Cluster Profile Aluminium Utensils, Gujranwala





Turn Potential Into Profit

Small and Medium Enterprises Development Authority (SMEDA) Ministry of Industries and Production (MoI&P) Government of Pakistan



4th Floor, Building No. 3, Aiwana-e-Iqbal Complex Egerton Road Lahore <u>www.smeda.org.pk</u> P: 111 111 456

Table of Contents

1 D	Description of Cluster	2
1.1	Introduction	2
1.2	Defining the Products	2
1.3	Core Cluster Actors	2
1.4	Other Support Actors	3
1.5	Geographical Location	4
2 A	nalysis of Business Operation	5
2.1	Production Process Flow	5
2.2	Raw Materials	6
2.3	Technology Status and Quality Standards Requirement	6
2.4	Sales and Marketing Analysis	6
2	.4.1 Local Market Trade	6
2	.4.2 International Market	7
2.5	Global Trade	7
2.6	Financing	8
2.7	Human Resource Management	9
3 I 1	nstitutional Setup	9
3.1	Entrepreneurs Associations	9
3.2	Support Institutions	9
3.3	Banks and Financial Institutions	10
4 N	lajor Issues and Problems	10
5 S	uggestions and Recommendations	12
6 I	nvestmenmt Opportunities in Cluster	13

1 Description of Cluster

1.1 Introduction

Gujranwala is playing a major role to support the economy of Pakistan. It is an industrially developed district in the country. Keeping in view the availability of raw-material and skilled labor, Gujranwala district supports a variety of industries. It is considered manufacturing hub of electrical home appliance, light engineering goods, kitchen utensils, plastic products and ceramic sanitary wares.

Gujranwala region is well-known for manufacturing of aluminium utensils in Pakistan. People have been associated with this sector prior to partition. Utensils Industry mainly exists at SME level and comprises of labor intensive units having semi-mechanized manufacturing facilities. Overall production of Gujranwala aluminium utensils cluster is estimated to be 60,000 tons per annum with capacity utilization of 40%. The cluster provides direct employment to more than 18,000 individuals across the region.

As far as expenditure and revenue of aluminium utensils is concerned; the costing of a typical utensil shows that around 56% is the cost of raw material, 17% is of labor, 17% is of gas and electricity and around 10% is of administrative and operating expenses. Whereas, on average 8-10 percent of the total cost contributes to the profit margin of the owner.

Current status of the cluster is considered as stagnant due to a number of reasons such as undue delays in the export refunds, power cuts, limited opportunities of training and development support, lack of business development service providers and unavailability of raw material from local market.

1.2 Defining the Products

Aluminium cookware is popular for cooking purposes as it is used for kitchen utensils. Its good thermal conductivity, light weight, resistance to numerous forms of corrosion makes it popular. However, uncoated and anodized aluminium utensils can be reactive with acidic foods.

The product range covers all types of aluminium utensils used in households, hotels, hospitals, canteens and other places for cuisine. The major products include cooking casserole sets, frying pan, sauce pan, wok, backing disk, pressure cookers etc. These utensils are manufactured in various sizes, shapes, designs and finish qualities including metal, mirror and non-stick coated. Major aluminium utensils manufacturing brands in Gujranwala include Sonex, Casio, Kitchen King, Chef, Majestic, Trophy and Kiran.

1.3 Core Cluster Actors

There are around 450 manufacturing units across the region, majority of the units are operating at small scales. The breakup of the manufacturing units is as follows:

Size	No. of Units	Capacity Per Unit / Product day Quality		Market
Large Unit	50	2-7 ton	High, Medium	Export/Local
Medium Unit	100	1 ton	High, Medium	Local/Export
Small Unit	300	500 kgs	Medium, Low	Local

Table 1: Aluminium Utensils Cluster, Gujranwala

Source: Gujranwala Chamber of Commerce & Industry (GCCI) and Directory of Industrial Establishments Industries & Commerce Department Government of Punjab

1.4 Other Support Actors

The key cluster support actors who provide support services to core cluster in the area are including but not limited to raw material suppliers, finishing and packaging service providers.

