

## ***Business Feasibility Study***

A new livelihood for urban poor

### **CLOTH BAG MICRO-ENTERPRISE**

#### **Table of Contents**

Context.....	2
Rationale .....	2
Objective .....	2
Research Items.....	3
Methodology.....	3
Findings .....	3
<b>1. Market Analysis .....</b>	<b>3</b>
<b>a. Product .....</b>	<b>3</b>
<b>b. Industry Analysis .....</b>	<b>3</b>
<b>c. Key Success Factors of industry .....</b>	<b>4</b>
<b>d. Value Chain.....</b>	<b>4</b>
<b>e. Existing Players .....</b>	<b>5</b>
<b>f. Scope for entrants .....</b>	<b>6</b>
<b>g. Interventions required for women/ women groups .....</b>	<b>6</b>
<b>2. Financial Analysis .....</b>	<b>7</b>
<b>a. Cost Structure .....</b>	<b>7</b>
<b>b. Income to women .....</b>	<b>8</b>
<b>3. Micro-enterprise start-up strategy – Action Plan .....</b>	<b>8</b>
<b>a. Procurement of raw material .....</b>	<b>8</b>
<b>b. Infrastructure and working capital .....</b>	<b>9</b>
<b>c. Sales and Promotion .....</b>	<b>10</b>
<b>d. Return to women .....</b>	<b>10</b>
Annexure - Illustrations.....	11

# Study on Cloth Bag business

---

## Context

In Jaipur, there are considerable numbers of urban poor women who don't earn livelihood due to their constraint to stay at home. At home, they lack relevant skills and resources (both monetary and business development related) to start micro business of their own.

Women who stay at home have very few available livelihoods to pursue, e.g. puppet making, stitching, embroidery, bead sequencing, precious stone scrubbing, quilt making etc. Most of these livelihoods require skills and resources to start with. For example, stitching and embroidery require relevant skills and minimum infrastructure to be pursued as livelihood. On other hand, livelihoods which require low level of skills and infrastructure e.g. puppet making, vegetable trading and bead sequencing carry very low incomes.

## Rationale

There is need for exploration of an alternative livelihood in slum areas for women, who are constrained to stay back at home. Such women cannot pursue livelihood as a construction worker (*beldar*), domestic help or sweeper as these livelihoods require outdoor activities.

The need is for such a livelihood which is flexible enough to be pursued from home, apart from being remunerative enough to be pursued by women for additional income for family.

Recently, such a business opportunity cropped up when Rajasthan Government put a complete ban on use of plastic carry-bags all over the State from August 1, 2010<sup>1</sup>. A notification declared the entire State a "plastic carry-bag-free zone". The prohibition applies to manufacture, storage, import, sale and transport of plastic carry-bags. No shopkeeper, retailer, trader, hawker or vendor is allowed to supply goods to consumers in these carry-bags.

With this legislation, using a plastic bag has become illegal for any use whatever. All of a sudden, with the out flux of plastic bags in the market, there has arisen a business opportunity to introduce a substitute to plastic bag. A cloth bag or paper bag fits well as substitute for plastic bag, with higher preference to cloth bag due to its longer durability.

## Objective

The objective is to explore 'Cloth Bag manufacturing' as an alternative livelihood that can be pursued by urban poor house wives, who cannot pursue other livelihoods due to lack of skills & resources, both monetary and otherwise. This study involves a comprehensive business feasibility analysis of Cloth Bag manufacturing business, which can be undertaken by urban poor women in slum areas in Jaipur.

---

<sup>1</sup> <http://www.hindu.com/2010/07/27/stories/2010072758390500.htm>

# Study on Cloth Bag business

---

## Research Items

The study involves primary research, secondary research, market feasibility analysis and financial feasibility analysis of Cloth Bag manufacturing business.

## Methodology

The research is aimed at conducting primary and secondary market research to understand industry players, industry growth potential, key success factors, risks and competitive landscape. The study also involves conducting interview of existing players (e.g. NGOs, women, and distributors etc) to assess viability of Cloth Bag manufacturing business. Business will be evaluated by building thorough understanding of different types of cloth bag and understanding the production process (throughput time, bottlenecks etc). Attempt has been made to understand the whole value chain, potential customer, competition, projected financials and cost structure.

