

CHAPTER - 6

CONCLUSIONS AND SUGGESTIONS

A) **Conclusions**

B) **Suggestions**

A) CONCLUSIONS

Diesel oil engine industry belongs to light engineering wing of the engineering industry. Development of this Industry in India is of recent days. In presindependence days this industry made no headway because of lukewarm attitude of British Government and on slaughter of the Great Depression. Second world War gave it a fillip. Restriction on import of diesel oil engines and spread of irrigation facilities were helpful to the development of this industry in early days of planning. The industry is categorically divided in to a small but strong organised large sector and weak, scattered, unorganised small sector. Production of diesel oil engines increased by leaps and bounds during last forty years. India produces Petter and Lister types of vertical engines. Exports, which began in 1970 have increased by 24 times in number and by 36.58 times in terms of value. India exports diesel oil engines to those countries from which it was importing engines formerly, Rumania, Czechoslovakia, East Germany, Japan, Italy and Korea are India's competitors.

Over the period of time new centres producing diesel oil engines have emerged and have surpassed Kolhapur because of cost advantage. Vertical, portable, fuel efficient engines have taken place of heavy, bulky, horizontal engines. Special purpose machines are increasingly used to produce components. There is very little technological development. Entrepreneurs have become more professional. However, growth of this industry can be credited more to government policy and economic development than to entrepreneurial acumen.

Development of diesel oil engine industry in Kolhapur went hand in hand with ups and downs in India. Oil engine producing have essentially remained small scale in Kolhapur. In recent years Kolhapur has lost its lead to other centres.

Diesel oil engine producing units suffer from all types of problems. Raw material, technology, finance, marketing, export, declining demand, changes in government policy are the specific areas where they face problems severely. On one hand prices of raw material are spiralling high and prices of finished product lag behind. Small units face these problems more acutely than large units. These problems are interdependent and therefore they fortify each other making their resolution much difficult. It is natural that many units become sick. It is not a matter of surprise that they become sick; It is a matter of astonishment that many function successfully.

Units producing diesel oil engines included in cluster A, are mainly organised on proprietary basis followed by partnership form of organisation. Higher form of organisation in the shape of private limited company is rare. This indicates that the industry is at a rudimentary step on the ladder of organisational growth. Over the period of time lesser number of units producing diesel oil engines have taken birth.

Individual with inadequate educational status are in majority in this industry. Graduates in non technical stream are in majority. On the whole, this technical industry is preponderingly owned by non technical men. There is a tendency to carry out most of the jobs, even sophisticated jobs, on multi purpose or all purpose machines like lathes, drilling and shaping machines. Engineering graduates

use special purpose machines marginally in greater number.

As for as capital invested at the time of establishment of unit is concerned partnership units had capital even less than that invested in proprietary units. Private limited units were having initial capital three times more than that of proprietary units. However, considering capital invested at present partnership units have 50 per cent more capital than proprietary units have and private limited units have about double the present capital that a partnership unit has. It indicates that, rate of growth of proprietary units, in terms of capital invested is slower in comparison to units in other two organisations. Entrepreneurs with lower educational status seem to have modest beginning because they have invested comparatively less capital. It may be probably because the units that they steer were established in early days when prices were lower.

There are six units that have all capital in the unit of their own and no funds are borrowed from others. This is at one extreme. at the other extreme, there are units which have barely twenty percent or less capital of their own invested in their enterprises.

Analysis of cost of production indicates that cost of raw material varies widely from 31 to 80 percent, while cost of labour is less than 20 percent. Cost of labour has remained disguised because the imputed cost of own labour is probably not included in the cost of production.

Proportion of skilled labour employed is greater but is not uniform in all units. Concerns producing ISI mark and quality mark engines employ skilled labour in greater proportion. Entrepreneurs with engineering education employ skilled labourer in greater proportion to be followed by graduates, because they produce better engines. Private limited units are more capital intensive and proprietary least.

Though wages paid to skilled labourer are more than wages paid to semi-skilled and unskilled workers, the remuneration paid to skilled labourer in proprietary units is less than that in partnership and private limited units. Moreover wages paid in those units which produce non-standard engines are less than paid in those units which produce better quality engines.

Small engineering units of Kolhapur are finding difficult to penetrate into market. This has three reasons, quality of engines they produce is not comparable, prices of engines are high and they do not have their own distribution channels. Oil engine market being imperfect it is necessary to pay greater attention to non-price competition and create brand loyalty. They have, very little sell at national level.

In spite of various odds the proportion of units showing vary good capacity utilisation is good; but the proportion of units showing bad capacity utilisation is also equal. It is heartening to note that atleast one unit in Kolhapur has good exports.

