CHAPTER – V

SUMMARY OF FINDINGS
5.1. INTRODUCTION

This chapter presents summary of findings. The researcher has divided this analysis chapter into the following sections to study.

- Demographic Profile Analysis
- Financial Aspects Analysis
- Infrastructural Aspects analysis
- Quality Aspects analysis
- Environmental Aspects analysis
- Marketing aspects analysis
- Safety aspects analysis
- Import – Export Aspects analysis
- Linkage Aspects analysis
- Performance Index with production analysis
- Performance Index with Financial analysis
- Performance Index with HRM analysis
- Reliability and Validity of Measurements scales Data analysis is done with help of descriptive analysis, ANOVA, Students t-Test, Cross Tabulation, Chi-square analysis, Factor analysis, Correlation analysis and Regression analysis.

The investigator has surveyed a total number of 71 industrial units which were established in the Match Cluster at Virudhunagar. After detailed analysis, the following findings have emerged.
5.2. DEMOGRAPHIC PROFILE OF THE UNIT HOLDERS

The demographic profile of the unit holders was analyzed in terms of 11 variables as detailed below.

- Age
- Gender
- Educational level
- Community
- Family Size
- Marital status
- Locality of the unit holders
- Generation of the entrepreneurs
- Existing/new entrant
- Experience and
- Training programmes attended

**Age:**

The dominant age group in the Match cluster is above 45 years constituted i.e. 76 per cent and 31 – 45 years constituted 23 per cent.

**Gender:**

90 per cent of the unit holders are the male members and remaining 10 per cent are the female members. Thus, the male members dominate the Match Cluster.
Educational Qualification:
It is found that majority of the unit holders have studied upto the higher secondary level.

Community of the unit holders:
The maximum respondents of 78 per cent belong to backward category and other communities constituted 11 per cent. Thus, it is revealed that the backward community holders are the dominant group in the Match Cluster.

Family Size:
In terms of family size among all the unit holders, it is revealed that the 4 – 8 members of family size holders are the dominant group in the Match Cluster.

Marital Status:
Majority of the unit holders are married.

Locality of the unit holders:
It was found that the rural units constituted 76 percent of the total units and urban units constituted 21 percent and semi urban units.

Generation of the Entrepreneurs:
The analysis was revealed that generation of business among the unit holders were the first generation entrepreneurs.
Existing/new entrant:
In terms of nature of entry among all the unit holders, “Existing” constituted 66 per cent and “New entrant” constituted 34 per cent. Thus, the analysis revealed that the nature of entry among the unit holder is “existed”.

Experience:
It is revealed that in terms of years of experience among all the unit holders, “Above 5 years” constituted 93 per cent.

Training programmes attended:
In terms of training programmes attended among all the unit holders, 63 per cent of the unit holders have attended government sponsored programmes. A trained entrepreneur is always better than an untrained entrepreneur. Thus, the analysis has shown that unit holders have to attend training programmes.

5.3. FINANCIAL ASPECTS ANALYSIS
The financial aspects of the units were analyzed with the help of 11 variables as detailed below.

- Nature of constitution
- Entrepreneurship Memorandum Part II Acknowledgement
- Value of fixed assets
- Value of current assets
Nature of constitution:
It is revealed that in terms of nature of constitution of the business among all the unit holders, Proprietorship constituted 94 per cent.

Entrepreneurship Memorandum Part II Acknowledgement:
85 per cent of the unit holders are having E.M. Part II in the business. And only 15 per cent unit holders have not filed EM Part II.

Value of fixed assets:
Majority of the unit’s (66 per cent) value of fixed assets of the business were “Less than Rs. 10 lakhs”.
Value of current assets:

Majority of the unit’s (77 per cent) value of current assets of the business were “Less than Rs. 10 lakhs”.

Equity capital:

70 per cent of the unit holders’ made investment on equity i.e. own investment of “Rs. 1 lakh to Rs. 5 lakhs”.

Funding institutions:

Majority (68 per cent) of the units are availed funds from the banks for investment, working capital, etc.

Funding type:

Majority of the units are utilizing their borrowed funds from bank for their working capital needs.

