

**DIAGNOSTIC STUDY OF THE “WET GRINDER CLUSTER”  
AT COIMBATORE**

**EXECUTIVE SUMMARY:**

During the diagnostic study of the wet grinder cluster at Coimbatore, the following points had been found out.

There are about 700 units in this cluster. This can be segregated into four categories.

1. Medium Scale Unit (1 No. – ELGI)
2. SSI Large - Composite Unit (50 Nos.)
3. SSI Medium – Assemblers (150 units)
4. Components (Motors, Drums, Castings, Stones, Arm sets, etc.) Suppliers (500 units)

The total turnover of the cluster is around Rs. 225 crores per annum. The product types and their share in the market are

- 1) Conventional type - 60%
- 2) Tilting type - 10%
- 3) Table top - 20%
- 4) Commercial - 10%

The cluster has got immense growth potential, provided some action plan is implemented. The cluster is functioning in an unorganized manner due to high rate of sales tax at 12%. Bringing down this tax to about 4% will help the cluster to function in organized manner.

The action plan will be implemented in the following strategic directions.

- Technology up-gradation.

- Creating new markets.
- Taping the export potential.
- Developing BDS to assist the cluster.
- Making the cluster an organized one.
- Representing to the Government for rationalizing the tax.

The ways and means of achieving the above are explained in detail in the action plan. It is also proposed to educate the cluster actors for the sustainability of the momentum generated.

The vision statement of the cluster is

**“To double the turnover in three years by making the cluster vibrant, exploring and creating new markets and supplying quality products.”**

It is proposed to give importance for marketing activities in order to increase the market of the product. A series of exhibitions is proposed to be conducted in various parts of India and abroad. Many other activities such as awareness and training programmes, common website, common procurement, setting up the common testing lab, improving the product through R & D, etc., are also planned.

**Cluster Development Executive**

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## **1. INTRODUCTION:**

Wet grinder is a household appliance used for preparing batter, out of which idlis and dosas are prepared. Rice and dhal are the main raw materials used in the preparation of the batter. Idlis and dosas are the common tiffen items in South India. These are becoming famous in North India also. These items are taken along with many side dishes such as chutneys, sambar and other non-vegetarian items. Before the invention of the mechanical wet grinders hand operated grinding stones were used for making this batter. Mr. Sabapathy and Others invented mechanical wet grinder around the year 1955 in Coimbatore. Till then many different types were invented by introducing different attachments for making it user friendly.

Coimbatore has emerged as the natural wet grinder industry cluster due to the availability of the natural stones suitable for wet grinders nearby. Also Coimbatore is one of the leading industrial cities in India. Many engineering and fabrication units functioning in and around Coimbatore had started manufacturing wet grinders. Foundries, mechanical fabrication units and electroplating units in and around Coimbatore supported this cluster for its development.

## **2. NATIONAL LEVEL SCENARIO:**

About 1 lakh nos. of Wet grinders are being manufactured every month in India. Out of these around 75,000 nos. are produced in Coimbatore alone. The total turnover of this industry is estimated to be around Rs. 300 crores per annum. Coimbatore cluster's contribution is around Rs. 225 crores per annum. About 80% of these wet grinders are being sold in the 4 southern states viz Tamil Nadu, Andhra Pradesh, Karnataka and Kerala. Remaining 20% is being sold in the other states of India as well as exported to the countries where Indians are living.

There are approximately 700 units in Coimbatore, involved in the manufacturing of wet grinders and their components. These units are located within a radius of about 25 kms from the center of Coimbatore. It is estimated that this industry provides employment to 20,000 persons directly and 50,000 persons indirectly. Many of the raw materials except the stone are being supplied from various parts of India. The finished product is distributed in various cities through dealers and agents.

### **3. INDUSTRIAL SCENARIO AT COIMBATORE AND OTHER SUPPORTING INFRASTRUCTURE:**

#### **3.1 Coimbatore, A land of Entrepreneurs:**

Coimbatore is well known for its high growth in industrial development. Some of the most famous industrial clusters of Coimbatore are Textiles, Motor, Pumpsets, Foundry, Power Loom, Hosiery, Agricultural Implements, Jewellery, Textile Machinery, etc. The primary capital income of Tamil Nadu mainly depends on the industrial output of Coimbatore, which is partly attributed to the entrepreneurial skills of this city.

#### **3.2 Coimbatore city has good linkages:**

The city is well connected with all major industrial cities in India mainly with Chennai and Bangalore, which is around 500 and 350 kms respectively. It has a good rail, road and air links with all major industrial cities. The leading transport carriers of India have their offices in the city. It is equipped with a railway junction and airport. The nearest seaport is Cochin in Kerala, 200 kms away. Another port at Tuticorin, Tamilnadu, which is 300 kms away is also catering to the needs of the exporters.