## Findings

### 1. Market Analysis

#### a. Product

Broadly, a cloth bag can be manufactured using either a synthetic cloth or a traditional cloth. *Illustration-1 in Annexure* shows synthetic material used for making cloth bags. *Illustration 2 – 4* shows cloth bags made using synthetic cloth and traditional cloth. Traditional cloth is typically a scrap from garment factory, retail outlet or old saree, used bed sheets, old clothes etc

#### b. Industry Analysis

Due to legislation of ban on plastic bags, a huge opportunity for a substitute has cropped up. Such a substitute has to provide minimum features, which were provided by plastic bags. For e.g. the substitute has to be strong enough to bear weight of grocery, durable enough to be used multiple times, cheap enough to be given almost free of cost by retailers, malls etc. A cloth bag (and not paper bag) fit well as substitute of plastic bag as it carries weight, stays long and cost a little.

There is a huge demand for cloth bag in Jaipur<sup>2</sup>, so much so that supply comes nowhere near to market demand.

One of reasons for this huge demand-supply gap is lack of any big player in manufacturing of cloth bags. There are fundamental reasons due to which a large player cannot sustain in this business. Cloth Bag manufacturing is meant only for tiny fragmented micro-enterprises. Reasons attributable are –

- Grocery Bag has **localized consumption** with local mom & pop stores, grocery shops, local retail stores eating up majority of bag produce

---

<sup>2</sup> Interviews at grocery shops, Mom & Pop grocery stores, retail outlets, malls etc

## Study on Cloth Bag business

---

- Grocery bags do not carry any brand. This **lack of branding** makes local tiny players eligible for manufacturing
- Due to low sale value of these grocery bags, **transportation** of these bags **over large distances** turns out to be **uneconomical**
- Due to “**unbilled**” nature of this business, with no value added tax (VAT) on its sale, this unorganized business throws a big potential for ‘**push**’ **driven market strategies**. In push driven market strategy, incentive or a commission is paid to middlemen or intermediaries (e.g. distributor) to push the product as compared to that of competitor

### c. Key Success Factors of industry

For a manufacturer to succeed in Cloth bag manufacturing, the manufacturer has to compete well on following parameters<sup>3</sup> of success in the industry -

1) Low cost of cloth bag

This is the cost of making a cloth bag. To compete well in market, the cost of manufacturing cloth bag should be as low as Re. 1 a bag

2) Turnaround time

This is time taken by manufacturer to service the order. For a player to compete well, turnaround time to service a order has to be as low as possible.

