Chapter 6

FINDINGS, SUGGESTIONS AND CONCLUSION
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In this chapter, summary of findings, suggestions and conclusions are presented.

FINDINGS

The following are the findings related to farmers.

1. The profile of farmers reveals that majority of farmers are in the age group of 25-40 years, belongs to Hindu religions, male farmers dominated the survey and having farming as the major occupation. The marital status reveals that most of the respondents are married and schooling is their major educational qualification.

2. Maximum of 92.2 percent of the farmers belong to Hindu religion.

3. A maximum of 89.3 percent of the farmers belong to male category.

4. A maximum of 68 percent of the farmers were farmers with no other occupations.

5. A maximum of 85.4 percent of the sample farmers were married.

6. The details of landholding reveals that majority of respondents are having less than 4 acres, mostly owned, the native of land is garden type.

7. The findings related to cultivated land reveals that most of the farmers are cultivating below 4 acres, paddy and fruits are the major crops which are produced by farmers.

8. The vegetables producing area of majority of farmers is 1 to 1.5 acres. Tomato and onion are the major vegetables produced by farmers.

9. The overall performance of the farmers was rated as good and the important factors contributing to it are native of ownership land holding size, age and cultivation area.

10. A maximum of 32 percent of cultivated crop is paddy.

11. A maximum of 39.8 percent of the vegetable produced areas belong to 1 to 1½ acres category.
12. A majority of 53.4 percent of the farmers produced tomatoes.

13. A maximum of 46.6 percent of the farmers irrigated their lands by using the source of well water.

14. The cost of preparing the land by the farmers reveals that majority of respondents is incurring Rs. 1000-1250 to prepare the land. The other related aspects are as under.
   a) Majority of the farmers buy seeds from seed shops the cost of seeds is Rs. 500-750.
   b) For majority of respondents the cost of manure incurred is Rs.250-500.
   c) The major sources of irrigation were well and river.
   d) The cost of fertilizers incurred by the farmers is below Rs. 1000.
   e) The interest paid by majority of farmers is below 10%.

15. The performance of pre-cultivating and financial function of the farmers is rated as fair. The various important factors which are ranked are sources of finance, cost of preparing the land rate of interest on debt etc.

16. The analysis of the financial aspects reveals the following.
   a) The miscellaneous expenses involved in procurement of finance are considered as low.
   b) The rate of interest are viewed by majority of farmers is wish and moderate.
   c) The ROI was observed as high.
   d) The cost of preparing the land was considered to be low.
   e) The cost of the seeds was considered to be moderate.
   f) The cost of manure was considered as high.
   g) The cost of irrigation was considered to be low.
   h) The cost of fertilizers was observed as moderate by majority of farmers.

17. The cost of various aspects like cost of human labor, cost of plant protection, was to the extent of Rs. 500-750, while the cost of pesticides was Rs. 750-1000, cost of packing Rs. 250-500, cost of maintenance was also Rs. 250-500, and the total cultivation cost is about Rs 3000-4000.

18. The expected total yield was Rs. 5000-7000 in case of majority of respondents.
19. The village extension officer who is supposed to be a source of information to farmers related to various agricultural related aspects could not provide any adequate information to farmers which are evident from the observation.

20. Most of 72.8 percent of the farmers did not get information from the village extension officer.

21. The majority of farmers are not aware of about yield of hybrid variety seeds.

22. The performance of cultivating function was observed to be moderate in case of majority of respondents.

23. The observation relating to the opinion of farmers regarding the cost of labour. Cost of plan protection, pesticide cost, cost of packing was considered as low.

24. The analysis relating to the opinion of farmers regarding maintenance cost, total cultivation cost, was considered to be moderate.

25. A maximum of 53.4 percent of the farmers viewed that of plant protection was low.

26. A majority of 65 percent of the farmers have no idea about up gradation of latest technique in the production of vegetables.