Working capital facility:

55 per cent of the units are availed bank loan for their working capital needs.

Sufficiency of working capital:

Majority of the units are viewing that they have sufficient working capital for smooth running of their business.
Level of funding for Medium Term Loan (MTL):
Majority of the units are borrowing less than Rs. 5 lakhs as Medium Term Loan for the business.

Level of funding for Working Capital:
80 per cent of the units are borrowing less than Rs. 5 lakhs for their Working Capital needs.

Repayment:
93 per cent of the units are repaying as per schedule given by the bank / financial institutions.

Subsidy for unit:
Availing subsidy is one of the important criteria for financial performance of the units. 82 per cent of the units are availing subsidy.

Perception on interest rate:
Perception on interest rate among all the unit holders, perceived “fair” constituted 87 per cent.

Profitability:
Majority of the unit-holders revealed that they are attaining break even and only 39 per cent of the unit holders revealed that their units are profitable.
5.4. INFRASTRUCTURAL ASPECTS ANALYSIS

The infrastructure facilities given by the clusters have been measured with the help of the following variables:

- Type of service availed by the units
- Number of employment created
- Number of women employees employed and
- Number of employees under the age of 18 employed.

Type of service availed by the units:
In terms of types of service availed by the unit from the cluster, half of the units (49 per cent) purchase splints from cluster and 42 per cent of the units use their own splint for job work i.e. they are not depending the cluster for the raw material.

Number of employment created:
Majority of the unit-holders i.e. 75 per cent have created less than 10 employments in their units after establishment of safety match cluster.

Number of women employees employed:
83 per cent of the unit holders have created “less than 10 women employment” in their units after establishment of safety match cluster.

Number of employees under the age of 18 employed:
All firms have employed only the employees who are above 18 years.
5.5. QUALITY ASPECTS ANALYSIS

The quality aspect is measured with the help of mandatory licenses and good manufacturing practices among the units after the establishment of cluster.

Mandatory Licenses:
Out of total respondents 59% of the respondent firms have not got license as per ARMS Act. Only 41% of the firms have got license as per ARMS Act.

Good Manufacturing Practices:
It is found that all the firms are practicing good manufacturing practices.

5.6. ENVIRONMENTAL ASPECTS ANALYSIS

The environmental aspects analyzed by pollution category and nature of pollution. The unit-holders are asked to mention the level of pollution at their units especially after the establishment of Match cluster in order to measure their level of enrichment in their environmental profile.

Pollution Category:
By the pollution rate, the units are categorized into ‘green’, ‘orange’ and ‘red’. The green category of units is highly pollution free whereas the red category is highly pollution category. Among all the unit holders 58% of the firms have green pollution category and 20% have orange pollution category. Only 22% of the unit holders have red pollution category.
Nature of Pollution:

All the firms are causing the Air Pollution. Pollution is the major problem for the growth of the industry.

5.7. MARKETING ASPECTS ANALYSIS

It is essential to measure the marketing profile of the units after establishment of cluster since one of the objectives of the establishment of cluster is to improve the marketing profile and efficiency of the units. The Marketing profile of the units in the present study is measured by the variables namely existence of brand name, marketing, market coverage, trademark, brand promotion, supply chain and competition.

Existence of brand name:

64 per cent of the units are using “Other brand” and only 32 per cent of the units are using their own brand name for marketing their products.

Nature of Marketing:

65 per cent of the units have outsourced their marketing activities and only 35 per cent of the units have their own marketing team.

Market coverage:

36 per cent of the units sell their products in the state of Tamilnadu and it is followed by the “Whole India” constituted 26 per cent. South India constituted 24 per cent and “International” market coverage constituted only 4 per cent. Thus, Export marketing need to be improved.
Trademark:
58 per cent of the units have registered in Trademark certification for their products and 42 per cent of the units have not registered in Trademark certification because majority of the units are not manufacturing their own brand products.

Brand promotion:
Majority of the units i.e. 45 per cent are in the Developing Stage of brand promotion. It is followed by the initial stage of brand promotion constituted 28 per cent.

Supply chain:
63 per cent of the units are in the developing stage of supply chain and only 20 per cent of the units are in the matured state of supply chain for marketing their products.

