CHAPTER-V

SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

5.1. FINDINGS

Profile of Respondents

1. The maximum of 73.3 percent of the total respondents in Kerala and 76.7 percent of the total respondents in Tamil Nadu fall under the male category.

2. The maximum of 50.7 percent of the total respondents in Kerala and 53.4 percent of the total respondents in Tamil Nadu come under the age group of 41-50 years who have the physical fit for the agricultural activities, especially in the cultivation of cardamom.

3. Out of the total 150 respondents in each state, the most of 42.7 percent of respondents have passed either SSLC or +2 in Kerala and 62.7 percent of the respondents in Tamil Nadu were below the level of SSLC. When compared it reveals the poor educational status of the respondents in Tamil Nadu.

4. The most of 50.7 percent of respondents in Kerala and 56.7 percent of the respondents in Tamil Nadu were below 4 members in the family. When compared it reveals the large family size of the respondents in Tamil Nadu.

5. 54.0 percent of respondents in Kerala and 63.3 percent of the respondents in Tamil Nadu belonged to agriculture. When compared it reveals the major occupation of the respondents in Tamil Nadu was agriculture.
Information Pertaining to Study

1. The most of 42.7 percent of respondents in Kerala and 56.0 percent of the respondents in Tamilnadu were having own land. When compared it reveals majority of the respondents owned land in Tamilnadu.

2. Out of the total 150 respondents in each state, the most of 57.3 percent of respondents in Kerala and 42.7 percent of the respondents in Tamilnadu were having above 15 years of experience. When compared it reveals the high level of experience of respondents in Kerala.

3. 36.0 percent of respondents were having 5-10 acres in Kerala and 57.3 percent of the respondents were having up to 5 acres in Tamilnadu. When compared it reveals the high level of area of cardamom cultivation owned by respondents in Tamil Nadu.

4. 32.0 percent of respondents were having above 15 years of experience in cultivation of other crops in Kerala and 34.7 percent of the respondents were having 15 years of experience in cultivation of other crops in Tamilnadu. When compared it reveals the high level of experience in cultivation of other crops by respondents in Tamil Nadu. Hence, more experienced cultivators produce more yields of other products also.

5. 42.7 percent of respondents were having up to 2 acres in Kerala and 54.7 percent of the respondents were having up to 2 acres in Tamilnadu. When compared it reveals the high level of area of other crop cultivation done by respondents are in Tamil Nadu. Hence, in both the states small area of other crop cultivators are large numbers. Therefore, all the small farmers
jointed together and cultivate co-operatively using high variety of seeds, machinery, pest control and fertilizers to improve the yield.

6. 33.3 percent of respondents were having up to 5 acres in Kerala and 45.3 percent of the respondents were having up to 2 acres in Tamilnadu. When compared it reveals the high level of total area of cardamom cultivation respondents in Tamil Nadu. Hence, in both the states many respondents possessed less number of acres under cardamom cultivation.

7. Out of the total 150 respondents in each state, 40.0 percent of respondents feel that nature of land as the reason for cardamom cultivation in Kerala and 49.3 percent of the respondents feel that climate condition for the reason for cardamom cultivation in Tamilnadu. When compared it reveals that many respondents in Tamilnadu prefer favourable climatic condition as the reason for cardamom cultivation.

8. 94.7 percent of respondents used latest technologies in cardamom cultivation in Kerala and 85.3 percent of the respondents used the latest technologies in cardamom cultivation in Tamilnadu. When compared it reveals that application of latest technology in Cardamom cultivation was done by more number of respondents in Kerala.

9. 82.7 percent of the respondents in Kerala and 68.0 percent of the respondents in Tamilnadu cultivated the large variety of cardamom. When compared it reveals the high level of large cardamom cultivation was done by respondents in Kerala.
10. 36.0 per cent of the total respondents in Kerala and 49.3 per cent in Tamilnadu have cultivated Mysore variety.

11. 38.0 per cent of the total in Kerala and 54.73 per cent of the total in Tamilnadu followed rainfall irrigation when compared with Tamilnadu State the respondents in Kerala have only little choice of irrigation types.

12. The majority 48.0 per cent of total respondents in Kerala and 52.0 per cent in Tamilnadu opined on less water supply during cultivation period. It shows the water supply was very less for Kerala farmers when compared with Tamilnadu.

13. The maximum of 40 per cent of the total respondents in Kerala get their seedling from their Govt. state seed farm and in Tamilnadu, 48 per cent of the respondents get their seedling from the nurseries.

