

2019

## Cluster Profile

### Auto Body Parts Manufacturing, Mandi Bahauddin



#### ***Turn Potential Into Profit***

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## 1 Description of Cluster

### 1.1 History & Background of Cluster

The first auto body part manufacturing unit was established in Mandi Bahauddin in 1980. The initial focus of auto body parts manufacturing was limited to tractors, buses and truck parts, especially for after sales market. Later on manufacturers started to produce parts of other automobiles as well. However, the major focus of the cluster still remains to cater for the need of after sales market.

Majority of auto body parts manufacturing units in Mandi Bahauddin are family owned businesses. The owners of the businesses are less educated and majority of them have no formal technical educations. However, their knowledge about materials, machinery and production is quite substantial, which is gained over the time through personal experiences of running and managing the parts manufacturing operations.

The Mandi Bahauddin Auto Body Parts Cluster is highly decentralized and fragmented in terms of the size, production capabilities and location. Majority of the units are of small size and are unorganized with exception of few large ones. Presently, there are around 55 manufacturing units<sup>1</sup> with an overall direct employment of around 1,000 people. The units are operating on conventional lines with very minimal technological advancement. Manufacturers suffers from a variety of issues namely; technological obsolescence, low level of product standardization, lack of education and skilled labor.

### 1.2 Defining the Products

The auto body parts manufactures of Mandi Bahauddin are predominantly involved in manufacturing of the parts produced through hydraulic or conventional pressing machines. These body parts mainly include the following steel items for trucks, busses, cars and other motor vehicles.

- Bonnet
- Door
- Fender
- Steel Bumper
- Roof and Floor Parts
- All type of Panels

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<sup>1</sup> Gujrat Chamber of Commerce & Industry

### 1.3 Core Cluster Actors

According to industry sources, Mandi Bahauddin Auto Body Parts Cluster is comprised of around 60 manufacturing units, with majority of the units are of small and cottage size. The key industry statistics of the cluster are as follows:

**Table 1: Auto Body Parts Cluster, Mandi Bahauddin**

Number of Units	Total Units: Approximately 60
Employment Generated (Direct)	Around 1,000 People <ul style="list-style-type: none"> <li>• 20-25 workers in a medium size unit</li> <li>• 4-8 workers in self-employed or small and cottage level units</li> </ul>
Installed Capacity	Around 800 Tons Auto Body Parts per month
Capacity Utilization	Around 60%

Source: Auto Body Parts Industry and Gujrat Chamber of Commerce and Industry (GtCCI)

### 1.4 Other Cluster Actors

Since majority of the manufacturers are making pressed steel body parts of different vehicles that involves use of a variety of conventional and semi automated tools and equipment, especially press machines, drills, cutters and welding machines. The majority of these machines are conventional and semi-automated except the hydraulic press. The suppliers of these machines are primarily operative in Lahore, Gujranwala and Faisalabad. The manufacturers normally purchase the machines directly from the suppliers.

In addition to the machinery, steel sheets and steel scrap are the basic raw material used in the manufacturing of body parts. Presently, there are around 4-5 steel sheets dealers in the cluster. The steel dealers trade the steel from Pakistan Steel Mill and steel scrap (both local and imported). Manufacturers also source directly from scrap dealers. Most of them are at Gujranwala, Karachi and Lahore.

### 1.5 Geographical Location

Geographically, these auto body parts manufacturing units are concentrated on main Shadianwala Road and Sughar Mill Road. However, few manufacturers can also be found on Phalia Road, Mandi Bahauddin.

### 1.6 Current Cluster Scenario

Auto Body Parts Cluster Mandi Bahauddin has a potential to transform from a small size cottage industry to medium level cluster. However, due to lack of technology and product diversification, manufacturers are trapped in merely producing the steel pressed body parts. The industry is still working on conventional lines and does not employ basic technology, such as CNC Machines, Automated Sheet Press or Cutting etc. Even the use of automated hydraulic press is very minimal

