

CHAPTER - 4**SECTION - B****PROBLEMS FACED BY OIL ENGINE MANUFACTURERS**

- A) Raw Material Problem
- B) Financial Problem
- C) Labour Problem
- D) Marketing Problem.

SECTION - B**PROBLEMS FACED BY OIL ENGINE MANUFACTURERS**

Manufacturing units in cluster A face a number of problems. Major problems among them are discussed below :-

A) Raw Material Problem :

Shortage of proper and right type of raw material especially pig-iron is the basic problem of small units in cluster A. Shortage of raw material (Iron and Steel) and uncertain supply of raw material are the main problems faced by majority of units. Table No. 4.25 exhibiting priorities to raw material problems shows intensity of each problem.

Table 4.25

Priorities of raw material problems

Priority	Shortage	High cost	Uncertain supply	Poor quality	Total
First Priority	9 (90) (75)	2 (40) (16.66)	1 (10) (8.33)	-	12 (41.37)
Second Priority	1 (10) (7/69)	3 (60) (23.07)	7 (70) (53.84)	2 (50) (15.38)	13 (44.42)
Third Priority	-	-	2 (20) (50)	2 (50) (50)	4 (13.79)
Total	10 (100) (34.48)	5 (100) (17.24)	10 (100) (34.48)	4 (100) (13.79)	29 (100)

Note : 1) Figures show number of units.

2) Figures in upper bracket show percentages to vertical total and those in lower bracket show percentage to horizontal total.

Table 4.25 shows that majority of the units are suffering from shortage (58.82 percent) and uncertainty of raw material (58.82 percent). All units do not face all the problems at a time. Only 4 units out of 17 (23.29 percent) face all these problems of raw material. Shortage of raw material was felt by 10 (58.82 percent) units. Among them three units are small proprietary and four are partnership units. Assembly units (7 units, 48.18 percent) do not suffer from this problem.

Among the three aspects of the problem of raw material, shortage is the most severe problem followed by uncertain supply. It seems producers get adjusted psychologically to the rising price of pig iron and steel. Quality of raw material seems to be less important problem.

Partnership units (table 4.26) suffer more from the problem of shortage of raw material because they are larger in size and their raw material requirement is greater than that of proprietary units. Proprietary units being smaller have less requirement of raw material which is available in local market. However proprietary units face uncertainty of supply because the raw material that they need is not readily available in the market. Private Limited concerns face no problems of high cost and poor quality of raw material.

Table 4.26
Organisationwise Classification of Raw Material Problem

Organisation	Shortage	Highcost	Uncertain supply	Poor quality	Total
Proprietary	3 (30) (30)	2 (40) (20)	3 (30) (30)	2 (50) (20)	10 (34.41) (100)
Partnership	6 (60) (35.29)	3 (60) (17.64)	6 (60) (35.29)	2 (50) (11.76)	17 (58.62) (100)
Private Limited	1 (10) (50)		1 (10) (50)	-	2 (6.89) (100)
Total	10 (100) (34.48)	5 (100) (17.24)	10 (100) (34.48)	4 (100) (13.79)	29 (100) (100)

Note : 1) Figures show number of units.

2) Figures in upper bracket show percentages to vertical total and in lower bracket to horizontal total.

Entrepreneurs having completed secondary education (Table 4.27) face no problem of raw material. Next to that uneducated have least incidence of the raw material problem. Graduates are more affected by shortage, engineering graduates by high cost. Primary educated, graduates and engineering graduates complain about uncertain supply. Those who get most of their raw material in the form of scrap complain about poor quality of raw material.

Table 4.27
 Classification of problems of raw material
 on the basis of education of entrepreneur

Educational Status of Producer	Shortage	Highcost	Uncertain Supply	Poor Quality	Total
1) Uneducated	1 (50) (50)	-	1 (10) (50)	-	2 (6.89) (100)
2) Primary Educated	2 (20) (40)	1 (20) (20)	2 (20) (40)	-	5 (17.24) (100)
3) S.S.C.					
4) Eleventh Twelfth	1 (10) (25)	1 (20) (25)	1 (10) (25)	1 (25) (25)	4 (13.79) (100)
5) Graduate	3 (30) (42.85)	1 (20) (14.28)	2 (20) (28.57)	1 (25) (14.28)	7 (24.13) (100)
6) Engineering Graduate	1 (10) (20)	2 (40) (40)	2 (20) (40)		5 (17.24) (100)
7) Engineering Diploma	1 (10) (33.33)	-	1 (10) (33.33)	1 (25) (33.33)	3 (10.34) (100)
8) ITI	1 (10) (33.33)	-	1 (10) (33.33)	1 (25) (33.33)	3 (10.34) (100)
Total	10 (100) (34.48)	5 (100) (17.24)	10 (100) (34.48)	4 (100) (13.79)	29 (100) (100)

NOTE : 1) Figures show number of units.