### **3.3 Organized and Unorganized sectors:**

The major difference between the two categories is that, while the organized sectors have a good organizational infrastructure and necessary machinery and testing equipments in house and are registered with various Government bodies and associations and carry out their activities in a systematic manner. The unorganized sectors are the ones who pick-up all the necessary components from the nearby shops and do very little operations in house and assemble without any testing and quality inspection. Most of their working is not systematic. The organized sector have a structured and very good marketing channel and do formal type of dealings whereas the unorganized sector target the low



income group sector of the market and mostly the transactions are informal in nature.

### **3.4 Raw material suppliers:**

The most important raw material used for the manufacture of wet grinders is the stone, which is available locally from the quarries situated in and around Coimbatore. Stamping sheets used for making the stator and rotor of the motor is sourced from Mumbai and Delhi markets by the dealers in Coimbatore and supply to the units. Copper wire, which is used for winding the stator laminations, is another important raw material. Only one unit is manufacturing it in Coimbatore. The remaining quantity is sourced from Delhi market and supplied by the traders.

SS sheets used for making the drums are procured through various dealers from Mumbai and other markets. Two re-rolling mills situated in Coimbatore supply mild Steel angles. ABS, which is the raw material for making tabletop grinders' body is supplied by two companies in India. Distributors for these two companies are available in Coimbatore.

### **3.5 Machinery suppliers:**

The machinery requirement for these units comprises of the lathes, hydraulic pressing machine,

drilling machine, slotting machine, cylindrical grinding machine, shaping machine, milling machine, copper wire winding machine (manual / automatic) and motor testing equipments. All the machines are of general purpose in nature and are provided by several individual suppliers and manufacturers in Coimbatore. The more specialized machineries required are Plastic injection moulding machine and Aluminium pressure die casting machine. All these machineries are available indigenously.

### **3.6 Component Traders:**

Ready-made components required for wet grinders such as capacitors, switches, cables, etc. are obtained from traders having their shops and offices in the local commercial markets in Coimbatore. The traders mostly source out parts such as stator, rotor die-castings, copper wire, bearings, electrical fittings, etc. from Mumbai and Delhi markets and from other parts of India.

### **3.7 Support Institutions:**

***Small Industries Service Institute (SISI):*** Branch Small Industries Service Institute, Coimbatore is a Branch Office of Small Industries Service Institute (SISI), Chennai. This is a field office of Small Industries Development Organisation (SIDO) under the Ministry of Small Scale Industries, Govt. of

India, New Delhi. SIDO acts as a policy formulating, co-ordinating and monitoring agency for the development of Small Scale Industries at National level. It provides a wide range of services through Small Industries Service Institutes and its Branch Offices.

### **I. Assistance to New Entrepreneurs and Existing SSI units**

1. Entrepreneurship development programme
2. Management development programmes
3. Model project profiles: Entrepreneur Information System
4. Library
5. Counselling & consultancy service
6. Skill development programme
  - a) CNC Programming & Operation
  - b) Laboratory Training in Electric Motor Testing, Pump Testing, Chemical Analysis & Physical Testing
7. Common facility services
  - (A) Testing Facilities offered to the small-scale industries are given below:
    - a) Electric Motor Testing (BIS recognized lab)
    - b) Pump Testing (BIS recognized lab)
    - c) Chemical Analysis (Ferrous & Nonferrous)
    - d) Sand Testing
    - e) Microstructure Analysis
    - f) Physical testing (Hardness, Tensile & Transverse)
  - (B) CNC turning centre
8. Consultancy offered  
ISO 9000, Energy audit, Project appraisal, Feasibility report

### **II. Economic information service**

Industrial potential survey, Market survey, Cluster study report, and Collection of statistics

### III. Marketing assistance

Vendor development programme, Government store purchase programme, Participation in exhibition, Exports promotion

***District Industries Centre (DIC):*** It is the State Government office for the promotion of small-scale industries sector. The department is headed by the Commissioner of Industries and Commerce at Chennai and the district office is headed by the General Manager.

The main functions of District Industries Centre are:

- Issue of provisional SSI and permanent SSI registration certificates.
- Conducting motivation and dissemination meets on industrial growth subjects.
- Conducting of entrepreneurship development programme.
- Helping SSI units to collect default payment from industries through the Regional Facilitation Councils.
- Motivate industries by giving them awards in various areas.
- Providing loan for educated unemployed through the PMRY scheme.

***NSIC (National Small Industries Corporation):*** The NSIC was established in 1955 by the Government of India with a view to promote, aid and foster the growth of small industries

in the country. NSIC provides diversified support through its wide spectrum of programme of SME's to cater to their different needs related to multi products and multi-locational markets.

NSIC is implementing the following schemes, namely:

- Machinery and equipment
  - Hire purchase scheme
  - Equipment leasing
    - Working capital finance
    - Composite loan scheme (tiny units)
    - Indo-Italian programme for development of Indian SMEs, through co-operation with Italian enterprises.

