

CHAPTER IV

INTERPRETATION OF DATA

SMALL-SCALE ENGINEERING INDUSTRIES IN DHARWAD CITY

INTRODUCTION:

"The engineering industry is relatively a new industry in India that developed primarily after Independence. It gained momentum after the adoption of heavy - capital - goods - based growth strategy in the second and subsequent plans"¹.

"Engineering industry is assuming increasing importance in the industrial life of India in view of the emphasis on machinery manufacture and the scope for wide and gainful employment opportunities in relation to investment"². The

small-scale engineering industry will get immense scope for the manufacture of an extensive range of goods. It also provides sufficient scope for diversification of output in its sector. Interpretation of data relating to the working of small-scale engineering industries in Dharwad city has been classified under the various heads like General Information, Capital Structure, raw-materials, production, marketing and employment.

I. GENERAL INFORMATION:

4.1: TYPE OF ESTABLISHMENT:

Four types of establishments are common to the Small-scale industries. These are - Sole proprietorship, Partnership, Private Limited Company and Cooperative Society. In Sole proprietorship only one person is involved in the ownership and control of a business. Under partnership two or more people are involved in the ownership and control of a business. Private limited permits a limited number of share holders to enjoy limited liability and to be taxed as a company. Cooperative Societies are formed by a few persons pooling together their resources for common benefit.

The most common type of establishment in the small-scale engineering industry of Dharwad city was that of sole proprietorship. Out of 16 units surveyed, 11 units

belonged to sole proprietorship form of business organisation, accounting for 68.75 per cent of the total.

Two units belonged to partnership type of business organisation accounting for 12.5 percent of the total units surveyed.

Two units belonged to private limited company type of business organisation accounting for 12.5 percent of the total units surveyed.

Only one unit belonged to cooperative society type of business organization accounting for 6.25 percent of the total.

Table 9 shows the type of establishments surveyed.

TABLE 9: TYPE OF ESTABLISHMENTS

<u>Sl. No.</u>	<u>Type of Establishments (B.O)</u>	<u>Units</u>	<u>Percentage of the total</u>
1.	Sole proprietorship	11	68.75
2.	Partnership	2	12.5
3.	Private Limited Company	2	12.5
4.	Cooperative Society	1	6.25
Total		16	100

The small-scale industries serve as the best source of self employment. The very fact that the sole proprietorship form of establishment is the most common one leads to conclude that the argument of self employment in favour of small industries holds true here. It is also disheartening to know that the cooperative societies are not the popular form of establishment.

4.2: YEAR OF ESTABLISHMENT:

The units studied in the present study have been classified according to the year of establishment and the data has been shown in Table 10.

TABLE 10: CLASSIFICATION OF UNITS BY THE YEAR OF ESTABLISHMENT

Year	Number of Units	Percentage of Total
Before 1950	1	6.25
1950 to 1960	2	12.5
1960 to 1970	3	18.75
1970 to 1980	4	25.00
1980 Onwards	6	37.5
Total	16	100

It was observed that six units were established after 1980, which accounted for 37.5 percent of the total. It depicts the increasing importance and scope given for the

small-scale engineering industry at Dharwad in recent years. It is also interesting to note that only one unit covered in the sample was established before the independence of the country. It accounts for 6.25%. There were two units accounting for 12.5% of the total established between the years 1950 and 1960. Three units were established between 1960 and 1970 (18.75%). Four units covered by the sample were established during the period between 1970 and 1980 which accounted for 25%.

It is observed from the table 10 that -

1. the rate of growth of new establishment is more only after Independence.
2. increasing number of units are established after independence i.e. before 1950, it was 6.25%, from 1950-60 12.5%, from 1960-70 it was 18.75% from 1970-80 25% and 1980 onwards 37.5%. It shows that Dharwad city is industrialising at a fast rate.

4.3: NATURE OF JOBS OF ESTABLISHMENT:

Regarding the nature of jobs of the establishment, an inquiry was made as to whether the establishment is an independent one or it works for dealers on wage basis or works partly independently and partly for dealers or it works for cooperatives or works partly independently

and partly for dealers or it works for cooperatives or works partly independently and partly for cooperatives. Out of the sixteen reporting units eleven of them have revealed that they are independent establishments which accounts for 68.75% of the total units covered. Three units revealed that they work partly independently and partly for dealers, accounting for 18.75%. The remaining two units revealed that they work for dealers on wage basis, accounting for 12.5%. This fact is shown in Table 11.