Units covered under cluster B are a replica of those covered in cluster A, with only difference that former produce components of oil engines and the latter complete oil engine. Proprietary units are in prepondering majority. In cluster B proportion of proprietary and partnership units is marginally greater than in cluster A, while that of private limited units is lesser.

Proportion of technically qualified entrepreneurs is greater in cluster B than that in cluster A. That of graduates in cluster B is also sizably greater. If education upto and inclusive of +2 stage is taken as inadequate to play entrepreneurial role about one third proprietors fall under this category but they are in greater proportion in cluster A than in cluster B.

Units in cluster A have lathes shaping and drilling machines in greater proportion while units in cluster B have special purpose machines in greater proportion. It would be misleading to compare requirement and availability of machines in units covered under cluster A and B, because nature of work performed in two categories of units is different and even in cluster A some units manufacture entire engine and some assembly.

Units in cluster B require raw material in huge quantity because they produce most of the components that are used to assemble engines. Type of raw material required by a unit depends upon the components the unit manufactures and the number and quantity of such components the unit manufactures. Units in cluster A require comparatively less quantum of raw material.

Table 6.1 gives comparative picture of growth of units in two clusters in terms of capital.

Table 6.1
Growth of units in both clusters

	Units in cluster A	Units in cluster B
Proprietary	5.43 times	12 times
Partnership	10.67 times	2.6 times
Private Limited	3.76 times	2.4 times

Own capital is the major source of capital to be followed by banks. There is greater proportion of units in cluster B having total own capital than in cluster A proportion of units having invested 51 to 90 percent of own capital is 17.64 percent in cluster A and 32.54 percent in cluster B. Proportion of units that have borrowed 51 to 90 percent of their capital is 17.64 in cluster A and 39.53 in cluster B.

In case of units in cluster A average proportion of cost of raw material in total cost is 55.00 percent and in cluster B 60.50 percent. Proportion of labour charges is almost same in both categories of units machining charges are higher proportion of total cost in cluster A units. Profits are higher by percentage in units in cluster A than in units in cluster B.

Units in cluster A employ on an average 24 labourers and in cluster B, 11. Former employ on an average 12 skilled workers while latter 5.

Labour machine ratio is put in comparative statement in table 6.2.

Table 6.2
Labour Machine Ratio

Type of organisation	Units in cluster A	Units in cluster B
Proprietary	5:1	1.25:1
Partnership	3:1	2.49:1
Private Limited	2:1	2.83:1

That means as far as proprietary and partnership forms are concerned units in cluster B are more capital intensive than units in cluster A. In respect of private limited units the case is otherwise. Wages paid in units in cluster A are higher than that in cluster B, but are usually less than those prescribed by wage Board.

Both types of units face imperfect and competitive market. However, the competition is more intense in component market. That is because, production of complete oil engine being more technical is taken by comparatively few producers while there are a host of component producers.

Units in cluster A reach national market in greater proportion. At state level also more of them are present while units from both clusters are present in local market in almost equal proportion.

Schematic representation of capacity utilisation is put in Table 6.3.

Table 6.3

Capacity utilisation in both clusters			
(percent units)			
Cluster	Bad capacity Utilisation	Good capacity Utilisation	Very good capacity Utilisation
A	35.29	29.41	35.29
B	32.55	46.51	20.93

Units from cluster A are at both ends in greater majority namely bad and very good capacity utilisation. While units from cluster B are leading in good capacity utilisation.

Among proprietary units those having plans of capacity enhancement, new market and change in production, units from cluster B are ahead of those in cluster A. It is so in case of partnership as well as in private limited companies. This is because units manufacturing components can diversify swiftly. They are root loose, while those in cluster A are deep rooted in their present activity.

Thus the working of diesel oil engines and their component producing units appears to be fairly satisfactory. This is second objective of the study.

PROBLEMS :

In respect of third objective of the study, a comparative picture of the problems faced by units in both the clusters in respect of raw mater, finance, marketing and labour is discussed below.

About 90 percent of units in both categories complain about shortage of raw material. Units in cluster A are victims in greater proportion of high cost of raw material, though units in cluster B faced this problem with little less intensify. Uncertain supply and poor quality of raw material are the problems of lesser intensify. Proprietary units in cluster B suffered from the problem of shortage of raw material greater proportion (72.73 percent) than those in cluster A (37.50 percent). Partnership units faced this problem almost in equal proportion. While private limited units in cluster B suffered from this problem very much.

