Preliminary Feasibility Study on
Handmade Carpets Production

Prepared by

Economic Performance Sector

Central Department of Feasibility Studies

General Department of Economic Feasibility Studies

June 2021

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I. Basic Information:

Project Name	Handmade Carpets Production
Project Location	Gharbia Governorate – Menufya Governorate – Sharqia Governorate (10th of Ramadan City)
Land Surface Area	2000 m^2
Land Cost per meter square	Lease Price is EGP 20/m^2 monthly
Buildings Surface Area	Buildings on a surface area of 1000 m^2 Storage and empty spaces on a surface area of 1000 m^2
Project Economic Life Expectancy	Five years
Project Products	Handmade carpets made of silk and wool
Expected Labor	103 worker and administration officer
Expected Investment Costs	EGP 11,110,000
Return on Investment (ROI)	48%
Payback Period (PBP)	24 months
Feasibility Study Date	June 2021

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II. Introduction on Handmade Carpets Production:

- Handmade carpets production is one of the oldest crafts prevailing in Arab community, due to its simplicity and high profitability, as well as being very important for home furnishings.
- Carpets production provide many job opportunities, as well as providing job opportunities for women and those belonging to low-income sectors.
- Handmade carpets is one of the high priced goods, and sometimes they are considered as rare property. Moreover, in some instances, auctions are hold to sell some types of used handmade carpets.
- Handmade carpets production is facing many threats all over the world due to the advanced technological renaissance and the great industrial boom in the field of carpets production, which reduced the dependence on human beings and increased the dependence on machines.
- Handmade carpets production and all handcrafts encountered many problems upon starting the dependence on machines due to the high price of handcrafts, whereas machines production save time and cost, in addition to being less priced than handmade carpets, however, handmade carpets are distinguished by their shape, material and quality.
- Carpets have different types and characteristics, according to the pile length, pattern, frame, final finish of the carpet and how the warp threads are placed with the weft and knots.
- Carpet fibers have three main types, which are polypropylene, nylon and wool. The three types are famous for their attractive colors, classy designs, the smoothness and density of the pile yarn, quality and high value.

III. Project Market Feasibility Study

The market feasibility study is part of the feasibility study, and usually detailed feasibility study starts with determining the marketing validity of the project subject to study with the aim of specifying the probabilities of market response to the idea of the new product or the service that the project seeks to provide. In the event that the outputs of the market study are positive, there is a chance to apply the idea technically. In this situation, outputs of the market study represent the basis of the technical and engineering feasibility study of the project and the subsequent financial, economic and social studies.

1. General Market Indicators – SWOT Analysis:

- **Opportunities:**
  - Availability of funding opportunities for the project through borrowing.
  - Availability of raw materials needed for carpets production such as polypropylene, nylon and wool.
  - Availability of plenty of lands on which the project can be carried on.
  - Availability of laws that provide encouraging incentives and guarantees to investors.
- **Threats:**
  - The spread of machine made carpets in the market and the increase of demand on them due to their low price, which affect the handmade carpets market.
  - Carpets trade is considered a sort of seasonal trade.
  - There is a strong competition in carpets trade, where there are multiple carpet galleries near to each other's due to the variety and different types and shapes of carpets.

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- **Strengths**
  - The availability of manpower.
  - Availability of needed expertise to manage and operate the project.
  - Availability of high quality raw materials, which lead to a high quality final product.
  - Availability of machines needed for production.
  - Availability of local and international demand on the final product.
- **Weaknesses:**
  - The carpet industry is monopolized by some giant companies, which affected the market of handmade carpets.
  - The competition among the Iranian, Turkish and Chinese carpets and the local handmade carpets.
  - The low price of Chinese carpets compared to local carpets.
  - The foreign competition in handmade carpet market, which decreases the international demand on them.
  - Decrease of local investments in the field of carpets industry due to the low demand after having new floor furnishings like porcelain and marble.

SWOT Analysis Results:

The good use of available opportunities can limit the threats encountered by the project. Moreover, Weaknesses can be reduced by the optimal use of strengths.