Description	Details
Packaging	Around 30 units are providing packaging and wrapping services to Gujranwala Aluminium Utensil Cluster.
Bakelite Supplies	50 units are operating in Gujranwala region to provide Bakelite supplies; Bakelite is an early form of brittle plastic used in short body handle (side handles) and long body handle of the utensils.
Handle Makers	Generally, handles used for aluminium utensils are not manufactured by utensils manufacturers themselves. Approximately, 50 handle makers are providing such products to the cluster.
Chemical Suppliers	Chemicals make an important component of aluminium utensils manufacturing process. Industry's demand of the same is being met by 15 suppliers in the region.
Color Coatings	Color coating is used at the time of finishing of the product. This kind of material is not available in Pakistan. Therefore, it is being imported from China to meet the requirements of the local industry.
Metal Suppliers	Metal is the prime raw material for the industry. Usually, large firms import the same by themselves either in the form of finished product or in the form of scrap material which is transformed into metal after necessary treatment. Whereas small manufacturing units depend on importers to meet their demands of raw material.

Table 2: Other Support Actors, Utensils Cluster Gujranwala

1.5 Geographical Location

The aluminium utensils cluster is scattered around Gujranwala city; however main concentrations are at:

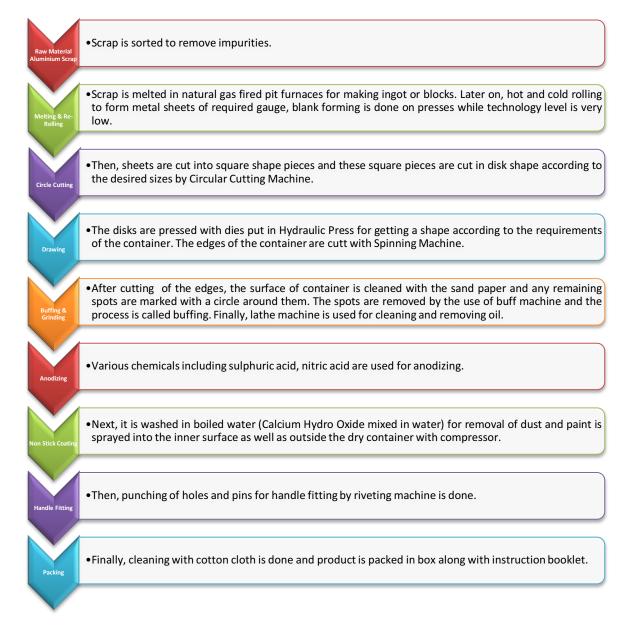
- Industrial Estate–II
- Nowshera Road
- Sheikhupura Road
- Mian Sansi Road
- Hafizabad Road
- Jinnah Road
- Muslim Road
- Bazar Ghulam Muhammad
- Kacha Khiyali Road

2 Analysis of Business Operation

2.1 Production Process Flow

The standard operations of the aluminium utensils' business include process flow, business trade cycle; and material and technological requirements to perform these business operations.

Figure 1: Production Process Flow Diagram



2.2 Raw Materials

The primary raw material for aluminium utensils manufacturing is aluminium category 3006. Around 95% of the same is imported in the form of Aluminium ingot (99.7% purity) and waste / scrap of aluminium foil, cables, PVC, Aluminium Conductor Steel Reinforced (ACSR), window section, utensils, UBC etc.

Raw material demand of the industry is being met by the help of importers / traders from Gujranwala, Lahore and Karachi. Large manufacturers also import the raw material directly. Aluminium scrap and ingots are imported from countries across the globe including Afghanistan, Russia, UK, Canada, Middle East, EU & Africa.

Moreover, packaging material and wood used in handles is also used as raw material for aluminium utensils manufacturing.

2.3 Technology Status and Quality Standards Requirement

There is lack of use of modern manufacturing machines and techniques. Currently, semiautomatic machinery is being used by the industry. The machines are locally made, labor oriented and inexpensive as compared to modern machinery.

No specific quality standards and certifications are mandatory or being practiced by the industry.

2.4 Sales and Marketing Analysis

Gujranwala Aluminium Utensils Cluster is targeting export / international market; around 70 percent of the total production is exported; whereas only 30 percent is sold out in the domestic market. Major importing countries and regions of Aluminium utensils cluster are Gulf States, Europe, Africa, United Kingdom, United Arab Emirates, Spain, Saudi Arabia and Afghanistan.

