Addis Ababa City Government

Investment Commission

Investment Opportunities, Challenges and Priorities in Addis Ababa

Excerpt

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1. Introduction

The general objective of this study is to identify the available investment opportunities; the challenges of investments and investment activities that should be given priority in Addis Ababa City Administration. The study used both primary and secondary types of data. The secondary data was the main source of data for the study. Information on sectors and subsectors performances, demand, and supply and inputs conditions has been obtained using secondary data. In addition, primary data was obtained from 499 establishments: 280 from manufacturing, 183 from service and 36 from urban agriculture sector. Investment opportunities are mainly identified through analyzing the input availability, supply performance, market demand condition and profitability in each subsector. Investments has been priorities based on the opportunity they provide in meeting demand gaps and using some common “priority indicators” such as employment, export, value added and domestic input use. In addition, investment challenges have been addressed by examining input availability and cause of input scarcity, capacity of operation and challenges from the business environment.

2. Investment Potential of Addis Ababa

Availability of economic infrastructure and resource potentials has an indispensable role in attracting and hence accelerating investments in the city. Addis Ababa City has endowed with various economic resources such as land and labor. Moreover, infrastructural developments such as road, transport, energy, water, telecommunication and environment infrastructures are key driver of investment via facilitating the process of production, distribution and consumption.

Abundant and Affordable Labor: investing in Addis Ababa city has a competitive advantage since the city is endowed with cheap skilled and semi-skilled labor resources. The wage of daily laborer and salaries of fresh university graduates is $5/day and $110-250/month respectively. There are fifty universities and 1,567 TVET institutions that enroll more than one million students yearly.

Land resource: the city is endowed with 54000 hectares of land. Though there is no systemized land registration and documentation, the agricultural land and green area covers 13.28% and

37% of the city respectively. Land is available for investment at a lease rate between US$ 11.60-21.55 per meter squared.

Financial Institutions: strong financial system is vital for investment and hence economic development. There are 18 banks with 5115 branches in the country. Of this, 35.3 percent of bank branches are located in Addis. Moreover, there are 17 insurance companies in the city.

Wide Domestic Market: there are large domestic markets potentials in Addis Ababa city. The city is home for more than 3.517 million people. The city has scored double digit economic growth averaging 10% per year. The city's Gross City Product (GCP) and per capita income (PCI) at current price has increased to birr 395.640 billion and $4,307.94 respectively which shows the improvement of people's purchasing power. Moreover, the city is diplomatic center and base for many international organizations and NGOs.

Transport Infrastructure: Addis Ababa city had a total of 2325.7 km road networks of all types. The city is linked with Adama which is the main import-export corridor of the country in expressway. Moreover, the expressway that connects Addis Ababa with Hawassa, the city where one of the largest industrial park is found, is under construction.

Ethiopian Airline: Addis Ababa is the base for the world class Ethiopian airline. The airline is flying to 97 international and 20 domestic passenger destinations. In addition to these, the airline has 36 dedicated cargo flight destinations and serves as a regional base for other airlines. Railway Infrastructure: the city has light rail transit that covers 32 km with 32 stations, with capacity of 80,000 passengers per hour. Addis Ababa is also connected with the electric powered 780 km railway with the port of Djibouti.

Electricity: the role of electricity in particular and energy in general is crucial for investment. The country has 4.9GW installed capacity and 60GW plus power generation potential. The Grand Ethiopian Renaissance Dam (75% is completed) is expected to generate additional 6,000MW electricity by 2015. Moreover, the electricity tariffs rate of the country is USD0.03 per KWh which is the lowest in Sub-Saharan Africa.

ICT Infrastructure: ICT infrastructure attracts investment via enhancing regional competitiveness and economic integration. By considering this fact, Ethio teleocm has increased the total telecom subscribers and internet customers to 44.5 million and 23.8 million in 2019 respectively. It has also introduced brand new fourth generation (4G) network. Furthermore, the application of e-government, e-commerce, e-learning, e-library, e-banking and others ICT supported activities in the city has been improved dramatically.

Industrial Parks: there are nineteen both government and private industrial parks in the country. Some of the industrial parks like Bole Lemi (I and II), Kilinto and Lebu (Huajian International Industrial Park) are found in Addis Ababa and they are available at affordable lease rate.

Water Service: water availability and supply has an important role for investment. The city water supply has increased from 216,069,997.3 m3 to 237,979,197.6 m3 in 2017/18 and planned to increase daily water production capacity from 599,000 m3 to 1,000,076,000 m3.The city water tariff rate is found between USD 0.076/m3 to USD 0.50/m3 which is globally competitive rate.

Development of Green Infrastructure: Recently the government gave due attention for the development and expansion of green areas. The forest coverage of the city has increased from 19.8% in 2013/14 to 21.4% in 2017/18. More than 7 million trees have been planted in Addis Ababa city under green legacy program by 2020. The city has also planned to increase the average per capita access to green space from the current 0.3 meter squared to 5 meter squared per person in 2027.

3. Manufacturing Sector: Investment Opportunities, Priorities and Challenges

3.1. Performance of Manufacturing Sector in Addis Ababa and Ethiopia

Between 2007/08 and 2016/17, the number of M&L manufacturing establishments in Ethiopia and Addis Ababa increased from 1930 to 3,627 and from 896 to 1,430 respectively. Addis Ababa’s share as of 2016/17 was about 40%. Between 2007/08 and 2016/17, the number of employment increased from 132,172 to 298,510 and from 64,764 to 122,690 in Ethiopia and Addis Ababa respectively. Addis Ababa’s share as of 2016/17 was around 41%. The gross value of production in Ethiopia rose from 22.9 billion birr to over 167 billion birr between 2007/08 and 2016/17. For Addis Ababa, it increased from 11.8 billion birr to 53.3 billion birr. The gross value of production in small manufacturing activities in Ethiopia increased form less than 3 billion birr in 2007/08 to about 65 billion birr in 2016/17. For M&L establishments, between 2007/08 and 2016/17, the value added as a ratio of gross value of production rose from 0.25 to 0.48 and from 0.24 to 0.49 in Ethiopia and Addis Ababa respectively. The value added as a ratio of gross value of production for small establishments rose from 41% to 56% in the given period.

Ratio of imported to total consumed raw material costs in M&L manufacturing establishments in Ethiopia is roughly about 50% over the given period. The actual value of production as a percent of yearly capacity is mostly about 60%. However, in 2016/17 the production capacity significantly declined, about 24%. The ratio of imported to total consumed raw material costs in small manufacturing is smaller, less than 20% for the indicated years. Export as a percentage of total sales of M&L manufacturing establishments in Ethiopia is generally low, less than 10% between 2007/08 and 2016/17. Similarly, in small manufacturing activities, export as a percentage sale is less than 10%.

3.2. Investment Opportunities in the Manufacturing Sector

3.2.1. Investment Opportunities in the Food and Beverage Subsector

Demand from Local Manufacturers: demand (measured in sales) performance resembles the supply performance as most of the products are sold except inventory differences.Real sales in M&L manufacturing increase from 23.8 billion birr in 2007/8 to 48.8 billion birr in 2016/17.This represents an average annual real growth rate of 8%. The real sales in small manufacturing also increased from 0.84 billion birr in 2007/08 to 22 billion birr in 2016/17. The real demand growth in both types of manufacturers implies the steady growth in demand for food and beverage products.

Import Demand: food and beverage products' real imports increased from 3.9 billion birr in 2009/10 to 21 billion birr in 2018/19. The average annual growth rate of real import demand for the stated period was about 17%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 34 and 30.9 billion birrin 2017/18 and 2018/19 respectively.

Forecasted Demand: real sales on average are expected increase by 3.3 billion birr for each year. The average yearly real sales growth rate is forecasted to be 5%. Real import demand on average is expected to increase by 1.95 billion birr for each year (by 2.86 billion birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 7%.

Input Availability: most of the inputs are predominantly from domestic sources except glucose, edible oil, sugar, malt, barely, essence and hops. The ratio of imported raw materials to total consumed raw materials for small and M&L manufacturing activities in 2016/17 was 0.11 and 0.27 respectively.

Most of the inputs, particularly agricultural and livestock products are available in the country. As of 2018/19, cereals constitute the highest crop production in the country with over 277 million quintals production. The largest cereals production includes teff, barely, wheat, maize and sorghum with 54,034,790; 17,675,184; 48,380,740; 94,927,708 and 50,243,680 quintals of production respectively. There is also a significant production level in pulses with annual production level of over 30 million quintals in the Meher season by private peasant holdings. Oil seeds are significantly available with close to 8 million quintals of production. Among oil seeds, Nug and sesame have the largest shares with 2,963,227 and 2,016,646 quintals production respectively.

Moreover, root crops, vegetables, fruit crops, coffee, hops and sugar cane production in quintal are 45,357,549; 8,893,169; 8,343,562; 4,945,743; 490,521 and 12,940,810 respectively. Within fruit crops, bananas (5,015,286), mangos (1,337,049) and avocados (847,936) take the first, second and third place respectively. In addition orange production is about 412,499 quintals. Within vegetable production, tomatoes comprise about 235,837 quintals of production.

As of 2018/19, the national herd comprises 61 million cattle, 33 million sheep and 39 million goats, and 59 million chickens. Total production of milk, meat and eggs amounts to 3.3 billion liters, 1.1 million tons and 151.5 million eggs per year respectively. Dairy-cows are estimated to be around 7.09 million and milking-cows are about 12.41 million heads during the reference period.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments was 0.46.

Compatibility with Addis Ababa's Context: Most of the food and beverage manufacturing activities can be done with limited spaces including rental possibilities. Some of the activities which may not be conducted in the current land availability in the city include large grain mills, large beverage plants, large oil processing plants, large plants of macaroni and pasta and large plants of malt liquor, soft drinks and mineral water. The subsector is generally compatible with the city's environmental safety standards.

Conclusion: the existing high demand gap, the growth of historical and forecasted demand and the availability of most inputs indicates the existence substantial investment opportunity in the subsector.

3.2.2.1. Promising Investment Opportunities in the subsector

A. Production, Processing and Preserving of Meat, Fruit and Vegetables

Demand from Local Manufacturers: for M&L establishments, real demand increase from 427.5 million birr in 2007/08 to 1.8 billion birr in 2016/17 with an average annual real growth rate of 16%. The demand from small establishments in 2015/16 and 2016/17 was 52 and 16 million birr respectively.

Import Demand: real import demand rose from 98 million birr in 2009/10 to 584 million birr in 2018/19 with an average annual real growth rate of 20%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 990 and 858 million birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: forecasting the local manufacturers' sales is difficult as the supply also greatly fluctuates. Given a smoothed linear trend, real sales on average are expected increase by 141 million birr for each year with an annual average real growth rate of 5%. Real import demand on average is expected to increase by 59 million birr for each year (by 86 million birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 5%.

Conclusion: given the historical high growth rate of imports, the existing gap of domestic demand met by imports and the forecasted growth of real demand, the activity will have a potential for new investments.

B. Manufacture of Vegetable and Animal Oils and Fats

Demand from Local Manufacturers: for M&L establishments, real demand increased from 341 million birr in 2007/08 to 705million birr in 2016/17 with an average annual real growth rate of 8%. The demand from small establishments increased from 442.9 million birr in 2007/08 to 1.73 billion birr in 2016/17.

Import Demand: real import demand rose from 2.39billion birr in 2009/10 to 9.74billion birr in 2018/19 with an average annual real growth rate of 16%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 15.4 and 14.3 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: forecasting the local manufacturers' sales is difficult as the supply also greatly fluctuates. Given a smoothed linear trend, real sales on average are expected increase by 39 million birr for each year with an annual average real growth rate of 4%. Real import demand on average is expected to increase by 869 million birr for each year (by 1.27 billion birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 7%.

Conclusion: given the historical high growth rate of imports, the existing gap of domestic demand met by imports and the forecasted growth of real demand, the activity will have a very good investment potential.

C. Manufacture of Dairy Products

Demand from Local Manufacturers: real demand for M&L establishments increased from 282 million birr in 2007/08 to 874 million birr in 2016/17 with an average annual real growth rate of 13%.

Import Demand: real import demand rose from 93 million birr in 2009/10 to 336 million birr in 2018/19 with an average annual real growth rate of 14%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 370 and 494million birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: real sales on average are expected increase by 45 million birr for each year with an annual average forecasted real growth rate of 4%. This forecast is using the recent 5 years trend (2012/13-2016/17). Real import demand on average is expected to increase by 41 million birr for each year (by 60million birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 10%.

Conclusion: given the recent high growth rates of demand and imports, the some level of domestic demand gap met by imports, the activity will offer an investment opportunity.

D. Manufacture of Grain Mill Products

Demand from Local Manufacturers: real sales (demand) show significant increase for M&L establishments. Accordingly it increased from 3.1 billion birr in 2007/08 to 7.9billion birr in 2016/17 with an average annual real growth rate of 10%.

Import Demand: real import demand increased from 713 million birr in 2009/10 to 3.35billion birr in 2018/19 with an average annual real growth rate of 17%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 4.33 and 4.92billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: real sales on average are expected increase by 586 million birr for each year with an annual average forecasted real growth rate of 5%. On the other hand, real import demand on average is expected to increase by 284 million birr for each year (by 417 million birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 7%.

Conclusion: given the high growth rates of demand and imports, the high level of domestic demand gap met by imports, the activity will offer a very good investment opportunity.

E. Manufacture of Prepared Animal Feeds

Demand from Local Manufacturers: real demand, from M&L establishments, substantially increased from 46 million birr in 2007/08 to 3billion birr in 2016/17 with an average annual real growth rate of 46%. However, the average growth rate is influenced by the sharp increase of sales after 2014/15.

