CHAPTER – VI
FINDINGS, SUGGESTIONS AND CONCLUSION

FINDINGS

Banana is an important energy producing food as well as good source of mineral salts and vitamins. It contains as much as 20 percent starch, which is converted into sugar during ripening. An increase in the consumption of fruits like banana will also help to get more calories. A hectare of banana can yield up to 30 million calories of energy compared to 2.5 million calories from one hectare of wheat.

Bananas are grown throughout the tropical countries. The maximum production is in the countries of the tropical America. The United Fruit Company claims to be the biggest farmer in the world. The plantations are laid out on a large scale and are often established after cutting virgin forests. Banana is cultivated in wetlands, dry lands and garden lands of Tamil Nadu. Wet land cultivation is popular in Kanyakumari district, because of the availability of both irrigation and drainage facility.

A pre harvest contractor is one who enters into a contract with the grower tell in advance of the harvest to buy bunches of banana at an agreed price. The second set of contractors “normally” enter into a contract immediately after the flowering stage. Price is fixed for the entire expected yield based on the number of matured plants. The third set of contractors enter into an agreement immediately after the harvest of first crop with the condition that the entire field is to be given to them till the end of the next season so as to enjoy the income from the sale of leaves also.
Retailers in banana trade refer to the traders who sell in smaller quantities to the consumers. Retailers include petty traders, pavement vendors and Street vendors. Petty traders have fixed shops. Pavement vendors conduct the business having their shop in the pavements nearby temple premises, bus stands and hotels where the floating population will be more. Street vendors carry banana in head loads or by carts and sell at the door of the consumers living in residential colonies and nearby factories.

It is found that among the growers of the river area, 46.67 per cent have studied below SSLC; 21.33 per cent have studied up to SSLC; another 21.33 per cent have studied up to Higher Secondary and 10.67 per cent have studied degree and above. Chi-Square test reveals that educational qualification of sample growers does not significantly differ with regard to their type of cultivation.

Among the sample growers of the river area, 28.00 per cent have up to 5 of experience in banana cultivation; 30.67 per cent have been 5 and 10 years of experience; 22.66 per cent have between 10 and 15 years of experience and 18.67 per cent have an experience of more than 15 years in banana cultivation.

Considering all sample growers, 26.00 per cent have up to 5 years of experience in banana cultivation; 38.00 per cent have between 5 and 10 year of experience; 19.33 per cent have between 10 and 15 years of experience and 16.67 per cent have an experience of more than 15 years in banana cultivation.
It is inferred that the experience in banana cultivation is higher in the case of growers of the river area than that of other area growers. CM-Square test reveals that experience in banana cultivation of sample growers does not significantly differ with regard to their type of cultivation.

Analysis shows that among growers of the river area, 48.00 per cent are cultivate banana in an area of up to 5 acres; and It is found that among growers of other area, 54.67 per cent are cultivating banana in an area of up to 5 acres. Considering all sample grower respondents, 51.33 per cent are cultivating banana in an area of up to 5 acres; 25.33 per cent have between 5 and 10 acres; 12.67 per cent have between 10 and 15 acres and 10.67 per cent have a cultivating area of more than 15 acres.

It is inferred that majority cultivators of other area are cultivating banana in less than 5 acres where as majority of river area cultivators are cultivating banana in more than 5 acres of land.

Chi-Square test reveals that Area of banana of sample growers does not significantly differ with regard to their type of cultivation.

Considering all sample grower respondents, 21.33 per cent are cultivating other crops for up to 5 years; 39.34 per cent have between 5 and 10 years; 26.00 per cent have between 10 and 15 years and 13.33 per cent have a cultivating for more than 15 acres.

It is inferred that majority of other area cultivators are cultivating other crops for less than 10 years where as majority of river area cultivate other crops for more than 10 years. Chi-Square test reveals that Years of other crop cultivation by of sample growers significantly differs with regard to their type of cultivation.
Considering all sample grower respondents, 41.34 per cent are cultivating other crops in an area of up to 2 acres; 23.33 per cent have between 2 and 4 acres; 22.00 per cent have between 4 and 6 acres and 13.33 per cent have a cultivating area of more than 6 acres.