2) Figures in upper bracket show percentage to vertical total and in lower bracket percentage horizontal totals.

B) Financial Problem :

Financial problem is the root cause of all problems. This problem occurs due to inadequacy of funds, late sanction of loans by the banks and financial institutions, high rates of interest and overdue payments.

Table 4.28
Priority Classification of Financial Problems

Priorities	Inadequate Funds	High Rate of interest	High Security	Late Sanction	Overdue Payments	Total
First Priority	12 (92.30) (80)	2 (33.33) (33.33)	-	1 (20) (6.66)	-	15 (46.81) (100)
Second Priority	-	4 (66.66) (40)	-	1 (20) (10)	5 (83.33) (50)	10 (31.25) (100)
Third Priority	-	-	2 (100) (50)	2 (40) (50)	-	4 (12.5) (100)
Fourth Priority	1 (7.69) (33.33)	-	-	1 (20) (33.33)	1 (16.66) (33.33)	3 (9.37) (100)
Total	13 (100) (40.62)	6 (100) (18.75)	2 (100) (6.25)	5 (100) (15.62)	6 (100) (18.75)	32 (100) (100)

NOTE : 1) Figures show number of units.

2) Figures in upper bracket are percentages to vertical total and in lower brackets are percentages to horizontal total.

It was observed while conducting survey (Table 4.28) that all problems regarding finance were present in two firms only; these firms are partnership small firms. and in other units 2 or 3 problems were observed. Almost all units suffered from the problem of inadequate fund. Proprietors of five units complained, along with the problem of inadequate funds, that they had to pay high rate of interest. Owners of 6 units who already had the problem of inadequate funds were found to be unable to repay loans on schedule.

Table 4.29
Organisationwise classification of financial problem

Organisation	Inadequate Funds	High Intrest	High Security	Late Sanction	Overdue Payment	Total
Proprietary	5	1	-	3	3	12
	(38.46)	(16.66)		(60)	(50)	(37.5)
	(41.66)	(8.33)		(25)	(25)	(100)
Partnership	6	3	1	1	2	13
	(46.15)	(50)	(50)	(20)	(33.33)	(40.62)
	(46.15)	(23.07)	(7.69)	(7.69)	(15.38)	(100)
Private Limited	2	2	1	1	1	7
	(15.38)	(33.33)	(50)	(20)	(16.66)	(21.87)
	(28.57)	(28.57)	(14.28)	(14.28)	(14.28)	(100)
Total	13	6	2	5	6	32
	(100)	(100)	(100)	(100)	(100)	(100)
	(40.62)	(18.75)	(6.25)	(15.62)	(18.75)	(100)

- NOTE : 1) Figures show number of units.
2) Figures in upper bracket relate to percentage to vertical totals and in lower brackets to horizontal totals.

Table 4.29 reveals the picture of organisationwise classification of financial problems. Three proprietary and partnership units had no problem of inadequacy of finance because they are well established small units. Their products have good demand in market and their profit plough back is enough to meet the financial requirement of the unit.

Partnership firms faced the problem of high rate of interest in greater severity, because these units borrowed more from private money lenders and investors while owners of these units who depended on banks for loans put forth the problem of late sanction.

Firms whose payments were delayed by customers faced the problem of overdue payments. The problem of inadequacy of finance is more acute in private limited and partnership concerns than those in proprietary concerns because they have to raise funds from their own accumulated wealth.

Educationwise classification of entrepreneurs (Table 4.30) shows that graduate entrepreneurs face all the five problems. Table 4.27 indicates that they faced all types of raw material problems. Graduate owners not only suffered from all aspects of financial problem but they experienced these problems with greater severity. Among graduates, those having small proprietary units faced out of these five problems the three problems of late sanction of loan by banks and financial institutions high rate of interest and late repayment of loan.

