

CLUSTER PROFILE

SANITARY FITTINGS

GUJRANWALA



Turn Potential into Profit

Small & Medium Enterprise Development Authority
Ministry of Industries & Production
Government of Pakistan
4th Floor, Building no. 3, Aiwan-e-Iqbal Complex,
Egerton Road, Lahore
Tel: 92-42-111-111-456 Fax: 92-42-6304926-27,
Email: helpdesk@smeda.org.pk

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1 Introduction – Gujranwala

Gujranwala District is situated on the main railway line connecting Lahore and Peshawar. The Grand Trunk Road runs parallel to the railway line and passes through the centre of the city. The Chenab River forms the northern boundary of the district. Gujranwala district is spread over an area of 3,622 Square Kilometres comprising of following four tehsils:

- I. Gujranwala
- II. Kamoke
- III. Nowshera Virkan
- IV. Wazirabad

Gujranwala district is one of the major industrially developed districts of the country. Keeping in view the availability of raw-material and skilled labor, Gujranwala district supports a variety of industries. It is centre of electrical and engineering goods manufacturing industries, plastic products industry and ceramic industries.

2 Description of the Cluster

2.1 History & Background of Cluster

In Pakistan the sanitary fitting industry is located mainly in Gujranwala. This industry not only caters the local market demand, but also contributes in exports to international markets. For years the manufacturers of this area have built their un-matched skills in design and quality. Their products speak for themselves and set higher standards of quality and excellence.

Historically people have been associated with this sector prior to the partition. After Partition the first major sanitary fittings industry (M/S Anwer Industries) which was established in 1954. In 1973 Rana Nasir Mehmood and Rana Faisal were to start a manufacturing entity in sanitary fittings under the name of “Faisal”. Likewise Mr. Mehmood and Maqbool, from Anwar Mechanical Works expanded this industry by started their venture called Master. Faisal was later to give rise to Magna in 1980. In 1990 a new venture was also started with the name of “Sonex. Over the years this industry has expanded and resulted in a long chain of sanitary fittings factories in this area and still they are growing.

The market for sanitary fitting in Pakistan is largely unorganized. Industry leader in organized segment are progressively scaling their production capacities, upgrading manufacturing process and focusing on innovative technologies to produce value products.

In Pakistan consumer has started beautifying their bathrooms. Increasing awareness among consumer is also influencing their demand and having a positive impact on the growth of this industry. Due to rapid growth of country population the need for houses is continuously increasing. The rise in demand of good housing facilities, rapid urbanization, rising incomes of the people and change in life style has raised the demand of quality bath fittings in houses and hospitality sector of Pakistan.

2.2 Description of Products

Sanitary fittings consist of hardware items that are used to add convenience as well as beauty to different bathroom settings. Major products of sanitary fittings are as follows:

- Bathroom and Kitchen Fittings:
Shower, Kitchen Mixer, Center-Hole Basin Mixers, Stop Cocks, Angle Cocks, Pillar Cocks, Swan Neck, Sink Cock etc
- Bathroom and Kitchen Accessories:
Bath sets (Robe Hooks, Soap Holders, Towel Bars, Towel Rings, Tumbler Holders), Mixer Leg Sets, Mixer Shower Stand
- Other Allied Items:
Connection Pipes, Gate valves, Multipurpose Angle Cocks, Nipples, Mixer Nipples

2.3 Core Cluster Actors

The manufacturers of sanitary fitting and accessories of both kitchen and bathrooms are the core clusters. According to the directorate of industries, Punjab, there are approximately 218 units located in the Gujranwala region. The brief details about these units are provided in the table below:

No of Units	Total Units 218
Employment Generation	2,836 people are directly employed by the cluster
Total Investment	Rs. 546.24 Million
Technology Level	Conventional technology with low automation and labor intensive

Source: The Directorate General of Industries www.doi.punjab.gov.pk

2.3.1 Sanitary Fittings Manufacturers:

According to the directory of industrial establishment, in Gujranwala, there are around 218 players in this sector. Out of which around 20 units are large all other units' falls under SME category. They have developed contacts with the distributors and retailers all over Pakistan and market their products through

these outlets. They are also exporting their products in Middle East, Africa and Central Asia.