It is found that 44.00 per cent of cultivators of other area are cultivating other crops in less than 2 acres where as 61.33 per cent of river area cultivators are cultivating other crops in more than 6 acres of land. Chi - Square test reveals that Area of cultivation of other crops of sample growers does not significantly differ with regard to their type of cultivation.

Among all sample grower respondents, 35.33 per cent are cultivating in a total area of up to 5 acres; 22.00 per cent have between 5 and 10 acres; 14.67 per cent have between 10 and 15 acres and 28.00 per cent have a cultivating area of more than 15 acres. It is inferred that 52 per cent of river area cultivators are cultivating in less than 10 acres where as 37.33 per cent of cultivators of river area are cultivating banana in more than 10 acres of land.

Chi-Square test reveals that total cultivation area of sample growers does not significantly differ with regard to their type of cultivation.

It is found that among the sample growers of the river area, 9.33 per cent have up to 3 years of experience in Poovan banana cultivation and 9 years of experience and 24.00 per cent have an experience of more than 9 years in Poovan banana cultivation. It is found that among the sample other area growers, 12.00 per cent have up to 3 years of experience in Poovan banana cultivation and 16.00 per cent have an experience of more than 9 years in Poovan banana cultivation.
Considering all sample growers, 10.66 per cent have up to 3 years of experience in Poovan banana cultivation; 34.67 per cent have between 3 and 6 years of experience; 34.67 per cent have between 6 and 9 years of experience and 20.00 per cent have an experience of more than 9 years in Poovan banana cultivation. It is inferred that the experience in Poovan banana cultivation is higher in the case of river area growers than that of other area rowers.

Chi-Square test reveals that “years” of Poovan cultivation by sample growers do not significantly differ with regard to their type of cultivation.

Among the sample growers of the river area, 25.33 per cent have up to 3 years of experience in Rasthali banana cultivation and 14.67 per cent have an experience of more than 9 years in Poovan banana cultivation. It is found that among the sample growers. In other areas, 20.00 per cent have up to 3 years of experience in Rasthali banana cultivation and 18.67 per cent have an experience of more than 9 years in Rasthali banana cultivation.

Considering all sample growers, 22.67 per cent have up to 3 years of experience in Rasthali banana cultivation; 24.67 per cent have between 3 and 6 years of experience; 36.00 per cent have between 6 and 9 years of experience and 16.66 per cent have an experience of more than 9 years in Rasthali banana cultivation.

It is inferred that the experience in Rasthali banana cultivation is higher in the case of river area growers than that growers in other areas. Chi-Square test reveals that Years of Rasthali cultivation of sample growers do not significantly differ with regard to their type of cultivation.
Among the growers of the river area, 10.67 per cent “always” follow crop rotation; 20.00 per cent “usually” follow it; 48.00 per cent “normally” follow it; 12.00 per cent “occasionally” follow crop rotation and 9.33 per cent “Never” follow crop rotation.

It is found that among the growers in other areas, 28.00 per cent “always” follow crop rotation; 13.33 per cent “usually” follow it; 36.00 per cent “normally” follow it; 10.67 per cent “occasionally” follow crop rotation ad 12.00 per cent “Never” follow crop rotation. Considering all sample 19.33 per cent “always” follow crop rotation; 16.67 per cent “usually” follow it; 42.00 per cent “normally” follow it; 11.33 per cent “occasionally” follow crop rotation and 1067 per cent “Never” follow crop rotation.

It is inferred that more than 36 per cent are following crop rotation either “always” or “usually”. Chi-Square test reveals that Crop rotation followed by of sample growers does not significantly differ with regard to their type of cultivation.

The point scored by growers of the river area is 8 and the coefficient is 0.107 and the point scored by growers in other area is 26 and the coefficient is 0.347. This shows that the growers in other area are following crop rotation more than that of growers in river area.