Unit holders who are S.W.S.C. educated suffered no problem in respect of raw material but suffered from two aspects of financial problem, namely inadequacy and late repayment, ITI trained entrepreneurs suffered from no financial problem. They must be asked the secret of it.

Table 4.30

Educationwise Classification of Financial Problem

Education of producer	Inadequate Funds	High Interest	High Security	Late Sanction	Overdue Payment	Total
1) Uneducated	1 (7.60) (100)	-	-	-	-	1 (3.12) (100)
2) Primary Educated	1 (7.69) (33.33)	1 (16.68) (33.33)	1 (50) (33.33)	-	-	3 (9.37) (100)
3) S.S.C.	2 (11.76) (66.66)	-	-	-	1 (16.66) (33.33)	3 (9.57) (100)
4) Eleventh Twelfth	2 (11.76) (66.66)	1 (11.66) (33.33)				3 (9.37) (100)
5) Graduate	3 (23.07) (25)	3 (50) (25)	1 (50) (8.33)	3 (60) (25)	2 (33.33) (16.66)	12 (37.5) (100)
6. Engineering Graduate	2 (15.38) (50)			1 (20) (25)	1 (10.66) (25)	4 (12.5) (100)
7) Engineering Diploma	2 (15.38) (33.33)	1 (16.66) (10.66)		1 (20) (16.66)	2 (33.33) (33.33)	6 (18.75) (100)
8) ITI						
Total	13 (100) (4.62)	6 (100) (18.75)	2 (100) (6.25)	5 (100) (15.62)	6 (100) (18.75)	32 (100) (100)

- NOTE : 1) Figures show number of units.
- 2) Figures in upper bracket show percentage to vertical total and that in lower show percentage to horizontal total.

Entrepreneurs educated at all level face problem of competition. One of them owning a partnership unit produces non standardised engine who faces the problem of standardisation and poor quality. The other, a proprietor producing ISI mark engine faces competition from big producers and electric motors. ITI/^{trained}manufacturer has small proprietary unit, manufacturing vertical Petter type quality mark engine. His engines face competition from ISI mark engines.

C) Labour Problem :

Labour is a crucial factor of production; inefficiency of labour affects the quality and quantity of production. Efficiency and productivity of workers depend upon the environment in which they work, payment or wages they are paid and personal relations with employers.

Labour problems arise due to many reasons; one of them is working conditions in industrial unit. It was observed during survey that the overall working conditions of workers engaged in small industrial units in Kolhapur are not satisfactory (exception of few partnership and private limited units). In 90 percent units, manufacturing diesel oil engines; working conditions are bad; workers have to work in dark, humid and congested places without ventilation. It was also observed that many industrialists donot register the units under Factory Act. But they register the units under the Shop Act. It enables them to avoid the statutory responsibilities. Stipulated under the former act. Even the main provisions under factory act relating to safety and welfare, hours of work, rest intervals; weekly off paid holidays, overtime payment etc. are not being implemented in some organisation.

i) System of recruitment of Workers :

The system of recruitment of workers in Kolhapur is very defective. Each organisation depends upon its own methods and efforts. Posts of technicians or skilled workers are advertised in local papers. Casual labourers are appointed whenever need arises. In case of any difficulty in getting sufficient supply of workers, the existing permanent workers are asked to bring their relatives, friends or acquainted persons.

ii) Wages :

The system of wage payment is defective in small units. Wages are fixed by personal negotiations which are more dependent on the willingness of employer than skill and experience of workers. Recommendations of fair and minimum wage of the Wage Board are hardly implemented by small units in Kolhapur.

Wages given by employer are so small that workers cannot satisfy even their basic needs of food, clothing and housing. Low wages result in low standard of living and physical inability of workers. This affects efficiency of worker adversely. Other important labour problems are labour absenteeism, late reporting on duty and low speed which are commonly observed in most of the units.

It was observed during survey that all units did not have all problems regarding labour. Only 7 units have all of these problems.