Import Demand: real import demand increased from 5.8 million birr in 2009/10 to 101million birr in 2018/19 with an average annual real growth rate of 32%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 125 and 148.8million birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: Forecasting the local manufacturers' sales is difficult as the supply also greatly fluctuates. A sustained increase has been observed after 2014/15. Given a smoothed linear trend, real sales on average are expected increase by 206 million birr for each year with an annual average real growth rate of 9%.On the other hand, real import demand on average is expected to increase by 9.3 million birr for each year(by 13.6 million birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 8%.

Conclusion: given the recent high growth rates and values of demand from local manufacturers, the activity will offer a good investment opportunity.

F. Manufacture of Bakery Products

Demand from Local Manufacturers: real demand, for M&L establishments, increased from 1.64 billion birr in 2007/08 to 2billion birr in 2016/17 with an average annual real growth rate of 2%. However, the growth rate was highly fluctuating where in 4 of the 9 years a negative growth has been recorded. On the hand, for small establishments, real demand increased from 353 million in to 19.3 billion birr for the indicated periods. This is an extremely high growth.

Import Demand: real import demand increased from 17.9 million birr in 2009/10 to 106million birr in 2018/19 with an average annual real growth rate of 20%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 27.3 and 156million birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: Forecasting the M&L manufacturers' sales is difficult as it highly fluctuates. Yet, based on the average growth rate in sales an annual 2 percent growth is assumed. On the other hand, the demand from small manufacturers is expected to increase sharply. Real import demand on average is expected to increase by 10 million birr for each year (by 14.7million birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 7%.

Conclusion: Overall, given the high supply (and demand) values from both M&L and small manufacturers; high growth of supply from small establishments and growing demand from imports, a high investment opportunity exists in the activity.

G. Manufacture of Sugar and Sugar Confectionery

Demand from Local Manufacturers: real demand, for M&L establishments, is characterized by fluctuation and negative growth rate for many years. Generally, real demand falls from 5.7 billion birr in 2007/08 to 3.74billion birr in 2016/17.

Import Demand: real import demand increased from 981 million birr in 2009/10 to 4.54billion birr in 2018/19 with an average annual real growth rate of 17%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 8.7 and 6.6billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: Forecasting the M&L manufacturers' sales is difficult as it highly fluctuates. However, real import demand on average is expected to increase by 442 million birr for each year (by 650million birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 7%.

Conclusion: Hence, based on the historical import data and the subsequent projections, the demand fulfilled by import is expected to increase. This is an attractive potential opportunity for investors to fill the demand gap and substitute imports.

H. Manufacture of Macaroni and Spaghetti

Demand from Local Manufacturers: real demand from M&L manufacturers increased from 910 million birr in 2007/08 to 1.79 billion birr in 2016/17 with an average annual real growth rate of 8%.

Import Demand: real import demand increased from 55 million birr in 2009/10 to 558 million birr in 2018/19 with an average annual real growth rate of 26%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 1.6 billion birr and 820 million birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: real sales on average are expected increase by 120 million birr for each year with an annual average forecasted real growth rate of 5%. On the other hand, real import demand on average is expected to increase by 78 million birr for each year(by 115 million birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 7%.

Conclusion: Therefore, given the historical high growth rate of demand and imports, the forecasted growth of demand and imports, the activity have a good opportunity for new entrants.

I. Distilling, Rectifying and Blending of Spirits

Demand from Local Manufacturers: real demand from M&L manufacturers increased from 607 million birr in 2007/08 to 1.1 billion birr in 2016/17 with an average annual real growth rate of 9%.

Import Demand: real import demand increased from 76 million birr in 2009/10 to 368 million birr in 2018/19 with an average annual real growth rate of 17%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 535 million birr and 541 million birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: real sales on average are expected increase by 84 million birr for each year with an annual average forecasted real growth rate of 5%. On the other hand, real import demand on average is expected to increase by 378 million birr for each year (by 556 million birr in 2018/19 prices). The average yearly real import growth rate is forecasted to be 7%.

Conclusion: Therefore, given the historical high growth rate of demand and imports, the forecasted growth of demand and imports, the activity have a good opportunity for new entrants.

3.2.2. Investment Opportunities in the Textiles Subsector

Demand from Local Manufacturers: real demand (measured in sales)of M&L manufacturing shows serious fluctuations between 2007/08 and 2016/17. Although sales increased from 1.9 billion birr to 3.3 billion birr in the period, higher sales has been recorded in the middle of the period.

Import Demand: imports, on the other hand, showed consistent increase between 2007/08 and 2016/17. Real imports increased from 1.12 billion birr in 2009/10 to 4.68 billion birr in 2018/19 with an average annual growth rate of 16%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was5.1 and6.8 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: as the supply fluctuates seriously, forecasting the supply (and demand) is difficult. Unless some interventions are changing the pattern, the real supply (and demand) is expected to decline. On the other hand, the real import demand is expected to increase by 0.36 billion birr each year(by 0.53 billion birr in 2018/19 prices)with an average forecasted annual growth rate of 7%.

Input Availability: manufacturers exclusively imported jute (fiber), sisal (leaves) and nylon yarn; mostly imported cotton yarn, fabrics, fiber (polyester), wool (waste), acrylic (yarn), cotton (lint) and chemical dyestuff; and mostly used domestic inputs of raw cotton and fiber (acrylic). Therefore, most of the inputs used are predominantly from foreign sources (imports). The ratio of imported raw materials to total consumed raw materials for M&L manufacturing activitiesin2016/17 was 0.44. The major domestic raw material, raw cotton, is widely produced in Ethiopia. According to USDA (2019), in 2018/19 cotton production in the country was 53,000 metric tons with a harvest area of 77, 000 hectares.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments was 0.36.

Compatibility with Addis Ababa's Context: textiles manufacturing generally requires large land area. Given this fact, few establishments may be admitted in the activity and/or smaller establishments should be given priority within the city. The activity discharges high amounts of chemical loads resulting from the high consumption of water and harmful chemicals use. Therefore, a specialized industrial parks/zone should be considered if few establishments are about to be considered.

Conclusion: although domestic supply performance is deteriorating, the demand gap is met by imports. Hence, still, a good investment potential exists for the subsector.

3.2.3. Investment Opportunities in the Wearing Apparel Subsector

Demand from Local Manufacturers: the real demand, from M&L establishments, increased from 1.02 billion birr in 2007/08 to 7.85 billion birr in 2016/17 with the average annual real growth rate of 23%. However, growth rates were influenced by sharp increase of supply and demand after 2014/15. In addition, some significant level of wearing apparel has been supplied and sold by small establishments. In 2015/16 and 2016/17 the levels of sales were 2.1 and 0.31 billion birr respectively.

Import Demand: real import demand increased from 1.73 billion birr in 2009/10 to 7.11 billion birr and 5.19 billion birr in 2017/18 and 2018/49 respectively with an average annual real growth rate of 12%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was11.1 and7.6 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: as the supply sharply increased after 2014/15, we can say that if the recent trend continues, the real demand from local manufacturers is expected to increase highly in the future. On the other hand, the real demand for import is expected to increase by 0.6 billion birr every year (by 0.88 billion birr in 2018/19 prices) with a forecasted average annual real growth rate of 7%.

Input Availability: The key raw materials used in the wearing apparel sub-sector are different textile products. The nominal gross value of production of textiles in the country was 5.54 billion birr and 4.05 billion birr in 2015/16 and 2016/17 respectively. The ratio of imported raw materials to total consumed raw materials for small and M&L manufacturing activities in 2016/17 was 0.19 and 0.56 respectively.

Profitability: profitability measured as a ratio of gross profit to total gross value of production between as of 2016/17 for M&L establishments was 0.82.

Compatibility with Addis Ababa's Context: from general perspective, the subsector is admissible within the land area allocated for the manufacturing activity by the city. If the wearing apparels use final textile products, the activity can be done in any part of the city.

Conclusion: the wearing apparel subsector shows recent increase in production. In addition, the demand gaps met by imports are increasing. Given these, the subsector offers a very good investment opportunity.

3.2.4. Investment Opportunities in the Tanning and Dressing of Leather Subsector

Demand from Local Manufacturers: the real demand for M&L establishments increased from 3.86 billion birr to 4.35 billion birr between 2007/08 and 2016/17 with average annual growth rate of 1%. However, the subsector faced serious fluctuations in the shown period. The real demand for small establishments increased from 0.01 billion birr in 2007/08 to 0.05 billion birr in 2016/17.

Import Demand: the real import demand increased from 0.36 billion birr in 2009/10 to 1.92 billion birr in 2018/19. This represents an average annual real growth rate of 19%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was3.46 and2.82 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: Given the serious fluctuation in the supply and demand from the local manufacturers, forecasting real demand is challenging. Roughly speaking, some positive trend over the coming years is expected. Whereas, real import is expected to grow by 0.22 billion birr each year (by 0.32 billion birr in 2018/19 prices) with an average real growth rate of 18%.

Input Availability: The national herd is the main source of hides and skins which serve as a main input for leather processing and products. According to UNIDO (2018) about 8 million of cattle hide, 12 million of sheep skin and 8 million of goat skin are available annually. Ethiopia's hides and skins are highly known for their natural qualities of clarity, flexibility, strength, thickness and compact texture, UNIDO (2018). Most of the raw materials are predominantly from domestic sources. The ratio of imported raw materials to total consumed raw materials for small and M&L manufacturing activities in 2016/17 was 0.097 and 0.44 respectively.

Profitability: profitability measured as a ratio of gross profit to total gross value of production between as of 2016/17 for M&L establishments 0.53.

Compatibility with Addis Ababa's Context: tanning practice requires larger land and specialized area. Therefore, such activities are not recommended to carry out within the city. The remaining activities which use the final leather such as hand bags and footwear manufacturing can be practiced within the available land area of the city. Except the tannery practice, the remaining manufacturing activities can be done with regular safety protocols within the city boundaries.

Conclusion: recent trend shows a decline in supply and demand from domestic manufacturers. On the other hand, imports are steadily increasing. Given these availability of inputs and the existence of high import demand, it is possible to say that there exists a significant market opportunity, calling for additional investments.

3.2.4.1. Promising Investment Opportunities in the subsector

A. Manufacture of Footwear

Demand from Local Manufacturers: for M&L establishments, real demand increase from 1 billion birr in 2007/08 to 1.84 billion birr in 2016/17 with an average annual real growth rate of 6%.

Import Demand: real import demand rose from 297 million birr in 2009/10 to 1.6 billion birr in 2018/19 with an average annual real growth rate of19%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 3 and 2.35billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: ignoring the fluctuations in the real demand from the local manufacturers, on average, a yearly a real value of 160-million-birr addition demand is expected each year with a forecasted annual growth rate of 5%. On the other hand, the real import value is expected to increase by 195 million birr each year (by 287 million birr in 2018/19 prices) with a forecasted annual growth rate of 6%.

Conclusion: despite fluctuation in the domestic production, there is sustained demand from foreign sources. Looking the demand and the growth rates of demand in both contexts, the footwear manufacturing activity could offer some investment opportunity.

B. Manufacture Articles of Leather; Travel goods, Handbags and Similar containers

Import Demand: The value of the imports of travel goods, handbags and similar containers in Ethiopia is not very high. The real import value increased from 62 million birr in 2009/10 to 313 million birr in 2018/19. This represents an annual average real growth rate of 18%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 435 and 461 million birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: the real import value is forecasted to grow by 30 million birr annually (by 44 million birr in 2018/19 prices) with a forecasted annual growth rate of 7%.

Conclusion: this specific manufacturing activity seems to increase rapidly and although has smaller value. Given the trend, the investment potential is worth to consider.

3.2.5. Investment Opportunities in the Wood and Products of Wood and Cork Subsector

Demand from Local Manufacturers: for M&L establishments, real demand increased from 0.35 billion birr in 2007/08 to 0.5 billion birr in 2016/17. The average real demand growth rate over the period was 4%.Similarly, in the same period, the small establishments real demand for the wood and products of wood and cork increased from 0.019 billion birr to 3.78 billion birr.

Import Demand: the real import demand increased from 0.36 billion birr in 2009/10 to 1.72 billion birr in 2018/19/ with the average annual growth rate of 17%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was2.33 and 2.54 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: generally, the demand (and supply) from M&L establishments show some fluctuations. If the exiting trend continues, an average annual growth rate of 5% could be expected. On the other hand, the real imports are expected to grow by the value of 0.17 billion birr (by 0.25 billion birr in 2018/19 prices) with an average forecasted real growth rate of 6%.

Input Availability: the key raw materials currently used in the wood and of products of wood and cork are chipwood, formica, log, plywood, veneer and plunk. Most of the raw materials are predominantly from foreign sources. The ratio of imported raw materials to total consumed raw materials for small and M&L manufacturing activities in 2016/17 was 0.03 and 0.24 respectively.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments 0.39.

Compatibility with Addis Ababa's Context: wood and of products of wood and cork can be practiced anywhere in the city with smaller land requirement and even with rental possibilities.

Conclusion: given the recent growth of demand from particularly small establishments and the demand gap met by imports, it can be concluded that there is a good investment opportunity in the subsector.

3.2.6. Investment Opportunities in the Paper, Paper Products and Printing Subsector

Demand from Local Manufacturers: for M&L establishments, the real demand rose from 3.21 billion birr in 2007/08 to 7.13 billion birr in 2016/17 with an average growth rate of 9%. The real supply (and demand) from small establishments is not very significant except in 2015/16.

Import Demand: the real import increased from 1.03 billion birr in 2009/10 to 4.15 billion birr in 2016/17. This represents an average annual real growth rate of 16%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was4.47 and6.10 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: The forecast of real demand from local manufacturers is expected to increase with 0.35 billion birr each year and the forecasted real import demand will increase by 0.29 billion birr each year (by 0.43 billion birr in 2018/19 prices). For both cases, the forecasted average real annual growth rates are 5%.