2.4.1 Local Market Trade

Of the total production of aluminium utensils, thirty (30) percent is sold in domestic market, which is quite challenging to handle due to lengthy and uncertain credit period. The major local markets for this cluster are upper Punjab and Karachi region. In order to target local market, manufacturers have developed a network of distributers across the country. Usually, 30 days' credit cycle is maintained in context of local trades.

The sales and distribution network flow in local market trade is as follows;



Some of the manufacturers also have their own retail and distribution arrangements for distribution of products. Additionally, export agents and local sales agents are also working to facilitate sales of aluminium utensils.

2.4.2 International Market

When it comes to sales of the product in international market, 95 percent of these are made through commercial agents or intermediaries such as national and international import / export agents and traders. Only 5 percent of the total aluminium utensils exports are being handled by the manufacturers of Gujranwala cluster directly. Pakistani trade exporters are leading the way with sales in Middle East. Generally, 60 days' cycle is maintained for international trade.

2.5 Global Trade

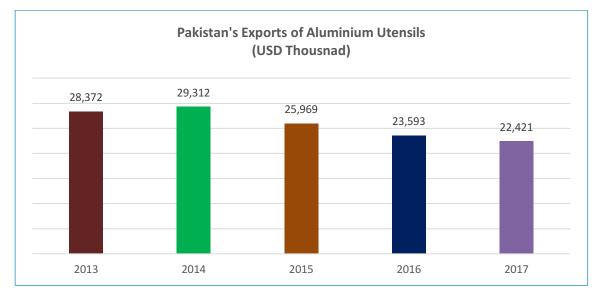
During the calendar year 2017, Pakistan exported aluminium utensils of worth US\$ 22 million. The export trends of aluminium products from Pakistan in recent 5 years in provided below.

Description	2013	2014	2015	2016	2017
Pakistan's Exports of Aluminium Utensils (Value in US \$ Thousands)	28,372	29,312	25,969	23,593	22,421
Pakistan's Exports Share in the World	0.59%	0.62%	0.58%	0.53%	0.48%

Table 3: Pakistan's Exports of Aluminium Utensils

Source: Trade Map (HS Code: 761510)

Figure 2: Pakistan Exports Bar Diagram



Source: Trade Map (HS Code: 761510)

7

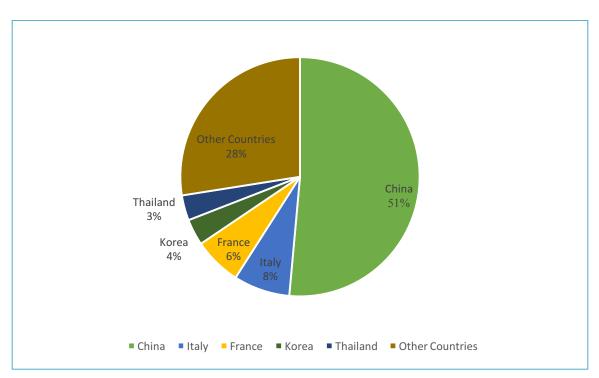
The details of total world exports and leading exporting countries of the aluminium utensils in the world are provided below.

Exporters	2013	2014	2015	2016	2017
World	4,775,005	4,697,548	4,503,950	4,456,868	4,684,836
China	2,386,739	2,382,234	2,323,052	2,254,062	2,409,765
Italy	430,472	346,586	320,853	324,141	356,622
France	321,216	287,513	263,579	287,538	304,254
Korea	211,333	210,220	197,798	189,588	166,513
Thailand	209,547	173,413	226,417	190,801	159,455
Other Countries	1,215,698	1,297,582	1,172,251	1,210,738	1,288,227

Table 4: World Exports and Leading Exporters of Aluminium Utensils (Value in US \$ Thousands)

Source: Trade Map (HS Code: 761510)

Figure 3: Export Share of Leading Exporters



Source: Trade Map (HS Code: 761510)

2.6 Financing

The funding from financial institutions is not popular among the industry stakeholders due to the interest factor associated with financing. Generally, investors rely either on their personal investment or friends and family sources of financing. However, almost all the registered financial

institutions of Pakistan have their branches within the geographical area of the cluster and are providing the financing at competitive rates.