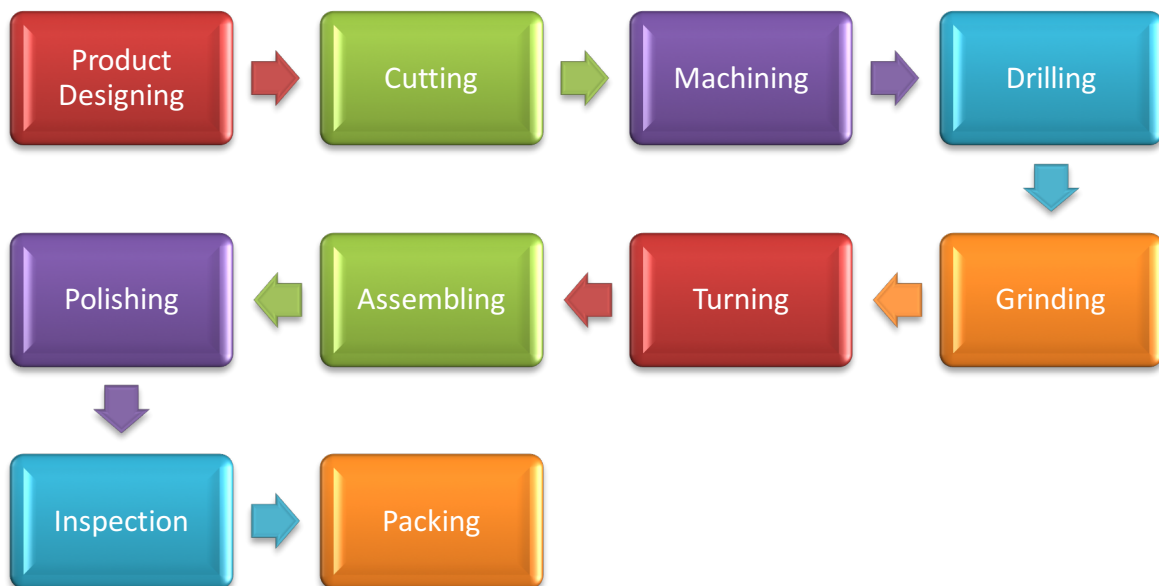
in the cluster. There is an urgent need to move the industry towards step by step automation and technology upgradation. The industry is solely catering to the needs of after sales market and lacks to produce the parts for the requirement of Original Equipment Manufacturers (OEM) standards.

## 2 Analysis of Business Operation

### 2.1 Production Operations

As already stated, auto body parts manufacturers of Mandi Bahauddin are involved in manufacturing of pressed steel parts for cars, buses, trucks and other vehicles. Mostly, production process of different types of auto body parts comprises of following broader steps.

Figure 1: Production Process Flow



### 2.2 Raw Materials

Steel sheets (from 0.7 mm to 3 mm) and steel scraps are the basic raw material for producing the auto body parts. Pakistan Steel and Peoples Steel Mills are the major producers of steel in Pakistan. Similarly, steel scrap is also easily available in the local market.

### 2.3 Technology Status

The body parts manufacturers are using only basic machines to cater the pressing, machining, drilling, turning and welding requirements. These machines include hydraulic press, conventional press, welding unit, drilling, grinding and basic machining machines.

Although technology is rapidly changing, but the cluster is suffering from serious technological deficiencies. The industry is still working on conventional lines and does not employ basic technology, such as CNC Machines, Automated Sheet Press or Cutting etc. Even the use of automated hydraulic press is very minimal in the cluster. There is an urgent need to move the industry towards step by step automation. Lack of education among entrepreneurs, limited access to financial resources and redundant production techniques have resulted in low production levels. This has also hampered the quality of products severely. Similarly, lack of modern technology and modern system is the main hurdle in the growth of Mandi Bahauddin Auto Body Parts Cluster.

Moreover, an important aspect of production process is ensuring standardization and quality control. No real quality control system and standard is followed in the cluster. Physical appearance and measurement fit is the only parameter to quality check. This makes reliability of parts even more vulnerable.

## **2.4 Marketing & Sales**

The manufacturers of auto body parts in Mandi Bahauddin are using different sales distribution channels, majority of manufactures have setup retail shops along with their manufacturing units. The parts are directly sold to end users. No real concept of branding and advertisements is followed in this cluster. Normally products are rated by customers via historical durability of the products of a particular manufacturer. Marketing is limited to word of mouth and sales agents only.

Besides that, manufactured goods are also sold to the traders within and outside the city. Each manufacturing concern has its own relationship with the dealers of the different areas of the country. The terms of sale and service are different between each manufacturer and trader.

## **2.5 Financing**

All the major financial institutions have their branches in the cluster and offering loan. At present, none of the financial institutions has developed / offered any particular lending scheme for the cluster. The financial products available in the market are not geared to cater the requirements of the cluster. Access to equity finance is the most malicious constraint to cluster growth and development. Commercial banks apply conservative policies while lending. Most of the time entrepreneurs rely on their own investment.