TABLE 11: NATURE OF JOBS OF ESTABLISHMENTS

<u>Sl. No.</u>	<u>Nature of Establishments</u>	<u>No. of Units</u>	<u>Percentage</u>
1.	Independent	11	68.75
2.	Establishment works for dealers	2	12.5
3.	Works partly independently and partly for dealers	3	18.75
4.	Works partly for Cooperatives	-	-
5.	Works partly independently and partly for cooperatives	-	-
<u>Total</u>		<u>16</u>	<u>100</u>

On the basis of the nature of the jobs performed by the units majority of the establishments are independent establishments.

4.4: USE OF POWER AND NATURE OF POWER USED:

Power is an essential input in the modern productive process. Various types of power which can be used are animal, steam, coal, oil, gas and electricity. In the past manufacturing units made use of animal power, steam power, coal, oil and gas. That also gives the idea of evolution of power.

All the units surveyed revealed that they make use of power. The nature of power used for the manufacture of various items was electricity. This fact is depicted in Table 12.

TABLE 12: NATURE OF POWER USED

<u>Sl. No.</u>	<u>Nature of power used</u>	<u>No. of Units</u>	<u>Percentage</u>
1.	Animal	-	-
2.	Steam	-	-
3.	Coal	-	-
4.	Oil	-	-
5.	Gas	-	-
6.	Electricity	16	100
Total		16	100

It can be concluded that all the small-scale engineering units make use of the modern type of power,

i.e. electricity. They have not been depending to any extent on the traditional type of power.

4.5: REGISTRATION:

Three units covered revealed that they are registered under the Factories Act, accounting for 18.75 per cent of the total.

The remaining thirteen units covered revealed that they have not been registered under the Factories Act because on an average they are employing less than 20 workers. They accounted for 81.25% of the total. This is depicted in Table 13.

TABLE 13: REGISTRATION

<u>Sl. No.</u>	<u>Item</u>	<u>Number</u>	<u>Percentage</u>
1.	Registered under Factories Act	3	18.75
2.	Not registered under Factories Act	13	81.25
Total		16	100

All the establishments were registered under the shop Act.

4.6: WORKING CONDITION:

Under this head an attempt is made to study the working of sample units under various types of environments. In business terminology it is classified as normal, brisk and slack conditions faced by the manufacturing units. Table 14 shows the classification of units according to the conditions faced by them. Out of the Sixteen sample units surveyed ten units revealed that working condition is normal throughout the year. They accounted for 62.5% of the total. Three units revealed that the working condition was slack, accounting for 18.75%. Three units revealed that the working condition was brisk accounting for 18.75%.

TABLE 14: WORKING CONDITION

Sl. No.	Item	Number	Percentage
1.	Normal	10	62.5
2.	Slack	3	18.75
3.	Brisk	3	18.75
Total		16	100

It can be concluded that for majority of small-scale engineering units the working condition was normal, through out the year.

4.7: WORKING CONDITION DURING LAST MONTH:

When an inquiry was made regarding the working condition during the last month, of the investigation, some interesting facts were noted. Ten units surveyed revealed that the working condition during the previous month was normal. They accounted for 62.5%. Three units revealed that the working condition was brisk during the last month of the survey, which accounted for 18.75% of the total. The remaining three units revealed that the working condition one month prior to the Survey was Slack, which accounted for 18.75% of the total. The following Table 15 reveals this fact clearly.

TABLE 15: WORKING CONDITION DURING LAST MONTH

<u>Sl. No.</u>	<u>Working Condition</u>	<u>No, of Units</u>	<u>Percentage</u>
1.	Normal	10	62.5
2.	Brisk	3	18.75
3.	Slack	3	18.75
Total		16	100

The survey was conducted in May 1984 so as to know the effect of budgetary policy on the working of the units. Table 15 reveals that even with the change in budgetary policy the working condition of majority of units (62.5%) remained normal.

4.8: NUMBER OF DAYS WORKED DURING LAST MONTH:

In the light of the study of the working of small-scale engineering units in Dharwad city, an inquiry was made regarding the number of days worked during last month of the investigation. This inquiry revealed that all the Sixteen sample units surveyed, together they have worked for 342 days during the previous month of the survey. It means on an average each unit has worked for 21.38 days in the last month of the survey.

4.9: NUMBER OF DAYS WORKED DURING THE LAST YEAR:

An inquiry was also made regarding the number of days worked during the last year of the investigation. Sixteen units surveyed together have worked for 4025 days in the previous year of the present study. It gives an average of 252 days in the year of each unit surveyed. It means that on an average each unit has worked for 252 days, accounting for 69% of the days in 365 days, Each unit on an average has not worked for the remaining 113 days, accounting for 31% of the days in the year. Table 16 makes this point clear.

