



PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG



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ADDIS ABEBA CITY ADMINISTRATION INVESTMENT COMMISSION
A.A

PROJECT PROFILE ON MANUFACTURING OF LADY’S HANDBAG

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I. Executive summary

This project profile is prepared to assess the viability of running ladies hand bag manufacturing factory, in Addis Abeba city administration. Hence Market, Technical, Organizational and Financial study was made to investigate the viability of the envisaged project.

This project profile on lady's hand bag manufacturing factory has been developed to support the decision –making process based on a cost benefit analysis of the actual project viability. This profile includes marketing study, production and financial analysis, which are utilized to assist the decision-makers when determining if the business concept is viable. Ethiopia has a private sector driven ladies hand bag manufacturing industry. According to the latest data sourced from the Ethiopian investment commission there are more than 171 registered companies to invest on leather products manufacturing business.

The location of the plant will be decided on the basis of access to raw materials, infrastructure namely power, water, transport and telecom to easy access to international market. The most locally available raw materials for the factory are leather.

The factory at full capacity operation can produce 390,000 pcs of lady's handbag, per year based on 260 working days and their shifts of 24 hours per day.

The total investment capital including establishing the factory is Birr 265.05million. Out of the total investment capital, the owners will cover Birr 79.52 million (30 %) while the remaining balances amounting to Birr 185.54 million (70 %) will be secured from bank in the form of term loan.

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As indicated in the financial study, the cash flow projection of the project shows surplus from the first year on. The net cash flows of the project range from Birr 46.60 Million in the first year to Birr 67.05 million at the end of the 10th year of operation. At the end of the 10th year of operation period the cumulative cash balance reaches Birr 676.82 million birr. The Benefit-cost ratio and Net present value (NPV) have been calculated at 17% discount factor (D.F) for 10 years of the project activity. Accordingly, the project has NPV of 382 million Birr at 17%D.F. and the benefit-cost ratio of 1.41 at 17% D.F.

Therefore, from the aforementioned overall market technical and financial analysis we can conclude that the leather products (lady's handbag) manufacturing business is a viable and worthwhile.

1. Background information

1.1. Introduction

Handbag are one of the most complementary clothing accessories and one of the most popular accessories for women. In addition, handbags are needed by women to house various accessories such as hairbrushes, make-up, mobile phones, car keys, and house keys. Handbags are made with different shapes, designs, colours, and functions. No matter whether you are young or old, everyone will feel that their appearances will not be complete without a handbag. Perhaps because of this, there are different types of handbags with their own functionality and fit for a wide variety of events. There is various shape of handbags including round shape, rectangular shape, rectangular shape amongst many others. In addition, handbags use a variety of materials including buttons, zips, velcro, and iron for bag hangers that are decorated with a variety of decorations. In today's market there are countless types and designs of the latest bags with interesting patterns, colours, and decorations.

The manufacture of handbags requires appropriate materials matched to the design of the handbags. An example of materials for handbags include zips, velcro, tab buttons, straps, buttons, hooks and clips. The use of zip, velcro, hooks and clips on the handbags provides a latch on the handbag, as well as a safety measure to prevent the items being kept from getting out of the bag. The zipper is usually placed on the surface of each pocket in the bag as a security function to keep the items away and to prevent items such as purses from being pulled out by thieves who clutch their pockets. In addition, the structures of the bag section also include buttons, hooks, safety pins which have a similar function to a zip

1.2. Product description

A woman's handbag is an integral part of her outfit. A handbag is more than just a sack to carry essentials. It's a fashion statement, a way to express her style and creativity. Handbags come in many shapes, sizes, colors, prices and labels.

Luggage and handbag can be categorized in different types: -

❖ **Satchel Bag**

Satchel bags are large bags used for casual occasions. The bag part is a big loose sack connected to a long strap. The strap is usually worn on the shoulder and crossed over the body so the bag rests on the opposite hip. Women usually wear satchel bags, but it's also acceptable for men to wear them.

❖ **Bucket Bag**

A bucket bag is exactly what the name sounds like. The bag part is in the form of a bucket, with a little less cylindrical shape. It's usually attached to a shoulder strap but can also be attached to a hand strap. The top part is left open or secured by a zipper.

❖ **Hobo Bag**

Hobo bags are oval in shape, with a zipper on the top. Small straps are connected to both ends so your shoulder can go through them. This bag usually has many compartments on the inside and a large storage area.

❖ **Clutch**

A clutch is mostly used for formal occasions. It's a small bag -- circular, oval, rectangular, or square. The clutch is held in one hand and rarely comes with a strap. Clutches are usually made from good quality and embellished to look more glamorous. There isn't much space in a clutch, only enough for a few essentials -- cell phone, lipstick, money.

1.3. Project location and justification

1.3.1. Location of Addis Ababa

Addis Ababa is the seat of the Ethiopian federal government. It is located on the central highlands of Ethiopia in the middle of Oromia Region. The absolute location is around the intersection point of 9°14'48"N latitude and 38°44'24"E longitudes. This is very near to the geographical center of the country. It is, therefore, equidistant to the peripheral areas or is equally accessible to almost all parts of Ethiopia. Addis Ababa is located on a well-watered plateau surrounded by hills and mountains. The city is in the highlands on the edge of the Ethiopian rift valley or the eastern slopes of the Entoto Mountain ranges bordering the Great Rift Valley. The total area of Addis Ababa is about 540 km² of which 18.2 km² are rural. Addis Ababa's built-up urban area spans 474 km². It is also the largest city in the world located in a landlocked country.

1.3.2. Demography of Addis Ababa

According to the CSA (2013) population projection, Ethiopia's total population reaches about 105 million people in 2022. Of the total population 22.9% (24 million people) live in urban areas. Ethiopia's urban population is expected to triple by 2037 (World Bank, 2015). Addis Ababa hosts an estimated 3,859,638 people. Currently, Addis Ababa is experiencing an annual growth rate of 3.8% and is estimated to reach 4,696,629 inhabitants by 2032 (CSA, 2015).

1.3.3. Economic activity of Addis Ababa

The transformation of Addis Ababa has especially been rapid since 1991. According to the data from the city's Bureau of Finance and Economic Development (2006), per capital income of Addis Ababa has grown from USD 788.48 in 2010 to USD 1,359 in 2015. The city also achieved a decline in the

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poverty index from a high of 29.6 in 2012 to 22.0 in 2014. Moreover, the current poverty headcount index for Addis Ababa is estimated at 18.9 while the poverty severity account for 5 and 1.8 index points respectively. Even though, the poverty status of Addis Ababa has an improvement over previous years, there is still much work to be done to curb both the incidence and severity of poverty.

The major contributor to the economic growth of the city is the implementation of publicly financed mega urban projects like condominium housing, the Light Rail Transit, the international airport and industrial zone development (The state of Addis Ababa, 2017). The existence of international large and medium-size enterprises in and around Addis Ababa have also significant role in creating huge opportunity for employment and technology transfer. Furthermore, there are strong demand for goods and services following the existence of many embassies and inter-governmental organizations like the African Union, the United Nations Economic Commission for Africa.

The manufacturing sector's contribution to Addis Ababa's GDP is high. Despite the fact that 86% of the industries in the city are micro and small scale (cottage and handicrafts, and small-scale), the majority of the country's large and medium scale industries are found in the city. Noticeable increases are also registered currently in other aspects of industrial growth.