Input Availability: the key raw materials currently used in the manufacturing of paper, paper products and printing are pulp, boxing paper, waste paper, chemicals and paper. Most inputs are obtained from domestic sources. However, the main input – pulp - is typically obtained from foreign sources. The ratio of imported raw materials to total consumed raw materials for small and M&L manufacturing activities in 2016/17 was 0.7 and 0.85 respectively.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments 0.63.

Compatibility with Addis Ababa's Context: paper production may require some significant land area however publishing activities can be done in any buildings. Given the allocated area for manufacturing activities, by the city, paper manufacturing can be admissible. The environmental impact of paper is significant and it is one of most polluting activity – if we consider pulp production. Therefore, this activity requires specialized industrial zone.

Conclusion: demand from both domestic manufacturers and imports are very high – in growth rates and values. Hence, the subsector can provide a very good investment opportunity.

3.2.6.1. Promising Investment Opportunities in the subsector

A. Manufacture of Paper and Paper Products

Demand from Local Manufacturers: for M&L establishments, real demand rose from 1.24 billion birr in 2007/08 to 1.97 billion birr in 2016/17 with an average annual real growth rate of 5%.

Import Demand: real import for the products increased from 796 million birr in 2009/10 to 3.04 billion birr in 2018/19. The average annual real growth rate during this period was 15%. **Demand Gap Met by Imports:** the nominal demand gap fulfilled by an import was 3.36 and 4.47 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: forecasting the real demand from local manufacturers is generally difficult as the values significantly fluctuates. If similar trend continues, we can expect a 5% real growth over a longer period. On the other hand, import demand is expected to increase by the value of 234 million birr annually (by 344 million birr in 2018/19 prices)with an average real growth rate of 6%.

Conclusion: although the real demand from domestic manufacturers is not showing a clear trend, the real import demand indicates a steady increase in demand for paper and paper products. Given these gaps, the subsector can have a good potential for investment.

B. Publishing and Printing Services

Demand from Local Manufacturers: for M&L establishments, real demand increased from 2.03 billion birr in 2007/08 to 5.23 billion birr in 2016/17. The average annual real growth rate over this period was 10%.

Import Demand: real the imports of published and printed products increased from 228 million birr in 2007/08 to 1.1 billion birr in 2016/17. The average annual growth rate of real imports over this period was 18%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 1.1 and 1.62 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: the real demand is expected to grow by 323 million birr each year with an average real growth rate of 6%. Similarly, the real import is forecasted to increase by 60 million birr each year (by 88 million birr in 2018/19 prices) with an average annual real growth rate of 6%.

Conclusion: given the high historical average growth rate of real demand from local manufacturers and real imports growth, the publishing and printing services offers a good investment opportunity.

3.2.7. Investment Opportunities in Chemicals and Chemical Products Subsector

Demand from Local Manufacturers: for M&L establishments, the real demand from local manufacturers for chemicals and chemical products rose from 4.7 billion birr in 2007/08 to 8.88 billion birr in 2016/17. An average annual real growth rate of 7% has been registered. Small manufactures have produced and sold significant level since 2015/16. In 2016/17, the value of real demand exceeded 1 billion birr.

Import Demand: real demand increased from 5.45 billion birr in 2009/10 to 28.05 billion birr in 2018/19. This represents an average annual growth rate of 18%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was32.47 and41.24 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: the forecasted real demand is expected to grow by 0.66 billion birr each year with an average annual real growth rate of 5%. On the other hand, the real import demand is expected to grow by 2.37 billion birr each year (by 3.5 billion birr in 2018/19 prices). The forecasted annual growth rate of real imports is 7%.

Input Availability: generally, most of the raw materials in the subsector are obtained from foreign sources. The ratio of imported raw materials to total consumed raw materials for small and M&L manufacturing activities in 2016/17 was 0.5 and 0.73 respectively.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments 0.33.

Compatibility with Addis Ababa's Context: some of the chemical and chemical products manufacturing activities can be manufactured within the area allocated for manufacturing in the city. However, larger plants may not be admissible within the available area of the city. In addition, the wastes of chemicals and chemical products are mostly hazardous. Therefore, location selection should be seriously considered when admitting manufacturers.

Conclusion: the subsector has one of the highest demands in terms of values. In addition, the growth rates of demand from local manufacturers and import is very high. Given all these, the subsector provides a very high investment opportunity.

3.2.7.1. Promising Investment Opportunities in the subsector

A. Manufacture of basic chemicals, except fertilizers and nitrogen compounds

Demand from Local Manufacturers: for M&L establishments, real sales increased from 187.6 million birr in 2007/08 to 687.91 million birr in 2015/16. In this period, the average annual real growth rate was 16%. During 2016/17, supply and demand fallen drastically.

Import Demand: real import value of basic chemicals increased from 572.45 million birr in 2009/10 to 3.33 billion birr in 2018/19. Over the period, the average annual real growth rate was 20%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 4.4 and 4.9 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: there is no a clear trend from the supply (and hence demand) of the basic chemical products in Ethiopia. Therefore, linear prediction will not give a reliable forecast. If we consider the beginning and end period of real sales, up to 2015/16, the historical average growth rate is 16%. Given this fact, real demand is expected to increase. On the other hand, real import on average is forecasted to increase by 298 million birr every year(by 438 million birr in 2018/19 prices). The average real import growth is expected to be 7%.

Conclusion: despite fluctuations in supply (and demand) from local manufacturers, higher proportion of the demand gap was met by imports. From demand gap perspective, although performance problems need to be investigated, the activity offers a good investment opportunity.

B. Manufacture of Paints, Varnishes and Mastics

Demand from Local Manufacturers: for M&L establishments, the real sales increased from 1.23 billion birr in 2007/08 to 3.02 billion birr in 2016/17. Over the period, an average annual growth rate of 10% has been registered.

Import Demand: real import increased from 196.7 million birr in 2009/10 to 1.16 billion birr in 2018/19. Over this period, the annual average growth rate was 20%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 1.34 and 1.7 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: the real demand from local manufacturers is expected to grow by 191 million birr each year. The linear forecast in sales represents a 6% annual growth rate. Real import demand is expected to increase by 109 million birr each year (by 160 million birr in 2018/19 prices). The linear forecast shows an average annual 7% growth in real import demand.

Conclusion: the growth rates of demand from local manufacturers and import is very high. In addition, the value of demand from local manufacturers is very high. Given all these, the subsector provides a very high investment opportunity.

C. Manufacture of Pharmaceuticals, Medicinal Chemicals and Botanical Products

Demand from Local Manufacturers: for M&L establishments, the real demand rose from 906 million in 2007/08 to 1.31 billion birr in 2016/117. This represents an average real growth rate of 4%. However, real supply (and demand) showed strong ups and downs over the period.

Import Demand: real import demand rose from 2.89 billion birr in 2009/10 to 13.38 billion birr in 2018/19. Over this period, the average annual growth rate was 17%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 15.3 and 19.6 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: As there was an ups and downs in the real supply (and demand), it is difficult to forecast the future trend of the real supply and demand from local manufacturers. The demand gap is significantly met by imports. Real import is expected to grow by 1.13 billion birr every year (by 1.66 billion birr in 2018/19 prices)with an average forecasted linear real growth rate of 7%.

Conclusion: the presence of such an astonishing gap in demand which is filled by imports calls for and offers a huge investment opportunity.

D. Manufacture of Soap and Detergents Cleaning and Polishing, Perfumes and Toilet Preparations

Demand from Local Manufacturers: for M&L establishments, real demand raised from 2.21 billion birr in 2007/08 to 4.16 billion birr in 2016/17. This represents an average annual growth rate of 7%. Real supply by small establishments increased from 1.82 million birr to 1.33 billion birr over the same period.

Import Demand: the real import value raised from 803 million birr in 2009/10 to 3.47 billion birr in 2018/19. Over this period, the average annual growth rate was 16%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 4.9 and 5.1 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: real demand from local manufacturers is expected to increase by 353 million birr yearly. In addition, real import demand is expected to increase in 301 million birr yearly (by 442 million birr in 2018/19 prices). The real demand from local manufacturers and import demand is expected to increase by 5% and 6% respectively.

Conclusion: the activity has high demand from domestic manufacturers and imports. The values of demand are high and the forecasts of demand growth are strong. This calls for a huge investment opportunity in the activity.

3.2.8. Investment Opportunities in the Rubber and Plastic Products Subsector

Demand from Local Manufacturers: for M&L establishments, the real demand for rubber and plastic products increased from 3.99 billion birr in 2007/08 to 10.76 billion birr in 2016/17 with an average annual growth rate of 11%.

Import Demand: real import demand increased from 3.34 billion birr in 2009/10 to 17.65 billion birr in 2018/18. This represents an average annual growth rate of 18%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was19.6 and25.9 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: real demand from local manufacturers is expected to grow annually with the value of 0.87 billion birr. On the other hand, the value of real import demand is expected to increase by 1.5 billion birr each year (by 2.2 billion birr in 2018/19 prices). Real demand from both sources is expected to increase by 6%.

Input Availability: most of the raw materials are from foreign sources. The ratio of imported raw materials to total consumed raw materials for M&L manufacturing activities in 2016/17 was 0.76.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments 0.41.

Compatibility with Addis Ababa's Context: the manufacturing of plastic and rubber products generally can be admitted within the available land are of the city. The activity will have emissions and wastes which can be hazardous to the environment. Therefore, the activity should be undertaken in specialized locations.

Conclusion: the subsector has a very strong demand from both local manufacturers and imports. The values of the demand and the predicted increase in demand are also very high. Taking into account these evidences, the subsector is one of the main investment potential areas.

3.2.9. Investment Opportunities in the Other Non-metallic Mineral Products Subsector

Manufacture of structural clay product, cement, lime and plaster, articles of concrete, cement and plaster are generally produced around sources areas and not generally suitable for manufacturing in Addis Ababa region. Generally, investment opportunities which can be done at Addis Ababa in this subsector are manufacture of glass and glass products and ceramics. These activities somehow can be compatible with the land availability for manufacturing activity in the city and goes with infrastructural and environmental standards of the city. Some inputs (silica and other sands) are available for these activities. The ratio of imported to total consumed raw material costs in the glass and glass ware manufacturing activity in Ethiopia between 2012/13 and 2016/17 is generally above 50%.

A. **Glass and Glass Ware Products Manufacture**

Demand from Local Manufacturers: for M&L establishments, real demand increased from 136 million birr in 2007/08 to 616 million birr in 2016/17 with an average real grow rate of 17%.
Import Demand: the real import value increased from 199.9 million birr to 1.52 billion birr with an average annual growth rate of 23%.
Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 1.95 and 2.24billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: ignoring the fluctuations, the real demand from local manufacturers is expected to increase with an annual value of 51 million birr. Similarly, the real demand from imports will increase by 148 million birr annually (by 217 million birr in 2018/19 prices).

Conclusion: given the sustained recent increase in demand and the existing demand gap met by imports, the activity offers a good investment opportunity.

B. **Manufacture of Ceramics**

Import Demand: real import demand for ceramics products increased from 228 million birr in 2009/10 to 1.02 billion birr in 2018/19. This represents an average annual growth rate of 17%. However, recently in 2015/16 and 2016/17, the value of imports declined consecutively.
Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 1.89 and 1.5 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: The real imports forecasted to increase by 127 million birr annually (by 187million birr in 2018/19 prices). The average annual growth rate is forecasted to increase by 7%.

Conclusion: Given the historical growth rate of imports and the forecasted increase in the real value of imports, some opportunities for investment exists.

3.2.10. Investment Opportunities in the Basic Iron and Steel Subsector

Demand from Local Manufacturers: for M&L establishments, the real demand for basic iron and steel products increased from 3.1 billion birr in 2007/08 to 9.38 billion birr in 2016/17 with an average annual growth rate of 12%.

Import Demand: the real value of iron and basic steel products import rose from 6.58 billion birr in 2009/10 to 27 billion birr in 2018/19. The average annual growth is estimated to be 16%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was33.3 and39.8 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: the yearly predicted increase in the value of real demand from local manufacturers is expected to be about 900 million birr. Similarly, the yearly real value of import demand is expected to increase by 2.5 billion birr(by 3.67 billion birr in 2018/19 prices). Real demand from both sources is forecasted to grow by 7%.

Input Availability: in Ethiopian mining sector, tantalum is relatively widely produced with about 222,846 tons of production in 2016/17. Therefore, the main metal elements which are necessary in the subsector are not generally available from domestic sources. The ratio of imported raw materials to total consumed raw materials for M&L manufacturing activities in 2016/17 was 0.79.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments 0.35.

Compatibility with Addis Ababa's Context: basic iron and steel manufacturing generally requires significant land size. Given the current land size allocated to the manufacturing and storage activities, about 5.87% of the city's land, the subsector is difficult to carry out in the city. However, few manufacturers may be admitted at the outskirt of the city or in the industrial parks.

Conclusion: demand from domestic sources and imports are expected to be steady for the coming years and the values of demand are also very high. Hence, the subsector offers a very high investment opportunity.

3.2.11. Investment Opportunities in the Fabricated Metal Products Subsector

Demand from Local Manufacturers: the real demand of fabricated metal products of M&L establishments increased from 2.83 billion birr in 2007/08 to 6.63 billion birr in 2016/7 with an average annual growth rate of 9%. Real demand from small manufacturers rose from 1.13 billion birr in 2007/08 to 6.20 billion birr in 2016/17. This implies a very strong contribution of small manufacturers in the subsector.

Import Demand: real import rose from 0.77 billion birr in 2009/10 to 3.05 billion birr in 2018/19. This increase represents an average annual growth rate of 15%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was4.46 and4.48 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: For the demand from local manufacturers, because a high increase in supply (and demand) during 2011/12 and 2013/14, generating a reliable forecast is difficult. However, if the overall trend continues, demand will increase by 0.25 billion birr yearly with average growth rate of 5%. The real value of imports is forecasted to grow by 0.27 billion birr yearly (by 0.4 billion birr in 2018/19 prices). The forecasted average annual growth rate of real imports is 7%.

