

Confidentiality Agreement

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Upon request, this document is to be immediately returned to

iCARUS Private Limited

Signature

Date

This is a business plan. It does not imply an offering of securities.

Table of Content

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Name: Icarus International (proposed)

Ownership of the business:

The business will be formed with 4 stock holders each with 25% share. The agreement will be in accordance with the law of the state of Bangladesh and will be drawn up by an attorney Advocate Mr. Jalil Anonto

Type of business and product:

Manufacturing of seamless bag using natural fiber (jute & others)

Locations and hours of operation:

The proposed location will be at “Gazipur” and land is still vacant.

Name and address of the principles:

| SI | Name & Address | Educational Qualification | Business Experience | Ownership (%) |
|----|-----------------------------|---------------------------|---|---------------|
| 1 | Sardar Md. Salahuddin Bijoy | BBA | He was engaged in NGO, IT business, stock market, | 40 |
| 2 | Nafeul Hafij | BBA | He was engaged in clinical business | 20 |
| 3 | Moni Rani Saha | BBA | Engaged with stock business, printing business | 20 |
| 4 | Airin Jannat | BBA | One of the owners of a jute product buying house. | 20 |

Statement of the financial Needed:

Total Investments

| Initial Investment | Fixed Asset | Current Asset | Total asset |
|--------------------|--------------|---------------|-----------------|
| Tk.6,125,949 | Tk.4,055,000 | Tk. 1,670,949 | Tk.5,725,948.50 |

Loan & Equity:

| Loan | Equity | Total |
|---------------|---------------|---------------|
| Tk. 2,500,000 | Tk. 3,625,949 | Tk. 6,125,949 |

Executive summary

A pollution free environment is necessary for human survival. Now people are more conscious about environment and they are willing to use such products that are eco-friendly in nature and among them using shopping bag is a big concern for everyday consumers. It has found that secondary packaging market is one of the fastest growing markets in the world. Though its growth is very high but in the perspective of our country, the growth was not substantial enough due to lack of advance technology, product innovation, diversifications.

Now the picture is changing. As the people are getting more conscious about environment, eco-friendly product nature and price hiking of petroleum products has influenced the natural fibre packaging sector to reemerge.

Considering all the facts 'iCARUS International' is going to open a new horizon that will be able to create value and profitability in the packing business and will be the leader in terms of supplying the highest quality reusable Bags made from domestic raw materials those will not harm the environment. In addition, the people who engaged in the business are very much creative and self-reliant. They love to face challenge and confident to handle problems. Our business will entirely using the available advance technology, domestic materials with lots of innovative ideas.

Our product is bag specifically "woven seamless Bag". According to buyer's requirement the bags will be produced. Different types of bags will be available as well as size. One of the most distinct characteristics of our product will be low cost compares to other similar products available in the market also the product will be, biodegradable, recyclable, fashionable and stylish, export quality.

Considering the product type, we have selected distributing channel wisely to reach the target market. It includes superstores, shopping malls, outlets, showroom and popular shops in local area.

Marketing strategy has been developed to capture both the local and international market. As we are emphasizing on secondary packaging we have selected internet, In order to enter the market our strategy will be widely used Market Penetration Strategy where we will be able to sell our product at the lowest price than the competitors to capture the market. We are expecting within a small period of time we will be able to grab a larger share we will start selling our product at competitive price.

According to your operation plan, we have decided to operate 12 hours shift and 300 days a year. The full capacity of the production will have 4 lacs pieces of bags. For efficiently running the plant it will require 50 persons directly and it will create more employment in future.

The total investment requirement is estimated at Tk. 61.25 lack, out of which 40.55 lacks is required for plant and machinery. The fund will be collected through sponsor and bank loan .The project is financially viable with an internal rate of return (IRR) of 13% and a net present value (NPV) Tk. 205,851.53 of discounted at 13%. A portion of our initial startup costs will be used to purchase inventory, office equipment, and different machinery. The balance will be used for catalog costs and initial advertising

expenses. Additionally, we project the need for additional financial commitment to finance receivables and payroll expenses for the operations. It should be noted that the partners are not intend to take any profits out of the business until the long-term debt has been satisfied.

Future outlook and trend

Role of packaging industries in Bangladesh:

Packaging sector plays an important role for the development of industry and export sector as well as local consumption. Now it has become integral part of human necessities. During eighties only a few packaging industries were set up to meet up the requirements of pharmaceuticals. But early eighties when RMG sector started their export; its demands were increased tremendously. To keep pace of the RMG sector and other export-oriented sector, packaging sector is going up by leaps and bounds to cater to the needs of the demand. Now all the export oriented sectors like frozen foods, handicrafts, pharmaceuticals, ceramics, flowers etc. are met up by the local packaging industries.

Apart from the export oriented sectors there are few hundreds of packaging industry to meet up the local industries like foods and beverages, cosmetics and other consumer goods. Because of tremendous demands of consumer needs, demands for foil, flexible packaging, and polyhas also increased. In recent times demand for pharmaceutical packaging increased for export their products. Government has given priority for agro product export such as fruits, vegetable etc. We produce these items abundantly. But due to poor packaging we are going to lose our foreign exchange. Although there is a scope of development of packaging of this sector by introducing standard and eco-friendly devices. The printing sector has also been developed. Now there is further scope of development of this sector by using modern technology.

Paper Packaging: Paper packaging has now been playing a very important role in the growth of our export as well as the economic development of our country. More than one thousand paper related corrugated carton industries in Bangladesh. Out of which about five hundred are 100% export oriented. They manufacture Corrugated Carton, Back Board, Neck Board, Hang Tag, Size Tag, Price Tag, Bar Code, Photo Card, Photo Inlay, Size Sticker, Carton Sticker etc.

Glass packaging: Glass packaging in Bangladesh shows a stable growth. Glass packaging is being used in pharmaceutical industries, food industries including drinks and beverages etc. With the introduction of plastic made containers, use of glass made containers for packaging is reducing slowly.

Plastic packaging: Use of plastic packaging has increased tremendously. Plastic packaging for packing food, Consumer items,

pharmaceutical, drinking water etc. has increased in big volume. There is a growing trend to use plastic made containers in place of containers made of metal and glass. This trend has also developed the printing processes.

Poly packaging: There are more than 500 small and medium size industries producing Poly packaging items. Use of Poly packaging items has, in recent times, increased in big volume. Although Government has imposed ban on use of polythene shopping bags for protecting environment pollution yet demand of polythene packaging for packing export oriented industry like readymade garments, food items, consumables etc. has increased in big volume. Poly factories use PP film, LLDPE Film, BOPP, Aluminum Foil, Metalized film, Polyester Film etc.

Tetra, aluminum foil and flexible packaging: Use of tetra, aluminum foil and flexible packaging for packing items like; spices, chips, pickles daily necessities, pharmaceuticals, drinks and beverage, ice cream, milk and pasteurized milk, juice, table salt, tea, sugar etc. has increased tremendously. This is because of the rapid growing population in urban areas.

Metal Packaging: Use of metal containers are limited for packaging chemicals, paints etc. which has also increased with the expanding demand of these items in local market.

Future growth of packaging industries in Bangladesh

Demand for packaging for export industries are increasing every year. Apart from that because of the rapid increase of local demand, packaging industries would continue to expand in the coming years too. There is ample scope in Bangladesh to invest in packaging raw material industries such as; paper mills, petrochemicals industries etc. Government has recently declared the agro based industries as a priority sector & declared some incentive for this sector.

Analysis of competitors:

Major Competitors and their position in the market

iCARUS International knows that there are some established manufacturers of related products in the field. iCARUS after a detailed analysis found that its major competitive advantage is its superb quality & design at a very reasonable price. However, we have identified 3 major types of competitors who are not producing the same product but creating barriers to our business. They are:

Direct Competition: We have direct competition with all the shopping bag manufacturers and printing presses that are selling the similar product within Bangladesh.

Indirect Competition: We have indirect competition with all the manufacturers of small paper packets and net bags. Still some people are illegally producing banned poly-bags. These people are also competing with us indirectly.

Hidden competitors: There are some manufacturers who are producing polythene shopping bags which have been banned since 2002. Though still they are available in the market also acting like a competitor to our product.