TABLE 16: NUMBER OF DAYS WORKED DURING THE LAST YEAR:

Sl. No.	Item	Days	Percentage
1.	Average No.of days worked	252	69
2.	Average No.of days not worked	113	31
	Total	365	100

The number of working days, on an average, are never 365 because of normal holidays enjoyed by the workers. Usually, the number of working days may be 293, 652 Sundays or Weekly holidays and 20 public holidays leave etc. When we compare average number of days worked (252) with the number of working days, it accounts for %. Which is certainly higher.

It can be concluded that as the average number of days worked in each unit is higher, industrial peace and harmony prevails.

4.10: REASONS FOR NOT WORKING:

While making an investigation regarding the reasons for not working, six reasons like strike, leave, lack of demand, sickness, lack of raw materials and power shortage were mentioned in the questionnaire. In the seventh column

the reporting unit was asked to specify any other reason for not working. Six units revealed that the reason for not working was the shortage of power, accounting for 37.5% of the total. Four of the units gave the reason of lack of raw materials. (25%) Two units reported that strike was the reason. (12.5%) One unit revealed that leave was the reason for not working. One unit gave sickness as the reason. One more unit gave lack of demand as the reason. Other reasons specified were shortage of proper skilled labour, non-availability of bank finance etc. The reporting units have also given more than one reason for not working. This has been depicted in Table 17.

TABLE 17: REASONS FOR NOT WORKING

<u>Sl. No.</u>	<u>Reasons</u>	<u>No. of Units</u>	<u>Percentage</u>
1.	Power shortage	6	37.5
2.	Lack of raw materials	4	25.00
3.	Strike	2	12.5
4.	Leave	1	6.25
5.	Lack of demand	1	6.25
6.	Sickness	1	6.25
7.	Other	1	6.25
<u>Total</u>		<u>16</u>	<u>100</u>

It can be concluded that power shortage is the main reason for not working in majority of the units. The

other strong reason for not working is the lack of raw materials.

4.11: NUMBER OF WORKING HOURS PER DAY:

All the reporting establishments have revealed that the number of working hours per day is eight hours per shift. Twelve units were working only on one shift of eight hours. They accounted for 75% of the total. Four units were working on two shifts of eight hours each. They accounted for 25% of the total number of units Surveyed. This is shown in Table 18.

TABLE 18: NUMBER OF WORKING HOURS PER DAY

<u>Sl. No.</u>	<u>Shifts (8 hrs. each)</u>	<u>No. of Units</u>	<u>Percentage</u>
1.	1 Shift	12	75
2.	2 Shifts	4	25
<u>Total</u>		<u>16</u>	<u>100</u>

It can be concluded that majority of the units are working with one shift only, at present capital is not fully utilised. Rest of the investment is going waste. The management of these units should produce such goods which have more demand, make use of market survey etc.

4.12: BUILDING:

An inquiry was made regarding whether the production is undertaken in the building ~~xx~~ used for residential purposes. The investigation revealed that thirteen units have not been undertaking production in the building used for residence. It means they have separate building for production purposes. They accounted for 81.25% of the total number of the units surveyed. The remaining three units have reported that they have been undertaking production in the building used for residential purpose. They accounted for 18.75% of the total. This fact is depicted in Table 19.

TABLE 19: BUILDING USED FOR PRODUCTION

<u>S1. No.</u>	<u>Items</u>	<u>No.of Units</u>	<u>Percentage</u>
1.	Units having separate building	13	81.25
2.	Units undertaking production in building used for residence	3	18.75
<u>Total</u>		<u>16</u>	<u>100</u>

Thus, it may be concluded that the majority of units carry out the production process in separate sheds constructed for the purpose.

II. CAPITAL STRUCTURE:

The stock of goods which are used in production and which have themselves been produced³ are referred to as capital. It is a produced means of production. A distinction is normally made between fixed capital, consisting of durable goods such as plant and machinery, building etc. and working (circulating) capital consisting of stocks of raw materials, semi-finished goods, components etc. Capital formation is considered as an index of economic development.

In this part of the study, an investigation is made about the capital structure of these establishments. It included the study of fixed capital, working capital, total capital investment, financial assets held by these units, loans and advances secured, the purposes for securing loans and difficulties in securing loans.

