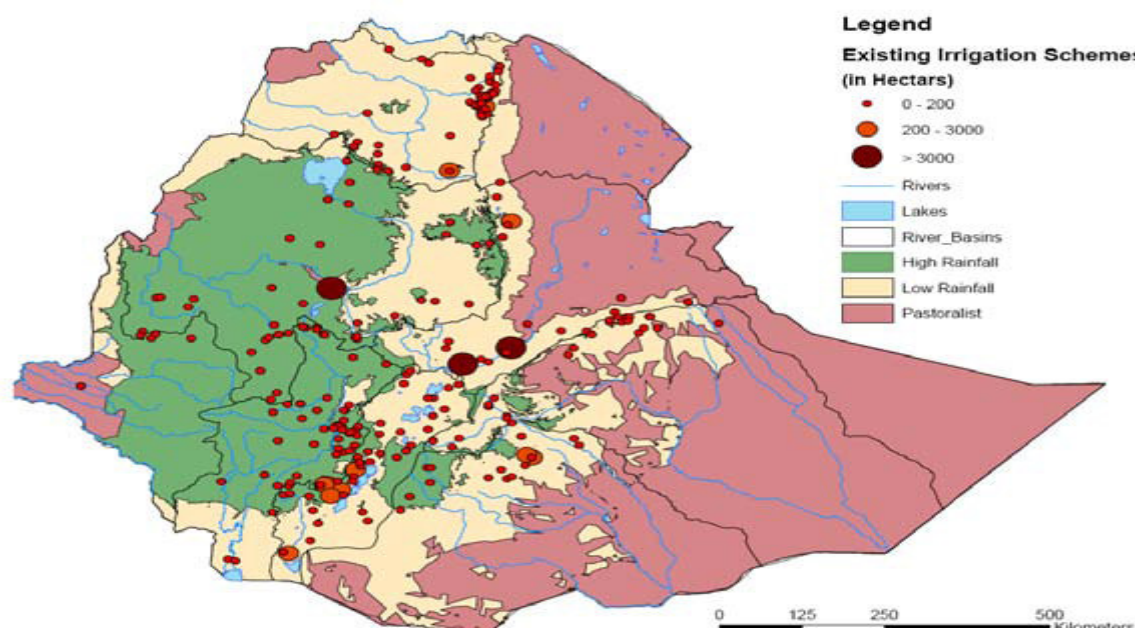
Current irrigation schemes cover about 640,000 ha across the country. These irrigation schemes vary widely in size and structure, from micro irrigation (RWH), to river diversion, pumping, and small or large dams, etc. These schemes can be subdivided into:

■ **Small scale-irrigation (SSI)**, which are often community-based and traditional methods, covering less than 200 hectares. Examples of SSIs include household-based RWH, hand-dug wells, shallow wells, flooding (spate), individual household-based river diversions and other traditional methods;

**Medium-scale irrigation (MSI)**, which is community based or publicly sponsored, covering 200 to 3,000 hectares. Examples of MSIs include the Sille, Hare and Ziway irrigation schemes;

■ **Large-scale irrigation (LSI)** covering more than 3,000 hectares, which is typically commercially or publicly sponsored. Examples of LSIs include the Wonji-shoa, Methara, Nura Era and Fincha irrigation schemes.

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**Figure 3. Existing irrigation schemes in hectares**

Source: IWMI

#### 2.2.4.1. Rain water harvesting (RWH) potential

Currently rainwater use in Ethiopian agriculture involves both unmanaged and managed rainwater use in rain-fed agriculture. The former is the major source of agricultural water in crop, livestock, agro-forestry and related sectors, e.g., rainwater directly irrigating fields and pasture.

#### 2.2.4.2. Fruit & Vegetable Production Area in Ethiopia

Table 10. 2010/11 Fruit & Vegetable Cultivation in Ethiopia for Private peasant Holdings (2010/11)

Crop Type	Area (ha)	Area %	Production (quintals)	production %	Productivity qt/Ha
Cereals	9,233,025.14	79.05	155,342,279.88	69.63	16.83
Oil seeds	780,915.89	6.69	6,436,143.98	2.89	8.24
Pulses	780,915.89	12.75	18,980,472.57	8.51	12.74
Cash Crops	159,287.98	12.75	39,226,177.5	17.58	246.26
Vegetable	159,287.98	1.36	1,403,234.19	0.63	192
Root Crops	4,419.64	0.06	996,331.80	0.45	225.4
Fruit Crops	5,266.91	0.04	706,119.18	0.32	134.07
Total	11,679,533.17		0.05		223,090,759

Source: Ethiopia Investment Agency, 2012

Table 11. 2013/14 Fruit & Vegetable Cultivation in Ethiopia for Private peasant Holdings

Crop Type	Area (ha)	Production (Quintals)
<i>Grain Crops.</i>	12,407,473.46	251,536,623.90
Cearals	9,848,745.96	215,835,225.61
<i>Pulses</i>	1,742,602.19	14.04
Oil seeds	816,125.31	7,112,592.38
<i>vegetables</i>	161,487.93	7,228,936.61
Root crops	209,879.65	41,608,725.14
Fruit crops	71,507.13	4,991,837.63
<i>Chat</i>	222,078.54	2,450,629.21
Coffee	538,466.80	2,450,629.21
<i>Hops</i>	538,466.80	3,920,062.22
	29,103.59	14,034,441.14
Total	26,585,937.36	551,169,717.09

Source: FDRoECSAASS, 2014

#### 2.2.4.2. Land at Bank and Future Potential

Ethiopia is endowed with both fertile soil and suitable agro-ecological zones for agriculture, that make the country the priority choice for the development of horticulture.

Table 12. Land at bank and future potential

No	Development Corridor	Land Registered in Land bank(ha)	Identified Land for Development (ha)	Land for out growers Scheme (ha)	Total (ha)
1	Oromia & Addis Ababa	7,354	2,646	20,000	30,000
2	Bahir Dar, Abay valley & South Gondar	2,000	3,000	20,000	25,000
3	Awash, Dire Dawa, Harar & Somali		20,000	1,000	21,000
4	Hawassa & Arbaminch Area	3,000	6,000	20,000	29,000
5	Mekele-Raya & Kobo Alamata	3,000	2,500	20,000	25,500
	TOTA	15,354	34,146	81,000	130,500

Source: EHDA, 2012

### 3. SUMMARY

All living creatures, including humans, depend on nature for production of food. Fruits and vegetables are source of energy, body-building nutrients, vitamins and minerals. The horticultural sector in Ethiopia is growing strongly. Ethiopia is endowed with natural resources in different agro-ecological zones which are suitable for the cultivation of horticultural products. Ethiopia has a comparative advantage in a number of horticultural commodities due to its favorable climate, proximity to European and Middle Eastern markets and cheap labour. The major markets for Ethiopian fresh fruits and vegetables are the European Union, the Arab countries and the regional markets. Government policies and strategies of Ethiopia are good for investment having its own proclamations.

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