Replacement competitor: There is another threat of replacement competitor who may use the same types resources to produce same types of product.

| Direct competitor | Indirect competitor | Potential competitor |
|---------------------------------|---------------------------|---|
| BJMC | Mosita Packaging Ind. Ltd | Diversified non-woven bag producer |
| Alijan Jute Mills Ltd. | Blue Orchid | Diversified natural fiber made bag producer |
| Asia Jute Company | Inventaproltd | |
| Jahan Group of Companies | Trend Traders | |
| Abir international | Mono Pp Wven Bag Ltd. | |
| National jute mills corporation | Rainbow Holdings Limited | |
| Confident jute mills ltd. | | |
| H.N enterprise | | |

Market Segmentation:

Product segmentation:

Government and consumers are now concerned about climate change and its sustainability. In order to meet the consumer demand we are providing products at a reasonable price with superior quality. Our customers are quite conscious about the environment. So they want to use environment friendly shopping bags.

Customer Segmentation:

Since, we want to sell our product to only those shops/ outlet/ superstores which have a minimum reputation. We are taking some super stores and some other renowned shops as our potential customers. However we do have market segmentation according to the volume of purchase by the customers. That segmentation as follows-

Master Consumer: Customers that purchase 15,000 units per month.

Elite Customer: Customers who purchase more than 7000 but less than 12,000unit per month.

General Customer: Customers who purchase more than 4,500 but less than 6,000 units are of this group

Customer Characteristics:

Our customers are quality conscious .They do not compromise with quality.

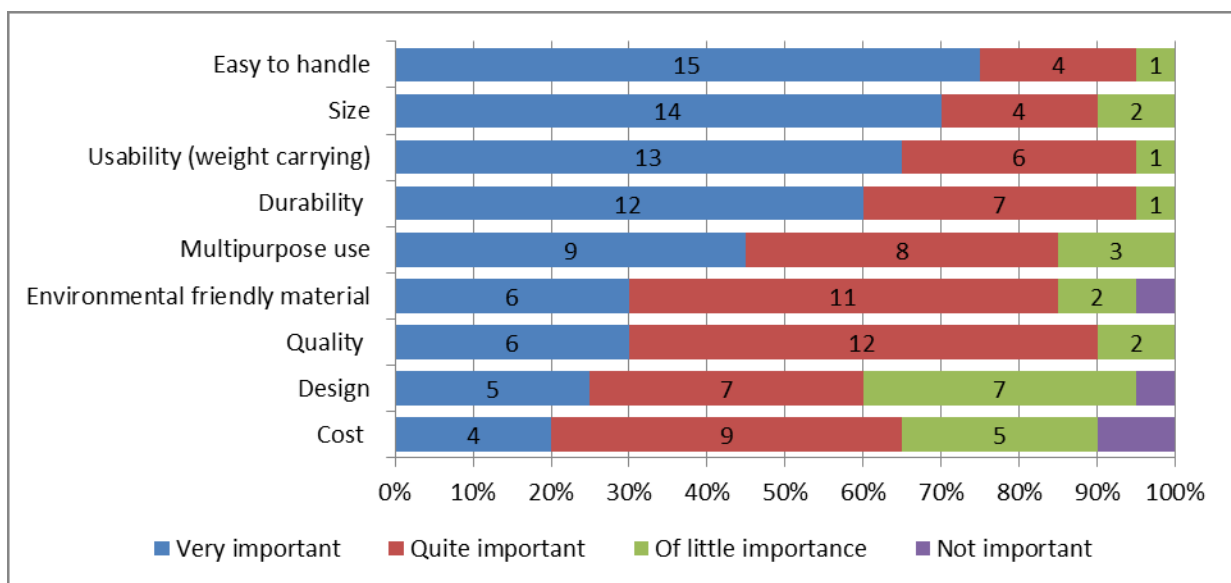


Figure: Most important characteristic while using shopping bag (n=20; multiple choice)

Local target customer

| Name of chain store | Addresses | Name of Outlets | Addresses |
|---------------------|---|--------------------------------|------------------------------------|
| 1.3S Shopping Mall | House-2, Road-9, Sector-1,Uttara, Dhaka | 15.Satarupa Departmental Store | 122, Kakrail, Subarna Plaza, Dhaka |
| 2.Agora | 80, Riles Square, Road-2, Dhanmondi, | 16.Step & Shop Ltd | Airport Road, Dargah Gate, Sylhet |

| | | | |
|---------------------------|---|---------------------------------|--|
| | Dhaka | | |
| 3.AI-Amin | G-12, DCC Market (Ground floor), Dhaka | 17.Stop N Shop | House # 23, Road # 27 (Old), Dhanmondi, Dhaka |
| 4.Almas General Stores | Road # 5, Dhanmondi, Mirpur Road, Dhaka | 18.Shameem Traders | 108, Aulad Hosen Market, Airport Road Tejgaon, Dhaka |
| 5.Aqib Departmental Store | 24 Shamoly Biponi Bitan, Mirpur Road, Dhaka | 19.Shantinagar Super Market | 24-4, Chamelibagh, Shantinagar, Dhaka |
| 6.Asian Sky Shop Ltd | 196, Green Road, (1st floor), Dhaka | 20.Shoppers World | 68/1, Gulshan Avenue, Gulshan-1, Dhaka |
| 7.BAFWA Complex | Shaheen College Gate, Dhaka | 21.Meena Bazar | 719/A, Satmasjid Road, Dhaka |
| 8.Desh Department | 2, Ishakha Shopping Complex, Kakrail, Dhaka | 22.Mona Departmental Store | Eastern Trade Centre, 56, Inner Circualr VIP Raod, Dhaka |
| 9.Elegant Golden Gate | 28, Mirpur Road, (1st floor), Dhaka | 22.Rahimafrooz Super Stores Ltd | Azad Chamber, 13, Mohakhali C/A, Dhaka |
| 10.Family Needs | Plot-7, Road-15, Sector-3, Rabindra Sarani, Uttara, Dhaka | 23.Prince Departmental Store | Bishal Center, 216, Circular Road Moghbazar, Dhaka |
| 11.Fortune City | Plot-38, Road-2, Sector-3, Uttara, Dhaka | 24.PQS Super Centers | Plot-11, Road-3, Sector-3, Uttara, Dhaka |
| 12.H.N.P. Family Mart | 55, South Avenue, Gulshan-1, Dhaka | 24.Plaza central | Plot # 22 (2nd Floor), Gulshan Circle-2, Dhaka |
| 13.Jamen Varieties Store | G-23, DMC North Market, Gulshan-2, Dhaka | 25.Pick & Pay Supermarket | A.R. Tower, 24, Kemal Ataturk Avenue, Banani, Dhaka |
| 14.Jonaki | Dhaka Sheraton Hotel, Dhaka | | |

International Target customer

| Name of the buyer | Origin |
|-------------------|---------------|
| Walmart | United states |
| Tesco | United states |
| KielSolution | Germany |

| | |
|--|----------------------|
| Long Vinh Trading Co.,Ltd | Viet Nam |
| Neiman-Marcus | United states |
| Moon Trading Co. | Turkey |
| Interstate Automobile Valuers & Assessor | Kenya |
| Flex Management Sdn Bhd | Malaysia |
| C V. Everbright International | Indonesia |
| | |
| Reliable Exim Industries | United Arab emirates |

Description of the venture

Office Equipment:

| Fixed Asset | Quantity(pcs) | Total Cost(Tk) | Depreciation |
|---|---------------|-----------------|---------------|
| Air Conditioner | 2 | 80,000 | 16,000 |
| Computer & laptop | 3 | 50,000 | 10,000 |
| Furniture(self,almirah,table,chair,desk & others) | | 70,000 | 14,000 |
| Total | | <u>2,00,000</u> | <u>40,000</u> |

Management Summary

iCARUS international will be organized and managed in a creative and innovative way to generate very high levels of customer satisfaction through delivering superior quality products, and to create a working climate to a high degree of personal development and economic satisfaction for employees.

On the job training (OJT) to help improve product knowledge and skills will be conducted on a regular basis. As the business grows, the company will consider offering an employee benefit package to include health and vacation benefits for everyone.