Input Availability: the inputs necessary for the production of fabricated metal products are basic iron and steel products. The nominal gross value of basic iron and steel products in the country was 10.08 billion birr in 2015/16 and 8.27 billion birr in 2016/17. The ratio of imported raw materials to total consumed raw materials for small and M&L manufacturing activities in 2016/17 was 0.33 and 0.75 respectively.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments 0.35.

Compatibility with Addis Ababa's Context: manufacture of fabricated metal products requires different land sizes depending on the nature of products. Generally, manufacture of structural metal products, tanks, reservoirs and containers of metal will need a larger area than manufacture of cutlery, hand tools and general hardware. Both can be compatible within the Addis Ababa context. However, the manufacture of cutlery, hand tools and general hardware are more compatible.

Conclusion: following the rising demand (in values and growth), there is a good opportunity in the manufacturing of fabricated metal products.

3.2.11.1. Promising Investment Opportunities in the Subsector

A. Manufacture of Structural Metal Products, Tanks, Reservoirs and Containers of Metal

Demand from Local Manufacturers: for M&L establishments, real sales increase from 1.84 billion birr in 2007/08 to 6.51 billion birr in 2016/17 with an average annual growth rate of 14%. Small establishments' supply increased from 1.18 billion birr to 6.53 billion birr over the same period.

Import Demand: the real import value increased from 94 million birr in 2009/10 to 555 million birr in 2016/17 with an average annual growth rate of 20%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 638 and 817million birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: the real sales for M&L establishments are expected to increase with 741 million birr annually with forecasted average annual growth rate of 6%. In addition, the forecasted annual increase for real imports is 53 million birr (by 88million birr in 2018/19 prices) with an average real annual growth rate of 7%.

Conclusion: there is high average real growth rate in demand from both local manufacturers and imports. Given the existing trend, the activity offers a high potential for investment.

B. Manufacture of Cutlery, Hand Tools and General Hardware

Demand from Local Manufacturers: for M&L establishments, between 2007/08 and 2016/17, the real demand, in terms of sales, declined from 478 million birr to 96 million birr. The supply and the real demand from local manufacturers suffer from serious fluctuation.

Import Demand: the real value of imports increased from 333 million birr in 2009/10 to 1.39 billion birr in 2018/19birr with an average annual growth rate of 16%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 2.02 and 2.04 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: the domestic production value is low and suffers from serious fluctuation. However, a yearly annual 124 million birr increase (by 182 million birr in 2018/19 prices) of real imports is forecasted with an average annual real growth rate of 6%.

Conclusion: the nominal demand gap met by imports is very high. This implies that there is a demand gap which can be met by domestic production – offering an investment opportunity.

3.2.12. Investment Opportunities in the Machinery and Equipment Subsector

Demand from Local Manufacturers: the real demand from M&L manufacturers increased from 0.07 billion birr in 2007/08 to 0.83 billion birr in 2016/17 with an average annual growth rate of 27%. The real demand from small manufacturers for the years 20015/16 and 2016/17 was 0.46 and 0.24 billion birr respectively.

Import Demand: the real imports of HS 84 machinery and equipment rose from 9.17 billion birr in 2009/10 to 39.78 billion birr in 2018/19 with an average annual growth rate of 16%. Similarly, the real import value for HS 85 machinery and equipment increased from 8.93 billion birr in 2009/10 to 20.59 billion birr in 2018/19 with an average annual growth rate of 9%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 68.5 and58.4 billion birr for HS 84 items and 43.6 and 39.7 for HS 85 items in 2017/18 and 2018/19 respectively.

Forecasted Demand: The demand from local manufacturers is expected to grow by 0.2 billion birr every year with an average annual growth rate of 8%. The forecasted real imports for HS 84 machinery and equipment are expected to grow by 4.4 billion birr every year (by 6.46 billion birr in 2018/19 prices) with an average annual growth rate of 7%. The real imports for HS 85 machinery and equipment are expected to increase by 2.07 each year (by 3 billion birr in 2018/19 prices) with an average annual growth rate of 6%.

Input Availability: Machinery and equipment productions use diverse raw materials including minerals, metals, plastics, chemicals. The ratio of imported raw materials to total consumed raw materials for small and M&L manufacturing activities in 2016/17 was 0.74.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments 0.55.

Compatibility with Addis Ababa's Context: machinery and equipment can be produced ranging from small establishments to large plants with extensive land area. Some basic machinery and equipment can be produced with small land requirements and can be compatible with Addis Ababa contexts. Some larger establishments can also be admitted in specialized manufacturing zones.

Conclusion: machinery and equipment production will offer a huge investment opportunity as there are strong demand gap met by imports.

3.2.13. Investment Opportunities in the Motor Vehicles, Trailers and Semi-trailers Subsector

Demand from Local Manufacturers: the real demand increased from 2.01 billion birr in 2007/08 to 4.08 million birr in 2016/17 with an average annual growth rate of 8%. Following the supply, demand shown significant fluctuations over the indicated period.

Import Demand: real import value increased from 6.58 billion birr in 2009/10 to 19.39 billion birr in 2018/19. The average annual growth rate of real imports over this period was 12%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 30 and28.5 billion birrin 2017/18 and 2018/19 respectively.

Forecasted Demand: the real demand from local manufacturers is expected to grow by 0.71 billion birr each year. The forecasted real imports are expected to grow by the value of 1.75 billion birr every year (by 2.57 billion birr in 2018/19 prices). The forecasted average annual demand growth is expected to be 7% and 6% for domestic producers and imports respectively.

Input Availability: The ratio of imported raw materials to total consumed raw materials for M&L manufacturing activities in 2016/17 was 0.97.

Profitability: profitability measured as a ratio of gross profit to total gross value of production as of 2016/17 for M&L establishments 0.45.

Compatibility with Addis Ababa's Context: generally, the manufacturing of motor vehicles, trailers & semi-trailers requires extensive land size. Usually such activities are recommended outside city boundaries. Following this, except parts and accessories manufacturing, assembly and manufacturing of motor vehicles may not go with the city's land context.

Conclusion: the subsector will offer a huge investment opportunity as there are strong demand gap met by imports.

3.2.14. Investment Opportunities in the Furniture Subsector

Demand from Local Manufacturers: real demand of furniture products from M&L establishments rose from 1.03 billion birr in 2007/08 to 9.145 billion birr in 2016/17 with an average annual growth rate of 24%. Similarly, the value of real demand from small manufacturers rose from 1.17 billion to 12.9 billion birr over the indicated period.

Import Demand: the real import demand rose from 0.64 billion birr in 2009/10 to 3.34 billion birr in 2018/19 with an average annual growth rate of 18%.

Demand Gap Met by Imports: the nominal demand gap fulfilled by an import was 4.98 and4.92 billion birr in 2017/18 and 2018/19 respectively.

Forecasted Demand: the real demand value from local manufacturers is expected to grow by 0.77 billion birr annually. The real import value is also expected to grow by the value of 0.34 billion birr each year(by 0.5 billion birr in 2018/19 prices). The forecasted linear real growth rate is expected to be 8% and 7% for local manufacturers and imports respectively.

Input Availability: the key raw materials currently used in the furniture manufacturing are chipwood, formica, log, plywood, veneer and plunk. Most of the raw materials are predominantly from foreign sources except formacia, log, plunk, CSA (2018a, 2017a, 2016a).

The ratio of imported raw materials to total consumed raw materials for small and M&L manufacturing activities in 2016/17 was 0.28 and 0.63 respectively.

Profitability: profitability measured as a ratio of gross profit to total gross value of production between 2007/08 and 2016/17 for M&L establishments 0.63.

Compatibility with Addis Ababa's Context: most of the furniture manufacturing activities can be done with limited spaces including rental possibilities. Therefore, the subsector is generally compatible with the land context of the city.

Conclusion: Despite the existing high value of supply in the furniture subsector, the growth trend in the subsector indicates the existence of good investment opportunity.

3.3. Investment Priorities in the Manufacturing Sector in Addis Ababa

3.3.1. Prioritizing Investments Using Opportunities

Based on the demand growth from local manufacturers indicator the seven highly growing subsectors are machinery and equipment; furniture; wearing apparel; basic iron and steel; rubber and plastic products; paper, paper products and printing and metal products. Domestic growth rates are seriously affected by fluctuations and average growth rates are not very reliable. In fact some of the subsectors which are considered as priority and strategic subsectors such as textiles and tanning and dressing of leather suffers from a sharp fall in recent years leading to negative average growth rates.

Considering import demand growth the seven highly growing subsectors are tanning and dressing of leather; footwear, luggage and handbags; rubber and plastic products; chemicals and chemical products; furniture; food and beverage; textiles; paper, paper product and printing.

Based on predicted yearly additional demand the seven highly growing subsectors are food and beverage; wearing apparel; basic iron and steel; rubber and plastic products; furniture; motor vehicles, trailers & semi-trailers and chemicals and chemical products. However, similar with growth rates, serious fluctuations exist from domestic manufacturers supply side.

Based on predicted yearly additional import demand the seven highly growing subsectors are machinery and equipment; basic iron and steel; chemicals and chemical products; food and beverage; motor vehicles, trailers & semi-trailers; rubber and plastic products and wearing apparel.

Within subsector, using growth in real demand, real import, real forecasted yearly value increase and the value of nominal demand gap met in recent years, the following activities are recommended:

- Food and beverage subsector
  - Production, processing and preserving of meat, fruit and vegetables
  - Manufacture of vegetable and animal oils and fats
  - Manufacture dairy products
  - Manufacture of grain mill products
  - Manufacture of bakery products
  - Manufacture of sugar and sugar confectionery
  - Manufacture of macaroni and spaghetti
  - Distilling, rectifying and blending of spirits
- Textiles
  - Any kinds of textiles which can be produced within available land
- Wearing apparel
  - Any kinds of wearing apparel
- Tanning and dressing of leather; manufacture of Footwear, luggage and handbags
  - Manufacture of footwear
  - Manufacture of luggage and handbag
- Wood and of products of wood and cork
  - Plywood, MDF, lumber, veneers, laminboard and particle board
  - Prefabricated wood buildings
- Paper, paper products and printing
  - Manufacture of paper and paper products
- Chemical and chemical products
  - Basic chemicals

  - Paints, varnishes and mastics
  - Pharmaceuticals, medicinal chemicals and botanical products
  - Soap and detergents cleaning and polishing, perfumes and toilet preparations
- Rubber and plastic products
  - Any kinds of rubber and plastic products
- Other non-metallic mineral products
  - Glass and glass ware products
  - Ceramics
- Basic iron and steel
  - Any kinds of basic iron and steel products which can be produced within available land
- Fabricated metal products
  - Cutlery, hand tools and general hardware
- Machinery and equipment
  - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof
  - Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles
- Motor vehicles, trailers & semitrailers
  - Spare parts and assembly
- Furniture
  - Any kinds of furniture

3.3.2. Prioritizing Investments Using "Policy Indicators"

Wearing apparel; textiles; wood and of products of wood and cork; paper, paper products and printing; tanning and dressing of leather; footwear, luggage and handbags are highly labor intensive. Wearing apparel; food and beverages; wood and of products of wood and cork; paper, paper products and printing; tanning and dressing of leather; footwear, luggage and handbags and other non-metallic mineral products have the highest value added. Wearing apparel; food and beverages; machinery and equipment; paper, paper products and printing; tanning and dressing of leather; footwear, luggage and handbags and other non-metallic mineral products have the highest export per sale. Food and beverages; wood and of products of wood and cork; tanning and dressing of leather; footwear, luggage and handbags and other non-metallic mineral products and furniture manufacturing have the highest domestic input use.

3.4. Investment Challenges in the Manufacturing Sector in Addis Ababa

According to the survey results, almost all of the sub-sectors face significant input shortage. The very important causes of input scarcity identified from most of the manufacturing activities include market misconduct; shortage of raw materials; seasonality; trade and import restriction; supply induced; trade and import restriction and lack of subsidy. In each of the sub-sectors over 60% of the respondents responded they are not operating at full capacity. The very important reasons for under-capacity operation in most of the manufacturing activities are shortage of raw materials; shortage of utilities; shortage of finance; Shortage of land and building and shortage of foreign currency. In addition, the availability of credit is generally rated low by most manufacturing sub-sectors. The major challenges which are rate to be high challenges by most manufacturers from business environment are shortage of utilities; access to land; and customs and trade regulation.

3.5. Recommendations

The major recommendations which would improve the utilization of investment opportunities and alleviate the challenges of investment in the manufacturing sector are the following:

- To ensure quality, quantity and sustainable supply of inputs, commercialized supplier should be encouraged.
- Input producers should be substantially encouraged and should be helped in market negotiations.
- Strategic solutions should be forwarded to obtain most inputs from the domestic sources as there is a huge dependency on imports.
- Even for the subsectors with known input availabilities, manufacturers responded the existence of input shortage. This implies a job should be done in improving logistics, transport infrastructure and market linkages.

- Ease of doing business should always be on the table to ease tax regulations and administrations, business licensing and permits, financial access and the like.
- Utilities, logistics, transport and other infrastructure still poses series operation problem and therefore solutions should be considered to ease the problem.
- Addis Ababa Investment Commission (AAIC) should work more on addressing logistical and infrastructural problems to unleash the potential of the subsectors as the current working capacity is low for most subsectors.
- As the city has limited land, manufacturing activities with high demand yet which can be done with limited land area should be identified
- Manufacturing activities which can be done with rental possibilities and with limited space should be identified. For those requiring larger area and still admissible within the available land, they should be located in industrial parks.
- The city should encourage manufacturers to deal with private land holders to alleviate the mounting land request for investment in the city
- Manufacturers handling an activity through rental or their own means of land should receive special incentives given the activity is a priority manufacture
- Better land administration should be applied for best use of the available land. This may include improving and using cadaster system.
- For priority areas special land arrangements hould be considered
- Generally, high tech and high value add manufacturing activities should be encouraged within the city.
- Manufacturing activities should consider quality and bulk production to compete with importing products and to obtain good return. Otherwise addressing the demand gap met by imports would be challenging. If quality is not able to be maintained by domestic investors, JV (Joint Ventures) and licensing possibilities should be considered.
- Technology adoption mechanisms should be promoted to help the domestic producers compete with quality and be profitable.
- Special supports, financial access, subsides and incentives based on value add should be established in addition to the existing incentives.

