## **CLUSTER PROFILE**

# LIGHT ENGINEERING, GUJRANWALA





# Turn Potential into Profit

Small & Medium Enterprise Development Authority Ministry of Industries, Production & Special Initiatives Government of Pakistan

Government of Pakistan 8<sup>th</sup> Floor, LDA Plaza, Egerton Road **Lahore** Tel: 92-42-111-111-456 Fax: 92-42-6304926-27

Website: http://www.smeda.org.pk

By: Muhammad Asim Malik (Regional Business Coordinator, Gujranwala)

# **Table of Contents**

1	Des	cription of the Cluster	. 3
	1.1	History & background of cluster	. 3
	1.2	Description of Products	
	1.3	Cluster Actors	. 3
	1.3.	1 Electrical Appliances	. 3
	1.3.	2 Machinery Parts Manufacturers	4
	1.4	Geographical Location	
	1.5	Current Cluster Scenario	
	1.6	Raw Materials Availability	. 5
	1.7	Technology Status	
	1.8	Financing	
	1.9	Human Resources	
2	Inst	itutional Setup	6
	2.1	Government & Semi-government Organizations	6
3	$\mathbf{SW}$	OT Analysis	
	3.1	Strengths	
	3.2	Weaknesses	
	3.3	Opportunities	6
	3.4	Threats	
4	Inve	estment Opportunities	. 7

# 1 Description of the Cluster

### 1.1 History & background of cluster

Gujranwala is playing a major role to support the economy of Pakistan. It is a large industrial city. The story of Gujranwala starts 500 years back, historically called as 'Khanpur Shansi', got its name from the 'Jaat' tribe 'Gujjar'. History hasn't been that friendly with this city, the tokens of glory, the buildings of past have vanished under the dirt of time and tint, but the remains still cram those old tales of Mughals, Sikhs and British who ruled this realm.

This part of world has listened to the music of hammers and anvils, which molded the shapes of metal. These songs have continued till today and Gujranwala stands up front as an industrial city refining its skills of manufacturing and development. Those hands of metal workers have learnt to craft wonders now.

These people have won the challenge with metal. With time the skills of this area have diversified enormously. Moving from pure metal based engineering to plastics and then composites shows their art in crafting for the need of the industry.

This endeavor doesn't end here as Gujranwala has started playing a stringent role in the foreign trade of the country.

## 1.2 Description of Products

A large number of small industrial units are operating in Gujranwala. The range of light engineering goods covers electrical goods, transport equipment, domestic appliances, telecommunication equipment etc.

#### 1.3 Cluster Actors

#### 1.3.1 Electrical Appliances

The industry is producing a variety of electrical goods in different sizes and designs. The major products are Fan (all types), Washing Machine, Spin Dryer, Room Air Cooler, Stabilizer, Tube Light Fitting, Electric Heater, Electric Geyser, and Electric Oven. Fan and washing machines are two main products of this cluster. Most of the raw materials used by fan industry are directly or indirectly imported from different countries. Some of the raw materials used in the manufacturing of a fan are: electric steel sheets, aluminum, enameled copper wire, ball bearing, steel rod and PVC. The latest trend is of plastic products.

There are about more than 270 units and a much larger number in the unorganized sector.

The industry is highly vendor based. One vendor is specialized in one part. Some home based manufacturing is also in existence. People are also winding motors in their homes and supplying to the market. Vendors are not only supplying parts to



assemblers but also in the wholesale market. Likewise assembler one wholesaler is purchasing parts from many vendors and supplying to the market.

The industry isnot fulfilling the domestic needs but also exporting small quantities of electrical home appliances. There is large export potential in Middle East, Africa and Cetral Asia.

#### 1.3.2 Machinery Parts Manufacturers

There are a number of large industrial units which have successfully duplicated certain models of machines. These efforts have been effective in import substitution of commodities. Gujranwala Light Engineering cluster also fullfilling the requirements of machinery spare parts of about almost all kind of industries in Pakistan.

#### 1.4 Geographical Location

Light Engineering Industry is in many areas of Gujranwala. The cluster is approachable by metal roads and railway facilities.

#### 1.5 Current Cluster Scenario

The state of the engineering industry describes the status of industrialization of a country since it portrays the capability to add value to the primary products and of indigenous production of plants and machinery. The developed countries have assigned high priority to the engineering industry in their own country.