Some of the major manufacturers are Master Sanitary Fittings, Sonex Sanitary, Faisal Sanitary, and Megna Sanitary.

2.4 Other Cluster Actors

The major supporting industries for sanitary fittings cluster are machinery suppliers and raw materials suppliers.

2.4.1 Machinery Suppliers:

There are number of manufacturers engaged in sanitary fitting manufacturing machines in Gujranwala, which are expert and fulfilling the needs of the local industry. The machinery used in sanitary fitting industry mainly includes Casting, Machining, Grinding and Polishing machines. These machines are easily available locally and skilled personal for maintenance and operation are also easily available.

2.4.2 Raw Material Suppliers:

The raw materials used by the industry are mostly waste and scrap of brass, copper, aluminum, steel and iron. The easy availability of raw material has also contributed for the emergence and growth of the cluster. Currently this demand of the industry is being met by the help of importers/traders, from Gujranwala, Lahore and Karachi. A few large manufacturers also procure/import the raw material directly.

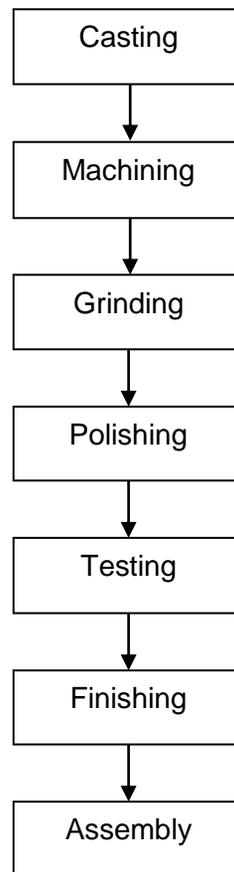
2.5 Geographical Location

The sanitary fittings and allied industry is spread across the city in Gujranwala. However the major cluster of sanitary fitting products is located at G.T. Road and Goray Daror Road. The biggest cluster of sanitary fittings manufacturers are in Rana Colony. It is approachable by metal road. Other major concentrations of sanitary fittings are in Kangniwala Bypass, S.I.E No. 2, Jinah Raod and Kacha Aimnabad Raod.

3 Analysis of Business Operations

3.1 Production Operations

The process is mainly comprised of three operations; Casting, Machining and Plating. The following chart depicts the generic manufacturing process of sanitary fittings.



Casting: Molten metal is casted in various moulds as per the pattern using to get the part in the shape of the die.

Machining: Cast products are machined as per the design requirements to create threads.

Grinding: Machine products are thus grinded using belt grinders to achieve smooth finishes.

Polishing: The grinded pieces are polished on high speed polishing machines to achieve perfect surface with high shine.

Testing: The water carrying components are pressure tested using Hydraulic Testing Machines at a pressure to detect any leakage in the casting.

Finishing: The tested pieces then undergo the process of finishing. The range of finishes includes - Chrome, Gold, Powder Coating, Electro Coating etc.

Assembly: The coated pieces are assembled as per the requirements. The assembled pieces are once again checked and tested with hydraulic pressure. The packed goods are then subject to the random checking by the management.

3.2 Raw Materials Availability

The major raw materials used in manufacturing of sanitary fittings mainly includes the following:

- Brass
- Copper
- Aluminum
- Iron
- Zink
- Nickel
- Magnesium
- Silica Sand
- Hard Coke
- Carbon
- Sulpher and etc.,

Waste and scrape of above mentioned alloys is the major source raw material. Majority of the industry generally uses the recycled materials of brass, copper, aluminum and iron in the manufacturing instead of pure materials

3.3 Technology Status

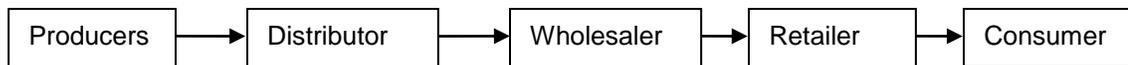
The involvement of technology in manufacturing process is minimal. Most of the units are at micro level about 10 – 12 % can qualify as proper units. The sanitary fittings industries in Gujranwala Cluster largely rely on traditional technologies and operating practices, which are inefficient. The raw materials are manually sorted to remove impurities and other metals. The sanitary fitting units are engaged in three distinct types of operations like melting, machining, polishing and plating. In majority of the sanitary fitting units, there is no temperature recording and temperature controlling devices in the foundry, no automatic machines, pressure die-casting machine, and electro-polishing plant. As a result, the industry is facing problems like coring and

segregation, pinholes and blowholes, shrinkages, dimensional distortions, etc. As a result, rejection rate is higher. Lot of machining operations are carried out which either could have been minimized or eliminated.