14. The researcher has express that how the differences have explored the problems have distinguished between Kerala and Tamilnadu. Particularly in the unavailability of the appropriate time is alone having high difference on Tamilnadu. Therefore the problem related to the purchase of seedlings with the cardamom cultivation in Tamilnadu comparably less than the Kerala.

15. 89.3 per cent of the total respondents in Kerala and 84.0 per cent of the total respondents in Tamilnadu have followed the pest control system. It shows the pest control system was very highly followed for Kerala farmers when compared with Tamilnadu.
16. 54 per cent of respondents have opined infavour of natural ways of pest control and on the other hand 46 per cent of the respondents control the pest through chemical pesticide. Particularly in Tamilnadu the cultivators are desired to control the pest through natural pesticides. But in Kerela they depend highly on chemical pesticides for pest control.

17. Among the respondents of Kerala a majority 53.3 per cent utilize both types of fertilizers. But, Tamilnadu cultivators favour organic fertilizers higher than the Kerala counterparts.

18. The utilization of natural fertilizer by Kerala farmers is higher than Tamilnadu.

19. Majority 38 per cent used fertilizers four times averagely for a year; followed by 22 per cent used fertilizers more than four times in a year. As far as Kerala is concerned, they responded high in favour of four times and once in a year usage of fertilizer. But in Tamilnadu, cultivators have responded high in favour of four times and more than four times usage of fertilizer. Therefore, the fertilizer usage is more in Tamilnadu than Kerala.

20. In both the states the majority of the respondents opined that the size of the cardamom is a major factor in determining the price of the cardamom. But in Kerala, the respondents favour colour of cardamom as the determining factor in price fixation.
Mean Score Results

Perceptions Relating to Cardamom Cultivation

21. An overall mean value of 63.24 per cent of the respondents is of the opinion that agricultural problems prevailed both in Tamil Nadu and Kerala.

22. The problem associated in the preparatory expenses is digging in Tamilnadu, irrigation in Kerala. Due to that the land surface is highly different between the two states. An overall mean value of the opinion about preparatory expenses is prevailed in the in Tamil Nadu and Kerala is 65.55 per cent. It is comes under moderate level of opinion of the respondents of the study.

23. In Tamilnadu and Kerala, farmers are facing huge problem in purchasing pesticides and fertilizers from the unauthorized market which is of very poor quality and high adulteration due to illegal import of Chinese fertilizer to Tamilnadu. Farmers of Tamilnadu agitated recently throughout the state for this problem. The agitation has spread to neighbouring Kerala also. In most Indian states, during heavy cultivation period boarding of fertilizers is done thereby creating an artificial demand resulting in high price.

24. The respondents of the study have opined about cost of labours is naturally high. But the response is high means the farmers are accustomed with the labour cost. In Tamilnadu the response is low relating to picking the cardamom at the time of harvesting and cleaning the dried leaves frequently. Due to scarcity of labour, the cost of labour is very high in Tamilnadu. The labour deficiency in Tamilnadu is attributed to the NREGS
implemented by Central Government and many non-priced goods
distributed under ration shop and government schemes resulting in scarcity
of labour.

25. The nature of the cardamom usage is dry usage. So, the cardamom is
supposed to be in a dry condition till the ultimate use. Therefore, the
cardamom is always requires a good packaged condition. Thus, the
cultivators or the processors spent more to its packaging of cardamom as it
is varied in size and quantity determining the quality. In the present study,
in Kerala, the respondents have represented very poor responses on the
packaging of the cardamom. It may be due to maintainence of moisture is
very difficult in Idukki district of Kerala. But in the case of Theni
maintainence of moisture is not a problem because Theni has a better
climate than Idukki.

26. Both in Tamilnadu and Kerala, online market problem has persisted. In the
absence of physical product transaction the price of the cardamom is
determined online with high volatility. Therefore, there is no consistency in
its pricing. It an inconsistency in inflow of returns. The government
authorities should regulate its online market conditions.

27. In Tamilnadu, the revenue officials are creating huge problems at the time
of getting ‘Chitta Adangal’ and conditioning of the land to cultivate the
cardamom to avail the agricultural credit facilities from the land
development banks, cooperative and commercial banks. As far as Kerala is
concerned, the financiers role a huge problem by offering money at a high
rate of interest.
28. In both respondents’ of the states are of the opinion that cultivation of other food grains is better, grading and drying is difficult, and profit margin is very less in cardamom cultivation. It is inferred that the cardamom cultivation farmers are cultivating the cardamom with no other alternative cultivation to suit their lands.