2.7 Human Resource Management

The aluminium utensils industry does not seek highly qualified workforce to perform technical and management operations. Due to semi-automatic nature of technology, technical operations are associated with skilled HR having training, diploma or certification in grinding; while management positions are generally occupied by the owner managers. Human resource is available in abundance and skills are traditionally inherited. Most of the labor is semi-skilled and is trained on job. Furthermore, there are no specialized marketing or accounts departments in small units. These units generate sales on the basis of personal contacts. Business accounts are not maintained properly; therefore, certain problems related to tax return, monitoring and evaluation are common in this cluster.

3 Institutional Setup

3.1 Entrepreneurs Associations

Gujranwala Chamber of Commerce & Industry (GCCI)

Address: Aiwan-e-Tijarat Road, Trust Plaza, Gujranwala

Tel: 055-9200391-4

Web: www.gcci.org.pk

3.2 Support Institutions

Regional Business Center (RBC) – Small & Medium Enterprises Development Authority (SMEDA)

Address: GBC Building, Aiwan-e-Iqbal Road, Trust Plaza, Gujrnawala

Tel: 055-3734600

Web: www.smeda.org.pk

Trade Development Authority of Pakistan (TDAP)

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

Tel: 055-9200138 - 9

Web: <u>www.tdap.gov.pk</u>

Punjab Small Industrial Corporation (PSIC)

Address: Small Industrial Estate no. 2, G.T.Road, Gujranwala

Tel: 055-4283074

Govt. College of Technology (Glass & Ceramics), ShahdaraAddress:Matchis Factory Gate No.1, National Fan Link Road G.T RoadTel:042-37901665				
Tel: 042-37901665				
Gujranwala Business Centre (GBC)				
Address: Aiwan-e-Tijarat Road, Trust Plaza, Gujranwala				
Tel: 055-9200868				
Web: <u>www.gbc.org.pk</u>				
Gujranwala Tools, Die and Moulds Center. (GTDMC)				
Address: Sialkot Bypass Chowk, Sialkot Road, Gujranwala				
Tel: 055 - 3827321 - 23				
Web: <u>www.gtdmc.org.pk</u>				
Light Engineering Service Center (LESC-TEVTA)				
Address: Small Industrial Estate no. 1, G.T. Road Gujranwala				
Tel: 055 - 9200661, 9200800				

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

Following are the major issues restricting the growth and development of aluminium utensils manufacturing cluster in the region:

<u>Export / Tax Refunds</u>: Long delays in tax / export refunds are striking the financial position of the cluster quite badly, hence pushing the financially stable industry into uncertainty.

<u>Lack of Quality Assurance</u>: There is no appropriate system for quality control of raw material and production process. Neither material analysis nor mechanical testing of products is carried out. Hence, variation in product quality persists. At all levels of work in process, the relevant foremen are responsible for keeping a check on quality on the behalf of their departments. After completion of the production process, different types of in-house tests are conducted for quality assurance purposes as well as meeting the buyer's requirements.

<u>Technology</u>: Aluminium Utensils cluster is highly dependent on the low quality raw material i.e. aluminium scrap and waste. Wastage rate is high due to use of old technology. There is an urgent

necessity to improve the value chain of utensils manufacturing cluster particularly in the areas of product quality, designing and technology to improve operational process.

Following are some key technology related issues:

- High rate of waste of energy and materials. Aluminium circle recovery is around 50% -60% through traditional ways of melting and re-rolling.
- Higher rejection rates.
- No heat control in melting.
- Low production capacity.
- Lack of energy saver and efficient equipment.
- High rate of injuries to labor during work on manual machines.
- No covering on molten metal.

<u>Training and Development</u>: There is a lack of technical training and courses offered by public or private institutions for developing the capabilities of the human capital. Industry has to altogether train individuals on job which affects productivity.

Energy Concerns: Electricity and gas constraints are of major concern to the industry as cost of doing business increases hence damaging the cluster productivity.

<u>Melting and Rolling</u>: Melting and rolling is an important step of the process to convert scrap into a major raw material component i.e. aluminium sheet. Domestic equipment and technology used for melting and rolling purposes is conventional and needs considerable up-gradation to meet the industry requirements. Generally, investors show little interest in melting and rolling business activity due to lack of modern technology. Therefore, industry has to rely on international suppliers; China is the biggest supplier to Pakistan.

Environmental Concerns: Industrial smoke and acidic water are of major concern to the aluminium utensils cluster. In the anodizing process, sulfuric acid fumes are released that are hazardous to employees and local community, for which there is no waste management system in place. In addition to that, lack of absorbing machines in melting furnaces for dissolution of black smoke and acidic gases in the atmosphere are also of serious concern for the environment. Technology and expertise are required in handling and minimizing the impact on environment.