3) Durability of cloth bag

More times a bag can be used, higher is its durability and higher is its demand

4) Strength of cloth bag

Stronger is the bag, higher is its demand

### d. Value Chain

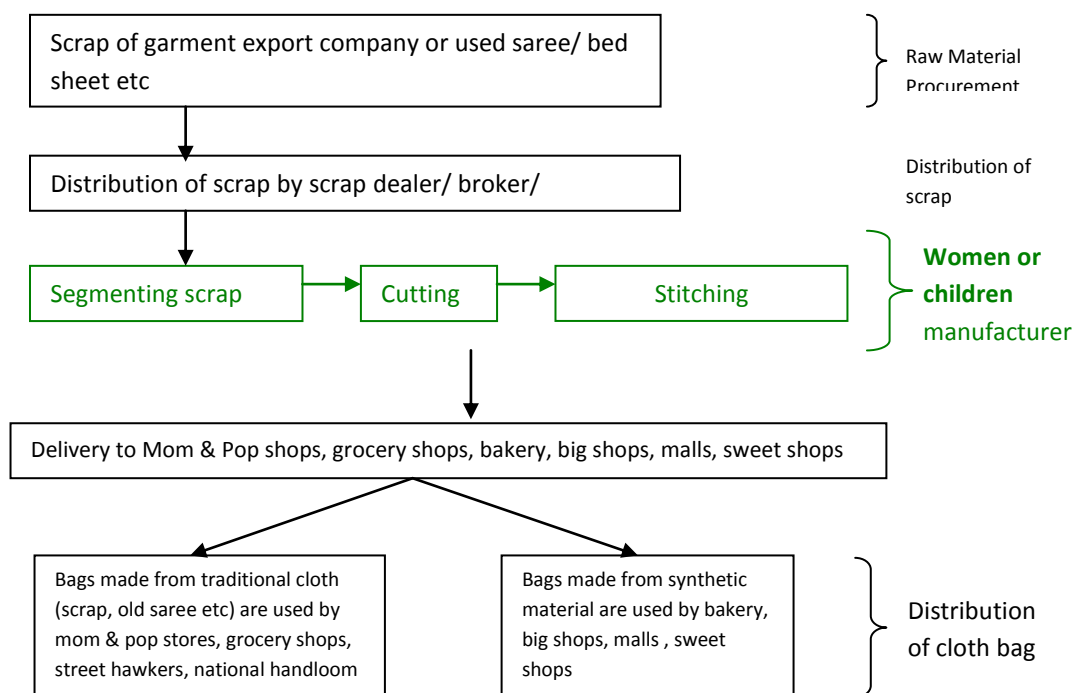
The value chain starts with collection of scrap of cloth. Scrap of cloth may be sourced from garment factories in Delhi, Mumbai, Chennai etc. It can also be sourced from export garment factories in city and outskirts. There are NGOs like ‘Ray’ in Jaipur, which source ‘used’ bed sheets sourced from households for cloth bag manufacturing. At a few NGOs, example, Vishwas NGO of Udaipur, old sarees and unsold sarees/ scrap is sourced from scrap market. Even National Handloom’s head office in Rajasthan uses unsold sarees/ chunnis/ cloth for in-house cloth bag manufacturing.

---

<sup>3</sup> Based on discussion with vegetable vendors, retail shops, grocery shops

## Study on Cloth Bag business

However, there are also manufacturers which source synthetic cloth material from cloth markets for cheaper deals. For example, Sambhali NGO in Jodhpur sources synthetic saree cloth from Surat, Gujarat for cheap deal. A few members of Self Help Group, supported by Kudumbshree, Kerela, source synthetic cloth material from Andhra Pradesh for cheap deal.



### e. Existing Players

There is lot of competition in cloth bag manufacturing in Jaipur, since barriers to entry in this business are low. Anyone possessing a sewing machine can start making bags because the raw material practically costs nothing. There are number of scattered cloth bag manufacturers in 'walled city' area, apart from NGOs supporting children who manufacture cloth bags.

Tendency of local shop keepers is to source durable cloth bags at cheapest cost. Lowest cost is typically provided by manufacturers in smaller towns which have cloth industries. This gives the manufacturers a location advantage or comparative advantage since they end up sourcing raw material at zero cost (no transportation expense). For example, in Jodhpur, local shop keepers buy bags from manufacturers

## Study on Cloth Bag business

---

in smaller towns like Pali, Balotra etc. These towns have lot of cloth industries, which results in lowest possible fabric cost.

### f. Scope for entrants

Women can take up cloth bag manufacturing from their homes. Cloth bags can be hand stitched or machine stitched. In case, cloth bags are hand stitched, only capital required to start cloth bag manufacturing business is cost of buying scrap garment. After sourcing the scrap, women hand stitches the cloth bag and delivers it to a middleman or straight to retailer. In case, cloth bag is machine stitched, capital is required for both stitching machine and scrap cloth. The productivity is, of course, higher when machine stitched.

This is discussed in more detail later.

### g. Interventions required for women/ women groups <sup>4</sup>

There are several problems that women groups may face while growing cloth bag business in Jaipur. They need to be supported by an agency in following aspects –

- 1) Market Linkage - For a Self Help Group (SHG) to scale up cloth bag business, it needs to have market linkages e.g. connections with distributors, retailers, malls, sweet shops etc who buy cloth bags in bulk. Women typically do not have such connections while working from home
- 2) Policy advocacy - Plastic bag producers and suppliers got banned, as per legislation of state government from August 1, 2010. However, the implementation has not been strict. There still are instances of plastic bag manufacturers supplying plastic bags to shop keepers in Jaipur and other parts of the state. These plastic bag manufacturers need to be banned strictly in markets, not just in papers.
- 3) Micro-credit – SHG members typically do not possess capital to buy stitching machines, for women to work from home. Moreover, they even lack working capital to buy scrap/ fabric in bulk for economies of scale. A supporting agency needs to provide micro-credit directly or through credit linkage for procuring raw material and buying/ leasing sewing machine.
- 4) Skill Training - SHG women may be trained for making high quality bags for bigger brands, for printing of the logos and for acting as intermediary or supplier.