The service sector is both the largest contributor to the city's economy and the largest employer. It contributes to 76.4% of the city's GDP while industry's share makes up (almost all) the rest. This sector is dominated by three major sub-sectors: Transport and communication; Real estate, Renting and Business services; and Trade, Hotel and Restaurants. According to the state of Ethiopian Cities 2015 report, the service sector has also been responsible for more than 50% of the growth in the estimated annual growth of the city's GDP. Although 75% of employment in the city is also generated in the service sector, a large proportion of the employed work in low skill and low paying

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jobs as shop salespersons, petty and 'gullit' traders, sales workers in small shops, domestic helpers or doorkeepers and restaurant service workers.

Analysis of the economic structure of Addis Ababa reveals that the services sectors (63%) dominates with industry (36%) in second place indicating that these sectors account for almost all of the Addis Ababa's GDP (The State of Addis Ababa, 2017).

Addis Ababa has a great share in the economy of the country due to its attractiveness to businesses, companies, individuals and foreign direct investment. Overall primacy index of the city is 24.8 based on urban employment and unemployment survey (CSA 2015). According to the State of Addis Ababa 2017 report, the simultaneous high rates of economic growth and urbanization in Addis Ababa indicates a likely further rising dominance of the city in Ethiopia's economy as well as growing agglomeration of economic activities in and around the city.

1.4. Why is it beneficial to invest in Addis Ababa?

Addis Ababa is the largest and most economically significant city in the country. Ethiopia's urban population share is only 17 percent (as of 2012, World Bank 2015). The city is the only urban area in Ethiopia capable of delivering scale economies in terms of concentrated demand, specialization, diversity and depth of skills, innovation, and technology transfers. Thus, investors will be benefited in getting capable human power from the market.

The capital is the country's main industrial hub. The city dominates industrial capacity in almost all the braches of light manufacturing that Ethiopia prioritizes. As a result Addis Ababa completely dominates production in various subsectors. This can be taken as the political and social stability of the city.

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Overall, the city has a beautiful environment, favorable location, and strong industrial base. Its advantage as an economic powerhouse of the country and human resource center are the most attractive features for local and overseas investors.

Moreover, investors will be getting a comprehensive set of incentives for priority sectors. These include:

- Customs duty free privilege on capital goods and construction materials, and on spare parts whose value is not greater than 15% of the imported capital goods' total value.
- Investors have the right to redeem a refund of customs duty paid on inputs (raw materials and components) when buying capital goods or construction materials from local manufacturing industries.
- Income tax exemption of up to 6 years for manufacturing and agro-processing, and up to 9 years for agricultural investment.
- Additional 2-4 years income tax exemption for exporting investors located within industrial parks and 10-15 years exemption for industrial park developers.
- Loss Carry forward for half of the tax holiday period. Several export incentives, including Duty Draw-Back, Voucher, Bonded Factory, and Manufacturing Warehouse, and Export Credit Guarantee schemes.

1.4.1. The city benefit from the investment

The city will be benefited from investment. These are discussed below.

- Employment opportunity

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Investment is expected to provide direct and indirect employment. These range from unskilled casual workers, semi-skilled and skilled employees.

- Improving growth of the economy

Through the use of locally available materials and exporting products, the investment contributes towards growth of the economy by contributing to the growth of domestic product. These eventually attract taxes including VAT which will be payable to the government hence increasing government revenue while the cost of local materials will be payable directly to the producers. In addition, domestic products save foreign exchange and exports also bring money to the country.

1.5. Availability of raw materials

1.5.1. Leather production in Ethiopia

The industry bases itself on the country's livestock resources. Ethiopia possesses one of the world's largest livestock population with 65 million cattle, 40 million sheep, and 51 million goats, 8 million camels and 49 million chickens in 2020 (Central Statistics Agency, CSA, 2020). This enormous population of livestock provides ample opportunity for the development of the leather industry in the country. This makes Ethiopia the 1st from Africa and the 10th from the world in its cattle population which enable the country to have a strong raw material base for the leather industry.

2. Marketing study

2.1. Market analysis summary

The current drive and emphasis by the government on the diversification of the industrial base away from the other sector presents an opportunity for production industry to a valuable contribution towards achieving goal. Having undertaken a thorough and comprehensive research of the market we realized that there was a vast opportunity for domestic products. Aware of the fact operating in such a market is largely dependent on good networking, the promoter intends to establish networks and strategic relationships with various wholesalers and retailers to ensure a steady stream of orders. In so doing the owner intend to ensure that the products they produce are of extremely high quality and fully serve the customers purpose.

2.2. The Supply of luggage and handbag

2.2.1. Local luggage and handbag Supply

In Ethiopia there are More than 75 domestic and foreign leather and leather product factories have invested in Ethiopia. Though there were only few tanneries a decade ago, in the industry there are 29 tanneries, 21 medium- and large-scale footwear manufacturers and 19 leather products firms. In addition, about 50 small and micro enterprises and there are more than 171 companies has been registered to invest on manufacturing of leather products like handbags. The current utilized capacity of those medium scale and small scale leather goods and leather garment enterprises is estimated to be about 3,769,452 pcs of luggage and handbag/year.

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Table 1 Local supply of leather garment, including handbag and luggage in Square feet

	2005	2006	2007	2008	2009	Average
Local Biscuit in quintals	81,325,000	84,232,000	21,101,000	8,404,000	15,923,000	42,197,000

Sources: - CSA

2.2.2. Import

The supply of luggage and handbag has been met both through import and domestic production.

Although there is no apparent trend in the growth of import luggage and handbag has continuously been appearing in the import statistics.

Table 2 Volume of imported luggage and handbag from 2012 to 2021 in pcs

year	Gross Wt. (Kg)	Net Wt. (Kg)	CIF Value (ETB)	CIF Value (USD)	Total tax (ETB)	Total tax (USD)	Quantity
2012	1,278,791	1,268,196	67,269,794	3,765,325	47,483,499	2,657,817	2,579,314
2013	1,615,724	1,612,532	83,560,537	4,444,686	61,288,100	3,259,988	3,241,344
2014	2,208,636	2,205,376	108,707,943	5,396,649	79,573,680	3,950,321	3,900,397
2015	2,718,623	2,717,584	143,073,854	6,884,508	99,424,852	4,784,181	5,169,143
2016	1,093,708	1,092,942	62,429,068	2,890,435	45,610,581	2,111,748	2,279,756
2017	3,396,661	3,395,693	175,977,925	7,266,740	128,045,544	5,287,446	6,118,384
2018	1,212,332	1,204,123	70,720,167	2,569,779	51,614,945	1,875,379	2,462,595
2019	131	131	3,291	113	2,416	83	106
2020	2,006,568	2,005,189	216,754,739	6,201,852	152,854,616	4,373,523	3,575,894
2021	1,903,901	1,903,188	388,696,993	8,770,239	249,406,961	5,627,413	3,430,800
Average	1,743,507.49	1,740,495.55	131,719,431.08	4,819,032.78	91,530,519.40	3,392,789.85	3,275,773.30

Source: Ethiopia customs Authority

As it has been shown in table 2 import of Luggage and handbag which was 2,579,314pcs at the beginning of the period (2012) has increased to 3,430,800 by the end of, 2021. A closer observation

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at the data set reveals that imported Luggage and handbag over the study period has shown varying patterns. Based on the data obtained from Ethiopia customs Authority, the annual average volume of imported Luggage and handbag is 3,275,773 pcs from 2012 through 2021.