- Innovative form of licensing should be established for the ones which mix different activities, for example activities which mix textiles, rubbers, non-metallic items products, etc.
- Accessory producers should be encouraged. In order to do this, identification of key accessories in each of the manufacturing subsectors should be identified.
- Special incentives for recycling firms should be available: leather, metal, paper, plastic, and other recyclers.
- The share of small food and beverage manufacturers is very high and the growth of sales is sharp. Given their ability to meet an increased demand, small food and beverage manufacturers should be encouraged.
- In domestic productions, there are serious fluctuations in the production levels whereas imports show consistent increase. The reasons for this should be studied further and remedial measures should be taken.
- Serious attention should be given to the textile and leather subsector as the supply extremely fluctuates while the country considers the subsectors as priority subsectors.
- Serious attention should be given to the chemical industry. While the demand gap met by imports is very high, 42 billion birr in 2018/19 (nominal), the local manufacturers working capacity was 5% and 23% in 2015/16 and 201/17.
- Although the demand gap met by import is very high for machinery and equipment and motor vehicles, manufacturing in these subsectors for only domestic markets usually may not be sufficient. Therefore, considering regional and international markets is advisable.
- Teff processing should be encouraged as the there is good input availability and the seed is globally acceptance as an emerging super seed which is glutton free with significant iron and protein content. This also gives the chance to be among a pioneer in teff processing and exporting.
- Sesame processing should also receive priority since there is high production level of sesame in the country (over 2 million quintal) and good reputation of the country in quality sesame seed.

4. The Service Sector: Opportunities, Challenges and Priorities

4.1. Introduction

The service sector in Addis Ababa plays a key role in the economic progress of the city. It contributes close to 75% to the GDP of the city administration.

4.2. Investment Opportunities in the Service Sector

4.2.1. Real Estate and Housing Development

A. **Introduction:** According to the National Bank (2018) report, the growth of housing and real estate sub-sector is increasing over time. The sector growth rate increased from 3.8% in 2011/12 to 6.2% in 2017/18 . The real estate and housing sector growth expected to go up 0.285 percent, annually.

B. Demand and Supply Analysis: The evidences demonstrate that the demand for a house increases with a raise in the population, urbanization and economic growth. The CSA population projections 2008-2037 indicated that the Addis Ababa population would show a substantial increase from about 2,792 thousand in 2008 to 5,132 thousand in 2037. The trend and forecast analysis reveals that the GDP per capita will increase annually by USD 30, keeping other things constant.

The Addis Ababa city government, in order to overcome the housing problem, has engaged in the construction of condominiums categorized into different schemes: 10/90, 20/80 and 40/60. . The number of housing units transferred to beneficiaries declined from 34,545 in 2014/15 to 2,604 in 2017/18.

According to data from Ethiopian Investment Commission, since 2015, close to 117 companies took an investment license to invest on 56 different real estate projects. Out of the existing 56 real estate projects to date, 43 are located in Addis Ababa.

Based on the past performances, it is difficult to balance the demand and supply gap with in the near future (Selam and Abebe, 2018).

C. Inputs Availability: The most foundational raw materials for the sub sector are labor, machineries, chemicals, wood, steel and cements. The overall trend from Medium & Large scale industries demonstrates that the outputs from domestic industries, In this regard, the real gross domestic production of chemicals and Rubber & Plastics increased from ETB 4.95 and 4.24 Billion in 2007/08 to ETB 9.11 and ETB 11.15 Billion in 2016/17, respectivelyThe Medium and Large Scale Industries production of basic iron increased from ETB 3.09 Billion in 2007/08 to ETB 9.42 Billion in 2016/17. The production of fabricated metals rose from ETB 3.44 Billion in 2007/08 to ETB 6.71 Billion in 2016/17. The forecast analysis as well reveals that the real production of both basis iron and fabricated metals will rise in the future.

D. Profitability of the Sub-sector: The result from the survey pointed out that the sub-sector is mainly characterized by moderate (as 59.3% of the respondents pointed) profit level.

E. Real estate and Housing Business Compatibility to Addis Ababa: The current plan (2017-2027) of the city government indicates a total land of 219,072,034.68 million meter square is allocated for mixed residence. It represents around 42.11 % of the total city area. This is a good opportunity for investors to be engaged in the real estate and housing sector. The real estate and housing sector has a 100% exemption from the payment of customs duties and other taxes levied on imports is granted to all capital goods, such as plant, machinery and equipment and construction materials.

F. Promising Investment Activities: Based on the survey and empirical literatures results, the most promising real estate and housing business activities are:

- ***Residential real estate****: It deals with selling or renting of condominiums and apartments.*
- ***Commercial real estate****: It includes shopping centers, malls, medical buildings, educational buildings, hotels and offices*
- ***Industrial real estate****: It contains medium manufacturing buildings and warehouses. The buildings can be used for research, production, storage, and distribution of goods.*
- ***Commercial parking developments****: deals with the building of car parking and renting it to car owners.*

G. Conclusion: The real estate and house development investment is desirable by all people; because it is a basic need.

H. Health Care Service

A. Introduction: The health industries are growing and expanding in Ethiopia. Indeed, it is certainly one of the fastest and steadily growing sectors now worldwide.

B. Demand and Supply Analysis: The analysis of supply and demand is important to illustrate the performance and capacity of the existing healthcare service in Addis Ababa. According to literatures, there are various ways of measuring the demand and supply of health care service. The health per capita expenditure will rise by USD 1.55, annually. Multiplying the mentioned figure with the population of Addis Ababa reveals that demand for health is rising noticeably in monetary terms. In related manner, the admission status and the OPD[1] (Outpatient Department Treatment) attendance per capita prove that the demand for health care service is mounting and expected to rise in the coming years, in Addis Ababa.

Despite recent improvements, the health service institutions are unable to provide quality health service as measured by international standards. There were in total 48 hospitals of different levels in 2013, of which 36 were privately owned. These hospitals, even if they provide city-level service, they are concentrated in and around the centre (Addis Ababa City Structure Plan, 2017-2027). The business opportunities in the health industry are massive. In line with this, the CSA population projections, 2008-2037, indicated the population of Addis Ababa will almost double, during the projections period. The World Bank data also illustrates that the GDP per capita income of Ethiopians increased, from USD 369.2 in 2011 to USD 602.17 in 2019, and expected to grow in the years coming.

C. Inputs Availability: The human resources supply, as measured by the number of students' enrolled in the domestic universities, is growing in the labor market. In the year 2016/17, of total students in both public and private universities, around 10% are enrolled in the medical and health sciences disciplines.

D. Profitability of the Sub-sector: The survey output indicates that 28.6% and 23.8% of the respondents feel that the profit of investment on health sector is very good and moderate, respectively.

E. Heath Care Service Compatibility to Addis Ababa: The current plan (2017-2027) of the city government allocates 2.8% of the total city area for social services, The plan reserved plots for the construction of 49 health centers; 29 primary hospitals and 2 specialized hospitals. The

[1] OPD attendance per capita refers to the average number of outpatient visits (including new and repeat visits) per person per year.

investors engaged in health care sectors are entitled to have custom duty exemptions. There are supportive regulatory frameworks (loans, biomedical instruments, zero tariff on raw materials etc.) and tax incentives to the sector.

F. Promising Investment Activities: The city administration is advised to encourage the following business activities in the health care sub sectors.

- ***Specialty clinics:*** *it includes clinics that focus on the treatment of maternal, children, dental, eye and etc.*
- ***Hospitals:*** *provide complete medical care, ranging from diagnostic services, to surgery, to continuous nursing care. Some of them may specialize in treatment of the specific health issues.*
- ***Door-to-Door Healthcare Services:*** *it provides healthcare services at home. It covers various activities like physical exercise, physiotherapy, mental therapy, short term or long term service for illness, disability, diseases, etc.*
- ***Healthcare Rehabilitation:*** *of various functions.*
- ***IT based Health and Consultation:*** *It provides various health related information and evidences for customers. The customers are reached via online platforms or mobile.*
- ***Gym Centers for Fitness:*** *With more and more people becoming aware of their fitness needs, gym centers are important.*

G. Conclusion: The role of the private sector is increasing due to government's financial constrains in expanding the health infrastructure and population growth. The over population and limitation of resources, in government-run health care infrastructure, has shifted the demand towards private sectors. As a result, the health care sector has the many opportunities in Addis Ababa.

4.2.2. Education

A. Introduction: The efforts to promote and improve the quality education need the participation of private sectors or investors.

B. Demand and Supply Analysis: According to data obtained from the Education Bureau of Addis Ababa, a total of 863,357 students were enrolled, in KGs (183,281), primary (523,456), secondary and preparatory (156,620) schools in 2017/18 E.C. The students' enrolment to school will increase in the years coming ahead, annually by 13,682 units. The result also indicates that students' enrollment number is expected to rise by 65,356 (for undergraduate program), 19,249 (for TVET program) and 10,104 (for postgraduate program).

C. The public sector, however, lacks the capacity to respond to the increasing demand from the population. In addition to these, the concern on the quality of state education has led many parents to seek alternatives to the state sector. This requires the private sector to invest on education business.

D. Inputs Availability: The real gross domestic production of paper, paper products and printing, in Medium and Large Industries, increased from ETB 3.53 Billion in 2007/08 to ETB 8.04 Billion in 2016/17. The basic infrastructures like electricity and internet, very supportive for the education service delivery, are expanding in the country.

E. The human resources supply, transport, communication and water supply are also growing in Addis Ababa.

F. Profitability of the Sub-sector: The survey outcome reveals that 27.3% and 40.9% of the respondents feel that the profit of investment on education is very good and moderate, respectively.

G. Education Business Compatibility to Addis Ababa: The current plan (2017-2027) of the city government allocates 2.8 % of the total city area for social services, including education. The plan reserved plots for the construction of 36 primary schools; 5 secondary schools; 12 preparatory schools and 10 TVETs.The investors to be engaged in education and trainings sectors are entitled to have custom duty exemptions.

H. Promising Investment Activities: The education businesses have been expanding. Some of the most promising activities in education sector are:

- ***Investment on Formal Education:*** *In line with increase in the population and income, there is a growing demand for school from day care to universities. The investors may also consider starting private schools for disable and adult education, as they rarely exist in the city.*
- ***Investment on Short Term Trainings and Special Education:*** *The skill development schools are profitable businesses in the education sector. The most promising types are skill schools are: Catering; Music, Art and Culture; Driving; Fashion Design and*

Decoration; Computer; Photography; Film Making, Animation and Graphics; Entrepreneurship and life skill; and Language. With the progress of computer application and increase in internet access, skill development training can be offered online.

- ***Home and online Tutor Services:*** *Tutorials can be offered via various platforms; most importantly, face-to-face, television, and online approaches.*
- ***Research and Consultancy Services:*** *The demand for consultancy service is mounting in line with the expansion of investments, economic growth and belief in professionalism.*

I. Conclusion: In line with population growth and economic progress, the business opportunities in the education industry are enormous.

4.2.3. Hospitality and Tourism

A. Introduction: The Ethiopian hospitality and tourism sector is growing quickly over the last few years..

B. Demand and Supply Analysis: Addis Ababa is a strategically located in the Horn of Africa. Many national, regional, continental and international meetings and conferences are held in Addis Ababa.The increasing number of tourists, along with domestic movement for conferences and different tasks, enhances a significant demand for standard hospitality and tourism services.

C. The arrivals of Ethiopia increased from 597,000 in 2012 to 849,000 in 2018 growing at an average annual rate of 7%. …increase by 58,607 annually.

D. However, the evidence reveals that, 78 star rated hotels in Addis Ababa, have 5045 rooms and 6187 beds.

The evidences demonstrate that, despite occasional shocks, international tourism has continued to experience expansion. The evidence reveals that, 78 star rated hotels in Addis Ababa, have 5045 rooms and 6187 beds. This implies that more than two million travelers could not find accommodation up to their standards in the city. Or in other words, more than 7,000 customers could not get international accommodation in Addis Ababa daily.

The combination of local tourism and international arrivals are providing a strong base for hospitality and tourism demand in Addis Ababa. In addition population growth; increase in disposable income; visa relaxation policies combined with infrastructure improvement contributed for the rise in the demand for hospitality and tourism sector..

E. Inputs Availability: The data from the National Bank of Ethiopia and World Bank reveals that transportation, communication, electricity, internet and financial intermediation services are mounting in Ethiopia. With this connection, the passenger carried by Ethiopia air transport, has increased from 4,440,918 in 2012 to 11,501,244 in 2018[2].

F. Profitability of the sub-sector: The study outcome reveals that the majority of the respondents (59.1%) feel that the profitability of sector is moderate.

G. Hospitality and Tourism: Compatibility to Addis Ababa: The evidences illustrates that the hospitality and tourism has been one of the most promising business and compatible investment to Addis Ababa. The current plan (2017-2027) of the city government allocates land for hotel and tourism. As a result, few establishments can be admitted to the allotted land. The others establishments may be required to come up with innovative business ideas of getting their working premise via renting. The investors engaged in hospitality and tourism sectors are entitled to have custom duty and income tax exemptions.

H. Promising Investment Activities: The hospitality and tourism industry offers several opportunities for investors who are interested to invest in this growing industry.