2. **Demand Volume:**

- The annual consumption of carpets reached about EGP 18 billion including the imported and local goods according to the latest statement of the Chamber of Handicrafts Industry.
- Egypt's import volume of handmade carpets reached approximately EGP 5 billion according to the latest report issued from the Central Agency for Public Mobilization and Statistics (CAPMAS)

3. **Supply Volume:**

- Egypt's export of carpets and kilim reached 14 billion and 519 thousand dollars in 2020 according to the latest report issued from CAPMAS
- The local production covers about 73% of the market's demand according to the Chamber of Handicrafts Industry affiliated to the Federation of Egyptian Industries (FEI).

4. **Market GAP:**

- There is a gap between the demand volume and the supplied volume by 27%, which is imported from abroad.

5. **Distribution Outlets:**

- Export to abroad
- Large carpet galleries
- Wholesale trade

6. **Market Feasibility Study Results:**

It is obvious from the abovementioned study that there is a demand on exporting this project abroad in addition to a local demand, and then the project is feasible from the marketing point of view.

IV. Project Technical Feasibility Study:

1. Project Location:

   According to the investment opportunities available on the investment map, it is suggested to set up the project in El-Mahalla Complex, Gharbia Governorate on a surface area of 2000 m^2 due the availability of large spaces in this area and its proximity to the Suez Canal, which facilitates the export, and import of materials. Moreover, the project can be set up in Menofya Governorate - Sharqia Governorate (10^{th} of Ramadan City).

2. Land:

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A land with a surface area of 2000 m^2 – Annual Lease

3. Buildings:
   - A building on a surface area of 1000 m^2 including production lines and administration area.
   - Empty spaces, lanes storage spaces on a surface area of 1000 m^2
4. Required Labor:

Item	Number
Factory Director	1
Financial Manager	1
Accountant	1
Production Workers (trained	100
Total	103

5. Basic Materials and Raw Materials Required for the Production Process:
   - Wood loom
   - Spindle, which is a simple hand-operated, where the thread is wrapped on it, then transferred to the loom to be woven after being sieved.
   - Latch hook
   - Blade for cutting threads
   - woolen thread
   - silk thread
   - Fabrics with certain specifications such as dimensional stability, elongation and flexibility.

6. Production Period:

- The production of carpets' main threads take about four days for the carpets sized one and half to two meters in width and three meters in length.
- After extending those silk threads woolen threads are added to fix the silk threads, this process is done according to the needed carpet color.

7. Handmade Carpets Types:

Silk Carpets:

Silk carpets are characterized by their bright colors and patterns, which are not usual and infrequent in other types of carpets. Moreover, they are characterized by their soft and wonderful texture, which give a luxurious touch to home decorations. Silk carpets have some designs including overlapping and intertwined patterns, and other designs are simple with some flowers, that's why it is one of the most expensive handmade carpets. The meter price of silk carpets ranges from EGP 4000 to EGP 25,000 according to the carpet's specifications.

Wool Carpets:

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Wool carpets are one of the most durable and finest types of carpets that have many advantages, such as:

- Durability and softness
- Wrinkle-Resistant
- Heat Retention
- Germs and Fire Resistant Characteristics
- Sound Isolation Characteristics

The meter price of wool carpets ranges from EGP 3000 to EGP 8000 according to the carpet's specifications as well as the type of wool and knot.

8. Production Phases:

To produce different types of carpets, the design of the carpet need to be executed must be drawn first on a paper like tailored clothes; however, the carpet drawing must include all the main details in order to have the final shape of the carpet. The work starts by the using the latch hook, then the wide blade to cut the threads, and usually the white silky thread is the one of the main threads used while making carpets. Carpets must be made of two main threads, which are wool threads that is used in creating the basic shape of the carpet, and silk threads.