<u>Human Resource</u>: Most of the labor is semi-skilled and trained on job. TEVTA and other institutes in the region have not been conducting any specialized training for utensils industry. Due to lack of finance and infrastructural facilities at their end, the small companies can only afford to employ ordinary level workforce. Hence, at the initial stage, an entrepreneur has to work with relatively unskilled workers. Highly educated and skilled personnel do not prefer joining small and medium enterprises, as SME cannot afford their high remuneration demands.

<u>Smuggling</u>: Smuggling of aluminium utensils has a significant impact on the cluster. Finished products are smuggled from Iran, Afghanistan and Turkey which negatively affects the cluster and Pakistan's export of aluminium utensils. The cost of doing business is higher in Pakistan as compared to competitors due to expensive energy, under-utilized capacity of production, semi-

mechanized equipment and old technology. It makes the industry less competitive to other nations; therefore, it is hard for local manufacturers to compete with the smugglers who smuggle units at hand in the export market.

<u>International Competition</u>: China and India are the biggest competitors of Pakistan in international export market. Both of the countries possess modern technology and fully automated machinery and equipment which leads to higher production rate with low human resource requirements and cost of doing business. Despite this fact, Pakistan still has a good market share due to better quality and uniqueness of the product; however, the lower product prices offered by the competitors pose serious threat to Pakistan's market share.

<u>**High Tariff Rates:**</u> Other than modern and mechanized equipment and technology; high tariff rates and VAT on import of aluminium scrape is a big challenge to the industry resulting in a decline in the production rate as well as achievement of significant breakthrough in the import of raw material and utensils' export.

<u>China Imports</u>: Since the year 2015, the import of Chinese utensils by Pakistan has increased due to increase in import duty on aluminium scrap which is basic raw material for manufacturing of aluminium utensils. This increase in duty initiated a decline in the imports and production which consequently opened the door for Chinese products in the local market.

5 Suggestions and Recommendations

- Government needs to take necessary actions to streamline the tax refunds.
- Industry needs to maintain quality assurance mechanism.
- As mentioned above, industry lacks facilities of technical training programs and courses for HR development. Therefore, training and development facilities should be established to offer such courses.
- > Technical assistance for best practiced modern production management techniques.
- Awareness and consultancy for:
 - Raw material testing (use of portable XRF for sorting of scarp)
 - Mechanism for reduction in smuggling of product
 - Energy subsidy
 - Temperature measuring
 - Product quality enhancement
 - Energy audit and efficiency
 - Workforce safety measures
 - Waste management

Technology and expertise are required in handling of smoke and waste to minimize the impact on environment. Therefore, installation of equipment and process for dissolving smoke & acidic gases needs to be ensured by the concerned authorities.

6 Investmenmt Opportunities in Cluster

There are Investment opportunities in the following business areas in aluminium utensils cluster Gujranwala.

Melting and Rolling Unit

There are ample business opportunities in the field of melting and rolling for local entrepreneurs. The production in Gujranwala is 60,000 tons per year of Aluminium utensils with 40 percent capacity utilization. Key raw / input material is Aluminium blocks or circles which are made by scrap. However, existing establishments / arrangements of converting aluminium scrap to blocks and circles are not meeting the demand of the local industry. This gap is being met through import of blocks / circles, mainly from china.

Energy Saving Company (ESCO)

The issue of energy consumption has been of growing concern across the cluster not only due to its immediate impact on production costs but also because of its considerable impact on environmental sustainability. Currently, energy audit and other energy related services are not readily offered across the region. Therefore, Energy Saving Company (ESCO) has good potential in this cluster.

Business Development Service Providers (BDSPs)

There is decent potential for BDSPs to provide human resources of this sector with prerequisite skill set and expertise. Further, consultancy / advice and equipment fabrication / delivery related to environmental impact and management of emissions / waste water etc. also has a good demand in the local industry.

Balancing Modernization & Replacement Technology

As Gujranwala Aluminium Cluster is facing many challenges with regard to productivity as manual and semi-automatic machinery & equipment and production process is prevalent. So, there are bright opportunities for investment in technology upgrade and process improvement.