4.13: FIXED CAPITAL:

Fixed capital consists of durable goods such as plant and machinery, building etc. Fixed capital plays a very important role in establishing a factory. In the present study a detail inquiry was made regarding the fixed capital structure which included machinery building (if rented,

the monthly rent), tools, furniture, fixtures and others. Value of the additions or renewals made in the beginning of the year, annual value of depreciation and the net value at the end of the year were also accounted for.

As shown in Table 20, on the basis of the investment in fixed capital the establishments were divided under six categories. In the first category the units having fixed capital investment of less than Rs.50,000 were included. There were five such units which accounted for 31.25%. There was only one unit with the fixed capital investment between Rs.50,000 and Rs.1 lakh, which accounted for 6.25%. Four units were classified under the category of Rs.1 lakh to Rs.2 lakhs, which accounted for 25% of the total. Four units were found in the category of Rs.2 lakhs to Rs.5 lakhs which accounted for 25% of the total, one unit was in the category of Rs.5 lakhs to Rs.10 lakhs, which accounted for 6.25%. One unit was put in the category of more than Rs.10 lakhs which also accounted for 6.25% of the total.

TABLE 20: FIXED CAPITAL

Sl. No.	Fixed Capital	No. of Units	Percentage
1.	Less than Rs.50,000	5	31.25
2.	Rs.50,000 to Rs.1,00,000	1	6.25
3.	Rs.1,00,000 to 2,00,000	4	25.00
4.	Rs.2,00,000 to Rs.5,00,000	4	25.00
5.	Rs.5,00,000 to Rs.10,00,000	1	6.25
6.	Above Rs.10,00,000	1	6.25
Total		16	100

The above table 20 reveals one more fact that the sample has covered almost all category of establishments from the point of view of fixed capital investment. It has covered the small scale engineering units having capital investment of less than Rs.20 lakhs as well as tiny units having fixed capital investment of less than Rs.2 lakhs. Tiny units having less than Rs.2 lakhs of capital investment account for 62.5% of the total. There were ten such units.

The conclusion that emerges here is that from the point of view of number of units majority of the small-scale engineering units in Dharwad city are very small units having the fixed capital investment of less than Rs.2 lakhs.

4.14: AVERAGE FIXED CAPITAL:

Total fixed capital of all the sixteen units works out to be Rs.37,26,344. Hence the average fixed capital of each unit working in Dharwad city comes to Rs.2,32,896.5. When a comparison is made about the average fixed capital with Table 20, it is noticed that ten units (62.5%) were using less than average fixed capital. This is depicted in Table 21.

TABLE 21: AVERAGE FIXED CAPITAL

<u>Sl. No.</u>	<u>Item</u>	<u>No. of Units</u>	<u>Percentage</u>
1.	More than average fixed capital	6	37.5
2.	Less than average fixed capital	10	62.5
<u>Total</u>		<u>16</u>	<u>100</u>

It can be concluded that the investment in fixed capital on an average seems to be much lower which may affect efficiency and production of the manufacturing unit.

4.15: SHARE OF MACHINERY IN FIXED CAPITAL:

Total investment in fixed capital as pointed out in the previous paragraph works out to be Rs.37,26,344. Out of this the share of machinery was Rs.31,69,141, which accounted for 85.05% of investment in fixed capital. The share of building, tool, furniture and others was only Rs.5,57,203, which accounted for 14.95% of total investment in fixed capital. This fact is depicted in Table 22.

TABLE 22: RELATIVE SHARES IN FIXED CAPITAL

S1. No.	Item	Amount	Percentage
1.	Machinery	Rs. 31,69,141	85.05
2.	Building, tools, furniture and others	Rs. 5,57,203	14.95
Total fixed capital		Rs. 37,26,344	100

It can be concluded that machinery is the single major item in which 85% of the investment in fixed capital has been made. This does not seem to be the right type of investment. Fixed capital investment in building, in particular, has been completely neglected. Better building premises lead to the hygienic condition of working.

4.16: WORKING CAPITAL:

The term working capital or circulating capital consists of stocks of raw material, semi-finished goods, components etc. The working capital plays the most important role in the day-to-day working of the factory. The present study made an inquiry about the working capital position on the day of making investigation. While studying the working capital position of each

establishment, an attempt was made to know the stock on the day of making the investigation which included raw materials, fuel and lubricants, stock of finished products and stock of semi-finished products, An inquiry was also made about the position of cash in hand and at the bank. After making a detail study the establishments surveyed were divided under six categories. The units working with less than Rs.10,000 of working capital were in the first category. There were three units in this category, which accounted for 18.75%. Secondly, in the category of Rs.10,000 to 42,000 of working capital, there were four units which accounted for 25%. Thirdly, in the category of Rs.20,000 to Rs.50,000, there were five units, which accounted for 31.25% of the total. Fourthly, in the category of Rs.50,000 to Rs.1 lakh, there was only one unit, which accounted for 6.25%. Fifthly, in the category of Rs.1 lakh to Rs.5 lakhs also there was only one unit, accounting for 6.25%. Sixthly, in the category of more than Rs.5 lakhs worth of working capital, there were two units which accounted for 12.5%. These facts have been summarised in Table 23.