- ***Accommodation:*** *It deals with the provision of a place to stay for customers on a short-term basis. The most common accommodations alternatives are: resorts, motels, hostels and hotels.*
- ***Food and beverage:*** *It is one of the principal sectors of the hospitality industry. It provides various services; most importantly cultural foods and drinks and fast food.*
- ***Travel and tourism****: It offers a combination of travel and tour products to tourists via both online and faces-to face platforms.*
- ***Entertainment in the hospitality industry****: It is a significant part of hospitality and tourism industry. The most common types of entertainment activities related to hospitality and tourism are: zoos, museums, parks, theatres, night clubs, and gambling.*

[2] https://knoema.com/atlas/Ethiopia/Number-of-air-passengers-carried

- ***Conference Tourism**: it deals with the preparation of quality places for meetings, events, conferences, and exhibitions.*

I. Conclusion: The study result concludes that investing on hospitality and tourism sector offers many investment opportunities.

4.2.4. Construction

A. Introduction: The construction sector plays a key role in speeding up the economic growth of nations. In the 2018/19, the construction sector's growth was 15%.

B. Demand and Supply Analysis: The construction sub-sectors is a huge part of Ethiopia's economy. The current trend in the Addis Ababa shows that the city is witnessing a construction boom. Someone who simply drives in the Addis Ababa city will observe that both public and private sectors are engaged in the construction of roads, condominiums, telecommunication infrastructures, business offices, hospitals, mixed use buildings, super markets, hotels, real estate, and others buildings. The sector is also expected to grow in line with an increase in population, economic growth, urbanization and industrialization. The Addis Ababa City administration has planned to build 1.2 million units of houses in the coming plan periods. The city estimated that the housing investment amounts Birr 268 Billion (Addis Ababa City Structure Plan, 2017-2027). The same plan also showed that the city administration has a motive to increase the road density from the existing 13% to 25%. The total number of roads proposed to be built over the coming ten years is 90 in number and 335KM in length. The road construction amounts a total of ETB 13.34 Billion. In related manner, to overcome the problem of car parking, the city administration has a plan to construct 60 buildings in different parts of Addis Ababa in the coming ten years. The city also aims to make different hierarchy of centers for public service delivery. This project, in general, amounts ETB 30 Billion. There are also others construction activities to be done by the Federal government, the city administration and private sectors in Addis Ababa. Therefore, the existing construction firms will be under pressure to meet the future demand of construction in the city. This needs the participation additional and efficient firms' in the sector.

C. Inputs Availability: The construction sector uses various factors of production. The basic raw materials are labor, machineries, chemicals, wood, steel and cements. The real gross domestic production of chemicals and Rubber & Plastics, in Medium and Large Industries, increased from ETB 4.95 and 4.24 Billion in 2007/08 to ETB 9.11 and 11.15 Billion in 2016/17, respectively. Similarly, the real production of basic iron and fabricated metals increased from ETB 3.09 Billion and 3.44 Billion in 2007/08 to ETB 9.42 and 6.71 Billion in 2016/17, respectively. The real value of production of glass and glass ware production increased from 148 million birr in 2007/08 to 802 million birr in 2016/17. The human resources required for the construction sector, as measured by the number of students' enrolled in the universities, are escalating in the labor market. In the year 2016/17, of total students in both public and private universities, more than 30% are enrolled in the Engineering and Technology fields.

D. Profitability of the Sub-sector: The study output demonstrates that the majority of the respondents (58.3%) feel that the profitability of sector is moderate.

E. Construction Investment Compatibility to Addis Ababa: The construction business is a compatible business to Addis Ababa. The most common utilities necessary for the activity such as water, electricity, human resources, transport, logistic services and communication are moderately available in the city. Besides these, there is a 100% exemption from the payment of customs duties and other taxes levied on imports is granted to all capital goods, such as plant, machinery and equipment and construction materials.

F. Promising Investment Activities: The construction sector has the many economic activities that attract investors. The following are promising construction activities that need due attention.

- ***General construction****: It deals with the construction of dwellings, office buildings, stores and utility buildings and etc. It also contains the constructions of streets, bridges, tunnels, railways, airfields, sewerage systems, industrial facilities, pipelines and electric lines, sports facilities etc.*
- ***Building installation activities****: contains activities such as plumbing, installation of heating and air-conditioning systems, antennas, alarm systems and other electrical work, sprinkler systems, elevators and escalators etc.*
- ***Building completion activities****: it focuses on construction activities like glazing, plastering, painting and decorating, floor and wall tiling or covering with other materials like parquet, carpets, wallpaper etc.,*

G. Conclusion: The rapidly growing demand for the construction activities like houses, infrastructures, and social services creates an opportunity for investment.

4.2.5. Information Technology

A. Introduction: The Information technology is one of the fastest growing sectors of the economy. Technology is the major driving force behind the globalization.

B. Demand and Supply Analysis: The information technology based sector provides substantial opportunities in the world. According to Lixi and Dahan (2014) less than 25% of the potential has been tapped so far. The information communication technology is relatively a promising business for private sector. Ethiopia has to work in order to obtain the benefits the information communication technology implementation (Lixi and Dahan 2014). With this connection, the government of Ethiopia has made the development of information and communications technology as one of its strategic priorities. The telecom network and service expansion activities are taken mechanism of expanding the information technology application in the country. In the second Growth and Transformation Plan (GTP II) of the country, it is planned that mobile service, broad band internet and narrow band internet subscriptions will reach 103.66 million, 39 million, and 17 million, respectively in 2020.

Ethiopia', despite some improvements in the past, the United Nations E-Government Survey reveals that the country's performance in e-government service is low in 2020 (scored 0.271 and ranked 178/193). The e-government refers to the application of information communication technologies, like computers and the internet, in order to provide public services to customers. The United Nations E-Government Development Index (EGDI) has three primary indicators. These are: Online Service Index (measures the online presence of the government in terms of service delivery), Telecommunication Infrastructure Index and Human Capital Index. In comparison to other Kenya, Uganda and Rwanda, the Ethiopia's e-government (0.274) and e-participation (0.333) performances are low and the results shows that much effort is required to upgrade the status of technology application. Therefore, the existing Information Communication Technology firms will be under pressure to meet the future demand for information communication technology services in Addis Ababa. Hence, the private investors are encouraged to invest on information communication technology.

C. Inputs Availability: Ethiopia has also been working towards stimulating the demand for the underlying infrastructure by increasing access to the public sector network and connectivity.

D. Profitability of the Sub sector: The survey reveals that around 47% respondents stated that the business of information technology has moderate level of profitability.

E. The Information Technology Investment Compatibility to Addis Ababa: The information communication technology services can be offered online or in any buildings. Hence, it is highly compatible to Addis Ababa. The investors engaged in ICT investment are entitled to have income tax exemptions for a period of four years.

F. Promising Investment Activities: it is advisable to support the following business projects:

- ***Tech Shop Digital Advertising and Marketing Business:*** *In line with the expansion of internet coverage and e-business, the digital advertizing, digital marketing and tech shop are growing rapidly.*
- ***Web design and Software Development Services:*** *These businesses are raising in line with the demand for various online services, like e-finance, e-learning, e-government, e-tourism and etc.*
- ***Internet Café:*** *there are a lot of people who are comfortable using the internet at a cafe.*
- ***Mobile Application Development Services:*** *The mobile applications are becoming part business investments.*
- ***Online Systems development****: It includes social networking; online school; online book store; and e-library, online research and consultancy service. Recently, the online systems are growing as people search to collect information and knowledge on a particular issue online.*

G. Conclusion: The information technology has become an essential instrument for organizations to operate in a global economy. Most organizations try to transform themselves into digital items as almost all core business processes and relationships with customers, suppliers, and employees. Hence, the investment on information technology is advisable.

4.2.6. Transport Service

A. Introduction: The transport and communication sector is growing on average by 13% between 2011/12 and 2017/18.

B. Demand and Supply Analysis: A well-functioning transport markets balances the transport supply to the transport demand. The Addis Ababa City Structure Plan (2017-2027) estimated that travel demand will reach 6.6 million in the next 10 years, and will increase to 9.7 million in 2040. The plan also mentioned that there were 8,500 minibus taxies, 442 midi buses, 1006 Anbessa city-buses and other 6,000 support vehicles that provide public transport service in the city. There are about 488,028 passengers per day travel by Anbessa city bus, and 479,182 passengers per day by mini bus taxis. Nonetheless, according to the plan, the overall transport system in Addis Ababa covers only about 46% of the total travel demand. Therefore, there is a market potential which requires the participation of the private investors.

C. Inputs Availability: The most basic raw materials for the sub sector are road, oil, labor, machineries, and maintenance materials. The CSA data indicates that, in 2016/17, 13 companies were engaged in the production of bodies, parts & accessories for motor vehicles, and one firm has engaged on the production of passenger cars, commercial vehicles, and busses. The same data illustrates that the real value of production increased from Birr 2.26 billion in 2007/08 to Birr 4.72 in 2016/17.

D. Profitability of the Sub-sector: The result from the survey indicated that the sub-sector is mainly characterized by moderate (40.9%) and very good (27.3%) profit level.

E. Transport Service Investment Compatibility to Addis Ababa: The demand and supply analysis illustrates that the transport has been one of the most attractive business. Unlike others sector of service, the transportation sector causes both air and noise pollution. Therefore, investors have to come up with environment friendly innovative ideas.

F. Promising Investment Opportunities: There are many promising activities in the transport sector.

- ***Application Based Taxi Services****: It is highly preferred by medium income people.*
- ***Car Shuttle Service:*** *It is designed to provide a service for private companies' employees on contract basis.*
- ***Passenger Bus and Mini-Bus Services:*** *It is intended to address the transportation demand for low and lower medium group.*
- ***Specialty Transportations:*** *it is intended to address the transportation demand for medical emergency, water, livestock, grocery, milk and others.*

- ***Truck transportation service:*** *it carries heavy goods from one place to another.*
- ***School Bus/Taxi for Kids/students:*** *With increase in the number of students, the private school bus and taxis services are popular transportation businesses.*
- ***Packers and Movers services****: it has gained popularity in the recent years. It is designed to pack and transfer households or companies goods from one place to another safely.*

G. Conclusion: As cities are growing in terms of population and physical size, the contribution of transportations also increasing due to increased economic activities in Addis Ababa.

4.2.7. Solid and Liquid Waste Management

A. Introduction: Like the others developing countries, solid and liquid waste management is a serious confront to Ethiopia.

B. Demand and Supply Analysis: The previous studies show that the waste collection, particularly solid waste, rate in Addis Ababa is 70%-75%. The city estimates that 70% of the city (by geographic area) receives waste collection services, regardless of the quality of the service offered (U.S. Environmental Protection Agency, 2015). The evidence from the Addis Ababa city government illustrates that there is a huge gap between amount of waste disposed and waste collected in the city Administration. The amount of sewage disposed (including sewerage system) increased from 5,392,899m^3in 2013/14 to13,897,328m^3 in 2017/18. In the same way, the disposing capacity of vehicles has also shown an increase from 511,597 m^3 to 1,280,145 m^3during the period. However, the vehicles disposing capacity (disposes only 10 percent of the total waste disposed) is by far below the waste generated. The liquid waste to be generated is expected to grow in the years coming ahead, at least, by 2,000,000m^3. Similarly, there is a big gap between solid waste generated and solid waste collected. The average amount of solid waste generated per day increased from 8,692m^3 in 2015/16 to 9,654m^3 in 2017/18. The waste disposal capacity in relation to average waste generated is low. The solid waste disposed is also expected to grow in the years coming ahead, based on population and economic growth. Therefore, the gap between waste generation (demand) and proper collection (supply) demonstrates that the market prospects for the solid and liquid waste collection and processing sectors are promising.

C. Inputs Availability: The evidences indicate that the status of inputs availability for sanitation business is modest. The CSA data demonstrates that the real value of production of soap and detergents; cleaning and polishing; perfumes; and toilet preparations, in medium and large industries, rose from ETB 2.42 Billion in 2007/08 to ETB 4.26 Billion in 2016/17. The water supply, which is crucial for sanitation service, is also growing in Addis Ababa.

D. Profitability of the Sub-sector: The sub-sector is mainly characterized by moderate profit. The status of the loss in the sub-sector is below 0%.

E. Solid and Liquid Waste Collection and Disposal Investment Compatibility to Addis Ababa: The Solid and Liquid Waste Collection and Disposal services are compatible to the Addis Ababa city. Above all, the solid and liquid waste collection and disposal activities are generally are pro-environment.

F. Promising Investment Activities: Addis Ababa is characterized by rapid population and economic growth. These in turn are responsible for many environmental problems, of which one is solid and liquid waste. Therefore, the following investments need due consideration;

- ***Solid and Liquid Waste Collection:*** *the demand for both liquid and solid waste collection is increasing in connection with the raise in the income of the households and the concern for the environmental quality. So far, the waste collection in Addis Ababa is not effective or efficient. With this connection, the investment on the mobile waste collection system, for instance mobile toilet, has a promising outcome.*
- ***Cleaning Services:*** *Addis Ababa is a center of various national, regional, continental and international governmental, non-governmental and business institutions. As a result, the demand for cleaning/sanitation service is increasing in Ethiopia.*

G. Conclusion: The study results show that investment on solid and liquid waste management is promising. The report from the municipality shows that the solid and liquid waste collected by far lower than the amount of waste generated in Addis Ababa.