2.2.2.1. Forecasted future import of luggage and handbag

Table 3 Future forecast of import of Luggage and handbag by trend adjusted exponential smoothing method

Year	Actual	Trend adjusted exponential smoothing
2012	2,579,314	
2013	3,241,344	
2014	3,900,397	
2015	5,169,143	
2016	2,279,756	
2017	6,118,384	
2018	2,462,595	
2019	106	
2020	3,575,894	
2021	3,430,800	
2022		3,430,800
2023		3,515,949
2024		3,601,097
2025		3,686,246
2026		3,771,394
2027		3,856,543
2028		3,941,692
2029		4,026,840
2030		4,111,989
2031		4,197,137
2032		4,282,286

Compiled: - by Consultant

2.3. Luggage and handbag Demand Projection

The demand for Luggage and handbag can be influenced by a number of factors. The size of population and its growth rate, disposable income and prices are few among many variables. However, data on some of these parameters are not readily available in Ethiopia. For the purpose of this study, attempts have been made to forecast the likely future demand for Luggage and handbag on the basis of the following assumptions:

- i. Out of the average local supply of leather garment 50% is assumed to Luggage and handbag and also assumed to be increased by 2.5% every year based on 21,098,500 square feet local production per year.
- ii. For to produce one hand bag 0.52 M² of leather is required, so 21,098,500 square feet = 3,769,452 pcs of handbag current local supply
- iii. Ethiopia population is estimated to be 117,270,906 in 2021 and 21% is urban population
- iv. Annual growth of population is taken to be 2.5%
- v. Per capital usage = $\frac{\text{Effective demand}}{\text{Urban population}}$
- vi. Effective demand = usage of domestic supply luggage and handbag+ Average imported luggage and handbag= 3,769,452 pcs / year + 3,430,800 pcs/year = 7,200,252 pcs /year.
- vii. Per capital usage = 7,200,252 pcs /24,626,890 = 0.29
- viii. Assume that Per capital usage will be increased by 10% every year

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Table 4 Projected Demand for Luggage and handbag in Ethiopia

Year	Population	Urban population 21%	Per capital usage of luggage and handbag is 0.29 pcs per person per year and will increase by 10%	Total demand for handbag
2022	120,202,679	25,242,563	0.32	8,052,377
2023	123,207,746	25,873,627	0.35	9,079,056
2024	126,287,940	26,520,467	0.39	10,236,635
2025	129,445,138	27,183,479	0.42	11,541,806
2026	132,681,267	27,863,066	0.47	13,013,386
2027	135,998,298	28,559,643	0.51	14,672,593
2028	139,398,256	29,273,634	0.57	16,543,349
2029	142,883,212	30,005,475	0.62	18,652,626
2030	146,455,292	30,755,611	0.68	21,030,836
2031	150,116,675	31,524,502	0.75	23,712,267
2032	153,869,592	32,312,614	0.83	26,735,581

As it is indicated above the effective demand for Luggage and handbag in 2022 is 8,052,377 pcs. This volume will increase to 26,735,581 pcs in the year.

2.4. Demand-Supply Gap Analysis

When we see the historical supply volume of Luggage and handbag in Ethiopia there is no apparent trend in the growth. Because both the import and production data are found to be erratic. Hence, it is found difficult to objectively forecast the future supply volume. Single exponential forecasted method was used, for forecasting purposes. A 2.5% supply growth rate, is also assumed for local production increase, for new as well as the capacity utilization increase for the existing unit.

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Table 5 Demand supply gap analysis

Year	Domestic production in (pcs)	Forecasted Import in (pcs)	Total supply in (pcs)	Demand (pcs)	Excess demand If import totally substitute by local production (in pcs)
2022	3,769,452	3,430,800	7,200,252	8,052,377	4,282,925
2023	3,863,688	3,515,949	7,379,637	9,079,056	5,215,368
2024	3,960,281	3,601,097	7,561,378	10,236,635	6,276,354
2025	4,059,288	3,686,246	7,745,534	11,541,806	7,482,518
2026	4,160,770	3,771,394	7,932,164	13,013,386	8,852,616
2027	4,264,789	3,856,543	8,121,332	14,672,593	10,407,804
2028	4,371,409	3,941,692	8,313,101	16,543,349	12,171,940
2029	4,480,694	4,026,840	8,507,534	18,652,626	14,171,932
2030	4,592,711	4,111,989	8,704,700	21,030,836	16,438,125
2031	4,707,529	4,197,137	8,904,666	23,712,267	19,004,738
2032	4,825,217	4,282,286	9,107,503	26,735,581	21,910,364

Compiled by: - Consultant

As shown in the above table, the product will have unsatisfied demand for the coming ten years' period. The projected unsatisfied demand will continue to be positive until 2032, if luggage and handbag import is blocked by the government, have to be substituted that also helps in saving the foreign currency outflow from the country.

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3. Technology and engineering

3.1. Technology

Table 6 Ladies handbag production step and process description

Production step	Description	Remarks
Step one	Designing of leather Goods	Designing, rendering and creating illustration
Step two	Selection of the leather for product	For example <ul style="list-style-type: none"> ✓ Butt portion is used for making vamp component ✓ Mbelly portion for quarter component ✓ Slightly defective portion may be utilized for handle, side gussets, bottom portion of component
Step three	Pattern cutting by manually/CAD	One sample product is made through the first pattern, to check the pattern's accuracy
Step four	Clicking of material	Clicking or cutting of product is made through the first pattern
Step five	Stamping and embossing	
Step six	Leather skiving	The thickness of certain edge of leather are reduced by the help of skiving machine very efficiently
Step seven	Decoration of the patterns	<ul style="list-style-type: none"> ✓ Punching and eye letting ✓ perforation
Step eight	Closing of cut component	Assemble and joined together with adhesive
Step nine	Finishing of the product	<ul style="list-style-type: none"> ✓ Edge trimming ✓ Edge coloring ✓ Threading burning ✓ Checking stitching locks ✓ Cleaning
Step ten	Packing	✓