---

<sup>4</sup> Based on feedback of SHG members and supporting NGOs

## Study on Cloth Bag business

- 5) Home delivery and collection – Some women do not want to go out of their houses, even for procurement and supply. There is need of a cab, which can give door delivery of the scrap/ fabric and can collect the cloth bags after production.

### 2. Financial Analysis

#### a. Cost Structure

Cost structure of cloth bags made from synthetic fabric and one made from traditional cloth (scrap/ used saree etc) are different. The cost structures are discussed in detail below –

#### *Cost structure of cloth bag made from synthetic fabric*

Cost structure per cloth bag - made from synthetic material		
	Item	In rupees
(A)	Average cost of synthetic material (Rs. per KG)	32.5
(B)	Number of bags per KG	37.5
(C) = A/B	Cost of synthetic material per bag	0.87
(D)	Cost of stitching per bag	0.75
(E) = C+D	<b>Cost of one bag (Rs.)</b>	<b>1.62</b>
(G) = E	Selling price per bag to middlemen	1.62
(H)	<b>Selling Price to bakery, big shops, malls, sweet shops etc</b>	<b>2.5</b>
(I) = J*K	Labour per day	75
(J)	Number of bags produced per day	100
(K)	Labour per bag	0.75

Above table indicates that cost of raw material per bag is Rs. 0.87 while cost of stitching labor is Rs. 0.75. This translates to total cost of Rs. 1.62 per bag. These bags are then sold at bakery, big shops, malls, sweet shops at Rs. 2 – 3 depending upon number of intermediaries in supply chain. These cloth bags made from synthetic fabric are of better quality as compared to ones made from scrap cloth, scrap saree, old sarees, old bed sheets etc

## Study on Cloth Bag business

### Cost structure of cloth bag made from scrap. Old saree/ chunni

	Item	In rupees
(A)	Mileage of truck (Km per liter)	3
(B)	Cost of diesel (Rs. Per liter)	37
(C)	Average distance (e.g. Delhi, Mumbai, Hyderabad etc) in km	500
(D) = $C*B/A*1.5$	Average cost of transportation (Rs. per truck load) say from Mumbai, Delhi etc including 50% margin	9250
(E)	Square meter cloth per truck load	10000
(F) = D/E	Cost of material per sq mt	0.93
(G)	Area of one bag (sq mt)	0.25
(H) = F*G	Cost of material in one bag (Rs.)	0.23
(I) = L/M	Labour per bag	0.75
(K) = I+H	<b>Cost of one bag</b>	<b>1.0</b>
(O) = K + P	<b>Selling Price to low cost retailer, hawker, vegetable vendor etc</b>	<b>1.5</b>
(P)	Commission to middlemen	0.5
(L)	Labour per day	75
(M)	Number of bags produced per day	100
(N)	Labour per bag	0.75

Above table indicates that cost of raw material per bag is Rs. 0.23 (due to inferior quality as compared to that of synthetic material) while cost of stitching labor is Rs. 0.75. This translates to total cost of Re. 1 per bag. These bags are then sold at mom & pop shops, small grocery shops, street hawkers, vegetable vendors etc at Rs. 1.25 – 1.75 depending upon number of intermediaries in supply chain. These cloth bags made from scrap cloth are of inferior quality as compared to ones made from synthetic fabric.

#### **b. Income to women**

Women or women group members make upto Rs. 75 a day manufacturing upto 100 bags a day. This fare well compared with what women earn in puppet making, vegetable trading etc. A woman, while working from home, can generate an additional income of Rs. 2250 in a month by manufacturing cloth bag.