27. A majority of 37.8 percent of the farmers spent between 100 to 200 rupees for grading the vegetables.

28. The opinion of farmers regarding total yield of vegetables per acre was considered as low.

29. The opinion an information provided by village Extension officer was considered as unless by majority of respondents.

30. The opinion of farmers regarding yield of Hybrid verity seeds was very low by as given by majority of respondents.

31. Majority of respondent farmers are not interacted to use of latest technology to upgrade production of vegetables.

32. A majority of 34 percent of the farmers revealed that the maintenance of accounts was bad, 

33. A majority of 34 percent of the farmers revealed that the payment system was bad.
34. A majority of 32 percent of the farmers disagreed that the changes in weather condition affected the vegetable business.

35. That the majority of 39.8 percent of the farmers agreed about the non-availability of fertilizers.

36. A majority of 43.7 percent of the farmers agreed that the insufficient rain existed in the cultivation of vegetables.

37. A majority of 45.6 percent of the farmers agreed on the existence of pest problem.

38. In case of majority of respondents cost of grading and packing cost per acre was Rs. 100-200 while the loading and unloading cost was Rs. 200-300. Storage cost was Rs. 200-300.

39. The sale of vegetables are to direct to retailer followed by pre-harvest contractor. Sale to commission agent was also made in few cases.

40. Bus was used as a major transport vehicle to market the vegetables by the sample respondent farmers. The cost of transport was Rs. 200-300 and the mode of sale was mostly credit sales.

41. The total sales per acre were above Rs. 5000 for majority of respondents and the market rate information is known through visiting the market. The cost of commission incurred by the majority of farmers was Rs. 300-400.

42. The selling function was observed to be moderate as opined by majority of respondents.

43. The opinion of sample respondent farmers on grading cost was low, packing cost moderate, cost of transport low, storage cost moderate, commission moderate, selling price was moderate, weigh ant system moderate, maintenance of accounts bad, and the payment system was bad.

44. The opinion of farmers regarding changes in wealthend conditions was disagree to majority of respondents, majority of respondent farmers agree with non-availabilities of fertilizers, agree with shortage of storage facilities available, agree with shortage of transport facilities, agree with insufficient rain, agree with absence of regulated market, and also agree with the problem of the pest. The majority of farmers agree with low price due to seasonal variations and are neutral to the statement that there is lack of assistance from agricultural department.
FINDINGS RELATED TO FUNCTIONS AND PROBLEMS OF MIDDLEMEN

1. The profile of sample middlemen reveals that majority of respondents are in the age group of 40-60 belongs to Hindu religion more male respondents, majority of them are married, schooling was the major educational qualification.

2. The nature of the business of the middlemen was commission agency, while is mostly inherited business.

3. A majority of 62.6 percent of the middlemen were doing their inherited vegetable business.

4. A majority of 64.5 percent of the middlemen established the vegetable business between 1975 and 2000.

5. The majority of 94.4 percent of the middlemen were sole- traders.

6. A majority of 42.1 percent of the middlemen purchased the vegetables directly from the farmers.

7. A majority of 68.2 percent of the middlemen purchased large quantity of vegetables.

8. A majority of 67.3 percent of the middlemen forecast the demand for vegetables depends upon the domestic consumption of consumers.

9. Majority of respondents established their business during 1975-2000, and in the form of sole proprietorship, the middlemen mostly work in the morning as they deal with vegetables, the average experience of majority of respondents was 20-30 years.

10. The performance of middlemen business was fair to a majority of respondents.

11. The findings related to source of acquiring vegetables reveals that farmer is the major source, the mode of purchase was both cash and credit, large quantity was purchased from farmers.

12. The major factor determining the demand for vegetables was domestic consumption. Price is fixed as certain percentage on purchase price, the major customers of middlemen are retailers, and the selling price was determined on the basis of total arrivals.