4.2.8. Media and Entertainment

A. Introduction: The media and entertainment sector is growing rapidly in Ethiopia.

B. Demand and Supply Analysis: Addis Ababa, which is considered as the capital of Ethiopia and Africa, hosts many national, regional, and international organizations. The large number of Ethiopians and foreigners moves to the city. The international arrivals of Ethiopia, for instance, increased from 597,000 in 2012 to 849,000 in 2018. The trend line also displays that the number is expected to rise in the future. To entertain these people, it is crucial to open up quality and standard bars, hotels, restaurants, café, and night clubs. The other component of the media and entertainment businesses is music and recording. In this regard, Addis Ababa is the hub of Ethiopia's music and recording Industry. The evidences demonstrate that the video producers can charge prices ranging from 60,000 ETB to about 150,000 ETB per video in Ethiopia. Unfortunately, the business, though profitable, is not properly managed in institutional and professional manner. These, therefore, need investment with a well-organized record labels, music video production and highly-equipped studios.[3] The advertizing business is also expanding in Ethiopia. The price of advertizing is also mounting. For example, a one minute advertizing price for TV is around ETB 250,000 and for one minute radio broadcast ETB 25,000.[4] In line with the expansion of the businesses, in Ethiopia, the advertizing sector is expected to boost up in the coming years. In addition to these, sports and gaming activities are becoming an indispensable part of the media and entertainment industry. Therefore, the future of media and entertainment businesses is promising in Ethiopia, in line with an increase in income, tourists, internet access and mobile penetration.

C. Inputs Availability: The human resources, electricity, internet, transport and communication facilities, which are very supportive for the media and entertainment sector, are found at moderate level.

D. Profitability of the Sub-sector: The sub-sector is mainly characterized by moderate profit level. The status of the loss in the sub-sector is uncommon.

E. Media and Entertainment Compatibility to Addis Ababa: The media and entertainment is one of the most promising and compatible sectors in Addis Ababa.

F. Promising Investment Activities: The media and entertainment has been one of the most attractive business activities preferred by many investors. The most promising activities are: TV and radio shows, private museum, legal gambling, film industry, online streaming, event organization, e-news, E-sports, Music events, sports and recreation activities.

G. Conclusion: The results, by and large, illustrate that media and entertainment provides various opportunities for investors.

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[3] https://allaboutethio.com/20-best-small-big-business-opportunity-in-ethiopia.html
[4] https://allaboutethio.com/20-best-small-big-business-opportunity-in-ethiopia.html

4.2.9. Finance Sector

A. Introduction: The finance sector is growing rapidly in Ethiopia.

B. Demand and Supply Analysis: Addis Ababa is experiencing faster financial growth than other parts of the country. In Ethiopia there are 18 banks with 5115 branches. Of these branches, 34.6 percent are located in Addis Ababa. There are 17 insurance companies in the city. Out of the 542 insurance companies' branches in the country, 54 percent are located in Addis Ababa. Besides these, 19 savings and loan institutions are found in the city (AAIC, 2019). Despite some improvement in the sector, in the last couples of years, Ethiopian finance sector remains in its low status.

According to the Global Findex data, in the year 2017, only 34.83 percent of Ethiopians (15+years) have a financial account. The same data illustrates that the status of mobile money account is the lowest, only 0.32%, as compared Sub Sahara African average. In related manner, the financial inclusion of Ethiopia is the lowest in terms of credit and debit card ownership, as compared to Sub Saharan average. Like others financial sector performance indicators, the digital payments is low in Ethiopia, only 11.9% of people made or received digital payments in 2017. The number is lower as compared to Sub Saharan Africa average (34.4%). As of a 2017 data, only 26.29% of adults saved their money in financial institutions and 10.58% borrowed from financial institutions. Therefore, the Ethiopia' low performance, compared to other countries, in financial inclusion calls for the private investors to expand and diversify the financial sector.

C. Inputs Availability: The adequate resources and infrastructures (most importantly, human resources, electricity, information technology, and internet connectivity) are crucial to properly manage the finance sector. The data from both the National Bank of Ethiopia and World Bank reveals that resources and infrastructures, required for the finance sector, fairly reachable country.

D. Profitability of the Sub-sector: The survey output indicates that 33.3% and 66.7% of the respondents feel that the profit of investment on finance sector is very good and moderate, respectively.

E. Finance Sector Compatibility to Addis Ababa: The finance and insurance is one of the most promising and compatible sectors to Addis Ababa. The city is the center of major financial institutions in the country. The city Administration may not give land to all investors who need land to construct their building. Therefore, the firms may be required to come up with innovative business ideas of getting their own working premise via renting.

F. Promising Investment Activities: The finance sector has been one of the most attractive business many investors. The most promising activities are:

- ***Investment Banking:*** *It helps the companies' to get an access capital markets, such as the stock and bond markets. Investment banks generally handle more complex financial transactions.*
- ***Banking Services:*** *It is the most common financial institution in Ethiopia. The banking services are provided by large commercial banks, community banks, credit unions, and other entities.*
- ***Insurance Services:*** *are available for protection against death or injury (e.g. life insurance, disability income insurance, health insurance) against property loss or damage (e.g. homeowners insurance, car insurance) or against liability or lawsuit*.

The investment on Specialized Banks (house, construction, industry and etc) and App/technology oriented financial services, above all, are hopeful.

G. Conclusion: The study concludes that it is advisable to engage private sectors on finance sector; due the fact that the sector has massive opportunities for the investors.

4.3. The Service Sector Investment Priorities

A. Introduction: the study has used various dimension of comparing the service sub-sectors. The most important indicators are: domestic inputs utilization; market demand and sustainability; and intensity of technology application.

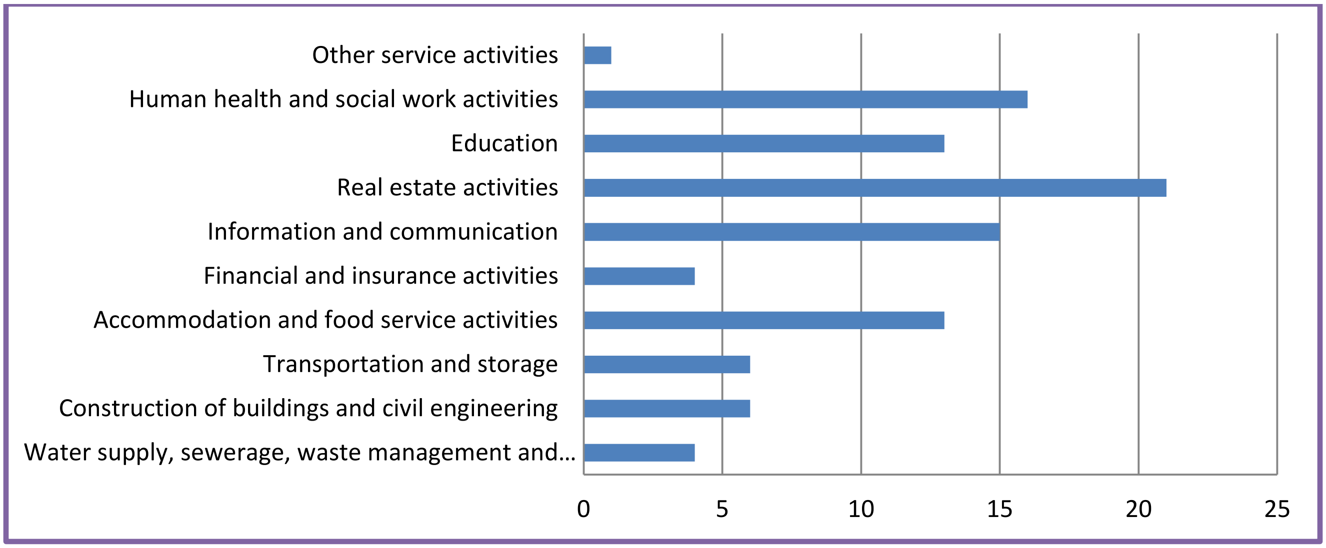
B. Domestic Inputs Utilization: The survey results show that, tourism and hospitality sub-sector uses considerable proportion of domestic inputs, as compared to other sectors. The respondents were also asked to state the quality of domestic raw materials. Accordingly, the majority of the respondents, in all sub-sectors, indicated that the quality of domestic raw materials is moderate. However, the state of raw materials for tourism and hospitality is relatively good.

C. Market Demand and Sustainability: The survey output demonstrates that finance (100%), solid and liquid waste management (100%); education (81%); and real estate/housing developments (70.4%) have relatively higher market demand. In the same manner, the secondary data and the survey output demonstrate that solid and liquid waste management; real estate and housing; ICT; health and education; and transport sub-sectors have relatively higher market sustainability.

D. Technology Intensity and Transfer: The application of technologies is pivotal in determining the future and the fate any organization. It can be considered as one of the mechanisms of identifying investment priority areas. The results from the survey illustrate that the intensity of information technology application is low. The utilization of information technology in the solid and liquid waste management and construction sub-sectors is relatively low.

E. Ranking and Ordering of Investment Priorities in the sector: The study has also tried to rank and order the investment activities under service sector. In this regard, there is no straight forward method of comparing and ranking the business activities. Besides the aforementioned dimensions of comparison, the respondents were asked to point out the best areas of investment, based on their business world experiences. The result from the survey, in line with the preceding topics and the demand supply analysis, demonstrates that Real Estate and Housing; Information Technology; Health care; Education; Hospitality and Tourism; and Transport were the most ideal investment areas by the respondents.

Figure 4.1: Respondents' Ordering of the Service sub-sectors



Source: Survey (2020)

4.4. The Service Sector Investment Challenges

A. Introduction: The major challenges of the service sector are: inputs scarcity, financial access problems and business environment difficulty.

B. Inputs Scarcity: One of the main challenges affecting the production and productivity of the service sector is inputs scarcity. All service sub-sectors encounter inputs shortage. However, the level of inputs shortage varies from one sub-sector to another. The study also identified the major factors responsible for inputs scarcity. Accordingly, the main factors are: market misconduct; shortage of raw materials; supply induced problems; and lack of subsidy.

C. Financial Access: The economic literatures argue that financial capital is pivotal for successful investments. In this regard, the survey output illustrates the availability of credit is relatively low for all service sub-sectors.

D. Challenges in the Business Environment: The results demonstrate that shortage of utilities; access to land; customs and trade regulations; transport and marketing infrastructures are the main challenges to the business environment.

4.5. Conclusions and Recommendations

The evidences illustrates that demand for the service sector is mounting in line with the rise of population and economic growth of nations. Above all, the demand for the service businesses is on the rise with an increase in stable middle class groups. The economic literatures reveal that the East Asian countries advanced through manufacturing-led activities, following the traditional path of development from agriculture to manufacturing and later to the services sector. On the other hand, South Asian Countries, like India, avoided the traditional path of development to attain sustainable economic growth. Instead, they guided by service-led activities using information technology. The second approach, service-led growth, can easily be applied in Addis Ababa, where the land is scarce and others resources required for the service sectors are relatively abundant.

The study, based domestic inputs utilization; market demand and sustainability; technology application; and the opinion of the respondents, identified that the city administration may give due consideration to Real Estate and Housing; Information Technology; Health care; Education; Hospitality and Tourism; and Transport investments. Accordingly, the following recommendations are forwarded:

- ✓ *The city administration can collaborate with investors and concurrently provide efficient public service that supports the investment. In this case, it is important to focus on expanding infrastructures; promoting good governance and easing the business environment.*
- ✓ *The government needs to revisit its incentive schemes for investment. The investors who come up with the idea of using their own working premise and domestic resources should be supported.*
- ✓ *The real estate and housing investors, in order to overcome the scarcity of land, may use the idea of getting land from households, making them the partner of the business.*
- ✓ *The health care sector investors are expected to come up with innovative and cost-effective approach of developing and promoting their service. Above all, they may focus on Health Care Information Technology, Health Consultations and Medical Tourism.*
- ✓ *The investment on education is highly beneficial if it is supported by the Information Technology. In this regard, offering online education, trainings and consultation services is effective.*

- ✓ *The hospitality and tourism sectors investors are expected to come up with innovative and cost-effective approach of developing and promoting their service. In this regard, the role of Information Technology is pivotal.*
- ✓ *The investment on information and communication technology provides a competitive advantage to the investor, as it is essential for very existence of every business.*
- ✓ *The transport sector is crucial for very existence of every business. The investors are expected to appear with idea of using innovative technology and domestic resources to develop and promote their service. Using the information and communication technology will contribute a lot in this regard.*
- ✓ *The media, entertainment and finance, as the study results and the experiences of other countries reveal, are too much reliant on the utilization of the mobile app and internet access. In this regard, the future of these sectors is promising. Hence, the investors are expected to come up with the utilization of innovative information.*

Finally, the most prevalent problems (like finance, inputs, land, utilities, transport and marketing infrastructure) of the business world need short, medium and long-term solutions. The city administration, with the support from all stakeholders, has to devise various mechanisms of addressing aforementioned problems.

5. Urban-agriculture: Investment Opportunities, Priorities and Challenges

5.1 Introduction

Urban and peri-urban agriculture plays an important role in Addis Ababa’s economy, food and livelihood systems. The contribution of urban agriculture to the GDP was 0.56%, 0.45% and 1.35% in 2015/16, 2016/17 and 2017/18 respectively. It also contributes to more than 3 percent of the total employment. The contribution of farm products to the city from urban agriculture producers is significant. According to AASP (2017), 30 per cent of vegetables, 65 percent of milk and close to 35 percent of poultry product consumed in the city are supplied by urban and peri-urban agriculture.

5.2 Investment Opportunities of Selected sub-sectors in Urban-agriculture

5.2.1 Poultry

Inputs Availability: The major inputs that are considered as the backbones of the poultry industry are feed, vaccines and drugs, and several equipments.

Feed: Annual poultry feed production by feed processing plants in 2015/16 has been estimated at 34505 tones and the amount of production has increased in a slow but steady manner. However, premixes and concentrates are usually imported since there is no or insufficient production of good quality premixes and concentrates in the country.

Vaccines and drugs: are both produced locally and imparted. Some of the locally produced vaccines are live and inactivated Newcastle disease, IBD, Fowl pox, and Fowl typhoid (Boere, *et al.*, 2015). Other important vaccines are not available from local producers. Hence, they are supplied by handful of importers.

Equipment: most equipment is imported as there is quite limited attempt to produce in Ethiopia. The importers have close relationships with several companies abroad.