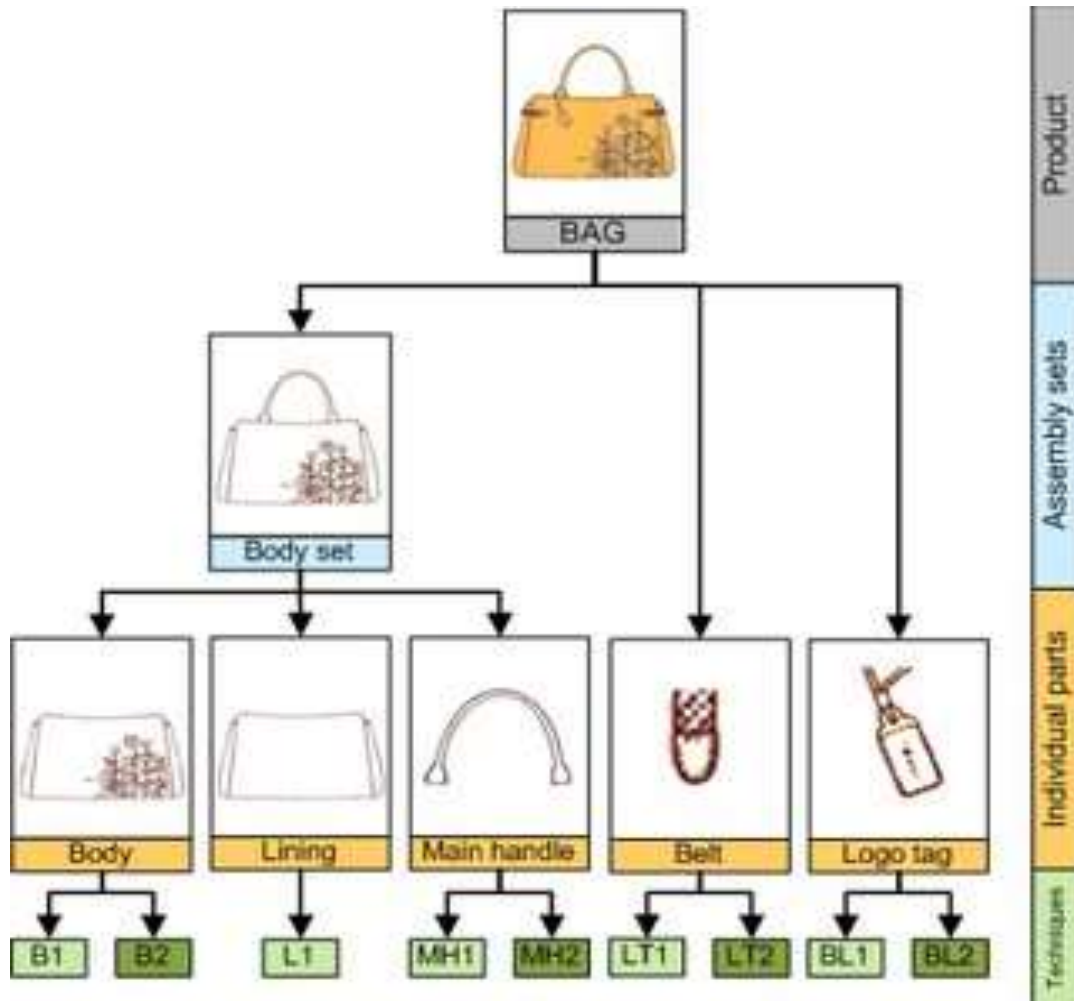


Figure 1 Handbag production process flow diagram

3.1.1. Environmental and social impact assessment of the project

Typically, any developmental projects also trigger a set of environmental and social impacts. These environmental and social due to development projects occur in different forms. An Environmental and Social Impact Assessment (ESIA) has to be carried out to study the potential environmental and social impacts due to the production ladies hand bag. Potential environmental and social impacts due to the production of leather based products on attributes like air quality, noise, water quality, soil, flora, socio-economic, etc. have to be assessed as part of the ESIA study. Appropriate mitigation measures to help minimize/avoid impacts from the development have to be recommended in the study. The measures include avoidance measures, mitigation measures and environmental enhancement measures. For the purpose of including environmental costs, the costs of wastewater treatment plant and solid waste incineration systems are included in the cost of machinery and equipment.

3.1.2. Production Capacity and Production Program

3.1.2.1. Plant capacity

The annual production capacity of the plant in full capacity is 390,000 pcs of hand bag per year. The production capacity is based on projected demand and realistic market share that could be captured. The production commences three shift and 260 working days a year. The production program does not include Sundays and national and public holidays.

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3.1.2.2. Production program

. The plant initially produces 70 % of its annual rated capacity bound to initial operating problems such as machine set up and marketing. The production capacity will increase by 10 % and attain its full capacity by the third year of its commencement.

Table 7 Production mix in pcs

	Period			Start-up			Full Capacity	
	Capacity utilization			70%	80%	90%	100%	100%
	Project year			1	2	3	4	5
	Product type		At full capacity Per day					
1	Ladies handbag	Pcs	1,500	273,000	312,000	351,000	390,000	390,000

3.2. Engineering

3.2.1. Land, buildings and civil works

The required area (m²) and construction cost for the production facilities essential for the successful operation of the processing plant is shown in Table 8. A total area ready for the processing plant is 10,000 m² out of which 5,366 m² is to be covered by building while uncovered area of 4,634m² is left storage of parking, green area and for future expansion. In order to estimate the land lease cost of the project profiles it is assumed that all the project will be located in different land level from level 1/1 to level 4/3, their current market lease price is from 39,073.31 birr per M² to 2,800.71 birr per M² respectively. Therefore, for the profile a land lease rate of birr 3,885 per M² have been taken, which is between the ranges.

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The cost of construction of building should be appropriate to the size and expected profitability of business, costs of building generally differs by the type of construction materials used, the type of foundation, wall height and location. The current building cost for simple storage and processing room is from 10,000.00 Birr per m² to 25,000.00 Birr per m². The total construction cost of buildings and civil works, at a rate of Birr 20,000 per m² is estimated at Birr 112.232 million. Therefore, the total cost of land lease and construction of buildings and civil works is estimated at Birr 151.08 million.

The proposed plant layout comprises the following buildings and structures.

Table 8 Building costs

S/No	Descriptions	Total area	Estimated cost per square meter (in Birr)	Total estimated cost (in Birr)	Remarks
1	Raw materials store	1,500M ²	20,000.00	30,000,000.00	
2	Production line	2,000M ²	20,000.00	40,000,000.00	
3	Main product store	1,000 M ²	20,000.00	20,000,000.00	
4	packing materials store	500 M ²	20,000.00	10,000,000.00	
5	Office and toilet	200M ²	20,000.00	4,000,000.00	
6	Canteen	160M ²	20,000.00	3,200,000.00	
7	Guard house	6M ²	20,000.00	120,000.00	
8	parking	600M ²	5,000	3,000,000.00	
9	Green area	625M ²	500	312,500.00	
10	For expansion	3,409	0.00	0.00	
11	Fence	1,200M	400*2*2,000	1,600,000.00	
	TOTAL	10,000 M²		<u>112,232,500.00</u>	

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

Table 9 Land lease period in Addis Abeba

Sector of development activity	Period of lease	Down payment
Education, health, culture and sports	90	10%
Industry (manufacturing)	70	10%
commerce	60	10%
For urban agriculture	15	10%
For others	60	10%

Sources: - city government of Addis Abeba land development and management bureau

Table 10 Land lease floor price in Addis Abeba

S/No	Land level	Current land lease floor price per M ²	Current lease price per M ² (Market price)
1	1/1	2,213.25	39,073.31
2	1/2	2,165.47	36,825.73
3	1/3	1,900.19	34,578.15
4	¼	1,552.93	31,119.21
5	1/5	1,531.91	29,096.45
6	2/1	1327.39	27,073.71
7	2/2	1,221.18	25,050.96
8	2/3	1,191.17	23,028.21
9	2/4	1,074.39	21,005.46
10	2/5	1,027.84	18,982.71
11	3/1	994.71	16,959.96
12	3/2	960.21	14,937.21
13	3/3	927.84	12,914.46
14	¾	904.77	10,891.71
15	3/5	873.74	8,868.96
16	4/1	814.06	6,846.21
17	4/2	786.45	4,823.46
18	4/3	748.80	2,800.71

Sources: - city government of Addis Abeba land development and management bureau

3.2.2. Machinery and equipment

The main plant and machinery consists Hydraulic Cutting Press, Skiving Machine, Needle Lock stitch, Machine and etc. Major part of the machinery will be imported.