Competition:
During the marketing of their products, 58 per cent of the units are facing medium level competition and 42 per cent of the units are facing high level competition.
5.8. SAFETY ASPECTS ANALYSIS

The industrial cluster may result in some enrichment in the safety aspects related to the units. It is measured with the help of existence on first aid facilities, fire safety, safety instructions, ESI coverage and Group Insurance.

First aid facilities:
It is revealed that all the unit holders have first aid facilities at their firms.

Fire safety:
94 per cent of the units availed the adequate Fire safety and only 6 per cent of the units availed inadequate fire safety. The cluster may take lead to give importance of fire safety.

Display of Safety instructions:
Most of the units i.e. 99 per cent of the units have displayed safety instructions in the units.

ESI coverage:
70 per cent of the units have not covered ESI coverage for the employees and only 30 per cent of the units are covering ESI coverage to their employees. This is because number of employees created in the units is less than 10 in numbers.
Group insurance:
87 per cent of the units have covered Group Insurance for their employees and only 13 per cent have not covered.

5.9. IMPORT-EXPORT ASPECTS ANALYSIS

It shows the level of involvement in Import and Export activities by the units.

Export Status:
92 per cent of the units are not involving the export for their products and only one per cent of the units are involving the direct export of their products.

Import Status:
99 per cent of the units are not involving any import activity and only one per cent of the units are importing raw materials for their production.

5.10. LINKAGE ASPECTS ANALYSIS

The linkage aspects are analyzed with help of marketing channels, international agencies, other associations, funding institutions and government agencies.

Marketing channels:
66 per cent of the units are having linkage with marketing channels and 34 per cent of the units are not having marketing linkage.
International agencies:
96 per cent of the units are not having linkage with International Agencies and only 4 per cent of the units are keeping link with International Agencies for their product promotion and import of raw materials.

Other associations:
51 per cent of the units are having linkage with Other Associations like VIDITSSIA, Chamber of Commerce of Virudhunagar, Sattur and Srivilliputhur and Match Box Producers’ Association. 49 per cent of the units are not having linkage with any Other Associations.

Funding institutions:
99 per cent of the units are not having any linkage with any funding institutions other than bank loan.

Government agencies:
99 per cent of the units are not having any linkage with any government agencies.

5.11. PERFORMANCE INDEX-PRODUCTION ANALYSIS
Performance Index with production analysis measured with the help of volume of production, cost of production, quality improvement, man-power for production, upgradation of product/pricing, shelf life and ease of production.
Volume of production:
46 per cent of the units showed volume of production improved up to 10 per cent, 35 per cent of the firms showed no change in the volume of production.

Cost of production:
55 per cent of the unit holders revealed that cost of production has been increased up to 10 per cent due to escalation of raw material cost.

Quality improvement:
Only 23 per cent of the respondents revealed no improvement. Rest of the 77 per cent respondents felt they have improvement after establishment of Cluster.

Man-power:
39 per cent of the firms revealed that the manpower has been reduced up to 10 per cent, 37 per cent of the firms showed that there is no change in the manpower after establishment of match cluster.

Upgradation of product packing:
58 per cent of the units showed nominal improvement in the upgradation of product packing and only 10 per cent of the units showed drastically improvement in the upgradation of product packing.
Ease of production:
The production was found to be an easy task for 55 per cent of the units and it was fair for 45 per cent of the firms.

5.12. PERFORMANCE INDEX-FINANCIAL ANALYSIS
Performance Index with financial analysis measured with the help of sales value, profitability, cost of inputs, economies of scale and brand building.

Sales value:
45 per cent of the units have improved sales value up to 10 per cent and 38 per cent of the units revealed that there is no change in the sales value.

Profitability:
Majority of the firms (64 per cent) had showed that profitability of the firms had been increased up to 10 per cent, 24 per cent of the firms showed that there is no change in their profits.

Cost of inputs:
34 per cent of the firms showed their cost of inputs had been increased up to 10 per cent and 30 per cent of the firms said that their cost of inputs had been reduced up to 10 per cent.