9. **Production Capacity:**

No.	Item	Sales by unit
1	Silk Carpet with an average size of 2mx3m	750
2	Silk Carpet with an average size of 2mx3m	500
	Total	1250

V. Project Legal Feasibility Study

- In accordance with the provision of the Investment Law, handmade carpets is one of the activities subjected to aforementioned Law. Moreover, the State gives attention and incentives to such activity.
- Companies incorporated for such purpose may be incorporated in accordance to the provisions of the Investment Law, Companies Law, and Commerce Law as per the desire of the owners.
- There are some legal limitations that must be taken into consideration to obtain the activity license from the concerned bodies, which are as follows:
  - The Governorate having jurisdiction over the land and its affiliated local units, or the City Hall
  - Civil defense and fire requirements
- In case of export, the project must obtain an import card indicating the nature and description of the products, or export through an intermediary company that undertakes the export and customs release procedures on behalf of the project.

VI. Project Environmental Feasibility Study:

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- The environmental feasibility study is defined as the study that explains the degree of protection and maintenance achieved for the environment, by taking into account its absorptive capacity or its maximum capacity to withstand human activities aimed at exploiting environmental resources without the occurrence of environmental degradation or depletion on the short and long term, whether directly or indirectly.
- Environmental feasibility studies are one the pillars of environment protection and maintenance. Since sustainable development is the one considering the environmental dimension in addition to the economic and social dimensions, then paying attention to environmental feasibility studies for different development projects is an absolute necessity to achieve sustainable development, along with economic feasibility studies that ensure that the project achieves the greatest amount of material benefits without taking into account the conditions of the environment or its potential and the possible negative effects for this project on it.
- The project does not produce harmful waste and factory waste can be used and recycled, hence the project is environmentally feasible.

VII. Project Social Feasibility Study:

- Investment projects are one of the main pillars of the State's economic development process and a mean to achieve the economic, social and development goals to be realized, which eventually results in achieving high levels of well-being.
- The project helps in directly employing different types of labors by working in the project itself, and indirectly through the supply and distribution chains that the project deals with starting from the obtainment of raw materials needed for production to sale outlets and customers.
- The project help in increasing the State's tax revenue, which is ultimately beneficial to the society.
- In case the project will export its products, this will contribute in increasing the State's foreign exchange earnings, thus bridging the balance of payments deficit.
- The project decreases the unemployment rates especially for uneducated labors whom the project needs and provides them with an income that ensure a decent life for them and make them productive for the society.

  In light of the aforementioned, the project is socially feasible.

VIII. Project Financial Feasibility Study:

Financial feasibility study is a tool that helps the investor in taking the investment decision. To simplify this decision, all investment and production costs must be calculated clearly and accurately taking into account that the project profitability depends on the volume and components of the investment and production costs.

1. Foundations and Hypothesis of the Financial Feasibility Study:

- In this financial feasibility study, data and sales revenue estimates are based on the market study results.
- Investment cost values and other costs and expenses have been estimated based on the technical study results.
- Buildings and machinery annual depreciation is estimated based on the technical study results. Same buildings and machinery sale value is presumed to be matching their book value at the end of the expected lifetime of the project.
- It is taken into account that the estimated value of the fixed assets mentioned in this study is time-and-circumstance limited; it is related to a specific period in specific circumstances. Accordingly, such value may change by change of circumstances or by report time prescription or change of economic climate.

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- Pursuant to the Egyptian Accounting Standards, it is presumed that incorporation and pre-commencement costs are fully expired by the first year of revenue.
- The estimated income statements have been prepared on the presumption that there is no fundamental change in the revenue values and expected annual costs during the study period.
- Annual cash flows are estimated using the indirect estimation method; necessary adjustments have been applied to the results of the estimated income statements of the years in this study.
- The study assumes that all purchases include the value added tax.