**Raw material assistance:**

- Schemes for import of scarce material.
- Raw material godowns in different parts of the country.

**Marketing:**

- Marketing consortium formation.
- Tender marketing support.
- Integrated marketing support.
- Registration for Government stores purchase programme.

**Technological upgradation:**

- Prototype centre and technical training centre in Chennai and consultancy through technical service centres.

- Technological transfer facilitation.

### **Exports:**

- Conducting of exhibitions / trade fairs and buyer seller meets.
- Absorption of marketing overheads and export promotion.
- Assistance under leasing for technology up-gradation.
- Pre-shipment advances.
- Assistance for project export.

***SIDBI (Small Industries Development Bank of India):*** It is a subsidiary of IDBI and started during the year 1990. The main objective of SIDBI is to assist SSI and promote its growth.

SIDBI offers:

- Term loan to all tiny and SSI units through SFC and commercial banks by the way of refinance.
- Extending seed capital / soft loan assistance under NEF and Mahila Udyam Nidhi scheme for SSI through specified agencies.
- National equity fund scheme for SSI units.
- Refinance scheme for acquisition of ISO 9000 services certificate by SSI units.
- Schemes for financing activities relating to marketing of SSI products.
- Scheme of direct assistance for development of industrial infrastructure for SSI sector.

- Scheme for export bill financing.
- Vendor development scheme.
- Working capital term loan scheme for SSIs.
- Credit guarantee fund scheme for small industries.

***BIS (Bureau of Indian Standards):*** In 1947, an organization by name Indian Standards Institution was set up which was later made a statutory body and christened as Bureau of Indian Standards (BIS) in 1986. The important activities of BIS include formulation of standards, product and quality system certification, training, information service etc.

***TIIC (Tamilnadu Industrial Investment Corporation):*** TIIC is one of the premier state government financial institution incorporated in 1949 to foster industrial development in the state of Tamilnadu. It provides financial assistance catering to the needs of tiny, small and medium scale industrial units for acquisition of fixed assets. TIIC grants financial assistance to set up new industries and also for expansion, diversification, modernization, and renovation or purchase of generators etc.

The various schemes available are:

- Single window scheme.
- Scheme for technology development and modernization.
- National equity fund.
- Marketing assistance scheme.
- Scheme for warehouse / storage godown.
- Transport vehicle scheme.

***COWMA (Coimbatore Wet Grinders and Accessories Manufacturers Association):*** Several wet grinder manufacturers came together and formed an association for discussing and taking up common activities in 1995. Presently there are 400 members in the association. It is taking up

various social activities also. So far it has been representing the Government in matters relating to Sales Tax, Central Excise, etc., Now the association is becoming more active for taking up common activities for the growth of the cluster.

***CODISSIA (Coimbatore District Small Scale Industries Association):*** CODISSIA started functioning in the year 1969 with 40 members and now the membership strength is around 5000. The association serves for growth and prosperity of industries and it has made a significant contribution towards building a strong and stable industrial city of Coimbatore. The association besides functioning as a development oriented association conducting series of seminars, training programmes, study tours, exhibitions, industrial trade fairs, industrial visits, etc. so as to develop and create awareness among industrial entrepreneurs. CODISSIA represents in all advisory and grievance redressal forums for the small-scale industries. The association along with SIEMA were very much instrumental for SITARC to be established in the year 1986 with financial assistance of IDBI etc., It is recognized as one of the best testing centres for various activities. The association is publishing its fortnightly journal (CODISSIA bulletin) from 1973 to disseminate valuable information relating to industries to the members. CODISSIA has set up a permanent trade fair complex at Coimbatore not only to conduct INTEC trade fairs comfortably but also to help other trade fair



organizers to use the infrastructural facilities for the betterment of the trade and industry in Coimbatore.

The association, by mobilizing funds from CODISSIA and getting loan from SIDBI has constructed a spacial building in a plinth area of 1,60,000 square feet at a total cost of Rs. 11 crores.

***SIEMA (The South India Engineering Manufacturers' Association):*** SIEMA was founded in 1952, with a sole aim of representing and protecting the interest of small, medium and large scale engineering industries of this region. SIEMA was founded in the year 1952, with only 20 members but now its strength is more than 500.

Most of its members are engaged in the manufacture of

- Electric motors
- Pumps
- Submersible pump sets
- Other engineering products

The main objective of the association is to inculcate awareness amongst the members. Significant achievement of SIEMA is the awareness created amongst its members regarding Quality Control. The association has close relationship with Bureau of Indian Standards in connection with the formulation of Indian Standards connected with the agricultural pump sets and motors. Considering this BIS, New Delhi has given representations in the Section Committees. SIEMA is having representation in most of the local bodies. The association has contributed a land measuring about 2 acres to SITARC in which the testing centre is now functioning.

***ICCI (Indian Chamber of Commerce and Industry):*** The President of ICCI, Coimbatore is Mr. A. Sakthivel. It is a powerful chamber, which looks after the welfare and interest of the industrial sector in the Coimbatore region.