13. Pre-determined price is the normal method of fixing selling price, monthly sales of middlemen was between Rs. 8000-12000. The godown facilities
used by middlemen were rented. The grading of vegetables was done by farmers in a majority of cases the basis of grading was quality.

14. The consumers are not allowed to choose the vegetables, most of the middlemen use gunny gags to pack the material.

15. The details of expenses and wastage reveals that packing expenses was below Rs. 50, transport expenses are Rs. 50-100, loading and unloading was above Rs.200, commission cost was Rs. 4000-6000, the quantity of wastage per day was Rs. 100-200.

16. The majority of middlemen viewed the performance of physical function was fair.

17. A majority of 60.7 percent of the middlemen had rented godown facilities.

18. A majority of 46.7 percent of the middlemen expressed that the grading of vegetables were done by the farmers themselves.

19. A majority of 70.1 percent of the middlemen did not allow the consumers to choose the vegetables at the time of purchase.

20. A maximum of 49.5 percent of the middlemen met the wastage per day between 100 to 200 rupees.

21. The opinion of middlemen about different expenses reveals that the godown rent was considered as very high, packing expenses were regarded as moderate, transport cost was understood as moderate loading and unloading charges were considered to be moderate, commission was also considered as moderate, and wastage of vegetables was moderate.

22. The mode of arrivals of vegetables in the market was through head load and business a majority of cases the arrival most of the vegetables was in evening.

23. The middlemen shop rent was Rs. 300-400, the staff salary per month are Rs. 750-1000, and the source of finance of middlemen was both own funds and borrowed funds.

24. The rate of interest paid by the middlemen was 20%, 25%, the administration expenses incurred by middlemen is Rs. 750-1000.

25. Majority of middlemen are using 3 employees and a majority of them are having a habit of small savings.

26. A majority of 46.7 percent of the middlemen viewed that the loading and unloading cost was moderate.
27. A majority of 55.1 percent of the middlemen revealed that the commission cost was moderate.
28. A majority of 37.4 percent of the middlemen revealed that the wastage of vegetables was moderate.
29. Most of the respondents are positive to introduce their wands in the business.
30. The performance of middlemen in facilitating function was understood to be fair.
31. A majority of 32.7 percent of the middlemen expressed that the vegetables arrived to the market by people carrying their load on their head.
32. A majority of 61.7 percent of the middlemen had small savings habit.
33. The maximum of 49.5 percent of the middlemen revealed that the facilitating function was fair.
34. A majority of 53.3 percent of the middlemen felt that the miscellaneous expenses were high.
35. A majority of 60.7 percent of the middlemen felt that the profitability position of this business was moderate.
36. A majority of 35.5 percent of the middlemen felt that the demand for forecasting function of vegetables was low.
37. A majority of 37.4 percent of the middlemen felt that the adjustment of climatic condition was excellent.
38. A majority of 48.6 percent of the middlemen felt that the risk involved in the business was very low.
39. The observation related to opinion of middlemen on different costs reveals that the shop rent, staff salary and rate of interest on borrowed funds were considered to be moderate, administrative expenses and donation cost were considered to be low, miscellaneous expenses were viewed as high.
40. The profitability from the business was considered to be moderate, as expressed by majority of respondent middlemen.
41. The analysis of the views of majority of middlemen on various aspects reveals that the nature of perish ability of vegetables was very low uncertainty in vegetable business is low, demand forecasting was low, climatic conditions was excellent.
CUSTOMER PREFERENCES AND SATISFACTION ANALYSIS

The findings related to customer preferences and satisfaction the following.

1. The profile of consumers reveals that majority of consumers are in the age group of 40-60 mostly government employees, more male consumers, most of them are married, have schooling as their major qualification, mostly belongs to unclear families and the status of consumer family reveals that most of the families have above 5 members. The monthly income of the majority of respondent customers was Rs. 3000-4000.

2. The level of satisfaction of consumers reveals that a very high majority of consumers are satisfied with the vegetable marketing.