2. Annual Sales:

According to the results of the market feasibility study after estimating the supply demand and the technical study after estimating the production capacity, the annual sales for the first year are estimated as follows:

No.	Item	Sales by unit	Average Price	Annual Sales Revenue
1	Silk Carpet with an average size of 2mx3m	750	14000	10,500,000
2	Silk Carpet with an average size of 2mx3m	500	8000	4,000,000
	Total	1250		14,500,000

3. Project Investment Cost:

- Investment costs mean all the money spent on the project from the moment of serious consideration of its establishment until the end of the first operational cycle. Such costs are related to the construction period, whose duration varies from one project to another, as the construction period may reach several years in some projects, and in other projects, the construction period may not be counted.
- Thus, the investment costs can be clarified as follows, according to the data specified in the project technical study:
- **Land:**

  Land with a surface area of 2000 m^2 annually leased for EGP 50/m^2 per year with a total cost of EGP 100,000 per year.

- **Machinery:**

  The cost of machinery is estimated at EGP 2,000,000, to be depreciated over 5 years.

- **Buildings, establishments and finishes:**

  The cost of buildings is estimated at EGP 3,000,000, to be depreciated over 20 years.

- **Trucks:**

  The cost of 1 truck is estimated at EGP 300,000, to be depreciated over 5 years.

- **Fixtures, furniture and furnishings:**

  The cost of finishes, fixtures, furniture and furnishings needed to finish the workshops and administration building is estimated at EGP 50,000, to be depreciated over 5 years.

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- **Legal Expenses, and Incorporation and Licenses Fees:**

  Is estimated at EGP 500,000 to be spent during the first year of business operation.

- **Materials**

  The cost of materials and production requirements are estimated at EGP 3,000,000 per year.

- **Payroll:**

  The total cost of payroll is estimated as follows:

Item	Number	Monthly salary	Annual salary
Factory Director	1	15,000	180,000
Financial Manager	1	10,000	120,000
Accountant	1	5000	60,000
Production Workers (trained)	100	4000	4,800,000
Total	103	34,000	5,160,000

- **Marketing Fees:**
  The cost of marketing campaigns according to the market feasibility study is estimated at EGP 50,000.

- **Other Running Costs:**

  They include any other costs related to operation (such as Electricity, water, maintenance). Such costs are estimated at EGP 200,000.

- **Annual Depreciation Installment:**

  The depreciation is calculated as follows:

Item	Asset Value	Production Age	Depreciation Rate	Annual Depreciation Installment
Buildings, finishes and Infrastructure	3,000,000	20	5%	150,000
Machinery	2,000,000	10	10%	200,000
Trucks	300,000	5	20%	60,000
Finishes, furniture and office supplies	50,000	5	20%	10,000
Incorporation Fees	500,000	1	100%	500,000
Total	5,850,000			920,000

- **According to the aforementioned, the investment costs are as follows:**

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Item	Cost
Buildings, Finishes and infrastructure	3,000,000
Machinery	2,000,000
Trucks	300,000
Fixtures, furniture and office supplies	50,000
Incorporation Fees	500,000
Annual Land lease	100,000
Materials cost	4,000,000
Payroll	5,160,000
Total	11,110,000

4. Financial Statements and Indicators and Expected Profitability Rates of the Project

- Financial statements and indicators as well as profitability rates are among the most important tools uses in measuring the economic feasibility of projects, by calculating project net income and project net cash inflows, as well as the Net Present Value (NPV) of money resulting from the increase of the inflation rate using the prevailing rate of interest.
- Financial indicators are used in the comparison between the available investment options as well as the comparison between Return on Investment (ROI) and Payback Period (PBP) for each project.