Most of its functions are:

- Lobbying with Government departments and representing on policy matters with the Government.
- Conducting meetings / seminars on various scenarios of industrial concerns.

***TAPMA (Tamilnadu Pump and Motor Spares Manufacturers Association):***

- Constituted in the year 2000.
- Total number of member around 100.

- Mainly tiny units (investment within 25 lakhs) formed for mainly lobbying with Government and to have co-ordination with the members in the association.

***CII (Confederation of Indian Industry):*** It is a powerful confederation in the national level. The main activities of the confederation are lobbying with Government (State and Central) for the welfare of the industry. It also conducts meetings and seminars on various scenarios in the context of industrial growth of the country.

***Commercial Banks:*** The Lead Bank in this region is Canara Bank, All other nationalized banks are also situated in and around Coimbatore. They provide finance for the concerns in various areas of operation such as working capital, term loan and other assistance such as bill discounting, extending cash credit facilities, etc.,

***EEPC [Export Promotion Council (Engineering)]:*** There is no office available at Coimbatore. For most of the activities regarding export of engineering products have to be contacted at their regional office at Chennai.

***SITARC (Small Industries Testing and Research Centre):***

This centre was established in the year 1986. The total project cost for setting up the lab was around 11 crores which was funded by various agencies like UNDP, Government of India, IDBI and Government of Tamil Nadu.

The main activities are:

- Testing of motors and pumps as per ISI standard (unit is recognized by BIS).
- Testing of raw materials.
- Provides quality awareness training and technical training.
- Research & development in the area of energy efficient pumps.

#### **4. HISTORY AND TURNING POINTS:**

Coimbatore is popularly known as “Manchester of South India”. Cultivation of cotton was the main activity undertaken during the first half of this century. Since the climate of the Coimbatore city is suitable for cotton yarn processing, one textile mill was set up at Coimbatore in 1930s by the Britishers. Some of the millioners of Coimbatore started textile mills in and around Coimbatore with the technology imported from United Kingdom. To cater to the needs of these mills many engineering units, foundries and fabrication units were setup. Hence, Coimbatore had emerged as an industrial city. In the later half of the century many other Industry clusters such as pumps, motors, foundries, engineering units, jewellery, etc. had developed.

Of these Wet Grinder cluster had developed as a natural cluster. This cluster is not available anywhere else in the world. In 1955, one Mr. Sabapathy invented a Mechanical Wet Grinder. Prior to that, for many centuries the Batter for Idlis and Dosas was being prepared by using manual grinding stores. This used to take a lot of time and hard labour. Hence people were preparing idlis and dosas only on special occasions and during festivals. After the invention of Mechanical Wet Grinder preparation of the batter has become so easy that people have started eating Idlis and Dosas on daily basis. Many units in Coimbatore had started

manufacturing Mechanical Wet Grinders. Thus the cluster came into existence at Coimbatore.

Prior to the invention of mechanized wet grinders, manual grinding stones were used for preparing batter. The batter is prepared by the grinding action of a large stone, holding the ingredients in a pit, in which another stone of smaller size is rotated. These movements were mechanized by using an electric motor. In the conventional type, the large stone is rotated with the help of a pulley and belt mechanism. The smaller stone is held inside the pit using the arm-set mechanism.

Today various types of wet grinders are available in the market. The most popular type is known as “Conventional Type”. This was the first mechanized grinder type invented during 1950’s. This type accounts for about 60% of the total wet grinder production.

During 1980, a leading Wet Grinder manufacturer viz “Shantha Wet Grinders’ had invented the “Tilting Type”, with some modifications to make it user friendly. In this type, the bigger stone was converted into a flat stone of 2-inch thickness. The smaller stone was changed to roller types of 2 or 3 numbers stones. This was made in 2 shapes of cylindrical as well as conical types. The drum was provided with a mechanism for tilting and taking out the batter easily. This helps the users to remove the batter quickly. This helped to make the Wet Grinder popular among the people. At present

this type accounts for about 10%. Soon many other units started manufacturing this type also.

In 1995 one leading Engineering medium scale unit viz ELGI entered the market with a new type known as “Table Top” version of the product. It was priced high in the market, more than treble of the standard type’s price. It was introduced to target the urban market having small families. This type occupies smaller space compared to other types. This is convenient to use by the housewives. In this type, the drum was made detachable and is smaller in size. After the grinding action, the drum can be detached and kept in a fridge after fermentation. This type occupies smaller space compared to the other types and saves space in the kitchen. Also it consumes less power compared to other types. The maximum capacity in this type is 2 litres. This type accounts for about 20% in the market. After some time many others started producing this type with their own design, thus bringing the price down almost to half.