All categories of units in cluster B faced high cost more severely than those in cluster A units in both clusters felt the problem of uncertain supply of raw material almost with equal severity. Problem of raw material were faced almost equally by all levels of educational status of the entrepreneurs.

Twelve units (74.54 percent) from cluster A complained that they had inadequate funds; while from cluster B the number was 26 (60.47 percent). Other problems in respect of finance were nt important for units in cluster B. Proprietary units in cluster B felt the pinch of inadequate funds in greater number (72.73 percent) than

those in cluster A (62.50 percent). While partnership concerns in cluster A had the problem of inadequate finance in greater number (85.71 percent) than those in cluster B (78.94 percent). All the private limited concerns in both the cluster had this problem.

Competition from large producers as well as from small producers is the major problem in marketing area; all units in cluster A and 88.37 percent units in cluster B faced competition. Delayed payment for goods delivered was the problem next in importance. Units in cluster A had this problem at lower priority though in greater number (12, 70.59 percent). But units in cluster B faced this problem even with higher intensity though in lesser number (24, 55.8 percent). Most of the component producers supply spares to engine manufacturing units in Kolhapur and they face the problem of receiving late payment. That means producers of Kolhapur are exploited, squeezed by producers of Kolhapur. Units in cluster A in all the three organisation face competition; however in cluster B except for private limited concerns the proportion of units facing competition is marginally less.

Cent percent proprietary units in cluster A were upset by labour absenteeism while 86.36 percent proprietary units in cluster B had this problem. ninety four percent partnership units in cluster B and 28.57 in cluster A found labourers remaining absent. All private limited units in cluster A and fifty percent in cluster B had this problem.

FUTURE TRENDS :

Both diesel engine manufacturers in (cluster A) and diesel engine component manufacturers (cluster B) have prepared schemes for capacity enhancement, search for new market and change in production. Plans was higher in (82.35 percent) in cluster A than that in cluster B (39.33 percent). Proportion of units having schemes for capacity enhancement was higher in cluster. A (41.17 percent, 7 units out of 17) than that in cluster B (27.90 percent). In both clusters, majority of the units having plans for capacity enhancement are partnership units. (42.86 percent in cluster A and 33.33 percent in cluster B.)

Very few units in cluster A and B are in search of new market. However proportion of units in search of new market is higher (41.17 percent) in A than that in cluster B (16.27 percent) proportion of all three types of organisations. Finding new market, is equal in both clusters.

Scheme for change in production was prepared by 41.17 units in cluster A and 37.20 percent units in cluster B. And majority of the units in cluster A and B which wanted to change the production were partnership units ~~were partnership units~~ (42.86 percent and 56.25 percent respectively).

Thus all the five hypotheses put forth in the third chapter of this dissertation are tested and accepted.

B) SUGGESTIONS :

While discussing problems of diesel oil engine industry in India, in chapter two, a number of suggestions are put forth to solve particular problems. In addition to those here are a few suggestions put to improve the working of diesel oil engine and component producing units. The suggestions are :

a) To the Government :

1) It is necessary to give a fresh look to the way in which small scale industry is defined. Faulty classificatory definition and frequent changes in it harms the prospects of this sector. Rather than classifying units on the basis of capital invested in plant and machinery an analytical definition as given by Eugene staley be adopted.

"An Industrial unit having following five characteristic features are small industry."

i) Little or no specialisation in management.

ii) Close and personal contact with those involved in the business.

iii) Lack of access to capital through an organised securities market.

iv) No dominant position in a major product market, and

v) Close integretion with local community by virtue of local ownership and management.

2) Government should develop only one agency which will provide all type of assistance to small industrial units such as organisation for small scale engineering industry will be able to understand problems better and solve them effectively.

3) There is a dire need to reduce paper work of small entrepreneurs. The small producer should be required to get one comprehensive licence and should report to one agency.

4) The tax structure has become so complex that a small producer is bewildered. He should have to pay only one tax at one place. Graded tax structure should be developed to put light incidence on smaller producer in small sector.

b) To the Banks :

Banks and financial institutions should accept the securities of raw material, semi-finished and finished goods to advance loans. Whatever decision to be taken in respect of granting loan should be taken promptly.

c) To the Producers :

6) Producers at Kolhapur should jointly act to establish and develop a research and development organisation. This organisation should develop on one hand new design of diesel oil engine and also jigs and fixtures.

7) Organisation should act as a marketing agency of the producers at Kolhapur. Kolhapur Engineering Association can be entrusted with this function.

8) Such an organisation can develop a wing to provide service after sales to the buyers.

9) Producers at Kolhapur should improve personnel relations.