

# Corrugated Packaging

An out of the box  
business opportunity



**JAMMU & KASHMIR  
ENTREPRENEURSHIP DEVELOPMENT  
INSTITUTE**

## Introduction

Industrially pre-fabricated boxes are primarily used for packaging goods and materials. It is one of the fast growing industries in all over India and also in our state. The business has witnessed a significant jump in the last decade because of huge growth in processed food, fruits and vegetables, electronic and consumer durables industries.

Market snapshot: India is the world's third largest apple producing country only behind China and the United States. The major portion of the produce comes from our state.

However, rude packaging in wooden boxes is telling upon the industry that forms the backbone of the state's economy.

Other states where apples are grown are using corrugated cardboard boxes. However, most of growers in Jammu and Kashmir still use wooden boxes to pack the fruit, even as the trend has started shifting.

The packaging tool has turned out to be the most popular goods transporting container. Industry experts in the state are of the view that it will soon become indispensable for the Rs.4,500 crore horticulture industry of Jammu and Kashmir, which houses Asia's second largest fruit market and employs thousands of farmers and people related to the sector.

## Opportunities

- **It's a huge industry and growing:** Corrugated packaging is a Rs.2 billion a year industry in India. In another five years, over 90 percent of all products in India would be delivered or displayed in corrugated. It is an industry that will survive well into the next century, and beyond.
- **It's everywhere and everybody needs it:** People outside the state have occupied the space but in Jammu and Kashmir the vacuum remains unfilled. Everybody wants it because it is cost-effective, lightweight, functional, versatile and sustainable.
- **Corrugated is "green":** Corrugated is the most recovered form of packaging, with 91 percent of all containers produced being reclaimed for recycling.

## The process

The process of manufacturing boxes or containers constitutes five operations.

- i) Slitting and longitudinal cutting
- ii) Creasing
- iii) Slotting
- iv) Flap or corner cutting
- v) Stitching

After passing the sheet through these operations, a box or container is ready. Slitting and creasing operations can be simultaneously carried over a four bar rotary cutting and creasing machine.

The trimmed and creased sheet is slotted and flap cut on an eccentric slotted machine. Finally, it is either stitched over a stitching machine or glued/taped manually. For partition boxes the half slotted boards are used which can conveniently be produced over a partition spotter machine.

## Types of corrugated board:

1. Single face/two ply
2. Single wall/3-ply
3. Double wall/5-ply
4. Triple wall /7-ply

**Raw materials used:**

1. Kraft paper/duplex paper
2. Gum/adhesive
3. Binding cloth
4. Adhesive tape
5. Stitching wire
6. Printing ink

**Economics of the project****Basis & Presumptions:-**

|                               |   |               |
|-------------------------------|---|---------------|
| No. of working days/year      | : | 300           |
| No. of shifts/day             | : | Single        |
| No. of working hours/shift    | : | 8             |
| Production capacity per annum | : | 450,000 Boxes |

**Total Capital Cost**

|                         |                    |
|-------------------------|--------------------|
| a) Land                 | Rs. 57.00 lakh     |
| b) Building (5800sq.ft) | Owned/Leased/Hired |
| c) Machinery/Equipments | Rs. 22.00 lakh     |
|                         | Rs. 35.00 lakh     |

**Operational Cost (For 1 Month)**

|             |                |
|-------------|----------------|
| Grand Total | Rs.10.00 lakh  |
|             | Rs. 67.00 lakh |

**Relevant government departments to approach for**

- Revenue department (Tehsildar, Local Body)
- District Industries Centre (DIC)
- State Industrial Development Corporation (SIDCO) for Land Allotment
- Small Scale Industrial Development Corporation Limited (SICOP)
- State Pollution Control Board
- Power Development Department (PDD)
- Public Health Engineering (PHE)
- Bureau of Indian Standards

## Checklist:

### 1. Land (pre-owned, leased or hired)

Area: 1.5 - 2 kanals

Nature: Industrial Estate is usually preferred

### 2. Building

|                      |             |
|----------------------|-------------|
| Processing hall      | 50 X 70 ft. |
| Raw material store   | 20 X 40 ft  |
| Finished goods store | 50 X 30 ft. |

### 3. Machinery Required:

|   |      |
|---|------|
| 1.Heavy Duty H/S Single Facer Paper (Oblique Type) Bearing Mounted. (Size: 52") | 1 no |
| 2.Reel to Sheet Cutter Machine. (Size: 54")                                     | 1 no |
| 3.Sheet Pasting Machine. (Size: 75")  | 1 no |
| 4.Sheet Pressing Machine. (Size: 65"x75")                                       | 1 no |
| 5.4 Bar Rotary Slittering & Creasing Machine.(Size: 75")                        | 1 no |
| 6.Eccentric Slotting Machine. (Size: 75")                                       | 1 no |
| 7.Box Stitcher Straight/ Angular Machine. (Size: 42")                           | 1 no |
| 8.Die, Punching and Creasing Machine. (Size: 39"x52")                           | 1 no |
| 9.Double Colour Paper Flexo Printer Machine. (Size: 52"x72")                    | 1 no |

### 4. Finances

Check various schemes at financial institutes like J&K Bank and DIC and JKEDI

### 5. Suppliers

Registered dealers of

Equipment

Machinery

Raw materials

### 6. Buyers

Dealers

Manufacturing units

Packaging units

Exporters of fruits like apple, strawberry and walnut