Table 11 Lists of machineries required for ladies handbag production

S/No	Machineries and equipment	Quantity
1	Hydraulic Cutting Press	1
2	Cutting Machine	1
3	Strap Cutting	1
4	Skiving Machine	4
5	Needle Lock stitch Machine	15
6	Single Needle Block	4
7	Single Needle Post-Bed Needle Feed	4
8	Dyes for Hydraulic Cutting	2

3.2.3. Lists of machinery suppliers

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4. Factory organizational structure

The selection of structure of the envisaged project is made based on the existing structure of manufacturing plants operating in the country, the capacity, complexity and technology mix of the plant. Organizational structure principles such as specialization, coordination, and departmentalization are also considered for design of structure that best suits the envisaged project

4.1. Manpower Requirement and Estimated Annual manpower costs

Table 12 Annual manpower costs

S/No	Description	Number of persons	Salary in birr	
			monthly	annually
1	General manager	1	35,000.00	420,000.00
2	Executive secretary	1	10,000.00	120,000.00
3	Manager- admin. and finance	1	25,000.00	300,000.00
4	Accountant	1	20,000.00	240,000.00
5	Cashier	1	7,500.00	90,000.00
6	Guards	5	3,500.00	210,000.00
6	Messenger and cleaner	1	3,500.00	42,000.00
7	Driver ii	4	7,500.00	360,000.00
8	Production and technical head	1	30,000.00	360,000.00
9	Chief quality controller	3	15,000.00	540,000.00
10	Machine operator	3	5,000.00	180,000.00
11	Assistant machine operator	6	5,000.00	360,000.00
12	Senior mechanics	3	12,000.00	432,000.00
13	Senior electrician	3	12,000.00	432,000.00
14	Store keeper	1	10,000.00	120,000.00
15	Manager- commercial	1	20,000.00	240,000.00
16	Purchaser	1	10,000.00	120,000.00
17	Sales- manager	1	15,000.00	180,000.00
18	Sales clerk	1	7,500.00	90,000.00
	Total	39	301,000.00	4,836,000.00

5. Financial Analysis

5.1. General

The financial analysis evaluation of lady's handbag manufacturing project, are mainly consisted of capital investment as well as operating and maintenance costs. The capital investment costs include fixed investment costs (initial fixed investment and replacement costs) and working capital, while operating and maintenance costs comprise current expenses related to material inputs, manpower cost, utility, repair and maintenance costs, spare parts, Overheads, Sales and distribution, interest and depreciation expenses.

The financial analysis and evaluation has been conducted taking assumptions:

1. It is assumed that about 70% of the total capital investment costs including the working capital requirement could be covered through development bank loans of short and long-term credits. The remaining balance 30% will be covered by equity capital contribution of the project owner.
2. Even though the project might secure loans under different term and conditions as well as from different financial sources, for the purpose of calculation of debt service scheduling, the current development bank of Ethiopia credit terms and conditions have been used. Consequently. It is assumed that the project will secure loan facility on the basis of 11.5 % annual interest rate.
3. Even though the estimated project production life is more 10 years, the financial analysis has been undertaken for a period interval covering the first 10 years only, during which time

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most of the capital assets are assumed to be depreciated, debts recovered and pay-back period accomplished.

4. It is assumed that the project will be start up production activity at 70 % capacity. During years 2 & year 3 the projects is anticipated to gradually increase capacity utilization to reach 100% in year 4. Therefore, starting from year 4 the project will be operational at full capacity.
5. Loading and unloading costs will be paid on piece rate (10 Birr per quintals)
6. For the project under reference promotional, sales and distribution expenses have been estimated at 3% of the sales revenue.
7. Maintenance and spare parts costs are 1.5% of the fixed investment costs.
8. Furniture and fixture costs assumed to be 500,000.00

5.2. Initial Fixed investment costs

Table 13 Initial Fixed investment costs

S/No	Fixed investment type	Unit of measurement	Quantity	Unit price	Total Amount	Remarks
1	Land	Square meter	10,000	3,885 birr/M ²	38,850,000.00	The period of land lease will be 70 years and 10% of the total lease amount will be paid in the first year
2	Buildings and civil works	Square meter	5,100	lump sum	112,232,500.00	
	Sub total				151,082,500.00	
3	Machineries	set	2	Lump sum	78,000,000.00	
4	Transformer	set	1	Lump sum	2,000,000.00	
5	Weighbridge	Set	1	Lump sum	4,000,000.00	
6	Truck and vehicles	Pcs	2	Lump sum	6,000,000.00	
7	Furniture and fixture	Pcs			500,000.00	
	SUB TOTAL				90,500,000.00	
	Fixed capital investment costs				241,582,500.00	
8	pre-operational expenses				2,000,000.00	
	Working capital				21,471,000.00	
	TOTAL INVESTMENT COSTS				265,053,500.00	

5.3. Working capital

Working capital is the financial means required for smooth operation and maintenance of a project mathematically, it is a difference between current assets and current liabilities. In the particular case of the project under consideration, the current assets comprise receivables, inventories (local and imported material inputs, spare parts, work in progress, and products ready for delivery) and cash in hand, while current liabilities comprise accounts payable to creditors.

5.4. Project Financing

Fixed capital investment costs and working capital requirements are assumed to be financed by equity capital of the owner and through loans of short and long-term credits.

The company obtains loans under different terms and condition as well as from different sources, for the purpose of calculation of debt service scheduling the current development bank of Ethiopia credit terms and conditions have been used. Accordingly, it is assumed that the company will be able to obtain loan 70% of the total investment costs for construction of different buildings for purchase of machineries. The remaining balance that of the total investment costs will be expected to be covered by equity contribution of the project promoter.

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5.5. Production costs

As it is depicted in Annex Table 20 major categories of the total production costs are assembled into the following cost elements.

5.5.1. Material inputs

In the project under study the basic material inputs are leather, thread, metal and packing materials etc. Therefore, the current prevailing local and international market prices have been used for estimation of material inputs costs. At full capacity operation the material inputs costs are estimated at Birr 135.12 million per annum.

Table 14 Materials input required to produce one bag

S. No.	Description	Unit of Meas.	Required Qty.	Wastage /Allowance	Total Qty.	Unit Cost	Total Cost
1							
	LADIES HAND BAG						
1	Dyed Softy Box	Sq.ft.	5.52	23%	6.79	40.65	276.00
2	Lining	M ²	0.63	3%	0.65	55	35.69
3	Thread	M	65	—	65	0.1	6.50
4	Glue	Kg	0.02	—	0.02	358	7.16
5	STIFNER	M ²	0.3	3%	0.31	70	21.63
6	Metal Logo	PCS	1	-	1	25	25.00
7	Puller VT-0	PCS	1	-	1	5.00	5.00
8	Zipper VT-0	M	0.22		0.22	10.00	2.20
9	Puller VT-10	PCS	1		1	6.00	6.00
10	Zipper VT-10	M	0.5		0.5	14.15	7.08
11	Foam	M ²	0.3	3%	0.31	25.00	7.73
	SUM						399.98