TABLE 23: WORKING CAPITAL

Sl. No.	Working Capital	Units	Percentage
1.	Less than Rs.10,000	3	18.75
2.	Rs.10,000 to Rs.20,000	4	25.00
3.	Rs.20,000 to Rs.50,000	5	31.25
4.	Rs.50,000 to Rs.1,00,000	1	6.25
5.	Rs.1,00,000 to Rs.5,00,000	1	6.25
6.	Above Rs.5,00,000	2	12.50
Total		16	100

It can be concluded that there are 13 units which are working with the working capital of less Rs.1 lakh, which account for 81.25% of the total. Only 3 units (18.75%) are working with investment in working capital of more than Rs.1 lakh.

The investment in working capital on an average seems to be very low which may affect the efficiency and production of the small-scale engineering unit.

4.17: FINANCIAL ASSETS:

Finance is the lifeblood of industrial development. A detail study was made on the position of the financial assets of the establishments surveyed. The study covered

the partners or owners or company's funds, loans from Government (including subsidy), loans from Banks, long term financial institutions like KSFC and insurance companies, loans from Cooperatives, loans from money lenders, friends and relatives. The study revealed that out of the total financial assets worth Rs.33,60,748 of all the establishments taken together owners or partners or company funds were worth Rs.8,41,300, which accounted for 25.03% of the total financial assets held by all the establishments. Loans from Government accounted for worth Rs.11,48,995. It comes to about 33.55% of the total funds. Loans from banks, K.S.F.C. and Insurance Companies were worth Rs.11,54,443 which accounted for about 35% of total financial assets. Loans from friends and relatives were worth Rs.1,86,000 which accounted for 5.53%. Loans from cooperatives were worth Rs.30,000 which accounted for only 0.89% of total financial assets. One happy Note to be pointed out here is that none of the reporting units were in the clutches of money lenders. The financial assets position of all the units surveyed has been summarised in table 24.

TABLE 24: FINANCIAL ASSETS

<u>Sl. No.</u>	<u>Financial Assets</u>	<u>Amount</u>	<u>Percentage of total</u>
1.	Owner's or Partner's Company's funds	Rs. 8,41,300	25.03
2.	Loans from Government	Rs. 11,48,995	33.55
3.	Loans from Banks, KSFC or Insurance Company's	Rs. 11,54,453	35.00
4.	Loans from Cooperatives	Rs. 30,000	0.89
5.	Loans from friends, relatives etc.	Rs. 1,86,000	5.53
6.	Money lenders	-	-
Total Financial Assets		Rs. 33,60,748	100

It can be concluded that almost one-third of the financial assets are contributed by the owners or partners or company's funds and friends and relatives. About one-third is contributed by the Government. The remaining one-third of funds is contributed by the banks, financial institutions, K.S.F.C. and Cooperative banks. Industries are free from the clutches of money lenders. The Government and banks are playing a very important role in developing small-scale engineering industries. Cooperative societies have not made much head way in supplying credit to industries.

4.18: PURPOSE AND DIFFICULTIES IN SECURING LOANS:

Industrial establishments require longterm capital for investment in fixed capital and working capital for day-to-day operations. The establishments surveyed revealed that they require loans for purchasing machinery, construction of building, expansion of plant and to purchase raw materials and for the working capital. The general opinion of most of the firms interviewed was that there was no much difficulty in securing loans for fixed capital investment. The difficulty was mainly with regard to securing the loans for working capital. Banks and other financial institutions are not spontaneously coming forward in looking after the working capital requirements of the firms. This fact was highlighted by most of the establishments at the time of the direct interview with them.

Following difficulties are faced by the units in securing loans -

1. Banks procedure is cumbersome
2. They ask for lot of information which are not readily available, e.g. balance sheet and audited accounts.
3. Forms for application of loans are more complicated. Small entrepreneurs find it very difficult to fill them.
4. Procedure for sanctioning and disbursement of loan is very lengthy.

Because of all these reasons, many a times, small-scale units cannot satisfy orders placed on them on account of shortage of working capital.