Labour absenteeism (table 4.31) is one of the most harmful phenomenon halting the development of an industry. Diesel oil engine industry in Kolhapur suffers from this problem. Labour absenteeism was observed in all three organisations in cluster A units. This

Table 4.31
Organisationwise Classification of Labour Problems

Organisation	Absenteesm	Late Reporting	Lowspeed	Total
Proprietary	8 (66.66) (47.05)	5 (71.42) (29.41)	4 (57.14) (23.52)	17 (65.38) (100)
Partnership	2 (16.66) (33.33)	2 (28.57) (33.33)	2 (28.57) (33.33)	6 (23.07) (100)
Private Limited	2 (16.66) (66.66)	-	1 (14.28) (33.33)	3 (11.53) (100)
Total	12 (100) (46.15)	7 (100) (26.92)	7 (100) (26.92)	26 (100) (100)

NOTE : 1) Figures show number of units.
2) Figures in upper bracket show percentages to vertical total and that in lower bracket show percentages to horizontal total.

problem was observed in 70.50 percent units. (Table 4.31). Out of these units 66.60 percent were proprietary units, 33.33 percent units were partnership units and 16.60 percent units were private limited units. Proprietary units face all the three aspects of labour problem with greater severity. Partnership units suffer less from this problem than other two organisations, because they have good personal relationship with labourers. Working conditions in partnership units are better than those in proprietary units. Workers in private limited units remain absent due to their personal problems such as illness, harvesting seasons, functions held in family etc. Proprietary units are

very smaller in size. Workers in these units have to work in dark and congested places, working environment is not pleasant and wages are very low as a result of this workers remain absent.

Late reporting by workers on duty is the next of the labour problems. However, proprietary units have maximum (71.42 percent) and private limited companies do not have this problem at all.

It is observed from table 4.32 that uneducated producers face all three problems regarding labour. It is so because working conditions in this unit are not good and as capital investment in this unit is very small, wages given to workers are not adequate. Comparatively graduates suffer less from labour problems.

Table 4.32 reveals that uneducated, primary educated, S.S.C. and ITI and engineering diploma holding entrepreneurs suffer more from labour problem than graduates and higher secondary educated entrepreneurs. Entrepreneurs at all educational levels face problem of labour absenteeism. Some graduates and engineering graduates (32.29 percent) who have good personal relations with workers and who give higher wages and incentives suffer less from absenteeism problem.

Out of 17 units, 8 units (47.5 percent) face the problem of late reporting. Uneducated (100 percent), primary educated (50 percent), graduate (40.00 percent), engineering diploma holders (50 percent) suffer from this problem. Many of those units use casual labour. These workers are not regular. Problem of low working speed was faced by graduates (4), Engineering Diploma holders (2) and uneducated (1) producers.

Table 4.32
Classification of units on the basis of
education of entrepreneur

Educational Qualification	Absenteesm	Late Reporting	Low Speed	Total
1) Uneducated	1 (8.33) (33.33)	1 (14.28) (33.33)	1 (14.28) (33.33)	3 (11.53) (100)
2) Primary Educated	2 (16.66) (66.66)	1 (14.28) (33.33)	-	3 (11.52) (100)
3) S.S.C.	2 (16.66) (100)	-	-	2 (7.69) (100)
4) Eleventh Twelfth	1 (8.33) (50)	1 (14.28) (50)	-	2 (7.69) (100)
5) Graduates	2 (16.66) (22.22)	3 (42.85) (33.33)	4 (57.14) (44.44)	9 (34.61) (100)
6) Engineering Graduate	-	-	-	-
7) Engineering Diploma	2 (16.66) (40)	1 (14.28) (20)	2 (28.57) (40)	5 (19.23) (100)
8) ITI	2 (16.66) (100)	-	-	2 (7.69) (100)
Total	12 (100) (46.15)	7 (100) (26.92)	7 (100) (26.92)	26 (100) (100)

NOTE : 1) Figures show number of units.

2) Figures in upper bracket show percentages to vertical total and figures in lower bracket show percentage to horizontal total.

D) **Marketing Problem** :

Marketing is a crucial area. Units with weak marketing infrastructure cannot survive for a long time. On the contrary units with a strong marketing setup stand better to rough weather including recession. Units in cluster A are facing a number of problems in marketing. A number of internal and external forces affect marketing and create problems. Marketing problems in cluster A arise due to following reasons.