3. The monthly expenditure of the majority of consumers for food constitute Rs. 1000-1500, and monthly expenditure for vegetables is Rs. 500-750.

4. Majority of consumers are aware of the mutative vegetables were observed from the analysis.

5. The frequency of consumer visit to market reveals that majority of consumers visit weekly once, the mode of transport being two wheelers, the value of purchase in every visit is Rs. 50-100.

6. A majority of 48.5 percent of the consumers were satisfied with the overall vegetable marketing in the market.

7. A majority of 27.5 percent of the consumers’ monthly expenditure for food was between 1000 to 1500 rupees.

8. A majority of 43.6 percent of the consumers’ monthly expenditure for vegetables was between 250 to 500 rupees.

9. A majority of 48.5 percent of the consumers used o wheelers to go to the market.

10. Majority of consumers visit in the morning hours, and a large majority of consumers visit on Sunday.

11. The details relating to channel of purchase and source of market information reveals that, the channel of purchase is through middlemen in the market, and the major source of information is through new papers.
12. The majority of consumers opened that the profit margin of middlemen is about 25%, 50%.

13. A majority of 63.2 percent of the consumers purchased the vegetables from the middlemen.

14. The majority of 31.9 percent of the consumers were allowed to pick and choose the vegetables in the market.

15. A majority of 47.1 percent of the consumers purchased the vegetables in many shops.

16. A majority of 37.7 percent of the consumers bargained the price while purchasing the vegetables.

17. A majority of 76 percent of the consumers revealed that the need for consumer protection was essential.

18. A majority of 33.8 percent of the consumers agreed that they purchased all the vegetables under one roof.

19. A majority of 31.9 percent of the consumers agreed that they visited more than one shop for scrutinizing the vegetables.

20. A majority of 31.4 percent of the consumers agreed that they wanted to save time during the purchase of vegetables.

21. A majority of 34.8 percent of the consumers agreed that the middlemen had good attitude with the consumers.

22. A majority of 34.3 percent of the consumers were neutral with the courteous middlemen.

23. A majority of 38.7 percent of the consumers agreed with the attractive speech of the middlemen.

24. A majority of 33.3 percent of the consumers agreed with the acceptable price of the market.

25. A majority of 35.3 percent of the consumers were neutral in the fresh vegetables available in the market.

26. A majority of 28.9 percent of consumers agreed that the no bargaining system existed in the market.
27. A majority of 31.9 percent of consumers agreed that the preference of wife/husband determined the purchasing of vegetables.

28. A majority of 39.2 percent of consumers agreed that the children preference helped in selecting the vegetables.

29. A majority of 38.7 percent of the consumers agreed that they preferred the seasonal vegetables at the time of purchase.

30. A majority of 39.2 percent of the consumers agreed that freshness was preferred at the time of purchasing the vegetables.

31. It was observed that majority of consumers do not have a refrigerator in their houses to store the vegetables.

32. The majority of consumers expressed that they are allowed to choose vegetables and they expressed that they visit many shops to select the vegetables. However, it was observed that they are not allowed to bargain the purchases price. Surprisingly many consumers feel that they do not need any protection.

33. Few statements are given and the consumers are asked to give their response as to strongly disagree to strongly agree the analysis reveals the following.
   a) Purchase of all vegetables under one roof - agree
   b) More shops to select the vegetables - agree
   c) Attitude of middlemen with a smiling face – agree
   d) Courteous conduct of middlemen - neutral
   e) Attractive speech of middlemen – agree
   f) Cancloseness of the middlemen - disagree & neutral

34. The response of the consumers towards the following aspects reveals the following analysis.
   a) Acceptable price - agree
   b) Good quality – agree
   c) Fresh vegetables – neutral
   d) No bargaining system – agree
   e) Preference of husband/ wife – agree
   f) Preference of children - agree
35. The response of the consumers towards the following variable reveals the following.
   a) Buyers preference - agree
   b) Price preference – agree
   c) Preference of seasonal vegetables – agree
   d) Preference of big size - neutral
   e) Preference of natural colour – agree
   f) Preference of freshness – agree