Management Team

1. Sardar Md. Salahuddin: He is 24 years old. He is now a student of BBA(9th semester).He has Started his career in 2007 as an operation manager in S.S Sanchoy Prokolpo till 2009. Then he had worked in Dreamz Unlimited as an

Accountant. He has also worked as IT Trainer in S.S Computer IT. He was also engaged with stock business. He will act as Chief Executive Officer (CEO). His job is to cover the corporate strategy, sales, E-Commerce, marketing and public relations in the company.

2. Nafeul Hafij Rista: He is a doctor .he completed his MBBS from Rajshahi medical college in 2001.He is now serving as government doctor .He is engaged in clinical business .He is 35 years old now.

3. Moni Rani Saha: He worked in a Shopping Mall in Saudi Arabia and returned in Bd. in 2010 and started career as a proprietorship concern with “jute world export” in 2011. Jute world export is jute buying house .He is 30 years old now.

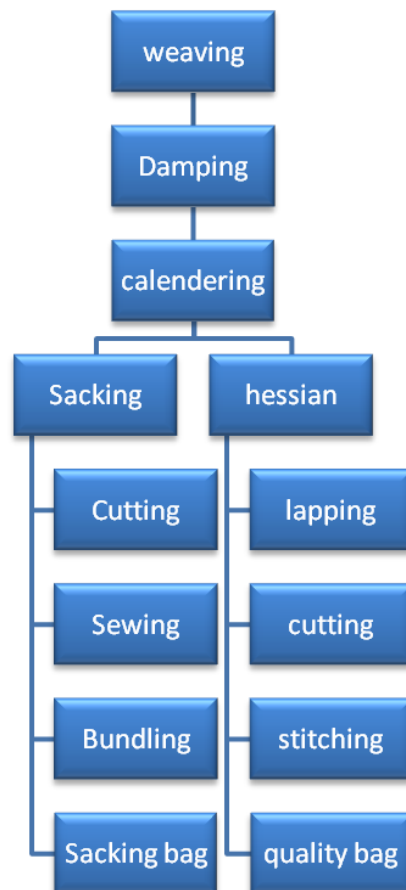
4. Airin Jannat: He is a Textile engineer; completing his B.Sc from Bangladesh University of Textiles .He has a sound knowledge in textile production. He will work as the Manager (Product & procurement) in the company. He was engaged with stockbusiness,printing business etc. His Job description is Product development, Process development, procurement and licensing activities across all divisions. He is 25 years old now.

Description of Production Process:

Traditional Process

The process of manufacture of jute bags essentially involves the following operations.

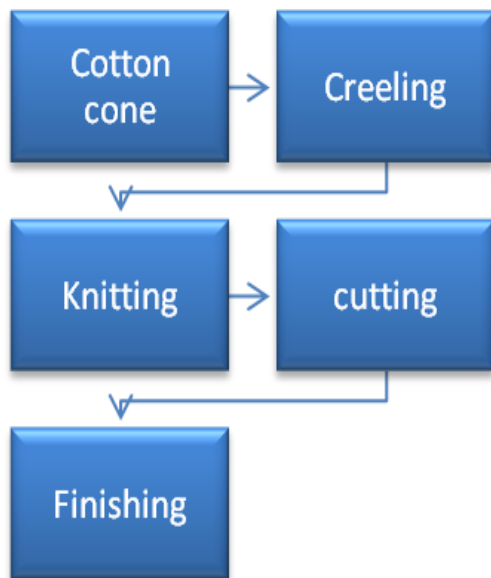
- a) Weaving of the Hessian or sacking from the yarn
- b) Cutting of the cloth into required sizes by heavy duty cutter
- c) Stitching by electrically operated stitching machines
- d) Testing
- e) Pressing
- f) Packing and forwarding



Flow chart of traditional making of sacking & hessian bag

Method of innovation

Our proposed process of manufacturing of jute bags involves the following operations:



Flow chart for seamless knitted bag



Flow chart for seamless woven bag

Basic principal of seamless bag:

Seamless bag are produced in tubular cloth principal. Here a tubular fabric consists of two distinct face and back in which selvages are joined ,because shuttle flies from left to right, inserting the face pick and then flies in opposite direction ,inserting the back pick .While producing seamless bag ,the shuttle inserts two face picks passing from left to right and right to left .As a result ,only the left selvages of the face and back fabrics are joined ,forming the bottom of the bag, the sides of the bag are formed by making a short length of the double fabric and then again a whole width of the bag.

Manufacturing Process

Weaving Fundamental:

The classical method of weaving is essentially the insertion of a continuous length of weft yarn from a shuttle which travels to and fro across the warp sheet in the loom and leaves behind a trail of weft (pick) at each passage. Weaving involves three primary actions and two secondary ones. These are briefly as below:-

Primary Action:

The three primary actions are shedding, picking and beating up. They must be performed in strict rotation in a loom.

i) Shedding

To form any weave structure all warp threads under which a particular pick has to lie in ultimate cloth are raised during the shuttle passage while all threads with the same pick has to pass over powered.

ii) Picking:

The action of passing the weft through the shed is picking.

iii) Beating Up

Finally after the insertion of each brick, the pick of weft in itself has to be pushed forward by a reed (a type of closed comb through which all of the warp threads are drawn) to a point adjacent to the previous pick, known as the 'fell' where this cloth is formed. This third action is called beating up.

Secondary action:

In addition to the primary actions two secondary actions are necessary. However, the instant at which they are performed is at the discretion of the weaver in the case of simple hand looms. On the other hand strict control and timing in relation to primary motions is required for power looms.

i) Taking up: This action involves the taking up of woven cloth as weaving proceeds so that the fell is maintained in the same position.

ii) Letting off: This action involves the letting off the further warp from a beam at the above of the loom to replace that woven into cloth.

Production Stages:

Manufacturing of Woven seamless bag:

Warping: It is the process of placing warp yarn on to the warp beam. Here also oil treatment is happened.

Beaming: Beaming process is follows after spool winding. In beaming operation yarn from spool is wounded over a beam of proper width and correct number of end to weave jute cloth. To increase the quality of woven cloth and weaving efficiency, the warp yarns are coated with starch paste. Adequate moisture is essential in this process.

Weaving: Weaving is a process of interlacement of two series of threads called warp and weft yarns to produce the fabric of desired quality. There are separate looms for Hessian and sacking in weaving section. The Hessian looms, shuttle which contents cops (weft yarn) is manually changed. The sacking looms are equipped with eco-loader to load a cop automatically into the shuttle

Cutting: Normally Rotary and Guillotine type machines are used to cut the cloth into pre fixed piece lengths depending on the dimension of the bag. Here we will follow the manual method of cutting.

Starching: Starching it is not a essential step .but when necessary it is done to increase stiffness. Starch solution in water contains tamarind kernel powder (TKP), antiseptic sodium Silica fluoride (NaSiF_4) and its concentration varies with the quality of yarn.

Drying: Drying is a necessary step for if the starching operation is done .

Printing section: As per buyer's requirement bags are branded manually by screen printing technique. Branded bags are kept on the floor for sometimes to facilitate drying of the dye staff used for branding printing will be done according to the buyer requirements.

Necessary instrument for printing are below:

- a) Wooden Printing Table
- b) Screen of Diff. Design
- c) Rubber Wiper
- d) Dye Paste Stirrer
- e) Water Drum
- f) Cottage Steamer
- g) Tubes, Steel Spoons,

Mugs, Bucket, Roper,
Clips, Stools

Lamination: Laminated Jute looks exactly like Raw Jute on the outside and has an additional thin layer of Polypropylene (PP) applied to the inside of the bag to stiffen and protect the natural fibers which creates a really structured, solid, long-lasting bag. The lamination of Jute adds about 10% to the cost and it will extend the life of the bag almost indefinitely. When times comes to discard the bag, the PP layer can be removed which leaves to completely biodegradable Jute bag

Inspection/ Repairing: The weaving faults present in the cloth are inspected and repaired manually. Inserted cop present, if any, is removed to avoid major damage supposed to occur during calendaring. Production at this stage varies depending upon major and minor weaving faults present in the fabric.

Manufacturing of Knitted seamless bag:

Seamless technology shortens the manufacturing process and reduces material wastage, offering greater comfort for packaging. Seamless knitting involves the production of a whole garment in one piece on a knitting machine such that little or no sewing-up is required. But it does not mean that complete elimination of seams. It is normally free from side seams, whereas it is less expensive.