3.4 Marketing & Sales

The Sanitary fittings manufacturing requires designing skills for manufacturing innovative products according the demand of customer.

Manufacturers have developed contacts with the distributors in all over the country and place their product on the market through these outlets. In Gujranwala, the wholesale market of sanitary fitting products is mainly located at Noor Bawa and Near Gondlanwala. The sales and distribution network of goods from producer to consumer is as follows:



Small manufacturers and venders usually supply their products to the wholesalers and retailers of other cities. Sales agents are also working in this sector. They book orders from other cities and supply the required quantity after purchasing from small manufacturers. Some manufacturers also have their own retail stores for distribution of their products.

3.5 Financing

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

Most of enterprises are working as sole proprietorship but some large manufacturers have advanced to more organized status and converted their enterprises to Pvt. Ltd. companies. All of the businesses are being mostly financed by equity.

3.6 Human Resources

Human resource is present in abundance. The owner usually deals with management related issues and activities. Most of the labor is semi skilled and are trained on job.

There are no specialized marketing department in the cluster expect of only a few. They facilitate their sales only on the basis of personal contacts and no

proper branding and marketing campaigns are conducted. Mostly primary or intermediate level employees are handling accounts.

Production supervisor and shop in charge and accountant are considered middle level management. Production floor labor or trained workers are also easily available in the market.

3.7 SWOT Analysis

3.7.1 Strengths

- High Growth and demand in market due to rapid urbanization and rising income of people
- Strong linkages with other key regional clusters.
- Abundance of low cost labor
- Good entrepreneurial skills

3.7.2 Weaknesses

- Lack of replacement demand of sanitary fitting items.
- Inconsistent raw material prices
- Regularity issue regarding export of raw material create gap among demand and supply and increase the prices.
- Low Framework for IP management in the cluster
- High cost of utilities (gas & electricity) resulting in high production cost
- Use of traditional manufacturing practices & absence of automation
- Non-availability of technical consultants & skilled workforce
- No quality control systems
- Limited product range
- Information gap
- Safety issues for workers
- High cost of financing and leasing

3.7.3 Opportunities

- Innovation towards emerging efficient and décor product.
- Rising domestic market potential for better quality and stylish products
- Establishment of brands in local and export market

- Growing demand in local and export market.

3.7.4 Threats

- Price variability in raw material and components
- Low entry barriers
- Poor image of the country
- Continuous depreciation of rupee against top world currencies

4 Institutional Setup

4.1 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. SMEDA has set up a “Gujranwala Business Centre” for promotion of industries situated in Gujranwala.

PSIC has a regional office in Gujranwala which helps in credit facilitation and establishing of new industrial areas. PSIC established four industrial estates in Gujranwala including 1 Export Processing Zone.

TDAP also has a regional office in Gujranwala and provides facilitation in areas of participation in international trade fairs, exhibitions and trade

Sr#	Name of Organization	Web Site
1	Small & Medium Enterprises Development Authority	www.smeda.org.pk
2	Punjab Small Industrial Cooperation	www.psic.gov.pk
3	Trade Development Authority of Pakistan	www.tdap.org.pk
4	Gujranwala Business Center	www.gbc.org.pk

delegations.

4.2 Local Bodies / Chambers / Association

Gujranwala Chamber of Commerce & Industry (GCCCI) established in 1978, provides various services to this cluster; arranging of Made in Gujranwala Industrial Exhibition for the promotion of local brands, trade delegations, research & development and information dissemination.

All Pakistan Sanitary Fittings Manufacturers Association facilitates the stakeholder in various issues.