### **3. Micro-enterprise start-up strategy – Action Plan**

#### **a. Procurement of raw material**

Raw material (garment scrap, old saree, used bed sheet etc) for manufacturing cloth bag should be sourced from Gujarati traders in Vidhyadhar Nagar, Jaipur. These traders possess collection of hundreds of thousands of old sarees and offer deep discounts on bulk procurement. At bulk procurement, they offer rates in range of Rs. 30-40 per kg, which is competitive enough to sustain in cloth bag business.



## Study on Cloth Bag business

---

When micro-enterprise scales up, these old sarees (and other scrap) can be sourced from Ahmedabad *Mandi* Markets. In Ahmedabad Mandis, old sarees are sold at deep discounts for bulk procurements.

### b. Infrastructure and working capital

As discussed above, cloth bags can be manufactured both manually and through machine.

#### Manual manufacturing

In this type of manufacturing, cloth bags are stitched manually by hands. A set of trainers can be called from Vishwas NGO in Udaipur or Sambhali Trust in Jodhpur to impart skill training to SHG women members.

A supporting NGO partner (like CmF) can provide working capital (say Rs. 120,000 to Rs. 150,000) to start with. This working capital will be used in sourcing raw material for production. This amount of working capital will be sufficient to buy 4 tonnes of old saree/ chunni material.

With production of around 20-25 bags per day per women, this amount of working capital will be sufficient for 4-6 months of cloth bag production, assuming 5 SHGs (around 50 SHG members) work on this business to start with. Wages to SHG members can then be paid from sale receipts of cloth bag.

This method of production is highly inefficient and may not be sustainable in future due to low incremental income to SHG member.

#### Stitching machine

Another way of producing cloth bag is through stitching machine. In this way of production, apart from working capital Rs. 1.2 L to Rs. 1.5 L<sup>5</sup>, capital expenditure for buying stitching machine is also required.

A traditional second hand stitching machine (*Illustration 5 in Annexure - Black color m/c*) costs Rs. 1500 to Rs. 2000 in second hand market. A better quality (*white color m/c*) machine costs Rs. 6000 - Rs. 7000 in second hand market. For cloth bag business, traditional second hand machine costing upto Rs. 2000 will fulfil the purpose. This machine can be connected to a motor and run with a paddle.

---

<sup>5</sup> A supporting NGO partner (like CmF) can provide working capital (say Rs. 120,000 to Rs. 150,000) to start with. This working capital will be used in sourcing raw material for production. This amount of working capital will be sufficient to buy 4 tonnes of old saree/ chunni material.

## Study on Cloth Bag business

---

A donor agency or supporting agency (like CmF) can buy 50 such machines (or hire on lease, if possible) incurring a capital expenditure of Rs. 100,000. With this capital expenditure, SHG members will be able to produce around 100 bags per day per women.

Therefore, with Rs. 1 – Rs. 1.5 L as one time grant for capital expenditure and Rs. 1.5 – 2 lacs as one-time grant for working capital, a micro-enterprise of 50 SHG members can be started providing livelihood income to tune of Rs. 2250 per month to all its 50 members. This amount of working capital will be sufficient for 1-1.5 months of cloth bag production, assuming 5 SHGs (around 50 SHG members) work on this business to start with. Wages to SHG members can then be paid from sale receipts of cloth bag.

### **c. Sales and Promotion**

To start with, this micro-enterprise can supply cloth bags to National Handloom, Rajasthan. Cloth bags made of old saree, chunni and garment scrap are sourced at National Handloom's Jodhpur head office and key contact at Jodhpur office for cloth bags procurement is Mr. Jitender Singh Bhati (+91 9314709321).

### **d. Return to women**

With Rs. 2.5 – 3.5 lacs of initial grant from a donor or supporting agency, cloth bag micro-enterprise will be able to provide Rs. 2000-2500 income per member per month.

## Annexure - Illustrations

**Illustration 1 – Synthetic Material for making Cloth Bag**



**Illustration 2 – Cloth Bag type -1 made of synthetic material**



**Illustration 3 – Cloth Bag type -2 made of synthetic material**



**Illustration 4 – Cloth bag made of old saree/ chunni scrap**

## Study on Cloth Bag business

---



### **Illustration 5 – Sewing machine**

*Traditional sewing machine which costs upto Rs. 2000 in second hand market*