Traditionally, manufacturing of bag has been considered to be labour intensive. It requires a high level of operator skill in handling tiny pattern pieces and stretchy materials. The measurements should be precise to achieve a perfect matching of components, a smooth and symmetric appearance and a comfortable stretch fit. With the advances in seamless technologies, the cut and sewn operations may be substantially reduced

Creeling: Creeling is the placement of full packages in position ready to be unwound as part of the transfer operations. An alternative meaning is the removal of the exhausted packages & their replacement with full ones.

Knitting: It is a technology of creating fabric by transforming continuous strands of yarn into a series of interlocking loops. We will use full circular garment length machine .Here tubular fabrics are made in continuous form.

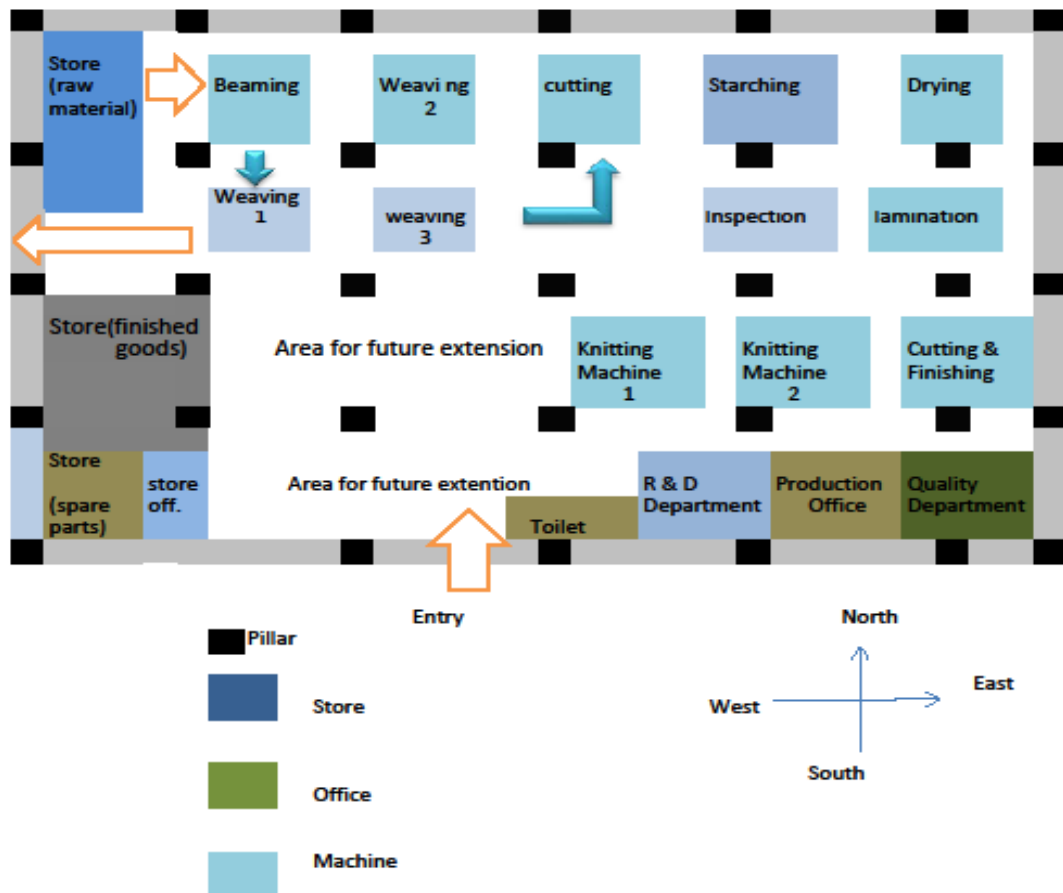
Cutting: Normally Rotary and Guillotine type machines are used to cut the cloth into pre fixed piece lengths depending on the dimension of the bag. Here we will follow the manual method of cutting.

Stitching & Finishing: Seaming is the most vital sewing operation in bag manufactures. Two ends of the same piece of cloth are placed one above other and stitched for seaming (joining) with Herakle sewing.

Quality Assurance or Continuous Improvement

There will be provision for quality assurance through practicing some of the quality assurance tools. The business will be driven by the thirst of continuous improvement. It will also be driven by the beauty of innovation, exploration, exposition and composition. These all things are required to ensure the continuous improvement

Physical Layout of plant



List of Machinery and Equipments:

| Machinery | Quantity | Price |
|-------------------------------------|----------|------------------|
| | | |
| Building & civil work | | 1000000 |
| Machinery & Equipment | | 1480000 |
| (1) Power Jacquard loom | 3 | 600000 |
| (2) Winding machine | 1 | 50000 |
| (3) Pressing machines | 1 | 50000 |
| (4) Lamination machine | 1 | 200000 |
| (5) Printing table & auxiliaries | | 30000 |
| (6) Tools and auxiliaries | | 30000 |
| (7) Garment length knitting machine | 3 | 400000 |
| (8) Inspection machine | 1 | 20000 |
| (9) Others machine | | 100000 |
| Furniture & Fixture | | 75,000 |
| Transport (pick up) | 1 | 1000000 |
| (10) Air Conditioner | 2 | 80,000 |
| (11) Computer & laptop | 3 | 50,000 |
| Total | | <u>3,685,000</u> |

List of the raw materials and supplier:

| Type of the raw material | Name of the material |
|--------------------------|----------------------------|
| Basic type | Jute yarn |
| | Jute bleached yarn |
| | Cotton yarn |
| Chemical type | Dye stuff |
| | Different chemicals |
| | Printing gum |
| | Thickener |
| Others | Sewing Thread |
| | PVC Buckle or Bamboo stick |
| | Packing Materials |
| | Needle |
| | Label |

| Description of Raw Materials | Unit | Quantity | Unit Price | Cost (Taka) |
|------------------------------|------------|------------|------------|----------------|
| Dye Stuff | Kg | 15 kg | 550 | 82050 |
| Printing gum | kg | 15 kg. | 50 | 12750 |
| Chemicals & auxiliaries | kg | | | 112800 |
| Jute yarn | metric ton | 15 ton | 84950 | 1274250 |
| Cotton yarn | metric ton | 3ton | 115581.333 | 346744 |
| PVC buckle or bamboo | pcs | 11800 pcs. | 1.5 | 17700 |
| Sewing thread | | L.S. | | 22200 |
| Packing material,label etc. | | L.S. | | 52200 |
| Total | | | | <u>1920694</u> |

Supplier of raw materials: Most of product we can purchase from the local market but some dyeing chemical we can import from BASF- Malaysia. They are one of the leading industrialists in chemical manufacturing business.

Marketing Plan

Our objective is to build “**ECOBAG**” a strong brand.

Product: Our company will produce two types of product one of them is woven bag another one is knitted bag. There will be two type of sub quality of that product like woven type (A) and woven type (B) also knitted type (A) and type (B). Two of them will be raw jute color. And two of them will be mixed color.

One of them is named gift packaging jute bag and another one jute and cotton shopping bag. Other one named is Eco jute shopping bag.



In the above picture both of them is gift packing jute bag. One may can use for shopping mostly. Above those two products has only raw jute using for the production of those particular product. But second one is only mixed red color for eye catching of the product.



Above those bag can use for the various purpose. Especially middle one can use as basket also. First one may use for shopping like carrying fruits.

Pricing Strategy:

Price plays an important in business. Inorder to enter into the market we have decided to use “*New Product Pricing Strategy*” as we want to enter into the market slowly and grab the market share slowly with the highest possible profit.

iCARUS international will manufacture shopping bags of 2 different materials.