Kolhapur engines have competition from Rajkot and Coimbatore engines. In both those places labour is available on contract basis; which is comparatively cheaper. Moreover, as Bhilai and Bokaro Steel plants are nearer, raw material is cheaper in Gujrath. On the other hand due to erratic supply from Rourkela, Kolhapur manufacturers have to incur heavy expenditure on raw material. Rising prices and erratic supply of raw material present formidable difficulties in adhering to the schedules of production and in maintaining the production cost at low level. As a result these units face serious problem at marketing stage. Due to high cost of production of diesel oil engine, Kolhapur manufacturers have to sell their engines at a loss or at a very narrow profit margin.

Table 4.33

Table showing priorities in Marketing Problem

Problem	First Priority	Second Priority	Third Priority	Fourth Priority	Total
1) Competition	17 (100) (100)	-	-	-	17 (40.47) (100)
2) Poor Design	-	1 (7.14) (100)	-	-	1 (2.38) (100)
3) Lack of Standarisation	-	5 (35.71) (55.55)	4 (44.44) (44.44)	-	9 (21.42) (100)
4) Poor Quality	-	2 (14.28) (66.66)	-	1 (50) (33.33)	3 (7.14) (100)
5) Late Payment	-	6 (42.85) (50)	5 (55.55) (41.66)	1 (50) (8.33)	12 (28.51) (100)
Total	17 (100) (33.33)	14 (100) (33.33)	9 (100) (21.42)	2 (100) (4.76)	42 (100) (100)

NOTE : 1) Figures show number of units.

2) Figures in upper bracket show percentage to vertical total and that in lower bracket show percentage to horizontal total.

Statistics in Table 4.33 indicates that all the 17 units in Cluster A have to stand competition from producers at other centers in India. Competition in a market is a natural phenomenon, and one has to stand it successfully. Competition in market should not be viewed as a problem but a challenge, an opportunity. It is a sad comment on

Kolhapur producers that they do not view competition in right perspective. At least it is good that Kolhapur producers realised that their engines are not standardised. However, they seem to have taken no action to standardise their products. Many complain late receipt of bills. Very few realise the importance of improving design and quality of engines.

Table 4.34

Organisationwise Classification of Units Facing Marketing Problem

Organisation	Competition	Poor Design	Lack of Standardisation	Poor Quality	Late Payment	Total
Proprietary	8 (47.5) (98.00)	1 (100) (4.76)	5 (55.55) (23.80)	1 (33.33) (4.76)	6 (50) (28.50)	21 (50) (100)
Partnership	7 (47.17) (43.75)		3 (33.33) (18.75)	2 (66.66) (12.5)	4 (33.33) (25)	16 (38.09) (100)
Private Limited	2 (11.76) (40)	-	1 (11.11) (20)	-	2 (16.16) (40)	5 (11.90) (100)
Total	17 (100) (40.47)	1 (100) (2.38)	9 (100) (21.42)	3 (100) (7.14)	12 (100) (28.50)	42 (100) (100)

NOTE : 1) Figures show number of units.

2) Figures in upper bracket relate to percentage to vertical total and that in lower bracket show percentages to horizontal total.

Total 4.34 gives picture of various marketing problems faced by units in various organisations. Table 4.34 shows that all units in all the three types of organisations equally face competition problem. It means that all units manufacturing standardised as well as non standardised engines have to face competition. Units manufacturing standardised engines have competition at national and international level from big companies in organised sector. Whereas non standardised and quality mark engine manufactures have competition from local manufacturers and all types of engines have competition from electric motors.

Though table 4.34 indicates that owner of one proprietary unit suffers in market because of poor design of his engine, observation shows that all units producing ^{non-}ISI mark oil engines do face the problem.

Oil engine producers selling their product through dealers and agents face the problem of late receipt of bill amount. Among them are 50 percent proprietary, 33.33 percent partnership and all private limited companies.

Table 4.35 shows that uneducated producer faces the problem of competition only. He is a major partner of a well established partnership unit and manufactures standard diesel engine having ISI mark. He faces competition from large companies in organised sector. One out of two primary educated producers faces all problems regarding market except late payment. Both of them face competition from local engine manufacturers as well as from large units in state and electric motor manufacturers.

Table 4.35

Classification of units on the basis of education of producers facing marketing problem.