- **Project Expected Income Statement for the First Five (5) Years:**

With an average 10% annual increase in production

بيان	السنة الاولى	السنة الثانية	السنة الثالثة	السنة الرابعة	السنة الخامسة
ايراد المبيعات	١٤,٥٠٠,٠٠٠	١٥,٩٥٠,٠٠٠	١٧,٥٤٥,٠٠٠	١٩,٢٩٩,٥٠٠	٢١,٢٢٩,٤٥٠
تكلفة المبيعات					
تكلفة ايجار الأرض سنويا	١٠٠,٠٠٠	١٠٠,٠٠٠	١٠٠,٠٠٠	١٠٠,٠٠٠	١٠٠,٠٠٠
الخامات ومستلزمات الإنتاج	٣,٠٠٠,٠٠٠	٣,٣٠٠,٠٠٠	٣,٦٣٠,٠٠٠	٣,٩٩٣,٠٠٠	٤,٣٩٢,٣٠٠
أجور	٥,١٦٠,٠٠٠	٥,٦٧٦,٠٠٠	٦,٢٤٣,٦٠٠	٦,٨٦٧,٩٦٠	٧,٥٥٤,٧٥٦
مجمل الربح	٦,٢٤٠,٠٠٠	٦,٨٧٤,٠٠٠	٧,٥٧١,٤٠٠	٨,٣٣٨,٥٤٠	٩,١٨٢,٣٩٤
مصروفات تسويقية	٥٠,٠٠٠	٥٥,٠٠٠	٦٠,٥٠٠	٦٦,٥٥٠	٧٣,٢٠٥
تكاليف تشغيلية أخرى	٢٠٠,٠٠٠	٢٢٠,٠٠٠	٢٤٢,٠٠٠	٢٦٦,٢٠٠	٢٩٢,٨٢٠
الاهلاك	٩٢٠,٠٠٠	٤٢٠,٠٠٠	٤٢٠,٠٠٠	٤٢٠,٠٠٠	٤٢٠,٠٠٠
صافي الربح قبل الضرائب	٥,٠٧٠,٠٠٠	٦,١٧٩,٠٠٠	٦,٨٤٨,٩٠٠	٧,٥٨٥,٧٩٠	٨,٣٩٦,٣٦٩
ضريبة ٢٢,٥%	١,١٤٠,٧٥٠	١,٣٩٠,٢٧٥	١,٥٤١,٠٠٣	١,٧٠٦,٨٠٣	١,٨٨٩,١٨٣
صافي الربح بعد الضريبة	٣,٩٢٩,٢٥٠	٤,٧٨٨,٧٢٥	٥,٣٠٧,٨٩٧	٥,٨٧٨,٩٨٧	٦,٥٠٧,١٨٦

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Item	بيان
First Year	السنة الأولى
Second Year	السنة الثانية
Third Year	السنة الثالثة
Fourth Year	السنة الرابعة
Fifth Year	السنة الخامسة
Sales Revenue	إيراد المبيعات
Sales Cost	تكلفة المبيعات
Annual Lease of Land	تكلفة ايجار الأرض سنويًا
Materials and Production Requirements	الخامات ومستلزمات الإنتاج
Wages	أجور
Total Profit	مجمل الربح
Marketing Fees	مصروفات تسويقية
Other Operational Costs	تكاليف تشغيلية أخرى
Depreciation	الاهلاك
Net Profit Before Taxes	صافي الربح قبل الضرائب
22.5% Taxes	ضريبة ٢٢,٥%
Net Profit after Taxes	صافي الربح بعد الضريبة