High transaction costs, collateral requirement, non availability of customized financial products are the major issues pertaining to finances of local manufacturers. Resultantly, entrepreneurs look for informal financing channels to meet their financial requirement. The markup in the informal sector financing is very high i.e. up to 30% annually.

## 2.6 Human Resource Management

Industry is facing shortage of skilled labor, due to which manufacturers mostly hire unskilled labor and train them over a period of time. Due to shortage of skilled labor in the cluster, employee turn over is high. Therefore, manufacturers have to engage unskilled labor to meet the requirement that results in high production wastage and low product standardization. Some institutions of TEVTA and PVTCL do offer few training courses related to light engineering, but there is a huge gap in demand and supply of skilled labor.

## 2.7 SWOT Analysis

### Strengths

- Availability of low cost human resource
- High growth and demand in the market
- Entrepreneurial capabilities and skills

### Weaknesses

- Shortage of electricity
- High cost of utilities
- Lack of long term vision and policy
- Lack of Information dissemination (Technical know how, Information on standards, Processing techniques, Design criteria)
- Lack of tooling, die manufacturing facilities and other aspects of modern technology
- Lack of skilled manpower for modern machinery
- Lack of well equipped facilities for product testing and R&D
- High cost of financing and leasing

### Opportunities

- Potential for high market growth due to wide gap in population to vehicle ratio
- Export potential in regional markets (Afghanistan, Bangladesh, Sri Lanka etc.)
- Domestic replacement parts market
- Global spare parts market of discontinued vehicles

### Threats

- No trade mark registration
- Lack of product diversification and standardization

### 3 Business Support Institutions

#### 3.1 Entrepreneurs' Associations

##### **Auto Body Parts Manufacturers Association (Informal Group – Not Registered)**

Address: Phalia Road, Mandi Bahauddin

##### **Gujrat Chamber of Commerce and Industry (GtCCI)**

Address: G.T. Road, Gujrat

Tel: (+92) 55 3706 113-4

Web: [www.gtcci.org.pk](http://www.gtcci.org.pk)

#### 3.2 Support Institutions

##### **Regional Business Center (RBC), Small & Medium Enterprises Development Authority (SMEDA)**

Address: GtCCI Building, G.T. Road, Gujrat

Tel: (+92) 55 111 111 456

Web: [www.smeda.org.pk](http://www.smeda.org.pk)

Email: [helpdesk@smeda.org.pk](mailto:helpdesk@smeda.org.pk)

##### **Punjab Small Industries Corporation (PSIC) – Regional Office**

Address: Small Industrial Estate, G.T. Road, Gujrat

Web: [www.psic.gop.pk](http://www.psic.gop.pk)

##### **Trade Development Authority of Pakistan (TDAP)**

Address: 20-E, Satellite Town, Pasroor Road, Gujranwala

Web: [www.tdap.org.pk](http://www.tdap.org.pk)

#### 3.3 Banks and Financial Institutions

Almost all the registered financial institutions of Pakistan have their branches in the cluster and provide the financing at competitive rates.

### 4 Major Issues and Problems

**Financial:** Provision of soft and long-term loans is required to upgrade the existing production facilities of units. Banks are hesitant to finance the new start-ups, which is a massive hurdle for access to finance.

**Technology:** The majority of the auto body part units in the cluster use conventional manufacturing techniques such as semi automated hydraulic or conventional presses and other



allied machines. With the increase in the market size, it is becoming difficult for these units to achieve the desired production and quality using conventional technologies.

**Marketing:** Lack of modern marketing and branding techniques is an issue restricting the growth and development of this cluster, as there are not any specialized marketing practices. Despite potential for exports in Bangladesh, Sri Lanka, Afghanistan and Africa, presently no manufacturer is involved in global trade. The main reason for not achieving the significant breakthrough both in local and export market is lack of modern manufacturing machines and techniques, quality standards, raw material testing facilities and the high tariff rates on imported raw material.

**Energy:** Auto Body Parts manufacturing is an energy intensive industry. Provision of continuous energy from Govt. is a must for cost effective products manufacturing. Alternate energy sources are very expensive. Similarly, the price of electricity is very high and uncompetitive.

**Human Resources:** Unavailability of Skilled labor for the cluster is one of the major issues. Govt. Technical Institutes are providing vocational and technical trainings but there is still a huge gap in Demand and Supply of skilled labor. Govt. should take measures to improve this situation.

## 5 Investment Opportunities in Cluster

Some of the potential investment opportunities in the cluster are as follows:

- CNC Center for Die and Molds
- CAD / CAM Institute
- Trading (especially Steel Iron Import)