Economies of scale:
The Economies of scale of 68 per cent of the firms had been improved and 32 per cent of the firms had shown no improvement.
Brand building:
44 per cent of the units responded good improvement in their brand building activities and 29 per cent of units revealed they had slight improvement.

5.13.PERFORMANCE INDEX-HRM ANALYSIS

Performance Index with financial analysis measured with the help of following six variables:

Availability of Manpower:
51 per cent of the units are having good manpower and 48 per cent of the units are having average manpower.

Skill Improvement:
51 per cent of the firms said that their skill improved at average level and 49 per cent of the units have showed that they are having the good skill improvement.

Training facility:
55 per cent of the units showed that they are giving good training facility and 45 per cent of the units stated that they are giving average training facility.
Performance improvement:

58 per cent of the units have showed their good improvement in their performance and 42 per cent of the firms have stated that they have average improvement in the performance.

Absenteeism of labours:

51 per cent of the firms showed increased the level of absenteeism and 49 per cent of the firms showed decreased the level of absenteeism.

5.14. INFERENTIAL ANALYSIS

5.14.1. ANOVA Test

From the ANOVA test results in respect of Demographic variables and the Dimensions of CFC revealed that except one variable Type of service availed in the cluster, all the five variables have significant difference with impression of industrial clusters.

- The mean agreeability score on age with impression of industrial clusters revealed that there is no significant difference between age group of the stakeholders with respect to impression of industrial clusters. The people in all age group have similar impression of industrial clusters.
• The mean agreeability score on Education qualification with impression of industrial clusters showed there is no significant difference among educational qualification of the stakeholders with respect to impression of industrial clusters. The stakeholders irrespective of their educational qualification have same impression of industrial clusters. They all have positive impression of industrial clusters.

• The mean agreeability score on Experience with impression of industrial clusters, it is concluded that there is no significant difference among experience of the stakeholders with respect to impression of industrial clusters. The stakeholders with more than 5 years of experience, 3-5 years of experience and even fresher have same impression of industrial clusters. They all agree with the variables of impression of industrial clusters.

• The mean agreeability score on generation with impression of industrial clusters reveled that there is no significant difference among generation of the stakeholders with respect to impression of industrial clusters. The first generation, second and third generation stakeholders have same impression of industrial clusters. They all agree with the variables of impression of industrial clusters.
• The mean agreeability score on place of domicile with impression of industrial clusters it is concluded that there is no significant difference among stakeholder’s place of domicile with respect to impression of industrial clusters. The stakeholders in rural, urban and semi urban have same impression of industrial clusters. They all agree with the variables of impression of industrial clusters.

• The mean agreeability score on type of service availed in the cluster with impression of industrial clusters showed that there is significant difference between types of service availed in the cluster with impression of industrial clusters.

Based on Duncan Multiple Range test, the stakeholder who purchase splints from cluster strongly agree (Mean=4.507) with the industrial clusters than the stakeholder who own splint for job work people. They merely agree with the variables of impression of industrial clusters (Mean=4.140).

**5.14.2. STUDENTS t-TEST**

• Since P value is greater than 0.05, there is no significant difference between male and female with respect to agreeability of the impression of industrial clusters. Both male and female agree the variables of the impression of industrial clusters.
• Since P value is greater than 0.05, there is no significant difference between proprietorship and partnership with respect to impression of industrial clusters.

• Since P value is greater than 0.05, there is no significant difference between profitability and breakeven with respect to impression of industrial clusters.

• Since p value is greater than 0.05, there is no significant difference between existing entrepreneur and new entrant entrepreneur with respect to impression of industrial clusters.

5.14.3. CROSS TABULATION ANALYSIS

• Constitution and working capital facility was revealed that 52.2% of the stakeholders who are the own proprietor availed loan from the banks and 54.9% of the stakeholder who are the partner with others availed loan from the banks. 47.8% of the proprietors have their own funds for business.

• Cross tabulation for constitution and registration with MSME was revealed that 88.1% of the proprietorship firms had filed EM –Part II and 11.9% had not filed EM –Part II in MSME. 25% of the partnership firms had filed EM –Part II and 75% had not filed EM –Part II in MSME.
• Cross tabulation for constitution and repayment of loan was revealed that 93.9% of the proprietorship firms are repaying their loans as per schedule and 7.5% are delayed in their repayment of loan. 100% of the partnership firms are repaying their loans as per schedule.