Price of the product:

| Product | Units | Time | Quantity | Avg Unit Price | Taka |
|----------------------|--------|--------|----------|----------------|---------|
| woven bag(type A) | pieces | 1 year | 20000 | 18 | 360000 |
| woven bag(type B) | pieces | 1 year | 180000 | 37 | 6660000 |
| knitted bag(type A) | pieces | 1 year | 15000 | 8 | 120000 |
| knitted bag (type B) | pieces | 1 year | 45000 | 17 | 765000 |
| Total | | | 260000 | | 7905000 |

Sales Forecasting:

| Year 1 | | | | | |
|------------------|-----------------|-----------------|-----------------|-------------------------|--------|
| Product name | 1 st | 2 nd | 3 rd | 4 th quarter | Total |
| Woven seamless | | | | | |
| Unit | 5000 | 25000 | 70000 | 100000 | 200000 |
| Average Price | 27.5 | 27.5 | 27.5 | 27.5 | 27.5 |
| Knitted seamless | | | | | |
| Unit | 5426 | 12045 | 23154 | 19375 | 60000 |
| Average Price | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| | | | | | 260000 |
| Sales revenue | | | | | Tk. |
| Year 2 | | | | | |
| Product name | | | | | |
| woven seamless | | | | | |
| Unit | 98075 | 113075 | 125000 | 53962 | 390112 |
| Average price | 28.5 | 28.5 | 28.5 | 28.5 | |
| knitted seamless | | | | | |
| Unit | 17065 | 20000 | 18075 | 21985 | 77002 |
| Average Price | 13 | 13 | 13 | 13 | |

| | | | | | |
|-------|--|--|--|--|--------|
| Total | | | | | 467114 |
|-------|--|--|--|--|--------|

Promotion & advertisement:

Based on our product categories we have selected 3 channel to promote and advertise our product. They are:

- a) Direct sales to the target customer through our company agent
- b) Billboard
- c) Internet

Our sales people will visit the target customer directly and will provide information about our product.

Billboard will be placed in front of popular public places and superstores and shopping malls and finally through internet.

Market Expansion Strategy and sales distribution network:

As the product has equal demand on Local as well as International Customers so our focus will also be distributed equally but firstly will try to grab the share of our local market first. Our first target will be superstores, showrooms, shopping malls, and popular shops in the locality. We have selected such distribution channel that will be able to effectively reach the target customer. Our less complex network will enable to cover the most possible area with the least possible cost.

Marketing Budget (Yearly):

| Product | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|--|--------|--------|--------|----------|----------|
| a. Promotion | 50000 | 55000 | 58850 | 62969.5 | 67377.37 |
| b Distribution of product | 46,000 | 50600 | 54142 | 57931.94 | 61987.18 |
| c.Sales commission(2% net sales) | 140000 | 154000 | 164780 | 176314.6 | 188656.6 |
| d.Internet marketing, trade show, sales bonus. | 42,000 | 46200 | 49434 | 52894.38 | 56596.99 |
| Total | 278000 | 305800 | 327206 | 350110.4 | 374618.1 |

Organizational Plan:

Organizational Structure:

| Management Team | No of post |
|------------------------------------|------------|
| Chief Executive Officer (CEO) | 1 |
| Manager (Product & procurement) | 1 |
| Manager (operations) | 1 |
| Manager (Administration & finance) | 1 |

Chief Executive Officer (CEO) will make critical decision making of the overall activities..

The manager (Product & procurement) will conduct research regarding better quality for surviving in the market.

Manager (operations) will be responsible for his works to the production manager. Production manager will control the whole production process.

Manager (Administration & finance) will take decision to improve working condition of the factory as well as recruiting manpower, set up distribution channel etc by consulting opinions from the marketing section, human resources and accounting officer.

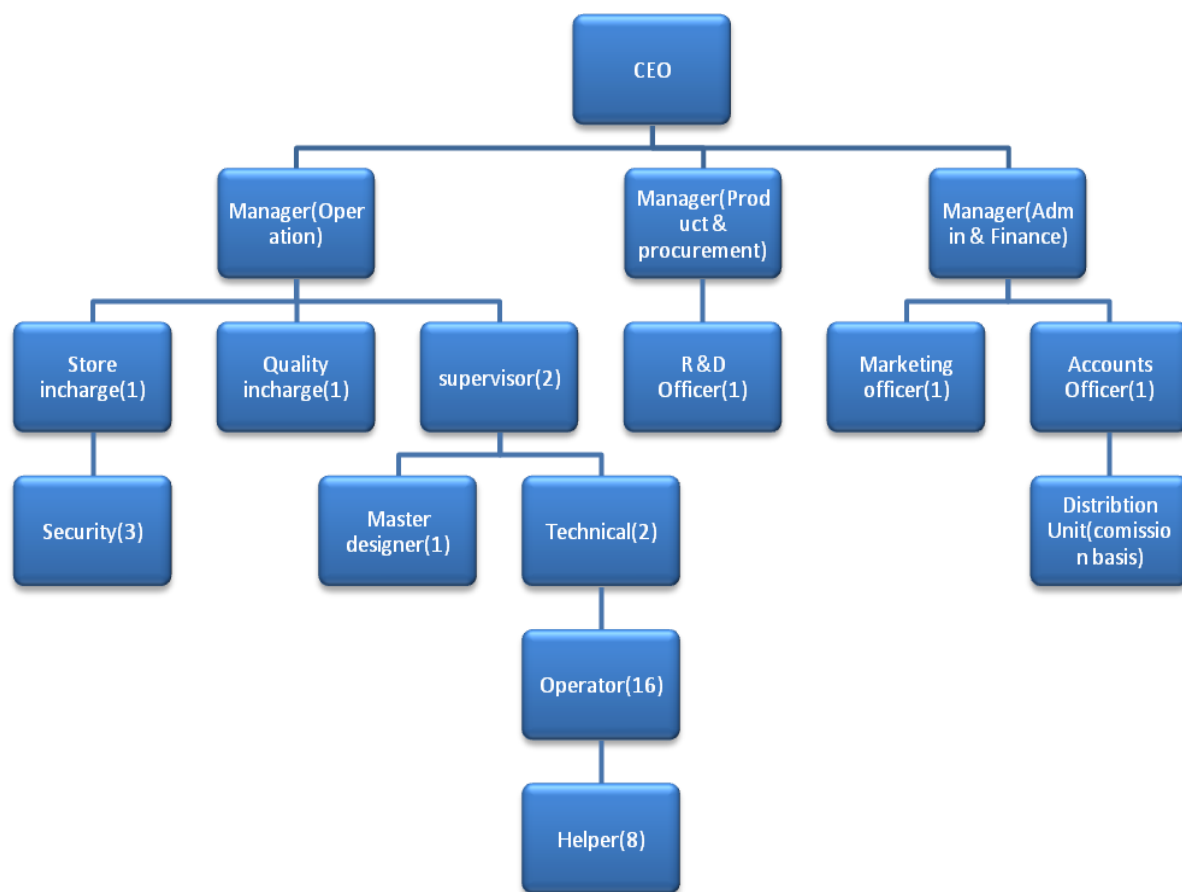


Figure: Organogram of iCARUS International

The background of the management team:

| Name | Designation | Job description | Qualification & experience |
|-----------------------------|-------------------------------|---|--|
| Sardar Md. Salahuddin Bijoy | Chief Executive Officer (CEO) | To cover the corporate strategy,sales,E-Commerce, marketing and public relations. | |
| Nafeul | Manager (Product & | Product development, | Md.Shahidul kader is acodtextile production. |

| | | | |
|----------------|---------------------------|---|--|
| Hafij | procurement) | Process development, procurement and licensing activities across all divisions. | |
| Moni Rani Saha | Manger (operations) | Responsible for the Total Production & Quality Control of the factory. | |
| Airin Jannat | Manager (Admin & finance) | Responsible for finance and accounting, controlling, IT, HR, logistics and legal. | |

Business Start-up Activities and Cost:

| Sl | Business Start-up Activities | Time(week) | Cost |
|----|---|------------|-----------------|
| 1 | Business Plan preparation | 8 | N/A |
| 2 | Registration and license for business | 6 | 50,000 |
| 3 | Application for loan | 6 | 10,000 |
| 4 | Contract/Agreement | 2 | 10,000 |
| 5 | Purchase of land/ Rent (only time) | 2 | |
| 6 | Connection of utilities (gas, electricity, water) | 6 | 50,000 |
| 7 | Recruitment | 4 | 30,000 |
| 8 | Others | 2 | 10,000 |
| | Total | 30 | <u>1,60,000</u> |

Salary of the Employees:

| Sl | Designation | Salary (Monthly) |
|----|---------------------------------|------------------|
| 01 | Chief Executive Officer (CEO) | Only take Profit |
| 02 | Manager(Product & procurement) | Only take Profit |
| 03 | Manger (operations) | 30,000 |
| 04 | Manager(Admin & finance) | 30,000 |

| | | |
|----|----------------------|-----------------|
| 05 | Clerk cum-Accountant | 10,000 |
| 06 | Marketing officer | 10,000 |
| 07 | R& D officer | 8,000 |
| | | <u>88,000</u> |
| | Add: Perquisite @15% | 13,200 |
| | Total(monthly) | <u>1,01,200</u> |
| | Total for 3 months | <u>3,03,600</u> |