- **Project Expected Cash Flows Statement for the First Five (5) Years:**

بيان	السنة الاولى	السنة الثانية	السنة الثالثة	السنة الرابعة	السنة الخامسة
التدفقات النقدية الداخلة	١٤,٥٠٠,٠٠٠	١٥,٩٥٠,٠٠٠	١٧,٥٤٥,٠٠٠	١٩,٢٩٩,٥٠٠	٢١,٢٢٩,٤٥٠
التدفقات النقدية الخارجة					
تكلفة ايجار الأرض سنويا	١٠٠,٠٠٠	١٠٠,٠٠٠	١٠٠,٠٠٠	١٠٠,٠٠٠	١٠٠,٠٠٠
الخامات ومستلزمات الإنتاج	٣,٠٠٠,٠٠٠	٣,٣٠٠,٠٠٠	٣,٦٣٠,٠٠٠	٣,٩٩٣,٠٠٠	٤,٣٩٢,٣٠٠
أجور	٥,١٦٠,٠٠٠	٥,٦٧٦,٠٠٠	٦,٢٤٣,٦٠٠	٦,٨٦٧,٩٦٠	٧,٥٥٤,٧٥٦
مصروفات تسويقية	٥٠,٠٠٠	٥٥,٠٠٠	٦٠,٥٠٠	٦٦,٥٥٠	٧٣,٢٠٥
تكاليف تشغيلية أخرى	٢٠٠,٠٠٠	٢٢٠,٠٠٠	٢٤٢,٠٠٠	٢٦٦,٢٠٠	٢٩٢,٨٢٠
ضريبة ٢٢,٥%	١,١٤٠,٧٥٠	١,٣٩٠,٢٧٥	١,٥٤١,٠٠٣	١,٧٠٦,٨٠٣	١,٨٨٩,١٨٣
اجمالى التدفق الخارج	٩,٦٥٠,٧٥٠	١٠,٧٤١,٢٧٥	١١,٨١٧,١٠٣	١٣,٠٠٠,٥١٣	١٤,٣٠٢,٢٦٤
صافي التدفق النقدى	٤,٨٤٩,٢٥٠	٥,٢٠٨,٧٢٥	٥,٧٢٧,٨٩٧	٦,٢٩٨,٩٨٧	٦,٩٢٧,١٨٦

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Item	بيان
First Year	السنة الأولى
Second Year	السنة الثانية
Third Year	السنة الثالثة
Fourth Year	السنة الرابعة
Fifth Year	السنة الخامسة
Cash Inflows	التدفقات النقدية الداخلة
Cash Outflows	التدفقات النقدية الخارجة
Annual Lease of Land	تكلفة إيجار الأرض سنويًا
Materials and Production Requirements	الخامات ومستلزمات الإنتاج
Wages	أجور
Marketing Fees	مصروفات تسويقية
Other Operational Costs	تكاليف تشغيلية أخرى
22.5% Taxes	ضريبة ٢٢,٥%
Total Cash Outflows	إجمالي التدفق الخارج
Net Cash Flow	صافي التدفق النقدي

- **Net Present Value of Cash Inflows:**

In accordance with a 10% discount factor, which is, the prevailing interest rate on the time of preparing this study:

السنة	التدفق النقدي	معامل الخصم ١٠%	صافي القيمة الحالية
السنة الاولى	٤,٨٤٩,٢٥٠	٠,٩٠٩	٤,٤٠٧,٩٦٨
السنة الثانية	٥,٢٠٨,٧٢٥	٠,٨٢٦	٤,٣٠٢,٤٠٧
السنة الثالثة	٥,٧٢٧,٨٩٧	٠,٧٥١	٤,٣٠١,٦٥١
السنة الرابعة	٦,٢٩٨,٩٨٧	٠,٦٨٣	٤,٣٠٢,٢٠٨
السنة الخامسة	٦,٩٢٧,١٨٦	٠,٦٢١	٤,٣٠١,٧٨٣
الاجمالى	٢٩,٠١٢,٠٤٥		٢١,٦١٦,٠١٧
التكاليف الاستثمارية			١١,١١٠,٠٠٠
صافي القيمة الحالية= (القيمة الحالية للتدفقات النقدية–التكاليف الاستثمارية)			١٠,٥٠٦,٠١٧

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Year	السنة
Cash Flow	التدفق النقدي
10% Discount Factor	معامل الخصم ١٠%
NPV	صافي القيمة الحالية
First Year	السنة الأولى
Second Year	السنة الثانية
Third Year	السنة الثالثة
Fourth Year	السنة الرابعة
Fifth Year	السنة الخامسة
Total	الإجمالي
Investment Costs	التكاليف الإستثمارية
NPV= (Current Value of Cash Flows – Investment Costs)	صافي القيمة الحالية = القيمة الحالية للتدفقات النقدية – التكاليف الاستثمارية)