Gujranwala Light Engineering cluster has a limited capability to design, test and experiment on new machines. The small and medium-sized units do not have the finances to risk innovative efforts, while the large ones are preoccupied with their production and have no time to spare for testing innovations.

The Light Engineering Industry still mainly exists at the level of SMEs, with exception of some firms, who have gained an extraordinary growth. This sector is not an organized sector. There is no exact figure available about total no. of units, installed capacity and operational capacity.

The industry has not fulfilling the domestic needs but also exporting small quantities of engineering products. There is large export potential in Middle East, Africa and Cetral Asia. The main reason for not achieving the significant break through in export by this industry is uncompetitive cost structure of domestic products due to ever increasing utilities prices coupled with the high tariff imported materials. Small units also have been facing problems of unavailablity of capital and lack of modern manufacturing machines and techniques.



### 1.6 Raw Materials Availability

Metal sheets are available in Javaid Sheet Market, Gondlanwala Road, Gujranwala. Metal is also one of the main raw materials which is imported in form of Metal waste from different countries. The waste is melted in furnaces and after this the process are hot and cold rolling, grinding and polishing. Metal sheets are available at different areas of Gujranwala, most of the furnaces are at Sheikhupura road, different gauges of sheets are available in the market.

Different chemicals, soda, salts and acids are required for electroplating and polishing purpose.

## 1.7 Technology Status

The involvement of technology in manufacturing process or for that matter in any process is minimal. Most of the units are at micro level about 10 - 12 % can qualify as proper units. There is lack of use of modern manufacturing machines and techniques, due to those small units are closing down and large size manufacturing units are filling this gap.

The cluster has a limited capability to design, test and experiment on new machines. The small and medium-sized units do not have the finances to risk innovative efforts, while the large ones are preoccupied with their production and have no time to spare for testing innovations.

# 1.8 Financing

Almost all the registered commercial and industrial development banks of Pakistan have their branches in the cluster and providing the financing at competitive rates. But most of stakeholders depend upon their own financial equity based resources. It is also observed that the entrepreneurs normally prefer obtaining loan from the informal sources. Due to unawareness, ineffective information flow and paper work these entrepreneurs are reluctant to go to the financial institutions.

#### 1.9 Human Resources

Human resource is present in abundance and skills are traditionally inherited. The owner usually deals with management issues and marketing related activities. Most of the labor is semi skilled and are trained on job. There is no specialized marketing or accounts department. They facilitate their sales only on the basis of personal contacts and no proper accounts are maintained therefore certain problems related to tax return, monitoring and evaluation are faced. Only primary or intermediate level employees are handling accounts.



# 2 Institutional Setup

#### 2.1 Government & Semi-government Organizations

SMEDA, PSIC, TDAP are three organizations which are providing facilitation to this cluster at the government level. SMEDA has a regional business centre in Gujranwala which provides various services; training services, marketing advice, technical advice, legal services, match-making and other business development services. TDAP also has a regional office in Satellite town, Gujranwala and provides facilitation in areas of participation in international trade fairs, exhibitions and trade delegations.

# 3 SWOT Analysis

### 3.1 Strengths

- Abundance of Low cost Labor
- Simple management structure.
- Extensive vendor industry.
- Technical skills of labour.
- Strong linkages with other key regional clusters.
- Entrepreneurial culture.

#### 3.2 Weaknesses

- Inconsistent raw material prices.
- Low framework for IP management in Cluster.
- High Utilities Cost of utilities (gas & electricity) resulting in high production cost
- Large unorganized vender base.
- Low R&D for product innovation
- · Lack of quality controls.
- Use of traditional techniques and technology
- Preference of informal credit
- No proper booking keeping.
- · Lack of marketing skills.

#### 3.3 Opportunities

- Rising local and international demand of Light engineering goods
- Support of institutional infrastructure.
- Large export potential in Electrical home Appliances in Middle East, Africa and Central Asia.
- Exploit local expertise in related sectors, clusters technologies.
- Facilitate supply chain collaboration.

#### 3.4 Threats

- Political situation of the country
- Low priced import from China
- Changing consumer preferences



- Large surplus capacities in the International market.
- Increasing regulatory pressures

### **4 Investment Opportunities**

Keeping in view the current potential and high market growth due to wide gap in population to vehicle ratio there is an ample opportunity for invest in Light Engineering Cluster, Gujranwala. Some potential project for invest are as follows:

- Computer Aided Product/Pattern Designing Center
- Dies and Molds Manufacturing Units
- Trading (Machinery & Raw material)