III: RAW MATERIALS:

If finance is the life blood of industrial development, raw materials serve as the basic food for industrial development.

4.19: RAW MATERIALS USED DURING LAST YEAR:

The present study has covered different types of small-scale engineering industrial units specialised in manufacturing different products. Therefore, the raw materials used by them are also of various types. The common types of raw materials used by these units were mild steel, steel bar, angles, castings, M.S. pipes, M.S. Sheets, Sheet metal, flats, wire etc. some other raw materials used by these units were clutch plates, forgings, copper wire, laminated core, and some other components.

The present study made an attempt to know about the various types of raw materials used during the last year and the value of these raw materials used. The total value of these raw materials used by all the sixteen



units was worth Rs.14,01,613. Therefore, safely it can be concluded that on an average each unit used the raw materials worth Rs.87,600.81. But depending upon the goods manufactured, raw materials used, size of the plant etc. there was vast variation regarding the value of the raw materials used from one establishment to the other.

Table 25 gives the list of raw materials used by all the sample units surveyed.

TABLE 25: RAW MATERIALS USED

<u>Sl. No.</u>	<u>Raw Materials</u>	<u>No. of Units</u>
1.	Castings	5
2.	M.S. Steel	4
3.	Alloy Steel	3
4.	Iron Sheets	3
5.	Flats	2
6.	Angles	2
7.	Steel bar	2
8.	M.S. Pipes	2
9.	Forgings	1
10.	Clutch Plates	1
11.	Laminated Core	1
12.	Others	3

As the study concentrates on the study of small engineering units it can be concluded that various types of steel like M.S. Steel, Cast Iron, alloy steel, flats, angles, sheet metal, steel bar etc. serve as the basic raw material of these industries.

4.20: PURCHASE OF RAW MATERIALS:

An investigation was made about the buying of principal raw materials by the units surveyed. Asked whether they buy the principal raw materials in the local market or distant market, none of the units were found buying their principal raw materials in the foreign market. Nine units were found buying their principal raw materials in the local market only. They accounted for 56.25% of the total. Five units were found buying their principal raw materials both in the local as well as in the distant markets, which accounted for 31.25% of the total. Two units were found buying their principal raw materials in the distant market only which accounted for 12.5% of the total. These facts have been summarised in Table.26.

• TABLE 26: PURCHASE OF RAW MATERIALS

S1. No.	Markets	No.of Units	Percentage
1.	Local market only	9	56.25
2.	Both local and distant markets	5	31.25
3.	Distant market only	2	12.5
4.	Foreign market	Nil	-
Total		16	100

Dharwad is a developed city. Local traders know their customers well and give their customers the raw materials on credit basis. It can be noted that the tendency of local entrepreneurs is to purchase raw materials locally and to some extent from distant market.

It is interesting to note that the small-scale engineering industries are not import - intensive industries. These are the units using domestic raw materials only. Rapid development of such units will help to reduce pressure on foreign exchange reserves which are necessary for the development of country like India.

4.21: AGENCIES SUPPLYING RAW MATERIALS:

An inquiry was made regarding the agency from which the raw materials are purchased. Ten units expressed their opinion that they purchase the raw materials from the middlemen, which accounted for 62.5%. Six units were found purchasing their principal raw materials directly from the producers, which accounted for 37.5%. This has been depicted in Table 27 there was no cooperative society to supply the raw materials.

TABLE 27: AGENCIES SUPPLYING RAW MATERIALS

<u>Sl. No.</u>	<u>Source</u>	<u>Units</u>	<u>Percentage</u>
1.	Middlemen	10	62.5
2.	Producer	6	37.5
3.	Cooperative Society	-	-
Total		16	100

It can be concluded that as the small engineering units had not formed their own cooperative society they had to purchase raw materials from middlemen by paying higher price.

4.22: DIFFICULTIES ENCOUNTERED IN SECURING RAW MATERIALS:

A list of difficulties encountered by the small-scale engineering units was put forward by most of the units surveyed. A few of the prominent problems encountered by them have been listed below.

1. Frequent shortages of raw materials in markets, both local as well as distant markets.

2. Prices of raw materials are rising rapidly while the prices of finished products cannot be changed so early easily. This affects adversely the profitability and hence the efficiency of the working of small-scale engineering units in Dharwad city.

IV: PRODUCTION:

Steadily rising production is a good indicator of strength of production unit. The present survey made an intensive study of the input as well as the output. While dealing with the aspect of production, information was collected about the names of the products manufactured and their value in the last year. An attempt was also made to know about the annual production of each unit surveyed, maximum productive capacity and if they are working below capacity, the reasons for working below capacity.