Administrative Expenses:

| Sl | Description | Cost (In Taka) |
|----|---|-----------------|
| 1 | Depreciation of Office Equipment | 40,000 |
| 2 | Salary of Employees | 3,03,600 |
| 3 | Office Rent | 60,000 |
| 4 | Office Utilities (gas, electricity, water etc.) | 9,000 |
| 5 | Postage, Telephone etc. | 6,000 |
| 6 | Stationeries | 5,000 |
| 7 | Entertainment | 20,000 |
| 9 | Speak money | 20,000 |
| | Total | <u>4,63,600</u> |

Monitoring and Evaluation :

| OBJECTIVES/ACTIVITIES | OBJECTIVELY VERIFIABLE INDICATORS | MEANS OF VERIFICATION | IMPORTANT ASSUMPTIONS |
|---|---|---|--|
| Overall Goal To establish an absolute commitment to customer satisfaction through establishing an eco-friendly Packaging green business. | -Removal of non-biodegradable packaging -The ability to control process -Confidence to occupying the packaging market | -Monitoring and Evaluation reports -Reports from networking personnel. | Assumption for sustainability: -demand growth of eco-friendly packaging increases Upcoming year. |
| <u>Project Purpose</u> Longer-Term To create a global market of our local jute in packaging. Shorter-Term | -Superior quality level of the product -Increased level of satisfaction of | - Interviews or surveys -Members own contribution -Progress | <u>Assumption for Overall Goal:</u> Availability of raw material will |

| | | | |
|---|-----------------|---------|---|
| To meet our customer's expectations, producing superior quality and exceptional service at a fair profit. | the stakeholder | reports | remain constant Government policy will be hard for polythene bag |
|---|-----------------|---------|---|

Business Social Responsibility (BSR)

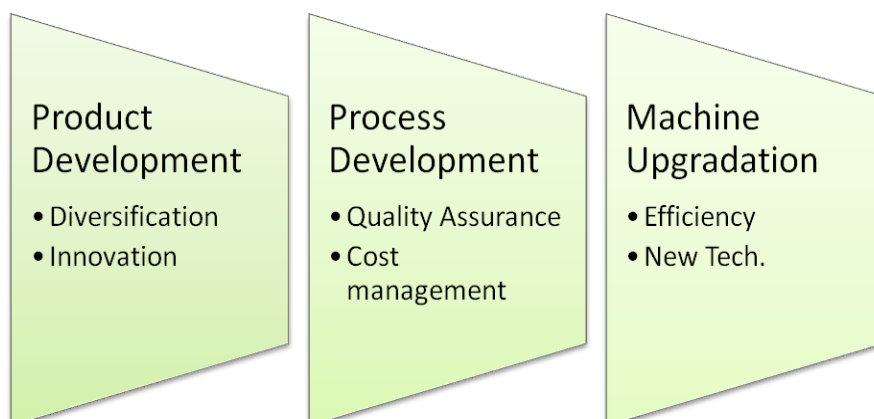
In our business plan we have emphasized significantly on Business Social Responsibility (BSR). We have a big plan for securing its existence and survival of our stakeholder like- the owners, investors, employees, consumers and government in particular and the society and community in general. Environment pollution is a top concern to the human being across the countries of the world. To reduce environment pollution, it is a vital need to launch green technology. We choose our business type from our responsibilities to the community, country and world.

Research and Development (R&D)

Research and Development is a vital need for sound operation of any industry, as a unique Business concern we will take necessary provision for research and development of products. We will form an outstanding technical, commercial and manufacturing team. Md. Shahidul kader, Manager (Product & procurement) will lead the R & D team engaged in priority work, researching and developing new concepts and technology in flexible packaging system.

Mainly the following area issues related to R&D

- Product development (diversification of product, up gradation of product)
- Process development (mill management, maintenance)
- Machine Up gradation



Training & Development

The skill of jute yarn weaving is well developed in our country since there many plant engaged in jute bag production. But we are working with new technology .However, machinery operators will have to be given training for Quality product.To increase the skill of the worker we will provide

- Regular training session
- To make trained up worker by external training program

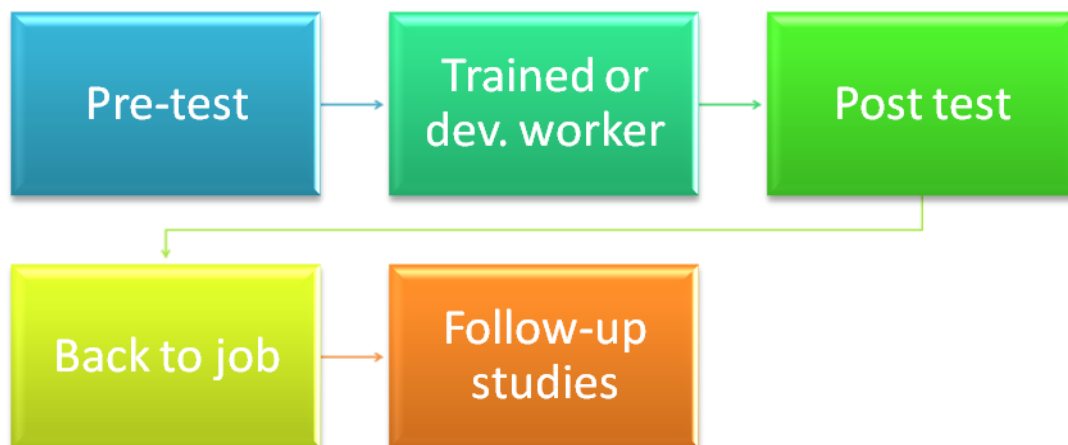


Figure: Training evaluation step

SWOT ANALYSIS:

:Risk of the Business:

| Risk factors(financial and non-financial) | Risk mitigate |
|---|---|
| 1. Shortage of working capital | The flexible financial strategy implies surplus cash and little short term borrowing. However, to start the operation of our business, we need to take both short and long term loans. Though the estimated net income for the first two years of our business will be positive. Hopefully reduces the risk of experiencing financial distress. |

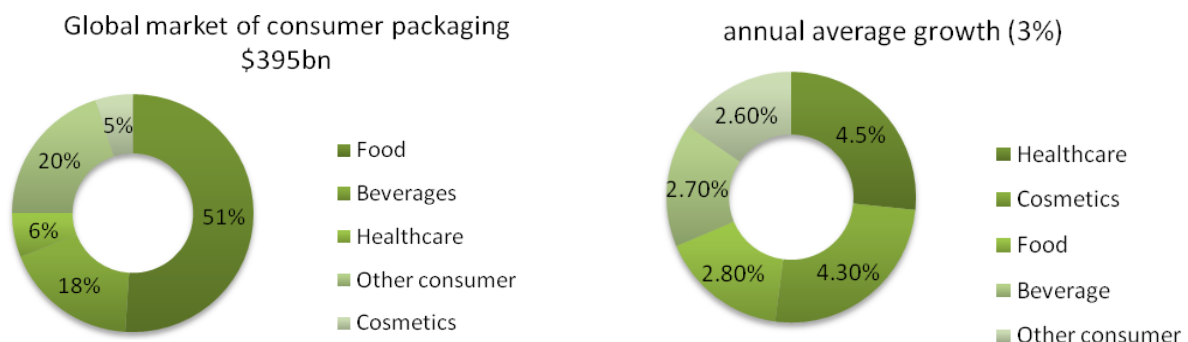
| | |
|------------------------------------|---|
| | |
| 2.Inflation risk | The high growth rate of price in this country may lead to decrease in investment in various sectors or it may increase the price of the product that will directly affect the revenue and thus the expansion of the firm. |
| 3.Volatility of interest rate risk | We will take short term loans more than long terms at the initial stage .Since, short term interest rates are more volatile than longer rates; this may lead to interest rate risk for our company. |
| 4.Power interruption | We have alternative plan (solar) to solve this problem |
| 5.Political risk | The current political instability may appear to be a major threat for a new entrant like us since opening a new firm requires considerable amount of activities regarding fulfillment of rules and regulations and maintaining laws that are directly or indirectly affected by political affairs |
| 6.Technical risk | Although technology is new, but we have a great effort .we are all engineers. It is a great advantage |
| 7.Business Risk | The business is at initial stage but the proprietor is very much alert and hired a strong experienced team to overcome this problem. |
| 8. Environmental risk | The past history of the location we have chosen is the least disaster prone area. |
| 9. Technological risk | Though technological risk is one of the most potential risk and inorder to mitigate the risk we have had an extensive survey and we have come to a conclusion that our technology will sustain in the market for a longer time. |

Research report of the risk:

Sustainable development is one of the most important issues in the world today. People can play an important role in the sustainable development in different ways regardless of their own position. This study focuses on finding out how plastic bags could be substituted by jute bags and how it would contribute to the sustainable development.