After the invention of the product, the need for bigger size than the normal one of 2 ltrs capacity was felt for Hotel industry and mass functions. Today commercial types of Wet Grinder up to 40 ltrs capacity are being manufactured. Also wet grinders are manufactured on order basis as per the requirement of the customers. Many commercial outlets selling the batter in ready to cook form have come up in small towns and cities. These outlets are using commercial types of various capacities from 3 litres to 40 litres. The commercial

types starting from 3 litres capacity to 40 litres capacity share the remaining 10%. Few numbers of special type wet grinders are also manufactured for specific purposes. These are used in pharmaceutical, chemical and other industries for grinding chemicals, herbs, drugs etc.

Thus, the mechanical wet grinder invented in 1955 had taken many avatars. Today, Coimbatore is having thousands of skilled labourers in this cluster.

## **5. STATUS AND PERFORMANCE OF THE CLUSTER:**

There are about 700 units in this cluster. This can be segregated in to four categories.

5. Medium Scale Unit (1 No. – ELGI)
6. SSI Large - Composite Unit (50 Nos.)
7. SSI Medium – Assemblers (150 units)
8. Components (Motors, Drums, Castings, Stones, Armsets etc.) Suppliers (500 units)

The total turnover of the cluster is around Rs. 225 crores per annum. The cluster is functioning mostly as unorganized sector. Some leading units are functioning in an organized manner. Most of the units have registered with the District Industries Centre. The manufacturing technology and design flows from one unit to the other by way of Informal discussions, Migration of the workers from one unit to the other, Reverse engineering etc.

The cluster has developed many specialized components suppliers. There are many units, which have specialized in manufacturing the stone sets required for various types of wet grinders. This is the main component, which is doing the grinding function. There are some specialized units, which are supplying motors specially designed for wet grinder application. Most of these are single-phase induction motors. Some of the units are fabricating the arm-sets required for the wet grinders. These arm-sets are electroplated by the

electroplating units, which are situated all over the city of Coimbatore. These units have mastered the technique of electroplating as per the requirement of wet grinder manufacturers. Similarly, there are specialized units supplying plastic components, rubber components, castings, aluminium injection molded components, gearboxes, drums etc. Apart from these units there are many traders who supply the raw materials required for this cluster. These traders procure the raw material from various sources in North India as well as abroad.

Development of such specialized suppliers increases the productivity and production of the cluster. At the same time, these components are supplied to various other towns, thus leading to the development of competition to this cluster. Many of these units do not undertake any kind of research and developmental work.

Coimbatore is having many engineering colleges, polytechnics and specialized institutes for research and development. The cluster is not utilizing the facilities available in these institutions. Many of the leading financial institutions and banks are also situated in the city. The cluster is not able to utilize their services also, since most of these units are functioning in an unorganized manner.

The State Government is imposing a high rate of sales tax of 12% on this product. This factor mainly drives the industry to function in an unorganized manner. Unhealthy competition that is prevailing in the industry is also another factor for



making the sector to become organized. The dealers, and not the manufactures are fixing the price of the wet grinders. Hence, the reduction of the sale tax to about 3 to 4 % will help the cluster to become organized.