• Cross tabulation for constitution and brand name was revealed that 31.3% of the proprietorship firms have their own brands of production and 64.2% are producing other brands (contract manufacturing). 50% of the partnership firms have their own brands of production and other 50% of them are producing other brands (contract manufacturing). 4.5% of the proprietorship firms are producing both i.e. their own brands and other brands.

• Cross tabulation for constitution and marketing activities it was revealed that 34.3% of the proprietorship firms market their products by their own marketing team and 65.7% of the proprietorship firms outsourced their products. 50% of the partnership firms have their own marketing activities and other 50% of them are outsourcing their products.
Cross tabulation for constitution and export status it is revealed that 91% of the proprietorship firms did not go for export business, only 1.5% of them do direct export, 4.5% export their products through merchant exporters and 3% of them export directly and through merchant exporters. 100% of the partnership did not go for export business.

5.14.4. CHI SQUARE ANALYSES

Chi-square test for association between constitution and profitability revealed that 37.3% of the stakeholders who are the own proprietor are profitable and 62.7% of the proprietorship stakeholder have breakeven point in their business. 75% of the partnership firms are profitable and 25% attained breakeven in their business. Since the calculated p value is greater than 1 percent level of significance, there is no association between constitution and profitability of the firm. Partnership firms are more profitable than proprietorship firms.

Chi-square test for association between Brand and competition revealed that 47.8% of the stakeholders who are producing their own brand face high competition and 52.2% are facing medium competition.

37.8% of the stakeholders who produces others brand face
high competition and 62.2% face medium competition. 66.7% of the firms producing their own brand and others brand face high competition and 33.3% face medium competition. Since p value is greater than 1 percent level of significance. Hence it was concluded that there is no association between brand and competition of the firm.

5.14.5. FACTOR ANALYSIS

Factor analysis is used for data reduction. In order to reduce the number of factors and enhance the interpretability, the factors are rotated. Five factors are identified as being maximum percentage variance accounted.

The 4 statements S1, S2, S3 and S6 are grouped together as Factor I labeled ‘Awareness of CFC’, accounted for 13.451 percent of variances.

The 8 statements S5, S7, S8, S9, S10, S11, S12 and S13 constitute the factor II labeled ‘Awareness of functions’ and accounts 24.888% of the total variance.

The 7 statements S15, S16, S17, S18, S19, S20 and S23 constitute the factor III labeled ‘Services of CFC’ and accounts 10.031% of the total variance.

The 8 statements S21, S22, S24, S25, S26, S27, S28 and S29
constitute the factor IV labeled ‘Facilities at CFC’ and accounts 20.714% of the total variance.

The 3 statements S30, S31 and S32 constitute the factor V labeled ‘Growth’ and accounts 5.365% of the total variance.

Thus the factor analysis condenses and simplifies the 30 statements and is grouped into 5 factors explaining 74.512% of the variability of all the 30 statements.

5.14.6. CORRELATION ANALYSIS

From the analysis the correlation between all the explanatory variables are highly significant and positive. Correlation between all the awareness of functions variables is highly significant and positive. The inter-correlation matrix of explanatory variables namely S15, S16, S17, S18, S19, S20, and S23 is have the correlation between all the Services of CFC variables are highly significant and positive except S17 and S23. There is negative correlation (-.058) between these two variables. It the correlation between most of the facilities at CFC variables is highly significant and positive. The correlation between variables S21 and S27, S28 and S29 are highly significant and negative.
5.14.7. REGRESSION ANALYSIS

The regression models indicated that out of the 5 explanatory variables

(i)  *Awareness of CFC*
(ii)  *Awareness of functions*
(iii) *Facilities at CFC*
(iv)  *Services of CFC*
(v)   *Growth factors at CFC*

all variables are contributing to CFC.

The analysis of variance of multiple regression models for Y indicates the overall significance of the model fitted. The coefficient of determination $R^2$ value showed that these variables put together explained the variations of Y.