Output Market: The annual per capita consumption of poultry products (egg and meat) in Addis Ababa was around, 5.5kg, 6.3kg and 7kg in 2013/4, 2014/15 and 2015/6. Therefore, using the latest available per capita consumption data (2015/16) as a springboard and given the population projection of Addis Ababa and national per capita income form 2015/16-2024/25; the total annual consumption of poultry in the city is estimated considering a two cases scenario.

Case 1: It is known that if the per capita demand remains the same, under normal circumstances, the total demand will increase parallel with the population. Assuming the per capita demand and productivity would remain the same over the years, the total demand will be 4,030,000x 7kg=28.2M kg per annum and the deficit will be 18.33M kg (65%) in 2025.

Case 2: Income elasticity of poultry products is 1.1, which means as income increases in certain proportion, the amount of demand for such products will increase more than the proportionate change in income. If the per capita income reaches at least $ 1,412 in 2025, the per capita consumption is expected to approach 14kg per capita (since the elasticity of demand for poultry products is 1.1). The total demand for poultry products will then be 4,030,000X13.9kg =56M kg per annum, while the deficit will be 36.4 M kg (65%).

Under the first case scenario, the demand is characterized by a relatively slow but steady rise. In the second case scenario the demand has exhibited and increase in increasing rate. Therefore, in both case scenarios the aggregate demand for poultry products has been increasing and is forecasted to increase.

Profitability: Based on general assessment of production costs and market price for poultry products, it can be concluded that an attractive profit margin can be enjoyed in the sub sector.

Compatibility with Addis Ababa's Context

Land utilization: With the proper shade and farms area design, and effective diseases prevention and waste management, the poultry sub-sector is feasible given the land shortage in the city.

Environment: Urban agriculture in general and urban poultry farming in particular has by and large limited negative effect on the natural environment.

Cities plan: The poultry sub-sector is identified as one of the high value agricultural commodities and suggested to be practiced in Addis Ababa as per the city's 10 years structural plan (AASP, 2017-2027).

5.2.2 Dairy

Inputs Availability: The major inputs in commercial dairy farms are, *inter alia*, feeds and concentrates, veterinary and pharmaceutical service, and multiple equipments. The status of local input availability is low.

Feeds and concentrates: In commercial dairy farms feed is the main constraint and accounts more than 60 percent of the cost of production. Commercially-prepared, balanced, dairy cattle concentrate-feeds of good quality are sold by number of feed mills and imported. They are all expensive and are rarely used by small-scale urban dairy farmers.

Veterinary and pharmaceutical service: Provision of veterinary service is the major and the day to day activity and encompasses basic animal health education; treatment and vaccination and laboratory diagnosis. The accessibility of veterinary services for urban businesses is limited while most pharmaceuticals are locally produced and available at animal drug stores.

Equipments: The main equipment and ingredients are *milk collection*, *milk transportation*, *laboratory*, and *storage*. None of the items are produced in Ethiopia. The dairy sector is in a critical problem to fly in the items from abroad in a timely manner to facilitate the day to day activity of milk production and processing, and quality control.

Output Market: The per-capita consumption of milk in Addis Ababa has registered a fast and seedy growth. Based on the latest three years report it was estimated to be 16.9, 17.5, and 18 liters in 2013/14, 2014/5, 2015/16 respectively. Given the population projection of Addis Ababa and national per capita income form 2015/16-2024/25, the total annual consumption of milk in the city is estimated considering a two cases scenario.

Case 1: It is known that if the per capita demand remains the same, under normal circumstances, the total demand will increase parallel with the population explosion. Assuming the per capita demand and productivity would remain the same over the years, the total demand will be 4,030,000x 18L=72,540,000M Li in 2025 and the deficit will be more than 24.4 M Li (35%).

Case 2: Income elasticity of milk is 2.1, which means as income increases by 1 proportion, the amount of demand for such products will increase by 2.1. Assuming that Ethiopia will reach the middle income status by 2025, the per-capita income would increase significantly, and that the population of Addis Ababa will exceed 4 million. If the per capita income reaches at least $ 1,412, the per capita consumption is expected to approach 68.7 liter per capita in 2025 (since the income elasticity of milk is 2.1). The total demand for milk will then be 4,030,000X68.7 liter =more than 276M liter per annum, while the deficit will be close to 97M liter (35%).

Therefore, in both case scenarios the aggregate demand for milk has been increasing and is forecasted to increase. Moreover, the current and the projected per capita milk consumption are by far lower than the recommended amount i.e. 200 liter/ annum/ capita. Besides, most dairy processing plants in the country are operating under capacity, i.e., less than 50%. Therefore in order to enhance the caloric intake per capita form milk and to supply sufficient impute for milk processing plants, further investment in the area should be encouraged.

Profitability: Small scale milk producers enjoy above-normal profits with very low capital input. Commercial medium and large scale producers and processors are also profitable. Thus, the sub-sectors profitability is almost granted.

Compatibility with Addis Ababa’s Context

Land utilization: with the proper shade and farms area design and waste management, the urban dairy sub-sector is workable given the land shortage in the city.

Environment: The adverse impact of dairy farms on the environment is not significant. The major environmental concern in Addis Ababa arises from the bad odor and waste emitted from the dairy sub-sector.

Cities plan: The dairy sub-sector is identified as one of the high value agricultural commodities and suggested to be practiced in Addis Ababa as per the city’s 10 years structural plan (AASP, 2017-2027).

5.2.3 Vegetable Production

Inputs Availability: There are several inputs needed in urban vegetable farms depending on their size and product Varity. The most important ones, among others, are improved seeds, pesticides, fertilizers and several farm equipments. The status of these inputs availability locally is found to be low.

Improved seeds, pesticides and fertilizers: The increasingly high cost of improved seeds and agrochemicals is the most critical problems experienced by the urban farms.

Equipments: Equipments range from variety of mechanized and high tech to locally made manual hand tools. Most high tech mechanized equipments are imported and are not affordable by even the medium scale operators.

Output Market: The latest available per capita consumption of vegetable in Addis Ababa was 110kg in 2015/16. Only 30% of the total vegetable demand of the city is met by urban and peri-urban production. Given the population projection of Addis Ababa and national per capita income, the total annual consumption of vegetable and root in the city is estimated considering a two cases scenario.

Case 1: Assuming no change in the per capita demand, total demand for vegetable products would be 4,030,000M x 110kg =443.3M kg/yr in 2025, while the deficit will be 310.3M kg (70%).

Case 2: If the per capita income reaches at least $1412 in 2025, the per capita consumption is expected to approach to 200 kg/capita, since the elasticity of demand for vegetables is 1%. The total demand for vegetables will be 4,030,000M x 199.89 kg = more than 805.Mkg per annum, while the deficit will be 563.9 Kg (70%).

Therefore, in both case scenarios (case 1 and case 2) the aggregate demand for vegetable has been increasing and is forecasted to increase. Vegetables are catered for both the domestic and export markets. Hence, there is great deal of market opportunity locally and internationally.

Profitability: Urban vegetable cultivation is generally a profitable venture. Though the degree varies, all of the surveyed undertakings are enjoying normal profit

Compatibility with Addis Ababa's Context

Land utilization: In comparison with urban poultry and dairy farming, the vegetable sub-sector requires higher acreage and quality of land, as well as irrigable water or dug well. Hence, with innovative land utilization and strict adherence with the city's structural plan vegetable farm investments can be promoted in the city.

Environment: Urban vegetable farming contributes to save energy that would have been consumed in transporting products from rural to urban areas. Local cultivation also allows energy savings in storage and cooling. It minimizes wastage, as vegetables are perishable farm products.

Human resource: Vegetable farming is highly labour intensive, requiring 30-35 laborers per hectare per day. Hence investors would not face difficulty to hire as Addis Ababa has abundant unskilled labour mainly due to the sky rocketing rural-urban migration.

Cities plan: The Addis Ababa city government is committed to promote urban farming and promote the right of individual and organized farmers within and around the city. To this end the government has recently established urban agriculture and farmers' affair commission.

5.2.4 Ornamental Plants

Inputs Availability: Each grower should review the needs of their operation to determine the ideal mix of equipment based on size, specialization and capital.

Plastic sacks and flower pots: Most planting materials, seedling plastic sacks and flower pots are mainly produced by local firms.

Seed, fertilizers and plant protection agents: while some seeds are imported, all fertilizers mixers, plant protection agents and green house equipments are imported from abroad and are quite expensive.

Equipments: Equipments range from variety of mechanized and high tech to locally made manual hand tools. All high tech mechanized equipments are imported and are not affordable by even the medium scale operators.

Hence, local inputs in the urban nursery, gardening and landscape businesses are fairly available. However, most inputs for green house based cut-flower investments are mainly imported as their local production is negligible.

Output Market: Ethiopia is the second top exporter flower to the European market. The cut flower export earning has been increasing over the years, for example it was about 104.7, 162 and 196.6 million USD, in 2008, 1012 and 2017 respectively. Conversely, the domestic market is too small and negligible, as significant Ethiopian population is living at subsistent level with undeveloped flower consumption culture. However, this market has certain potential to be developed as a parallel market. The sub-sector has also got an opportunity to substitute import of live tree, bulbs and other ornamentals. For instance the country imported an average of 97 million Ethiopian birr worth of these items form 2013/14-2018/19.

Profitability: Though the demand for the products fluctuates due to seasonal test of customers, sufficient profit can be enjoyed in the sub-sector.

Compatibility with Addis Ababa's Context

Land utilization: The conventional green house based cut flower investment is not recommended in Addis Ababa as it requires multiple hectares for a single investor. However, seedling nursery, and landscape investment is ideal in Addis Ababa as the government is relentlessly working on green legacy and city beautification.

Environment: The floriculture industry has its own negative environmental and health impact, due to the input the industries utilize. However, since no green house base cut flower investment is yet operational in Addis Ababa, the aforementioned impacts are not concerns so far. In contrary, operational flower and tree seedling nurseries and landscape businesses are positively contributing to the urban ecology. .

Cities plan: As a result of the ambitious of green legacy undertaking to become a green city by planting various types of eoc-friendly seedling to combat environmental degradation, and the sheger beautifying project; investment in tree, fruit and ornamental seedling is highly encouraged by the government.

5.3 Investment Priorities in Urban-agriculture

Based on the investment opportunity assessment, the poultry and dairy sub-sectors have high investment opportunity. In the poultry sub-sectors the reasons are the excellent market demand and sustainability and good profit. Even its land requirement makes it better than the other sub-sectors in urban agriculture. Similarly, the urban dairy production sub-sector has high investment opportunity. Similar reasons are valid for this sub-sector too, except the waste management concerns.

The urban vegetable production sub-sector has a moderate investment opportunity, while the ornamental plants sub-sector has a relatively low level opportunity in Addis Ababa. Though, the market demand and its sustainability are excellent for vegetables, and a modest profitability can be enjoyed, the input availability is rated low. Access to cultivable investment land in Addis Ababa is another impediment. Concerning, urban ornamental sub-sector the opportunity to invest at medium and large scale cut-flower is low. Though, the market demand and its sustainability are good, the local demand is elastic and seasonal. Besides other factors like access to cultivable land and environmental concerns in relation with agrochemicals application makes it less desirable in cites. The most feasible ornamental investments in Addis Ababa are nursery, gardening and landscape businesses.

To sum up, based on their respective opportunity score the surveyed sub-sectors in urban agriculture can be ranked to indicate priority. Accordingly, the urban poultry sub-sector comes first followed by the dairy sub-sector. The third and the fourth ranks are taken by the vegetable and ornamental plants sub-sectors respectively. Despite the above prioritization based on current opportunity, all the sub-sectors have huge potential resulted from unfulfilled local, national and oversee demand.

5.4 Investment Challenges in Urban-agriculture

The major existing and potential challenges in urban agricultural investment include: environmental degradation and water and air pollution; public health hazards due to contaminated irrigable water; land tenure insecurity; negative attitude towards urban agriculture; shortage of inputs and inadequate credit supply; inefficient bureaucracies for licensing new investments and facilitating land acquisitions; inadequacy of water and electricity; and shortage of foreign currency (for large scale) investments.

5.5 Conclusion and Recommendations

Conclusion

The highest opportunity score come from the poultry sub-sector followed by the dairy farm business. In the same token, while the vegetable production sub-sector has a moderate opportunity, ornamental plants sub-sector is rated low in terms of its current opportunity to invest. Nonetheless, all of the surveyed sub-sectors have enormous potential resulted from, *inter alia*, unfulfilled market demand, increasing per capital income, and population growth.

There is a common misconception of regarding agricultural investments as exclusively rural undertakings. However, there is emerging green and self suffice city concept where modern cites are supposed to produces part of their food consumptions with proper land utilization and innovate production techniques. In line with this, the Addis Ababa city structural plan (2017-2027), has allocated a total area of 7,389.2 ha of land for urban agriculture and established a commission to coordinate the activities. Above and beyond the existing poultry, dairy, vegetable and ornamental farms, future agricultural investment promotions should also consider mushroom and herbs cultivation and vertical and roof top farming techniques as emerging areas of investment.

Recommendations

- Instead of pushing away vegetable farm business out of the city, an innovative approaches like vertical and roof top farming techniques should be experimented.
- It is known that there are several informal and small farmers in Addis Ababa. In order to provide extension services, credit, training and the like, the government has to bring them to the formal economy.
- Promoting the widely known export oriented cut-flower farm business within Addis Ababa is practically invalid and not recommended. Instead investment promotion activates in the sub-sector should focus more on nurseries, ornamental landscape and beautification service.
- The Urban vegetable and ornamental plants sub sector suffers from the short supply and high price of fertilizers. One mechanism of alleviating this constraint is through the use of poultry and dairy farms, and household and market wastes. Linking solid waste management to urban agriculture (composting), improves production and productivity, creates job opportunities and income generation and saves foreign currency.