STATISTICAL FINDINGS

Chi-Square Test

By using chi-square test, the significance of pressure exerted by personal characteristics of respondents on the level of respondents’ opinion towards cultivation and marketing problems of cardamom growers was tested. The result of the test is highly significant, the levels of opinion and measures of Chi-square were significantly reported its goodness of fitness.

STATISTICAL FINDINGS RELATING TO CARDAMOM CULTIVATION

ANOVA

In overall sense, the analysis of variation is highly significant at 0.01 per cent confidence level for the cultivation problems of cardamom growers of the study. The null hypothesis of the study relating to the cultivation problems of cardamom growers is rejected. It is found that there is a significant variation among average levels of opinion of respondents about “cultivation problems of cardamom growers”.
Correlation

The null hypotheses are rejected on the dependent variables of the cultivation problems of cardamom growers. Thus, there are correlations between all the factors of cultivation problems of cardamom growers identified for the study.

Factor analysis

The cultivation problems of cardamom in the aspects of ranking of expenses, opinion about problems, preparatory expenses and after harvesting have highly contributed in the first set of components than others, the second thing is cost of materials, cost of labour. The third set of components contributed financial aspects. The fourth set of components contributed on human problems and comparison with other agriculture products. Thus, the opinion of the respondents’ pertaining to the cultivation problems of cardamom is highly contributed from the above four sets of components such as ranking of expenses, opinion about problems, preparatory expenses and after harvesting. Therefore the cardamom growers have to concentrate on the above said factors.

PERCEPTIONS RELATING TO CARDAMOM MARKETING

Information Pertaining to Study

1. 34.0 per cent of respondents in Kerala and 32.0 per cent of the respondents in Tamilnadu were having above 15 years of experience. When compared, it was revealed that the high level of experienced marketers were in Kerala.

2. Out of the total 150 respondents in each state, the most of (56.0%) the respondents in Kerala and 64.0 per cent of the respondents in Tamilnadu have never used the public transport. When compared, it shows very high
respondents in Kerala have never used the public transport for cardamom transit.

3. The most of (40.0 per cent) the total respondents in Kerala and 48.8 per cent of them in Tamilnadu have chosen auction centres for marketing their cardamom products. It shows that both the states cardamom cultivators have more awareness about marketing of their products through auction centers for making correct price for their products.

4. The majority of (58.0 per cent) the respondents in Kerala have satisfied with present auction centre and 70.0 per cent of them in Tamilnadu have dissatisfied with present auction centre. It shows that in Kerala states present auction centre working performance on marketing system have more effective than the Tamilnadu.

5. 64.0 per cent them in Kerala have felt very high level of legal formalities for marketing of their cardamom products and 42.0 per cent of them in Tamilnadu are of the view that there are very high level of legal formalities for marketing of their cardamom products. It shows favourable marketing environment in Tamilnadu states than Kerala.

Mean Score Results

1. The price of cardamom have represented 50.80 per cent high level of mean score about harvest besides 27.00 per cent low level of mean score about season. Comparatively the high level of average response in Tamil Nadu represented 37.36 per cent of high responses relating to price of cardamom. The rank of the price determination is first position to harvest second is to size of the cardamom. Hence, whenever the harvest of the cardamom is
taken place the price determination is also taking important phenomenon. The researcher understood that the size of the cardamom is next factor to determine the price, because the colour and size of the cardamom influences the intermediaries.

2. The production area and the growing at different soil content and fragrance of the cardamom are highly significant factor to determine the cardamom grade, the researcher understood. The particular variety of the cardamom is to be making cultivatable in all the areas of cardamom cultivation in Kerala.

3. 84.80 per cent high level of mean score about financier problem besides 41.20 per cent low level of mean score about cultivators’ problem in Kerala. 82.00 per cent high level of mean score about revenue official and 51.60 per cent low level of mean score about producer in Tamil Nadu. Comparatively the high level of average response in Kerala represented 72.60 per cent of high responses relating to opinion about problems.

4. 91.20 per cent high level of mean score about natural calamities problem also 75.60 per cent low level of mean score about cultivators behaviour problem in Kerala. 90.80 per cent high level of mean score about marketing problems and 74.80 per cent low level of mean score about consumer behavior problem in Tamil Nadu. Comparatively the high level of average response in Kerala represented 83.00 per cent of high responses relating to opinion about financial problems. About overall mean value of the opinion about financial problems are prevailed in the in Tamil Nadu and Kerala is
82.35 per cent. It is comes under high level of opinion of the respondents of the study.