## **6. ANALYSIS OF BUSINESS OPERATION:**

### **6.1 Product and its uses:**

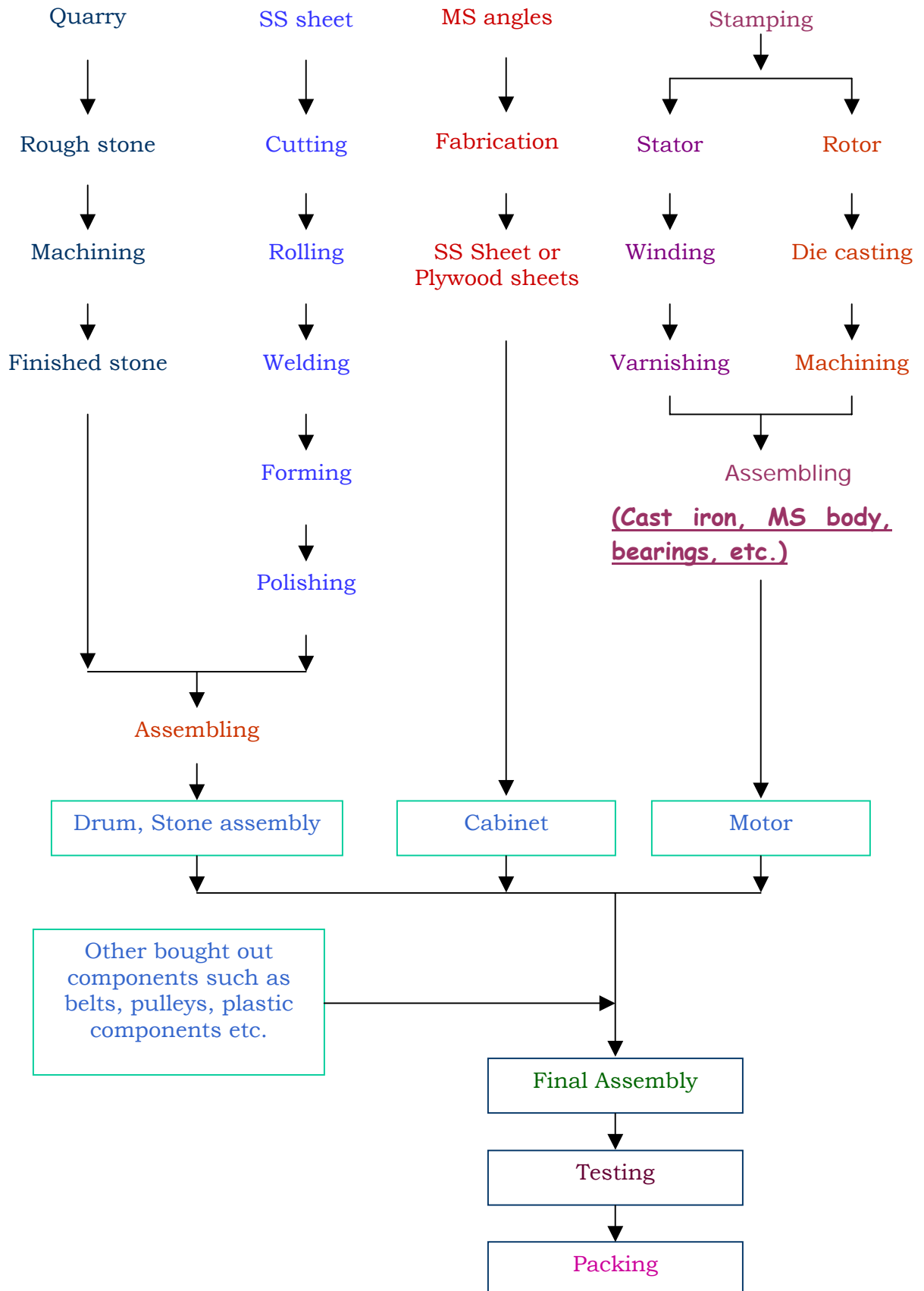
Wet grinder is a home appliance, which is used for preparing the batter, which is the ingredient for idlis and dosas. Various types of wet grinders are available in the market starting from 2 ltrs capacity and up to 40 ltrs capacity. Now a days this product is becoming a necessary home appliance in South India. Also, wherever South Indians are living there is a huge market potential. Higher capacity wet grinders from 3 ltrs onwards are used for commercial purposes like hotels, marriage halls, commercial batter manufacturers, etc. Many people in urban areas are doing business by using commercial wet grinders, preparing and selling batter through retail outlets.

### **6.2 Production process:**

The production of wet grinders does not involve highly technical operations. But it requires a degree of specialization in manufacturing the components required for wet grinders. Simple machineries such as lathes, drilling machines, welding machines are sufficient. Only few of the units are manufacturing all the components in house. Many units are outsourcing the components from

the suppliers. Specialized suppliers are available in Coimbatore for every component being used in this industry. The production process in general is given below:

## PRODUCTION PROCESS – FLOW CHART





### **6.3 Components:**

Each wet grinder manufacturer adopts its own design of the product. Some of the units are manufacturing many types of the product whereas others concentrate on one or two types. In spite of their own design, there are many common features and components in all these types. The major components of the product are as given below:

- a) Motor
- b) Stone set
- c) Drum
- d) Cabinet (outer casing)
- e) Armset
- f) Gearbox
- g) Belt and Pulley
- h) Plastic components
- i) Bearings

### **6.4 Value Chain Analysis:**

For value chain analysis purpose, conventional type wet grinder is taken. This product is available at various prices depending on the quality of raw materials used. All the components are purchased from suppliers in ready to assemble form. The components are assembled and packed for transportation to the dealers.

The rates are obtained from two different manufacturers and given below.

<b>Components/ Expenditure</b>	<b>Small firm</b>	<b>Large firm</b>
Stone	225	225
Drum	120	160
Cabinet	150	170
Armset	120	130
Motor	600	850
Belt and Pulley	30	35
Other components	100	100
<b>Total</b>	<b>1,345</b>	<b>1,670</b>
Labour charges	50	50
Packing charges	20	NIL
Profit	85	280
Selling Price	1,500	2,000

Thus by using slightly quality components, the large firms are able to increase their profit. The small firms are not able to invest heavily in their business and settle for smaller profit. The middlemen are exploiting the small firms on this count.

## **6.5 Suppliers:**

For each of the above components, specialized suppliers have emerged in Coimbatore who are supplying to many of the wet grinder manufacturers. Some large manufacturers have developed their own suppliers who are supplying exclusively to them by using the raw material supplied by the manufacturer. Many traders are available in Coimbatore who are procuring raw materials and components from North India and supplying exclusively to this industry. The following are the groups of suppliers emerged under this industry.