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

Table 15 Raw materials input plan in Birr

	Period				Start-up			Full Capacity
	Capacity utilization				70%	80%	90%	100%
	Project year				1	2	3	4
	Materials input for ladies handbag	Unit of measure	Quantity at full Capacity	Unit price				
1	Dyed Softy Box	Sq.ft.	2,152,800	40.65	61,257,924	70,009,056	78,760,188	87,511,320
2	Lining	M ²	245,700	55	9,459,450	10,810,800	12,162,150	13,513,500
3	Thread	M	25,350,000	0.1	1,774,500	2,028,000	2,281,500	2,535,000
4	Glue	Kg	7,800	358	1,954,680	2,233,920	2,513,160	2,792,400
5	STIFNER	M ²	117,000	70	5,733,000	6,552,000	7,371,000	8,190,000
6	Metal Logo	PCS	390,000	25	6,825,000	7,800,000	8,775,000	9,750,000
7	Puller VT-0	PCS	390,000	5.00	1,365,000	1,560,000	1,755,000	1,950,000
8	Zipper VT-0	M	85,800	10.00	600,600	686,400	772,200	858,000
9	Puller VT-10	PCS	390,000	6.00	1,638,000	1,872,000	2,106,000	2,340,000
10	Zipper VT-10	M	195,000	14.15	1,931,475	2,207,400	2,483,325	2,759,250
11	Foam	M ²	117,000	25.00	2,047,500	2,340,000	2,632,500	2,925,000
					94,587,129	108,099,576	121,612,023	135,124,470

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5.5.2. Utilities

In estimating costs of utility expenses for operation and maintenance of the project, Costs of fuel, oil and lubricant, electricity and water consumptions have been taken in to consideration, the rates of which have been estimated on the basis of the proposed capacity utilization program of the project and at the current official charging rates. At full capacity operation the project will have the following utility expense per annum which amounts to Birr 5.079 million.

Table 16 Utilities of the factory'000''Birr

Utility'000''Birr		Start-up			Full Capacity
		70 %	80 %	90 %	100 %
Capacity utilization		1	2	3	4
Project year					
Item description	Unit of measurement				
Fuel					
Gasoline for service vehicle	50km*260days*37Birr/LIT*8km/Li	42.09	48.10	54.11	60.13
Gasoline for transport truck	(200km*300days*37Birr/LIT*5km/Li)*3	311	355	400	444
Sub-Total		353.09	403.10	454.11	504.13
Change of oil and lubricant	10% of the fuel consumption	35.30	40.30	45.40	50.40
Sub-Total		388.40	443.40	499.51	554.53
Electricity	260days*24 hrs.*650kwh* 0.4736Birr/kwh	2,839	3,245	3,650	4,056
Sub- Total		2,839	3,245	3,650	4,056
Water	365days*100m ³ /day*15 Birr/m ³	255.50	292.00	328.50	365.00
Sub -Total		255.50	292.00	328.50	365.00
Telecommunication					
Telephone	5 lines* 1,500Birr/month/line+18Birr/line/month	31.08	31.08	31.08	31.08
Mobile	5 lines*1,500 Birr/month/line	30.00	30.00	30.00	30.00
Fax	2line*1,000Birr/month + 17 Birr/line/month	12.40	12.40	12.40	12.40
Internet	2,500 Birr/month	30.00	30.00	30.00	30.00
Sub-Total		103.48	103.48	103.48	103.48
TOTAL		3,586.40	4,083.88	4,581.50	5,079.01

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

5.5.3. Over heads

In the expenses under this title have been included land and building taxes, buildings, vehicles as well as machinery and equipment insurance, vehicles annual inspection; postage, telephone and e. mail, stationery and office supplies; printing and copying; audit fee; cash indemnity etc. The overhead costs and divided in to direct overheads and administration overheads.

Table 17 Overhead costs

Direct Overhead"000"Birr		Year 1	Year 2	Year 3	Year 4
Annual land lease Payment		5,550	5,550	5,550	5,550
Insurance					
Building and Civil works	0.10%	112.23	112.23	112.23	112.23
Machinery and Equipment	0.20%	156.00	156.00	156.00	156.00
Motor vehicle and Truck	1%	60.00	60.00	60.00	60.00
Vehicles annual inspection and registration	25,000 Birr per annum per vehicle	50.00	50.00	50.00	50.00
Work cloth	Two times per annum per workers at 800 Birr	31.20	31.20	31.20	31.20
Cleaning and sanitation	An estimate of 300 Birr/day	78.00	78.00	78.00	78.00
Sub Total		6,037	6,037	6,037	6,037
Administration Overhead "000' Birr					
Audit fee	40,000 Birr per annum	40.00	40.00	40.00	40.00
Office cleaning and sanitation	2,000 Birr per month	24.00	24.00	24.00	24.00
Stationery and office supplies	2,000 Birr per month	20.00	20.00	20.00	20.00
Printing and Copy	2,000 Birr per month	24.00	24.00	24.00	24.00
Sub Total		108.00	108.00	108.00	108.00
GRAND TOTAL		6,145	6,145	6,145	6,145

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

5.5.4. Financial costs

As it has been outlined earlier under "project Financing" the current Development Bank of Ethiopia credit terms and conditions for newly establishing projects have been used to compute the financial costs, estimated to be incurred in connection with that of the total investment costs assumed to be covered through loan financing. The amount of the loan capital to be obtained and the financial costs to be incurred thereof have been determined depending on the amount of fixed investment cost and pre-production expenses.

5.5.5. Depreciation

Table 18 Depreciation in Birr"000"

Period			Start-up			
			70 %	80 %	90 %	100 %
Capacity utilization			1	2	3	4
Project year						
Item description	Original Value					
Structure and civil works	112,232,500.00	5% of original value	5,611.62	5,611.62	5,611.62	5,611.62
Machinery and equipment	78,000,000.00	15 % of original value	11,700.00	11,700.00	11,700.00	11,700.00
Transformer	2,000,000.00	15 % of original value	300.00	300.00	300.00	300.00
Motor vehicles and trucks	6,000,000.00	15 % of original value	900.00	900.00	900.00	900.00
Weighbridge	4,000,000.00	15 % of original value	600.00	600.00	600.00	600.00
Office equipment and furniture	500,000.00	20% of original value	100.00	100.00	100.00	100.00
Pre-operation expense	2,000,000.00	25% of original value	500.00	500.00	500.00	500.00
Total			19,711.62	19,711.62	19,711.62	19,711.62

5.6. Break Even point and ROI

5.6.1. Break Even point (BEP)

Three kinds of break-even point

- A. BEP Sales Revenue(BR)
- B. BEP production (Volume)
- C. BEP Percentage (%)

A. Break-even point(BEP) Sales

To determine BEP Annual Sales, multiply annual sales found in income statement by the annual fixed cost, and divided by Annual sales less Annual variable cost.

$$\text{BEP (sales)} = \frac{\text{Annual sales} \times \text{Annual fixed costs}}{\text{Annual sales} - \text{Annual variables costs}}$$

Annual sales = 218,400,000.00 Birr

Unit selling price = 800 Birr/pcs

$$\text{BEP (sales)} = \frac{\text{Annual sales} \times \text{Annual fixed costs}}{\text{Annual sales} - \text{Annual variables costs}} = \frac{218,400,000 \times 52,029,000}{218,400,000 - 108,349,000}$$

BEP (Sales) = 103,253,342 Birr

B. BEP production

To determine BEP production volume, divided BEP sales by the unit selling price (USP)

$$\text{BEP production} = 103,253,342 / 800 = 129,067$$

$$\begin{aligned} \text{c. BEP percentage} &= \frac{\text{Annual fixed costs} \times 100\%}{\text{Annual sales} - \text{Annual variables costs}} \\ &= \frac{52,029,000 \times 100\%}{218,400,000 - 108,349,000} \\ &= 47\% \end{aligned}$$

5.6.2. Return on investment

Return on investment = Net profit /Total capital requirement

$$= 72,128,000/265,053,500$$

$$= 27\%$$

The return on owners' investment (ROOI)

= Annual net profit /owners' investment

$$= 72,128,000/79,516,050$$

$$= 91\%$$

5.7. Project benefits

For financial analysis and evaluation of the given project, the current leather price, and packing materials buying price and final packed handbag price at the project gate has been taken as a basis. Consequently, based on the recent market survey, materials input price at the nearby market pints is estimated has been indicated in table 13.