4.23: PRODUCTION IN THE LAST YEAR:

The present study covered the units producing cylinders, monoblocks, tools, machinery parts, sheet metal works, fabrication works, welding transformers, battery charging, M.S. moulds, electrical motor, grinders, liners, pistons, cylinder heads, piston rings, vibration dampers, multi-disc clutches, damper clamp, other clutch parts, mill housing pin, chucles, grill works, other machine spare parts etc. Total value of these products produced by all these units in the last year amounted to Rs.36,19,625. Each unit on an average was producing different products worth Rs.2,26,226.56. But the productive capacity greatly varied between over unit to the other.

The important products produced by the different units are listed in Table 28.

TABLE 28: PRODUCTS MANUFACTURED

Sl. No.	Products	No. of Units	Percentage
1.	Machinery parts	6	37.5
2.	Sheet metal works	2	12.5
3.	Electrical Motor, Grinder etc.	2	12.5
4.	Fabrication	1	6.25
5.	Welding transformer battery charging etc.	1	6.25
6.	Others	4	25
Total		16	100

It can be easily noticed that the majority of the engineering units are spare part manufacturing units.

4.24: TOTAL ANNUAL PRODUCTION:

The study also attempted to know the total annual production for the years 1980-81, 1981-82 and 1982-83. Favourable response was found when the inquiry was made about the annual production position for these three years. The aggregate annual production of all the units together for the year 1982-83 amounted to Rs.36,19,625. It gives an idea of average annual production by each unit for the year 1982-83. It works out to be Rs.226226.56. The corresponding figure for 1980-81 was Rs.34,40,255 and for 1981-82 it was Rs.35,20,260. This is depicted in Table 29.

TABLE 29: TOTAL ANNUAL PRODUCTION

Sl. No.	Year	Total Annual Production	Percentage of increase
1.	1980-81	Rs.34,40,255	-
2.	1981-82	Rs.35,20,260	2.27
3.	1982-83	Rs.36,19,625	2.74

The rate of growth of annual production is very less. It can be concluded that the rate of growth of annual production should be at least around 15%.

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The rate of growth of annual production during 1982-83 was much better (2.74%) compared to the growth rate in 1981-82 (2.27%).

4.25: MAXIMUM PRODUCTIVE CAPACITY:

An investigation was made about the maximum productive capacity. More than half of the units interviewed agreed that they are working below capacity. The reasons for working below capacity are enumerated in the following paragraph.

4.26: REASONS FOR WORKING BELOW CAPACITY:

The field investigation as well as the direct interview with the owners of the small engineering units have revealed some true facts for working below capacity. These reasons for working below capacity by the small engineering units are mentioned below:-

- a) Due to the scarcity of raw materials the firms are unable to meet the market demand.
- b) Shortage of power is also responsible for working below capacity. Power supply is irregular. Power cut has become a regular feature.

- C) There is limited scope for the development of ancillary engineering units as the large-scale engineering units providing the job work to these ancillary units are limited in number in this areas
- d) As most of the units were newly started, they have to face stiff competition from the well-established units.
- e) Recession in Bombay market due to the strike of the textile workers has affected the units supplying machinery parts to textile machiner manufacturing units and textile units.

4.27: DESIGN:

An investigation was made on the design used. Eleven units reported that they are using modern design, accounting for 68.75%. Two units reported that they use conventional design (12.5%). The remaining three units (18.75%) expressed that depending upon the customers demand they use both conventional as well as modern design. This is shown in Table 30.

TABLE 30: DESIGN

<u>Sl. No.</u>	<u>Design</u>	<u>No. of Units</u>	<u>Percentage</u>
1.	Modern	11	68.75
2.	Conventional	2	12.5
3.	Both Conventional and Modern	3	18.75
Total		16	100

It can be concluded that in the engineering industry technological advancement is fast taking place. As majority of the units are using modern design, it shows that these industries are having upto date knowledge of modern technology and design.

V. MARKETING:

The Institute of Marketing defined the term marketing as - "the management function which organises and directs all those business activities involved in assessing and converting customer purchasing power into effective demand for a specific product or service to the final consumer or user so as to achieve the profit, target or other objectives set by a company"³. In the aspect of marketing of engineering goods the present investigation throws light on where and to whom the goods are sold, difficulties encountered in marketing the goods and remedies suggested to overcome these difficulties.