- a) Drum manufacturers
- b) Motor manufacturers
- c) Stone manufacturers
- d) Plastic injection moulders
- e) Arm-set manufacturers
- f) Other component traders

Among the suppliers of drum, motor, stone and arm set, heavy competition is existing, which brings down the price drastically. A cordial relationship exists between the suppliers and the manufacturers.

## **6.6 Raw material sourcing:**

The basic raw material, which is the grinding stone set, is procured from local sources such as Salem, Palani, Uthukuli, Coimbatore, etc. Recently, stone



manufacturing has been mechanised and physical labour is mostly eliminated.

The other main raw material viz. SS sheet is procured from SAIL plant, Salem. It is also being procured from other sources such as Jindal, VSP, etc. Sometimes imported SS sheets are also available in the market. Bearings and copper wires, which are used in motor manufacturing is procured from Mumbai and Delhi. The gear sets used in gearbox manufacturing are procured from North Indian markets such as Mumbai, New Delhi, Kolkata and Ahmedabad. The second hand gear sets dismantled from various automobiles such as auto rickshaws, cars and trucks are used for this purpose.

The materials, which are procured from North Indian market are supplied through various dealers available in Coimbatore. Other raw materials such as MS angles, electrical fittings, belts, etc. are procured from local market.

## **6.7 Machinery:**

The major machines used in this industry are plastic injection moulding machine, aluminium die casting machine and TIG welding machine. Other machineries such as lathes, drilling machines, and arc-welding machines are available locally. Since there is a

machinery manufacturing cluster functioning at Coimbatore, most of the machines are available locally. Second hand lathes are used for stone machining purpose.

### **6.8 Testing:**

There is no IS specification available for wet grinders. But some of the motor manufacturers have obtained IS marking license. These units are testing the motors as per the relevant IS standards. The final product wet grinder is tested for its grinding performance, running smoothness and safety. The manufacturers have developed their own method of testing the product.

### **6.9 Management:**

Coimbatore is a land of entrepreneurs in all fields of industry. It all started with the setting up of a few textile mills during 1930s. To support the textile mills, many engineering units and workshops had emerged. Subsequently these engineering units started manufacturing their own products. Wet grinder is one among them. Entrepreneurs who have gained experience working in other units manage all these units. A single person or 2 to 3 persons of the same family mostly manage these units. A few units have started implementing modern management practices.

## 6.10 Marketing:

There are about 200 units manufacturing wet grinders. Each unit has developed its own marketing channel. There are no common marketing channels available for the cluster. Some of the units are also exporting their products to other countries. These marketing channels had been developed over a period by the respective units. Most of the units are supplying directly to the showrooms. Others are supplying through agents who are selling through dealers. The products are transported through various means such as train, lorries, couriers, buses, etc. to various cities in India. Some agents come to Coimbatore to place orders and take the product on their own. These traders develop a severe price competition among the manufacturers.

The following are some common distribution channels.

- 1) Manufacturer → Branch → Distributors → Retailer
- 2) Manufacturer → Distributors → Showroom →  
Retailer
- 3) Manufacturer → Retailer
- 4) Manufacturer → Agent → Export

### **6.11 Finance:**

Most of the units had been started with the own capital of the entrepreneurs. The cost of plant and machinery is not heavy except in case of plastic injection moulding and aluminium die-casting. Most of the marketing is done on credit basis. Hence lot of money is locked in working capital. Since most of these units are functioning as unorganized sector, availing of credit from banks is not easy. The State Government's sales tax of 12% is forcing the cluster to function in an unorganized manner.

### **6.12 Units layout:**

Most of the units' layout is in an unprofessional manner. Some of the leading units have started professional methods of units' layout and assembling section. Since these units are located almost in all the areas of Coimbatore city, space is a constraint for them.

### **6.13 Technology:**

The technology used in wet grinder manufacturing is the common one, which is adopted in all engineering units. Simple processes like turning, drilling, plastic injection moulding, aluminium die-casting, electroplating, SS polishing, motor winding, etc., are used. No specialized technical process is used in this industry.

## 7 SWOT ANALYSIS:

7.1 **Strength:** This is a product invented, designed and developed at Coimbatore without any outside help.

- i) The food habits of South Indians mainly include idlis and dosas. This creates the market demand.
- ii) This is a natural cluster developed on its own at Coimbatore.
- iii) This cluster does not exist anywhere else in the world.
- iv) Availability of the main raw material i.e., stone suitable for wet grinders locally.
- v) Availability of a strong, skilled labour force.
- vi) Strong reputation for Coimbatore made wet grinders in the domestic market.
- vii) Presence of well-developed industry clusters such as motors, foundry, electroplating, stone machining, etc., which can supply components to this industry.
- viii) Presence of a large number of technical institutions in Coimbatore.
- ix) Location of the cluster in a well-developed city having a good infrastructure.
- x) Availability of good transport linkages – 3 National Highways, 1 airport, railways and many state highways.