STATISTICAL FINDINGS RELATING TO CARDAMOM MARKETING

ANOVA

In overall sense the analysis of variation is highly significant at 0.01 per cent confidence level for the marketing problems of cardamom growers of the study. The null hypothesis of the study relating to the marketing problems of cardamom growers is rejected. It is found that there is a significant variation among average levels of opinion of respondents about “marketing problems of cardamom growers”.

Correlation

The null hypotheses are rejected on the dependent variables of the marketing problems of cardamom growers. Thus, there are correlations between all the factors of marketing problems of cardamom growers identified for the study.

Factor analysis

The marketing problems of cardamom in the aspects of opinion about problem markers and financial problems have been highly contributed in the first set of components than other; the second thing is price of cardamom and grading cardamom. Thus, the opinion of the respondents’ pertaining to the marketing problems of cardamom is highly contributed from the above two sets of components such as opinion about problem markers and financial problems. Therefore the cardamom growers have to concentrate on the above said factors.
5.2. SUGGESTIONS

1. Both states are facing problem in cardamom cultivation with vital requirement transport and water; the mutual sharing policy of the two states will rectify the problems persisted.

2. In Tamilnadu is concern the trips method of irrigation is promotable because of water scarcity. In Kerala canal irrigation is not possible instead of that they need to undergo on sprinkler method of irrigation.

3. In order to reduce the cost of materials of agricultural inputs, government should take steps to control the unorganized markets and duplicate products.

4. To reduce the labour cost, new technology is required in picking the cardamom instead of manual resource. Thus, the agricultural universities in India have to carry out special research on ‘how to reduce the cost of labour in the cardamom cultivation’.

5. The small farmers face problem in preserving and spacing the picked cardamom as they are in need of warehousing and dryer facilities to preserve the good condition of cardamom.

6. The government authorities should regulate its online market conditions.

7. The both the Governments should take necessary steps for arrangement of godown and reduced rental facilities to the cardamom growers and cultivators.

8. The Tamilnadu government should take necessary steps to ease the document needs and also provide credit facilities under priority sector
lending schemes. The Kerala government should take necessary steps to provide the credit facilities under priority sector lending schemes.

9. The government should offer subsidies to cardamom cultivators for purchasing pesticides and fertilizers.

10. The government should concentrate to furnish its price structure as like as Sugar, Sago, Paddy and the like. It will lead to assist the cultivators and the consumers of the cardamom products.

11. Both the states should promote the research on hybrid variety of cardamom to be found a big size and good quality is concern.

12. All the small farmers joint together and cultivate co-operatively using high variety of seeds, machinery, pest control and fertilizers for improve the yield.
5.3. CONCLUSION

Cardamom cultivation is concerned both the states are facing problem due to vital requirement of transport and water; the mutual sharing policy of the two states will rectify the problems persisted. In Tamilnadu is concern the trips method of irrigation is promotable because of water scarcity. In Kerala canal irrigation is not possible instead of that they need to practice sprinkler method of irrigation. Cost of materials is concerned it is to be reduced in respect of agricultural inputs, government should take steps to control the unorganized markets and duplicate products. To reduce the labour cost, new technology is required to picking the cardamom instead of manual resource. Thus, the agricultural universities in India have to take special research on ‘how to reduce the cost of labours in the cardamom cultivation’.

The small farmers are facing problems in preserving and spacing the picked cardamom during heavy harvest, they need warehousing and dryer facilities for the good condition of cardamom. The godown and its rent are very high as per the opinion of the respondents of the present study. Hence, the both the government should take necessary steps for arrangement of godown and reduced rental facilities to the cardamom growers and cultivators. The credit facilities to farmers is concerned, Tamilnadu government should take necessary steps to provide the document needs and also credit facilities under priority sector lending schemes. In Kerala is concern, the financiers are posing serious problem by lending at high rate of interest. Therefore, Kerala government should take necessary steps to provide credit facilities under priority sector lending schemes. And of course, Kerala government should give affordable subsidies to the cardamom cultivators while purchasing the pesticides and fertilizers. Generally, the growers have represented their opinion on moderate basis.
5.4. SCOPE FOR FURTHER RESEARCH

The study can be done on the followings aspects:

1. A study on strategy adopted for marketing cardamom in Tamilnadu
2. Cost benefits analysis of cardamom cultivation in Theni district of Tamilnadu.
3. Export marketing behaviour: A study on Indian Cardamom species products
4. Determinants of export market entry decision making – a study in the Indian context