4.28: BUYERS OF GOODS:

Fourteen units were found to be selling their engineering products directly to the ~~mx~~ customers or to industries. They accounted for 87.5% of the total. One unit was found producing goods to the manufacturer who advanced raw materials. One unit was found selling its products directly to the government. This has been summarised in Table 31.

TABLE 31: BUYERS OF GOODS

<u>Sl. No.</u>	<u>Buyers</u>	<u>No. of Units</u>	<u>Percentage</u>
1.	Customers and industries	14	87.5
2.	Manufacturer who advances raw materials	1	6.25
3.	Government	1	6.25
<u>Total</u>		<u>16</u>	<u>100</u>

It can be concluded that majority of the units covered by the sample are customer oriented and ancillary industries.

4.29: MARKET FOR SELLING GOODS:

Nine units sold their goods in the local market, which accounted for 56.25%. Six units sold their goods in the distant market, which accounted for 43.75% of the total. None of the units surveyed was found to be selling its goods in the foreign market. One unit (6.25%) sold its goods both in the local as well as in the distant market. This fact can be illustrated in Table 32.

TABLE 32: MARKET FOR PRODUCTS

<u>Sl. No.</u>	<u>Market</u>	<u>No. of Units</u>	<u>Percentage</u>
1.	Local market	9	56.25
2.	Distant market	6	37.5
3.	Foreign market	-	-
4.	Local and Distant market	1	6.25
<u>Total</u>		<u>16</u>	<u>100</u>

It can be concluded that majority of the units are local oriented units. None of them is manufacturing goods for export market some cater to the needs of distant market also.

4.30: DIFFICULTIES IN MARKETING OF PRODUCTS:

It was noticed that the small-scale engineering units were facing good many difficulties while marketing the products. Some of the difficulties faced by the producers were -

1. keen competition for their products,
2. non-availability of markets, and
3. shortage of working capital.

VI: EMPLOYMENT:

The small-scale industries are encouraged especially because of their characteristic feature of having employment potentiality the present study also makes an investigation into this aspect. For the purpose of the present study, three categories of workers were considered, viz family workers, outside workers and supervisory and managerial staff. The inquiry also covered the skilled and unskilled workers aspects of average number of male and female workers employed per day, number of hours worked and wages paid.

4.31: AVERAGE NUMBER OF WORKERS EMPLOYED PER DAY:

The average number of workers employed per day covered the male and female family workers, outside workers and supervisory and managerial staff. There were thirteen family workers employed by the units covered under the survey. These sixteen units had provided employment to 174 outside workers. These units provided employment to 29 persons for managerial and supervisory work. Out of them two were female workers, In all, these sixteen units have provided employment to 216 persons. This is summarised in Table 33.

TABLE 33: PERSONS EMPLOYED

<u>Sl. No.</u>	<u>Category</u>	<u>No.of employed per day</u>	<u>Perce- ntage</u>
1.	Family workers	13	6.00
2.	Outside workers	174	80.55
3.	Supervisory and managerial staff	29	13.45
<u>Total workers employed</u>		<u>216</u>	<u>100</u>

It can be concluded that outside workers form the major portion of the workforce in these units.

IV.32: NUMBER OF HOURS WORKED AND TOTAL WAGES:

Each worker is working for eight hours in a day. There is a wide variation in the wages paid to the workers in different units, Generally, it ranges between Rs.10 and Rs.15 for the outside workers. It can be concluded that exploitation of labour prevails in these units. Availability of cheap labour also has the other advantage of attracting more industrialists to Dharwad.

4.33: SKILLED AND UNSKILLED WORKERS:

Out of 187 workers employed 90 workers were skilled workers and the remaining 97 workers were unskilled. This is shown in Table 34.

TABLE 34: SKILLED AND UNSKILLED WORKERS

S1. No.	Workers	Number	Percentage
1.	Skilled workers	90	48.13
2.	Unskilled workers	97	51.87
Total		187	100

It can be concluded that there are equal number of skilled and unskilled workers employed in small engineering units of Dharwad.

In the small engineering units even though the number of unskilled workers is more, within a short time by gaining experience they can become skilled workers.

3.34: TRAINING FACILITIES:

In plant training and technical training is most essential for the workers employed in the engineering industry. Tool and dye making training is given to the meritorious students who have passed S.S.L.C. at Nettur Technical Training Foundation (N.T.T.F.) at Dharwad, Small Industries Service Institute at Hubli and Industrial Training Institutes at Hubli and Dharwad. Some of the workers and owners have obtained training from these institutes. But most of the workers in the units covered had joined as unskilled workers and have obtained training in these units only.

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