- **Average Return on Investment (ROI):**

السنة	صافي الربح السنوي	معدل العائد سنويا
السنة الاولى	٣,٩٢٩,٢٥٠	%٣٥
السنة الثانية	٤,٧٨٨,٧٢٥	%٤٣
السنة الثالثة	٥,٣٠٧,٨٩٧	%٤٨
السنة الرابعة	٥,٨٧٨,٩٨٧	%٥٣
السنة الخامسة	٦,٥٠٧,١٨٦	%٥٩
التكاليف الاستثمارية	١١,١١٠,٠٠٠	
متوسط العائد على الاستثمار		%٤٨

Year	السنة
Net Annual Profit	صافي الربح السنوي
Annual ROI	معدل العائد سنويًا
First Year	السنة الأولى
Second Year	السنة الثانية

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Third Year	السنة الثالثة
Fourth Year	السنة الرابعة
Fifth Year	السنة الخامسة
Investment Costs	التكاليف الاستثمارية
Average ROI	متوسط العائد على الاستثمار

- **Payback Period:**

The payback is calculated on two steps. The first is calculating cash inflows in the first five years of the project until covering the amount of the investment costs as follows:

السنة	٠	١	٢	٣	٤	٥
التدفق السنوي الداخل	(١١,١١٠,٠٠٠)	٤,٨٤٩,٢٥٠	٥,٢٠٨,٧٢٥	٥,٧٢٧,٨٩٧	٦,٢٩٨,٩٨٧	٦,٩٢٧,١٨٦
التدفق التراكمي	٠	(٦,٢٦٠,٧٥٠)	(١,٠٥٢,٠٢٥)	٤,٦٧٥,٨٧٢	١٠,٩٧٤,٨٥٩	١٧,٩٠٢,٠٤٥

Years	السنة
Annual Cash Inflows	التدفق السنوي الداخل
Cumulative Flows	التدفق التراكمي

- **The second step according to the below law is to identify the Payback Period (PBP)**

PBP = Number of Years of Negative Cash Flows + absolute value of last negative cumulative cash flow ÷ cash inflow of the following year		
Number of Years of Negative Cash Flows	+	absolute value of last negative cumulative cash flow
		cash inflow of the following year
2	+	1,052,025
		5,727,897
2	+	0.18
PBP in months	=	24

Thus, PBP is 24 months.

5. Financial Feasibility Study Conclusion:

The conclusion of the project financial feasibility study can be summarized as follows:

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فترة دراسة المشروع	٥ سنوات
متوسط المبيعات خلال فترة المشروع	١٧,٧٠٤,٧٩٠
متوسط مجمل الربح	٧,٦٤١,٢٦٧
متوسط صافي الربح	٥,٢٨٢,٤٠٩
التكاليف الاستثمارية	١١,١١٠,٠٠٠
صافي القيمة الحالية للتدفقات النقدية N.P.V	١٠,٥٠٦,٠١٧
معدل العائد على الاستثمار R.O.I	٤٨٪
مؤشر فترة الاسترداد Payback period	٢٤شهر

Project Study Period	فترة دراسة المشروع
Project Average Sales	متوسط المبيعات خلال فترة المشروع
Average Total Profit	متوسط مجمل الربح
Average Net Profit	متوسط صافي الربح
Investment Costs	التكاليف الاستثمارية
NPV of Cash Flows	صافي القيمة الحالية للتدفقات النقدية
ROI	معدل العائد على الاستثمار
PBP	مؤشر فترة الاسترداد

IX. Conclusions and Recommendations:

It is evident from the previous study that:

- The project can achieve profits in the short term.
- Potentials are available to set up the project, starting with the availability of the raw material required to produce the final product in Egypt, the ease of providing machinery and the current climate that encourages investment in Egypt.
- Therefore, the study concluded the following:
  - The investment costs of the project are estimated at about EGP 11,110,000
  - The project achieves a positive Net Present Value during the first five years at an amount of EGP 10,506,017
  - The project achieves an annual ROI estimated at about 48%
  - The estimated PBP of the project is 24 months

Accordingly, this project is feasible.

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