- xi) Presence of most of the offices of Central and State Government Departments and developmental agencies.

## **7.2 Weakness:**

- i) Unprofessional way of management.
- ii) Weak marketing linkages – absence of organized marketing channels.
- iii) Most of the raw materials except the stone are bought from outside states.
- iv) The traders do Price fixation.
- v) Non-availability of quality standard.
- vi) Usage of low quality raw materials.
- vii) Cut throat price competition among the manufacturers.
- viii) Non-employment of BDS providers.
- ix) Poor packaging techniques.
- x) Exploitation of export marketing opportunities by the traders.
- xi) Absence of a technical analysis of the product and professional design.

## **7.3 Opportunities:**

- i) Improving the product quality of the cluster through standardization of the product.
- ii) Creation of new market avenues for the product by educating the people.

- iii) Development of an exclusive motor and gear box through R & D.
- iv) Dissemination of new methods of production among the entrepreneurs.
- v) Introduction of new technologies for improving the product.
- vi) Common procurement of raw materials for availing price benefits.

#### **7.4 Threats:**

- i) Entry of a new technology in the product
- ii) Supply of finished components to other cities for assembling and thereby creating competition to the cluster.
- iii) Emergence of new clusters in other cities where local market is available.
- iv) Practicing of informal business methods.
- v) Chance of a large-scale manufacturer entering the market.
- vi) Unexpected threats coming from outside countries due to WTO.

## **8 STRATEGIC DIRECTIONS:**

The wet grinder cluster at Coimbatore has developed on its own without any external help so far. This cluster has got tremendous growth potential if a proper guidance is given. The main areas of strategic interventions shall be

- Technology up-gradation.
- Creating new markets.
- Taping the export potential.
- Developing BDS to assist the cluster.
- Making the cluster an organized one.
- Representing to the Government for rationalizing the tax.

The ways and means of achieving the above are explained in detail in the action plan. It is also proposed to educate the cluster actors for the sustainability of the momentum generated.



## **9 ACTION PLAN:**

### **Vision statement:**

To double the turnover in three years by making the cluster vibrant, exploring and creating new markets and supplying quality products.

Based on the diagnostic study conducted in the cluster through various interviews, meetings, visits, studies, etc., the following activities were identified for implementation.

- Development of an exclusive motor for the use in wet grinders through R & D.
- Development of ISI standard for wet grinders in association with BIS.
- Quality improvement through ISO 9000 implementation.
- Developing a common testing centre for wet grinders, components and the raw materials.
- Educating the entrepreneurs in quality, pricing, design aspects, technological importance, marketing, HRD through a series of training programmes and awareness programmes.

- Developing an industrial estate exclusively for electroplating units (50 units) in association with the State Government.
- Development of BDS providers in various fields such as motor designing, energy audit, ISO 14000, aesthetic design, product diversification, etc.
- Common procurement of raw materials such as plastic granules, MS plates, angles, SS sheets, aluminium ingots, copper wire, stampings, diamond cutters, etc.
- Representing to the State Government for rationalising the Sales Tax from the present level of 12% to about 4%.
- Developing small consortiums among similar manufacturers and suppliers for various developmental purposes.
- Promoting the importance of maintaining quality product for survival in the long run against competition from large industries.
- Promotion of wet grinders through common marketing activities such as exhibitions, participation in fairs, food expos, etc.
- Diversification of the industry to manufacture various allied products.
- Promoting linkages with various technical institutes available in Coimbatore.
- Export promotion.

- Strengthening the cluster association COWMA by having a Secretariat, magazine, linkage with other associations, institutes, Government, etc.
- Process technology improvement in the areas of stone machining, SS drum polishing, welding, etc.
- Design and development of gearboxes for exclusive use in wet grinders through R & D.
- Arranging common visits to various other clusters for studying the technology being used.
- Developing common branding for the product.
- Developing varnish-applying chamber using vacuum pump in motor manufacturing through R & D.
- Activating other associations such as electroplaters association for the benefit of the industry.
- Improving the quality of wet grinders through usage of energy saving components (Energy audit).
- Delegation to international markets.
- Workshop on globalization and WTO.
- Training programme on international marketing, export procedures and documentation.
- Promoting a common website.
- Exploring the possibilities of supplying to Military canteens and Government supplies.
- Developing an alternate supplier for MS angles.
- Product standardization.

### **Actions to be taken on priority:**

- Representing to the State Government for rationalising the sales tax.
- Initiating actions to construct a building for accommodating Association Secretariat, Common Testing Lab and Training Centre.
- Common procurement of raw materials such as MS angles, SS sheets, ABS and stampings.
- Common marketing activities.
- Export promotion activities.
- Product standardization.
- Awareness and training programmes.
- Common visits to other clusters for promoting a common brand.
- Promoting a common website.
- Exploring the possibilities of supplying to Military canteens and Government supplies.
- Developing an alternate supplier for MS angles.