Bangladesh exports jute goods around the world over to 85 countries including, Turkey, Iran and Belgium, Canada, Japan, EU and the United States. It also exports raw jute in different countries up to 59 countries including Brazil, Vietnam Thailand, China, Germany, India, Pakistan, Spain, and the USA and UK. In the fiscal year 2008-09 the country's jute goods export was recorded at \$269.25 million and raw jute export at \$148.17million. Australia, Canada, USA, Belgium, India, Indonesia, Thailand, China, Pakistan and Philippines are showing keen interest for jute bags in the local markets. In the year of 2007-08, India was the top world's production of jute with 58 percent whereas Bangladesh was 33 percent holding second position.

World consumer packaging industry has been growing 3-5% per annum. Around 29% in Asia pacific region (Australia, Japan, China are the major). The global market for consumer packaging in 2010 was valued at just over US\$395bn Per capita packaging consumption around the world \$74 and this rate is increasing gradually some specific region like in North America \$380, Europe \$220, Latin America \$54, Asia \$36 .



Large chain stores are also offering alternate bags made of jute or cotton. This proves there is healthy global demand for these products due to the growing awareness of and demand for eco-friendly and biodegradable products.

Opportunities:

Bangladesh is now one of the leading manpower exporting countries of the world. The export earnings also have been experiencing increase especially in the readymade garments, medicine, leather, shrimp and jute & jute goods. The revenue earning is also increasing which was more than 10% higher than the last fiscal year 2009-2010.

The government is giving highest priority to rapid industrialization of the country. An extensive program of incentive to expedite investment in the country is now in place. No ceiling for investment, tax holiday up to 10 years, tax exemption and duty free import of capital machinery and spare parts for 100% export oriented industries, residency permit for foreign nationals, profit and dividend repatriation facilities, avoidance of double taxation, tax-exemption on the interest payable on foreign loan, convertibility of taka on current account etc. Foreign direct investment encourages in all industries except reserve list. Moreover equal treatment of local & foreign investment was given and safeguarding foreign investment from state expropriation.

Export performance: The government has liberalized its trade policy and declared various incentives packages for exporters. Because of that export trade of the country achieved a growth of 17.71% in 2010-2011. A comparative statement showing export earning of the country for the last five years is given below

| Fiscal Year | Export Earnings (million US\$) | (+)Increase | Increase in % |
|-------------|-----------------------------------|-------------|---------------|
| 2006-2007 | 6548.44 | +562.35 | + 9.39% |
| 2007-2008 | 7602.99 | +1054.55 | + 16.10% |
| 2008-2009 | 8654.00 | +1051.01 | + 13.83% |
| 2009-2010 | 10526.16 | + 1872.00 | + 21.63% |
| 2010-2011 | 12180.00 | +1653.84 | +17.71% |



Financial Plan

Presumption

The financial analysis of the seamless bag project is based on the data presented in the previous chapters and the following assumptions:-

- The cost in respect of plant and machinery, raw materials and selling price of finished product are those generally obtained at the time of preparation of project profile and may vary depending upon other various factors.
- The salary and wages of staff and labors has been taken as per present market rate.

c) Production utilization capacity is considered initially at 70% of the total capacity. The time period for achieving full envisaged capacity utilization is three years.

d) Working days per year is considered 300 days and working hours is 8 hour per day considering single shift.

e) The rate of interest on Bank loan has been considered as 15% p.a. which may vary from time to time

| | |
|---------------------|---------|
| Construction period | 1 year |
| Tax holidays | 3 years |
| Discount cash flow | 15% |
| Accounts receivable | 30 days |
| Raw material local | 30 days |
| Work in progress | 2 days |
| Finished products | 30 days |
| Cash in hand | 5 days |
| Accounts payable | 30 days |

- Average Loan utilization of the facility: 90%
- Cost of fund is assumed at 10% and Interest rate is 13.00% p.a.
- Loan Processing Fee @ 0.20% on approved limit
- Loan Service Charge @ 0.15% per quarter on quarter end outstanding

List of Fixed Asset

| Fixed Assets | Quantity | Price | Depreciation (In Taka) |
|-------------------------|------------|---------|---------------------------|
| Land (rent) | 30 decimal | 500000 | |
| Building & civil work | | 1000000 | 50000 |
| Machinery & Equipment | | 1480000 | 148000 |
| (1) Power Jacquard loom | 3 | 600000 | |
| (2) Winding machine | 1 | 50000 | |
| (3) Pressing machines | 1 | 50000 | |

| | | | |
|-------------------------------------|---|------------------|----------------|
| (4) Lamination machine | 1 | 200000 | |
| (5) Printing table & auxiliaries | | 30000 | |
| (6) Tools and auxiliaries | | 30000 | |
| (7) Garment length knitting machine | 3 | 400000 | |
| (8) Inspection machine | 1 | 20000 | |
| (9) Others machine | | 100000 | |
| Furniture & Fixture | | 75,000 | 15,000 |
| Transport (pick up) | 1 | 1000000 | 200000 |
| Total | | <u>4,055,000</u> | <u>413,000</u> |

Current Asset

| Description | Duration(months) | Present (Tk) |
|------------------------------|------------------|--------------------|
| Raw materials expenditure | 3 | 480173.5 |
| Wages | 3 | 276375 |
| Factory Overhead expenditure | 3 | 290750 |
| Marketing expenditure | 6 | 139000 |
| Administrative expenditure | 3 | 484,650 |
| Total | | <u>1,670,948.5</u> |

Income Statement

| Items | Year 1 | Year 2 | Year 3 |
|------------------------|---------|-----------|-------------|
| Sales | 7905000 | 10276500 | 13359450 |
| (-) Net VAT | | 0 | |
| Net Sales | 7905000 | 11067000 | 13359450 |
| (-) Cost of Goods Sold | 4189194 | 5027032.8 | 5881628.376 |
| Gross Profit | 3715806 | 5249467.2 | 7477821.624 |

| | | | |
|--|---------|-----------|-------------|
| (-) General Administrative and sales expenditure | 2216600 | 2438260 | 2925912 |
| Net Profit Before Interest and Tax | 1499206 | 2811207.2 | 4551909.624 |
| (-) Interest on bank loan | 233472 | 233472 | 233472 |
| Net Profit Before Tax | 1265734 | 2577735.2 | 4318437.624 |
| (-) Tax | | | |
| Net Profit After Tax | 1265734 | 2577735.2 | 4318437.624 |