36. The response of the consumers towards the following factors reveals the following.
   a) Incorrect weight - neutral
   b) High price of vegetables – neutral
   c) Fresh vegetables – agree
   d) Unclean vegetables – neutral
   e) Parking place facility - agree
   f) Congested shops – neutral
   g) Shortage of drinking water facility – neutral.

37. The views of consumers towards various variable shows the following analysis.
   a) Shortage of toilet facility – neutral
   b) Absence of restaurant facility – neutral
   c) Discourteous non co operation of middlemen – neutral
SUGGESTIONS AND RECOMMENDATIONS

Based on the compilation of previous chapters and findings from the analysis, the researcher gives suitable suggestions the players namely the farmers, the middlemen and the consumers are involved in the marketing of vegetables in Tumkur district.

1. As most of the farmers belong to Hindu religion, the researcher suggests to the Muslims and Christians to engage in the business of vegetable farming.

2. The researcher suggests the inculcation of education to bring awareness among the farmers about the application of the latest technological development and methods. The researcher recommends the farmers to contact the horticulture officers whenever they face ordinary and technical problems in their business.

3. It is suggested that the farmers make use of the barren land to cultivate appropriate vegetables according to the fertility of that land which can lead to the productivity of vegetables.

4. In order to borrow money with meager interest, the researcher advises the farmers to approach the commercial banks and financial institutions instead of local money lenders.

5. The researcher suggests that in order to reduce the cost of production of vegetables per acre, the farmers may opt for bulk purchase of fertilizers, seeds, manure etc., along with their co-farmers.

6. The researcher suggests the method of proper planning reduce the expenses incurred for maintenance, picking of vegetables and transport purposes.

7. The farmers are advised to know about the benefits of using the Hybrid variety seeds.

8. The researcher advises the farmers to update and make use of the latest information provided by the Village Extension Officers.

9. In order to reduce the transport expenses for carrying the vegetables to the market, the researcher suggests cheap means of transport like Bus, and a combined transport along with the co-farmers.
10. The researcher recommends that the Government must come forward to increase proper storage facilities to the farmers for season wise supply of vegetables.

11. It is advised to the farmers that they should carry clean and Size-based vegetables to the market in order to increase the selling price.

12. Harvesting should be preferably done during cooler part of the day in order to maintain the freshness of the vegetables.

13. Training may be given to the farmers in the areas of grading, handling, and preservation of vegetables.

14. New and modern packaging devices and techniques should be used by the farmers to fetch the more prices.

15. Support prices should be announced by the Government, whenever the price hits the rock bottom due to seasonal glut.

16. To bring down the packing expenses, the researcher advises bulk purchase of carry bags to the middlemen.

17. In order to reduce wastage, the researcher suggests to the middlemen to determine the demand of vegetables well in advance using his experience and to handle the vegetables.

18. The researcher suggests that the middlemen can reduce the rent given to the shop to enhance the variety of vegetables.

19. It is suggested that the middlemen may improve the storage facilities to avoid wastage of vegetables.

20. It is also advised that the middlemen must try to increase the working hours for reducing the fixed cost.

21. The middlemen are recommended that the uncertain and risk should be overcome by their valuable experience in the sale of vegetables.

22. It is advised to the middlemen that he should always maintain courteous conduct and smiling face to the consumers at the time of sale of vegetables.

23. The researcher suggests that the middlemen be honest in telling the facts about the quality of the vegetables.

24. It is suggested that the middlemen follow proper weighing system in order to retain his customers.
25. The researcher advises the middlemen to allow the consumers to choose the 
vegetables by themselves.