Sr#	Name of Organization	Web Site / Address
1	Gujranwala Chamber of Commerce & Industry	www.gcci.org.pk
2	Brass Water Fittings Manufactures Association	M/s Faisal Sanitary Fitting, G.T Road, Gujranwala Ph:055-4271243-5

4.3 Private BDS Providers / Banks / Other Support Institutes

Regional support institutions are a key factor in the development of a strong cluster. There are following three educational institutes which facilitate research and knowledge transfer to companies:

1. Light Engineering & Service Centre, (LESC) Gujranwala
2. Gujranwala Tools, Dyes & Moulds Centre. (GTDMC)

Light Engineering Service Centre (TEVTA) and Gujranwala Tools Die & Moulds Centre are the technical training centers and also provide services as common facility Centers for dye & mold making.

Sr#	Name of Organization	Web Site
1	Technical Education & Vocational Training Authority (TEVTA)	www.tevta.org.pk
2	Gujranwala Tools Die & Moulds Centre	www.gtdmc.org.pk

Majority of the registered commercial and industrial development banks of Pakistan have their branches in this cluster. Financing from banks is easily available at very competitive rates.

5 Issues & Problems / Support Requirement

5.1 Financial

In the absence of financial assistance without collateral security they are finding it difficult to modernize their production process. Most of the Existing units need up-gradation of new plant and machinery in place of old plant and machinery to remain competitive in costs and quality compared to our global competitors.

Technology up-gradation fund scheme for Sanitary fittings industry is needed. This will provide loan to units at subsidized rates to sanitary manufacturers for the purchase of new machinery for up-gradation as well as to set up new units with state-of-the-art technology so that its viability and competitiveness in the domestic as well as international markets may enhance. This will make the industry competitive.

5.2 Marketing

There is vast new and unexplored market exists at local and international level. Lack of modern marketing techniques is an issue restricting the growth and development of this cluster, as there is not any specialized marketing department even in medium level units, absence of website, branding and product advertisement, no participation in national or international Exhibitions, Lack of educated, certified and professionally trained / skilled workforce

There is large export potential for sanitary fittings in Middle East, Africa and Central Asia. But unfortunately only a few manufacturers are involved in export. The main reason for not achieving the significant breakthrough in export by this industry is due to lack of modern manufacturing machines and techniques, quality standards, raw material testing facilities and the high tariff charged on imported raw material.

5.3 Technology

The majority of the sanitary fittings industries in the cluster uses conventional manufacturing technologies such as Casting, Machining and different kinds of grinding machines to manufacture their products (for operations like gas cutting, shearing, bending, punching, milling, boring, welding). With the increase in the market size, it is becoming difficult for these units to achieve the desired production and quality using conventional technologies. Consequently, few progressive units have adopted modern technologies such as computerized numerical control (CNC) machines and electric heated furnaces. The remaining units still rely on conventional manufacturing technologies.

In sanitary fittings manufacturing the electricity cost ratio has major share in total cost of production. There is lack of energy saver and efficient machinery and equipments used by the cluster.

5.4 Soft Interventions Program:

Under SMEDA cluster development program Soft Intervention program consist of activities which lead to creation of general awareness, counseling, motivation and trust building, exposure visits, market development including exports, participation in seminars, workshops and training program on technology upgrading etc. Soft intervention program can help in capacity building and marketing development of cluster members.

6 Investment Opportunities in Cluster

The sanitary fitting industry is growing due to rise in demand of modern designs in various categories. There are some specific reasons that have

lead to increase in demand like rapid urbanization, rising income of people and change in life style. So, there is an ample opportunity for investment in Sanitary Fittings Cluster, Gujranwala. The need for following projects as potential investment opportunities in Sanitary Fittings Cluster, Gujranwala has been identified on the basis of the key strengths of this cluster:

- Manufacturing of Modern Designs and Stylish Products
- Trading of Raw Materials
- Recycling Units for Scrap Metals
- Development of Marketing/Trading Facilities
- Retail Chain Networks
- Consultancy for Technical Assistance, Product Innovation, Marketing & Branding, Supply Chain Management and etc