Balance Sheet:

| Item | Year 1 | Year 2 | Year 3 |
|---|------------------|------------------|-------------------|
| Current Assets | | | |
| Cash and Bank balance | 587728 | 1234228.8 | 2098188.96 |
| Inventory | 2400000 | 3642000 | 6555600 |
| Accounts Receivables | 260000 | 390000 | 741000 |
| Prepaid Expenses | | | |
| Total Current Assets | 3247728 | 5266228.8 | 9394788.96 |
| Fixed Assets | | | |
| Fixed Assets | 4,055,000 | 4,055,000 | 4,055,000 |
| Less accumulated depreciation on all fixed assets | 413,000 | 702,100 | 1,193,570 |
| Total Fixed Assets | 3,642,000 | 3,352,900 | 2,861,430 |
| Total assets | <u>6,889,728</u> | <u>8,619,129</u> | <u>12,256,219</u> |
| Liabilities | | | |
| Current liabilities | | | |
| Cash credit | 318425 | 95527.5 | 750479.75 |
| Accounts Payable | 230000 | 115000 | 57500 |
| Interest Payable | | | |
| Taxes Payable | | | |
| Outstanding expenses | | | |
| Total Short term liabilities | 548425 | 210527.5 | 807979.75 |

| | | | |
|--|----------------|----------------|-----------------|
| (b) Long term liabilities | | | |
| Bank loan payable | 1400000 | 889563 | 876497 |
| Mortgage payable | | | |
| (-) Current portion of long term liabilities | | | |
| Total Long term liabilities | 1400000 | 889563 | 876497 |
| Total liabilities | 1948425 | 1100090.5 | 1684476.75 |
| Owners Equity | | | |
| Initial capital | 3675569.1 | 3675569.1 | 3675569.1 |
| Retained Earnings | | 1265734 | 2577735.2 |
| Profit for the year | 1265734 | 2577735.2 | 4318437.624 |
| Total Owners Equity | 4941303.1 | 7519038.3 | 10571741.92 |
| Total Liabilities & Equity | <u>6889728</u> | <u>8619129</u> | <u>12256219</u> |
| Differences (if any) | 0 | 0 | 0 |

Cash Flow Statement

| Projected Cash Flow [Year] | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|----------------------------|-------------------|-------------------|-----------------|--------------------|-------------------|
| OPENING BALANCE | N/A | 3042909 | 3100490 | 4992625 | 5462728 |
| Cash inflows | | | | | |
| Sales | 7905000 | 10276500 | 13359450 | 14695395 | 19104013.5 |
| Equity | 2,825,949 | 2,625,949 | 1500000 | 600489.64 | 900734.46 |
| Loan | 2500000 | 500000 | 0 | 2625000 | 200000 |
| Asset sales | | | | | |
| Debtor receipts | | | | | |
| Total Cash inflows | <u>13230948.5</u> | <u>13402448.5</u> | <u>14859450</u> | <u>17920884.64</u> | <u>20204747.9</u> |
| Cash outflows | | | | | |
| Marketing Expenses | 278000 | 305800 | 327206 | 350110.42 | 374618.14 |
| Capital Expenses | 4,055,000 | 2,027,500 | 2,230,250 | 1,784,200 | 1,962,620 |
| Cost of raw materials | 1920694 | 2304832.8 | 2765799.36 | 3318959.232 | 3982751.07 |
| Wages | 1105500 | 1216050 | 1337655 | 1471420.5 | 1618562.55 |

| | | | | | |
|---------------------------|-----------------|-------------------|--------------------|--------------------|--------------------|
| Factory Overhead Expenses | 1163000 | 1337450 | 1538067.5 | 1768777.625 | 2034094.269 |
| Start-up cost | 1400000 | 0 | | 0 | 0 |
| Office Equipment | 200000 | 160000 | 128000 | 300000 | 240000 |
| Salary | 1338600 | 1606320 | 1927584 | 2313100.8 | 2775720.96 |
| Administrative expenses | 484,650 | 533115 | 586426.5 | 645069.15 | 709576.065 |
| Bank fees & charges | 50000 | 35000 | 24500 | 17150 | 12005 |
| Interest paid | 233472 | 233472 | 233472 | 233472 | 233472 |
| Lease/Rent | 500000 | 600000 | 660000 | 726000 | 798600 |
| Income Tax | | | | | |
| Dividend | 0 | 0 | 2500000 | 3250000 | 4225000 |
| Total Cash outflows | <u>12728916</u> | <u>10359539.8</u> | <u>11758960.36</u> | <u>12928259.73</u> | <u>14742020.07</u> |
| Cash balance | 502033 | 3042909 | 3100490 | 4992625 | 5462728 |
| CLOSING BALANCE | 502033 | 3042909 | 3100490 | 4992625 | 5462728 |

Break-even Analysis

Production cost:

$$\text{Unit cost of product} = \frac{\text{Total production cost}}{\text{Total No. Of Units produced}}$$

$$= (4189194/310000)$$

$$= \text{Tk.13.25}$$

Break-even Analysis:

$$\text{Break – Even volume} = \frac{\text{Total Fixed Cost}}{\frac{\text{Unit price- Total variable cost}}{\text{Total production unit}}}$$

$$= \frac{4055000}{20 - (4207805/260000)}$$

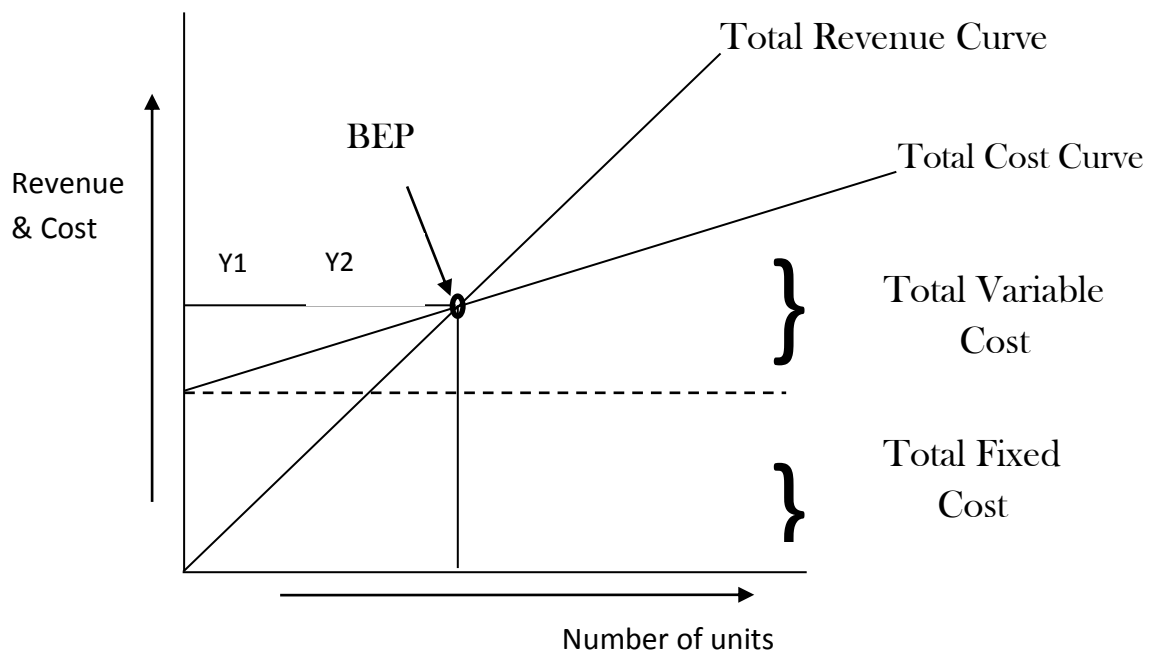
$$= 1062594$$

Sales unit after 2nd year = 727114

Sales unit of 3rd year = 534378

Break even at the middle of 3rd year = $727114 + 534378$

$$= 1261492$$



| Break-even Analysis | |
|--|-------------|
| Total fixed cost | Tk. 4055000 |
| Total variable cost | Tk. 4207805 |
| Average unit price | Tk. 20 |
| Total production unit / 1 st year | 260000 |

Sources of Fund

Start-up Cost = TK. 400,000

Total Investment = Fixed asset + Current asset + Pre-operative expense
= Tk. 6,125,949

Fund structure:

| Description | Loan | Equity | Total |
|-------------|------------|---------------|--------------|
| Capital | Tk. | Tk. 3,625,949 | Tk.6,125,949 |
| Sources | E.E.F (BB) | | |

Schedule of Loan Repayment:

| Total loan | Installment/Year | Interest/Year | Total paid |
|-------------|------------------|---------------|------------|
| Tk. 2500000 | Tk. 416667 | Tk. 233472 | Tk. 650139 |

Conclusion:

Jute and cotton are valued natural fiber with unique characteristics and long standing end-use applications. Increasing production was, in fact, unable to meet the needs of rapidly expanding demand, resulting shortages in and for which manufacturers of synthetic substitutes were able to compete with a far larger potential capacity, budgets for promotion and lower prices. The demand for jute in export markets for the traditional products declined in the face of this competition with carpet backing the first to suffer in the United States. Use of mineral oil is incompatible with the eco-friendly characteristics of jute and needs to be phased out as far as possible.