26. Selling of multiple vegetables is advised in order to reduce the consuming 
time of the consumers.

27. It is to be checked by the middlemen that if vegetables are clean and hygienic 
in order to attract the consumers.

28. It is suggested to Municipal Corporation that proper parking and toilet 
facilities should be provided near the market place for the benefit of the 
consumers, farmers and middlemen.

29. Consumers should be given proper protection against the exploitation by the 
middlemen so that it leads to a healthy marketing of vegetables.

30. Proper arrangement should be made to clear garbage every day.

31. It is the high time consumers of Karnataka changed their food habits so as to 
include more vegetables in their food.

32. The Gandhi market should be provided with all infrastructural facilities like 
transport, link rods, post-office, banks, restaurants, lighting, public 
convenience, parking lots etc.

33. Sufficient lighting facilities should be provided by the Corporation of 
Tumkur, as loading and unloading activities are mostly done in the nights.

34. The consumers, especially women who come with cash should be given 
proper protection from the anti-social elements.

35. Vegetable sales booths like Co-operative milk booth may be opened at 
different places in Tumkur.

36. To avoid differences in prices from shop to shop, information/price board at a 
place outside the market can be placed in order to display the retail prices 
obtaining every day.

37. Rest rooms for vehicle drivers, farmers and consumers may be provided at the 
markets.

38. Advertisements can be creatively designed in order to include consumption of 
vegetables and to develop awareness about the highly nutritive values of 
vegetables especially through the media.

39. Regular checking of the weights and scales used by the commission agents 
should be done periodically by the members of the department of metrology
CONCLUSION

Based on the findings extracted from the analysis, the researcher comes to the conclusion regarding the performance of farmers, middlemen and consumers.

Maximum number of farmers in the study perceived the functional performance of pre-cultivating & financing function and found it to the moderate. Similarly the performance of their function was influenced by certain important factors such as sources of finance, cost of preparing the land, rate of interest on debt and mode of irrigation and these contributed to the performance of this function. The researcher also scrutinized the problems such as cost of picking, maintenance cost, cultivation cost and poor information provided by village extension officers reducing the performance of this functional area.

Most of the middlemen were aged between 40 to 60 years and they were illiterate married male Hindus. Majority of them were commission agents and were working in the morning hours and their performance of exchange and physical function was fair. The researcher also identified that the sales achieved per month, nature of purchase, loading/unloading and godown facilities were the key factors which triggered the performance of exchange and physical functions. Packing expenses, commission and wastage were some of the problems which reduced the performance exchange and physical function.

Problems like the shop rent, administrative expenses involved and other expenses reduced the performance. The middlemen agreed that the overall performance of their business was fair. The researcher also identified some exclusive general problems like perishability of the vegetables, uncertainty in business and risk reduced the overall performance in the business of the middlemen.

In the research study, most of the consumers were males between 20 to 40 years aged with a monthly income of rupees 3000 to 4000. Majority of the consumers do not have refrigerators at their home. The consumers were allowed
to pick and choose the vegetables in the market and they scrutinized many shops to purchase quality vegetables. They usually bargained at the time of purchase.

The researcher identified 15 consumer preference factors. Among these, acceptable price in the market, good quality, absence of bargaining, freshness of vegetables and existence of shops in the market contributed to their satisfaction.

Though consumers are kings of the market, they also face some problems such as unclean vegetables, congested shops, and absence of toilet facility and discourteous non cooperation of the middlemen reduced their satisfaction. Finally, majority of the consumers were satisfied with the marketing of vegetables in Tumkur District.

SCOPE FOR FURTHER RESEARCH.
The scope for further research can be presented as under.
1) As the present study is conducted in one of the districts in Karnataka, this type of study may be organized in other districts of other states in the country.
2) The present study is confined to three commodities only i.e., Tomato, Onion, and Brinjal only. Hence there is a scope for further research in other commodities in the same district or in the other districts of the country.