As it has been stated earlier the project is envisaged to reach full capacity operation four years after commencement of production activities which are assumed to begin with 70% of the estimated total capacity.

At full capacity operation the project is envisaged to have the following revenue components.

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

Table 19 Source of revenue in Birr"000"

	Period			Start-up			Full Capacity	
	Capacity utilization			70%	80%	90%	100%	100%
	Project year			1	2	3	4	5
	Product type	U/M	Unit price					
1	Hand bag	pcs	800	218,400	249,600	280,800	312,000	312,000
	Total			218,400	249,600	280,800	312,000	312,000

Thus, according to the computation in Annex Table 22 and Annex Table 24, the net income and cash flow statements analysis revealed that at full capacity operation the project will generate a total income (gross revenue) amounting to 312 million Birr per annum. The corresponding Annex Table 22 of "Net Income Statement" shows a steady growth of gross profit starting from 58 million Birr in year 1 reaching the peak of 138.90 million Birr in year 10. In its 10 years of manufacturing activities, the project is expected to generate a total net profit of 711 million Birr and contribute 383 million Birr to the government treasury in form of 35% income tax.

According to the current investment Law, machinery and equipment are anticipated to be imported duty- free. The liquidity position of the project is very strong. The corresponding Annex Table 24

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

of “Cash Flow Statement” shows the positive cumulative cash balance of Birr 677 million and the project will not face any cash shortage throughout its production life.

The computation of the pay-back period as depicted in Annex table 29 indicates that the project will be able to reimburse itself from its net cash-income within four years after commencement of production activities, the period which is considered to be very good for the project of this nature.

In Annex Table 30 of the Benefit-cost ratio and Net present value (NPV) have been calculated at 17% discount factor (D.F) for 10 years of the project activity. Accordingly, the project has NPV of 382 million Birr at 17%D.F. and the benefit-cost ratio of 1.41 at 17% D.F. These results are most appreciable, especially, when related to the external capital borrowing interest rate which ranges from 8.50% to 18.5 % for newly establishing projects.

Break-even point (BEP) have been undertaken the project under study when implemented will have BEP at about 47% operation of the estimated full capacity

In addition to this, finally, summary of financial efficiency tests have been conducted in Annex table 28, Accordingly, all efficiency ratios indicated positive trends and consequently, it can be inferred that the project can operate in the frame work of free market mechanism on commercially and financially viable basis and is remunerative.

ANNEXES

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

ANNEX II

CALCULATION OF ANNUAL PRODUCTION COSTS

Table 20 Annual total production costs'000'

Period	Start-up			Full capacity						
	70 %	80 %	90 %	100 %	100 %					
Project Year	1	2	3	4	5	6	7	8	9	10
Cost category										
I. Material inputs	94,587	108,100	121,612	135,124	135,124	135,124	135,124	135,124	135,124	135,124
II. Labor	4,836	4,836	4,836	4,836	4,836	4,836	4,836	4,836	4,836	4,836
III. Utility	3,586	4,084	4,582	5,079	5,079	5,079	5,079	5,079	5,079	5,079
IV. Repair and Maintenance costs ,spare parts (1.5 % of fixed costs)	3,624	3,624	3,624	3,624	3,624	3,624	3,624	3,624	3,624	3,624
VI Direct overheads	6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037	6,037
A. Direct Production costs	112,670	126,681	140,691	154,700	154,700	154,700	154,700	154,700	154,700	154,700
VII. Administration over head	108	108	108	108	108	108	108	108	108	108
VIII. Marketing and Promotional expense 3 % of sales revenue	6,552	7,488	8,424	9,360	9,360	9,360	9,360	9,360	9,360	9,360
B. Operating costs	119,330	134,277	149,223	164,168	164,168	164,168	164,168	164,168	164,168	164,168
Interest	21,336	20,091	18,702	17,154	15,427	13,502	11,355	8,962	8,293	3,318
Depreciation	19,712	19,712	19,712	19,712	19,212	19,112	14,616	5,612	5,612	5,612
C. Total production costs	160,378	174,080	187,637	201,034	198,807	196,782	190,139	178,742	178,073	173,098

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

ANNEX IV CALCULATION OF WORKING CAPITAL REQUIREMENTS

- I. Minimum requirement of current assets and liabilities
- A. Accounts receivable: 26 days at total production costs minus depreciation and interest
- B. Inventory
1. Material inputs: 26 days
 2. Spare parts : 90 days
 3. Work under process: two days at direct costs
 4. Product ready for delivery: 8 days at direct costs plus administration overheads
- C. Cash on hand : 360 days
- D. Accounts payable 26 days for material inputs and utilities

ii. Working capital requirement

Table 21 Calculation of working capital

Cost category	Minimum Days of coverage	Coeff-icent of turnover	Project year									
			Start up			Full capacity						
			1	2	3	4	5	6	7	8	9	10
I. Current asset												
A. A/R	26	10	11,933	13,428	14,922	16,417	16,417	16,417	16,417	16,417	16,417	16,417
B. Inventory												
1. Material inputs	26	10	9,459	10,810	12,161	13,512	13,512	13,512	13,512	13,512	13,512	13,512
2. Spare parts	90	4	906	906	906	906	906	906	906	906	906	906
3. Work under process	2	130	867	974	1,082	1,190	1,190	1,190	1,190	1,190	1,190	1,190
4. Product ready for delivery	8	32.5	3,575	4,006	4,437	4,868	4,868	4,868	4,868	4,868	4,868	4,868
C. Cash on hand	360		4,548	4,672	4,797	4,921	4,921	4,921	4,921	4,921	4,921	4,921
D. Current assets			31,288	34,796	38,305	41,814	41,814	41,814	41,814	41,814	41,814	41,814
II. Current liabilities			9,817	11,218	12,619	14,020	14,020	14,020	14,020	14,020	14,020	14,020
A. A/p	26	10										
III. Working capital												
A. Net working capital			21,471	23,578	25,686	27,794	27,794	27,794	27,794	27,794	27,794	27,794
B. Increasing in working capital			21,471	2,107	2,108	2,108	0.0	0.0	0.0	0.0	0.0	0.0

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

ANNEX VI

PROJECTED NET INCOME STATEMENT

Table 22 Projected Net income statement "000"