Education	Competition	Poor Design	Lack of Standardisation	Poor Quality	Late Payment	Total
1) Uneducated	1 (5.88) (100)	-	-	-	-	1 (2.32) (100)
2) Primary Educated	2 (11.76) (40)	-	1 (11.11) (20)	1 (25) (20)	1 (8.33) (20)	5 (100) (100)
3) S.S.C.	2 (11.76) (40)	-	1 (11.11) (20)	1 (25) (20)	1 (8.33) (20)	5 (100) (100)
4. Eleventh Twelfth	2 (11.76) (33.33)	-	1 (11.11) (16.66)	1 (25) (16.66)	2 (16.66) (33.33)	6 (11.62) (100)
5) Graduate	5 (29.41) (38.46)	1 (100) (7.69)	3 (33.33) (23.07)	-	4 (33.33) (30.76)	13 (30.23) (100)
6) Engineering Graduate	2 (11.76) (40)	-	1 (11.11) (20)	1 (25) (20)	1 (8.33) (20)	5 (11.62) (100)
7) Engineering Diploma	2 (11.76) (40)	-	1 (11.11) (20)	-	2 (16.66) (20)	5 (11.62) (100)
8) ITI	1 (5.88) (33.33)	-	1 (11.11) (33.33)	-	1 (8.33) (33.33)	3 (6.97) (100)
Total	17 (100)	1 (100)	9 (100)	4 (100)	12 (100)	43 (100) (100)

NOTE : 1) Figures show number of units.

2) Figures in bracket show percentage to vertical total and that in lower bracket show percentage to horizontal total.

Conclusion :

Diesel oil engine producers, consisting of cluster A, are seventeen in number. All of them are studied. Proprietary form of organisation is most popular followed by partnership form. There was a backward change in the forms of organisation in case of two units. Graduates were in prepondering majority. Technically qualified entrepreneurs in this technical industry were next in order. Most of the units had adequate machines. Those who manufacture sophisticated ISI mark diesel oil engines have advanced as well as special purpose machines.

Units that assemble diesel oil engines purchase components from local producers. So they need hardly any raw material. Producers manufacturing oil engines need casting, pigiron, mild steel and sheet metal as raw material.

By terms of capital invested in the firm, proprietary units on an average have grown by 5.43 times, partnership units have grown by 10.67 times and private limited companies have on an average grown by 3.76 times.

Analysis of cost of production of diesel oil engines indicates that cost of raw material is 31 to 80 percent of total cost and it is the major component of cost of production. Labour and machining charges are upto 20 percent of total cost of production. While, transport, overheads and advertisement expenditure claim marginal share of total cost. The diesel oil engine manufacturers employ skilled labour more. Labour machine ratio is higher in proprietary units indicating that they employ labour intensive technique. Private limited companies, on the other hand, adopt capital intensive technique of production. Private limited companies pay comparatively higher wages to all the three types of labourers to be followed by partnership units. Proprietary units pay least wages.

Structure of oil engine market is changing continuously. Most of the producers sell the product in Kolhapur as well as state level market. Only four units export their engines. Those who sell in local market prefer direct contact with buyers. No producer depends upon one channel to sell his product.

Rate of increase in production of diesel oil engines is declining mainly because of limited uses to which Kolhapur Engines can be applied and switching on to electric motors. Number of units having good capacity utilisation and unsatisfactory capacity utilisation is equal. Graduates and engineering graduates did well in utilising installed capacity.

Only four firms of Kolhapur export oil engines to Middle East, Latin American Countries and Bangla Desh.

Oil engine manufacturing units of Kolhapur face a number of problems. Shortage of raw material, uncertain supply of raw material are major aspects of the first problem. Most of the firms face, inadequacy of funds. They have to pay high rate of interest. Habitual absence, late reporting and working slowly are the three problems related to labour. Workers in proprietary units are found to be working slowly because wages paid in these units are lower than that in partnership and private limited companies. Uneducated entrepreneurs face these problems with greater severity because wage as well as working conditions are retrogratory.

Oil engine producing units are trapped in a vicious circle. Supply of pig iron and steel from Rourkela being erratic, its price is higher; thus cost of production is higher in comparison to that in Gujarath. Therefore, sales are less. It is heartening to note that producers of Kolhapur have realised that they have to face problems in marketing their product because of poor design, poor quality and lack of standardisation.