Period	Start up			Full capacity						
	70 %	80 %	90 %	100 %						
Project year	1	2	3	4	5	6	7	8	9	10
Item description										
Product sales revenue	218,400	249,600	280,800	312,000	312,000	312,000	312,000	312,000	312,000	312,000
Less total production costs	160,378	174,080	187,637	201,034	198,807	196,782	190,139	178,742	178,073	173,098
Gross profit	58,022	75,520	93,163	110,966	113,193	115,218	121,861	133,258	133,927	138,902
Tax	20,308	26,432	32,607	38,838	39,618	40,326	42,651	46,640	46,874	48,616
Net profit	37,714	49,088	60,556	72,128	73,575	74,892	79,210	86,618	87,053	90,286
Accumulated net profit	37,714	86,802	147,358.25	219,486	293,062	367,953	447,163	533,781	620,833	711,120

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

ANNEX VII DEBT SERVICE SCHEDULE AND COMPUTATION PAYMENT OF EQUAL ANNUAL INSTALLMENTS

Table 23 Debt services schedule and computation '000'

Item description	Project year									
	1	2	3	4	5	6	7	8	9	10
A. Investment and working capital										
1. Investment										
2. Increment working capital										
Total										
B. Loan receipts and balances										
1. Loan receipts	185,537	174,706	162,629	148,163	134,149	117,409	98,743	77,931	54,725	28,850
2. Outstanding balance at end of year	185,537	174,706	162,629	148,163	134,149	117,409	98,743	77,931	54,725	28,850
a. First year loan										
Total										
A. Debt service										
1. First year Loan										
a. Interest	21,336	20,091	18,091	17,154	15,427	13,502	11,355	8,962	6,293	3,318
b. Repayment of principal	10,831	12,077	13,466	15,014	16,741	18,666	20,812	23,206	25,875	28,850

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

ANNEX VIII CASH-FLOW STATEMENT FOR FINANCIAL PLANING

Table 24 Projected Cash flow statement

Period	Start up			Full capacity							
	70%	80%	90%	100%							
Capacity utilization											
Project year	1	2	3	4	5	6	7	8	9	10	
Item description											
A. Cash - inflow	493,270	253,108	284,309	315,509	312,000	312,000	312,000	312,000	312,000	312,000	
1. Financial resource (total)	274,870	3,508	3,509	3,509							
2. Sales revenue	218,400	249,600	280,800	312,000	312,000	312,000	312,000	312,000	312,000	312,000	
B. Cash – outflow	446,676	196,385	216,896	238,683	235,954	236,662	238,986	242,976	243,210	244,952	
1. Total assets schedule including replacement	274,871	3,508	3,509	3,509							
2. Operating costs	119,330	134,277	149,223	164,168	164,168	164,168	164,168	164,168	164,168	164,168	
3. Debt service (total)											
a. Interest	21,336	20,091	18,091	17,154	15,427	13,502	11,355	8,962	6,293	3,318	
b. Repayment	10,831	12,077	13,466	15,014	16,741	18,666	20,812	23,206	25,875	28,850	
4. Tax	20,308	26,432	32,607	38,838	39,618	40,326	42,651	46,640	46,874	48,616	
C. Surplus (Deficit)	46,594	56,723	67,413	76,826	76,046	75,338	73,014	69,024	68,790	67,048	
D. Cumulative cash balance	46,594	103,317	170,730	247,556	323,602	398,940	471,954	540,978	609,768	676,816	

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

ANNEX XII TOTAL INVESTMENT COSTS

Table 25 Total investment costs''000''

Period	Start up			Full capacity								
	1	2	3	4	5	6	7	8	9	10	11	
Project year												
Investment Category												
1. Fixed investment costs												
a. Initial fixed investment costs	241,583											
b. Replacement												
2. Pre-operational capital expenditure	2,000											
3. Working capital increase	21,471	2,107	2,108	2,108								
Total investment costs	265,054	2,107	2,108	2,108								

ANNEX XIII TOTAL ASSETS

Table 26 Total Assets

Period	Start up			Full capacity								
	1	2	3	4	5	6	7	8	9	10	11	12
Project year												
Investment Category												
1. Fixed investment costs												
c. Initial fixed investment costs	241,583											
❖ Cost of land												
d. Replacement												
2. Pre-operational capital expenditure	2,000											
3. Current assets increase	31,288	3,508	3,509	3,509								
Total assets	274,871	3,508	3,509	3,509								

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

ANNEX XIV SOURCES OF FINANCE

Table 27 Sources of finance

Period	Start up			Full capacity							
	1	2	3	4	5	6	7	8	9	10	Total
Project year											
Sources of finance											
1. Equity capital	79,516	2,107	2,108	2,108							
2. Loan capital	185,537										
3. Current liabilities	9,817	1,401	1,401	1,401							
Total finance	274,870	3,508	3,509	3,509							

ANNEX XI SUMMARY OF FINANCIAL EFFECIENCY TESTS

Table 28 Summary of financial efficiency tests

Project year	Project year									
	1	2	3	4	5	6	7	8	9	10
Capacity utilization	70%	80%	90%	100%						
Financial ratio in %										
1. Gross profit : Revenue	27%	30%	33%	36%	36%	37%	39%	43%	43%	45%
2. Net profit : Revenue	17%	20%	22%	23%	24%	24%	25%	28%	28%	29%
3. Net profit : initial investment	14%	18%	22%	27%	27%	28%	29%	32%	32%	33%
4. Net profit : Equity	47%	60%	72%	84%	86%	87%	92%	101%	101%	105%
5. Gross profit : Initial investment	22%	28%	35%	41%	42%	42%	45%	49%	49%	51%
6. Operating costs : Revenue	55%	54%	53%	53%	53%	53%	53%	53%	53%	53%

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

ANNEX XV CALCULATIONS OF PAYBACK PERIOD

Table 29 Calculation of payback period"000"

Year	Amount Paid Back			Total investment	End of year
	Net Profit	Depreciation	Total		
1	37,714	19,712	57,426	265,053	-207,627
2	49,088	19,712	68,800	2,107	-140,934
3	60,556	19,712	80,268	2,108	-62,774
4	72,128	19,712	91,840	2,108	+26,958

PROJECT PROFILE ON MANUFACTURING OF LADY'S HANDBAG

ANNEX XVI CALCULATIONS OF NET PRESENT VALUE AT 17% D.F.

Table 30 Calculation of NPV at 17% D.F.

Project year	Gross Revenue	1/(1+i) ⁿ At 17%	Present value at 17%	Project costs			
				Total investment	Operating costs	Total	Present value at 17%
1	218,000	0.854701	186,325	265,053	119,330	384,383	328,533
2	249,600	0.730514	182,336	2,107	134,277	136,384	99,630
3	280,800	0.624371	175,323	2,108	149,223	151,331	94,487
4	312,000	0.53365	166,499	2,108	164,168	166,276	88,733
5	312,000	0.456111	142,307		164,168	164,168	74,879
6	312,000	0.389839	121,630		164,168	164,168	63,999
7	312,000	0.333195	103,957		164,168	164,168	54,700
8	312,000	0.284782	88,852		164,168	164,168	46,752
9	312,000	0.243404	75,942		164,168	164,168	39,959
10	312,000	0.208037	64,908		164,168	164,168	34,153
Total			1,308,078				925,825

A. Benefit- cost ratio At 17% D.F. = 1.41

B. NPV At 17% D.F. = 382,253,000 Birr