Analysis reveals that among growers in river area, 24.00 per cent “always’ buy suckers; 30.67 per cent “usually” buy suckers; 34.67 per cent “normally” buy suckers; 6.66 per cent “occasionally” buy suckers and 4.00 per cent “Never” buy suckers.
It is found that among growers in other area, 37.33 per cent “always” buy suckers; 26.67 per cent “usually” buy suckers; 20.33 per cent “normally” buy suckers; 9.33 per cent “occasionally” buy suckers and 6.67 per cent “Never” buy suckers.

Considering all sample growers, 30.67 per cent “always” buy suckers; 8.67 per cent “usually” buy suckers; 27.33 per cent “normally” buy suckers; 8.00 per cent “occasionally” buy suckers and 5.33 per cent “Never” buy suckers.

It is inferred that majority of growers are buying suckers either “always” or “usually”. Chi-Square test reveals that Method of acquiring suckers by of sample growers does not significantly differ with regard to their type of cultivation.

Scaling Point Analysis shows that the points scored by growers in river area is 48 and the coefficient is 0.64 and the point scored by other area growers is 59 and the coefficient is 0.787. This shows that the growers in other area, are buying suckers more than river area growers.

It is inferred that among cultivators in river area, 6.66 per cent “always” sell banana leaves; 10.67 per cent “usually” sell leaves; 14.67 per cent “normally” sell leaves; 34.67 per cent “occasionally” sell leaves and 33.33 per cent “Never” sell leaves.

It is found that among other area cultivators, 12.00 per cent “always” sell banana leaves; 2.134 per cent “usually” sell leaves; 36.00 per cent “normally” sell leaves; 13.33 per cent “occasionally” sell leaves and 17.33 per cent “Never” sell leaves.
Considering all sample cultivators, 9.34 per cent “always” sell banana leaves; 16.00 per cent “usually” sell leaves; 25.33 per cent “normally” sell leaves; 24.00 per cent “occasionally” sell leaves and 25.33 percent “Never” sell leaves.

It is inferred that around 49.33 per cent of sample growers “Never” sell banana leaves or “occasionally” sell banana leaves. Chi-Square test reveals that Selling of banana leaves by sample growers significantly differs with regard to their type of cultivation.

Scaling Point Analysis shows that the points scored by growers in river area is -58 and the coefficient is -0.773 and the point scored by growers in other area is -2 and the coefficient is -0.027. This shows that the act of selling leaves is less in the case of growers in river area than that of other area growers.

It is inferred that among river area cultivators, 48 per cent either “always” or “usually” follow intercrop cultivation whereas 22.67 per cent either “occasionally” or “Never” follow intercrop cultivation. It is found that among other area cultivators, 64 per cent either “always” or “usually” follow intercrop cultivation whereas 16.00 per cent either “occasionally” or “Never” follow intercrop cultivation.

Considering all sample cultivators, 56.00 per cent either “always” or “usually” follow intercrop cultivation whereas 19.33 per cent either “occasionally” or “Never” follows intercrop cultivation. It is inferred that majority of sample respondents are following intercrop cultivation. Chi-Square test reveals that Inter crop cultivation followed by sample growers does not significantly differ with regard to their type of cultivation.
Scaling Point Analysis shows that the points scored by growers in river area s 31 and the coefficient is 0.413 and the point scored by other area growers is 61 and the coefficient is 0813, This shows that the act of following intercropping pattern is higher in the case of growers in other area than of river area growers.

It is inferred that among the cultivators in river area, 12.00 per cent use 20 per cent natural fertilizers and 80 per cent chemical fertilizers and 40 per cent chemical fertilizers and 10.67 per cent use 80 per cent natural fertilizers and 20 per cent chemical fertilizers; It is found that among cultivators in other area, 9.33 per cent use 20 per cent natural fertilizers and 80 per cent chemical fertilizers and 40 per cent chemical fertilizers and 8.00 per cent use 80 per cent natural fertilizers and 20 per cent chemical fertilizers.

As a whole, 10.67 per cent use 20 per cent natural fertilizers and 80 per cent chemical fertilizers and 9.33 per cent use 80 per cent natural fertilizers and 20 per cent chemical fertilizers.

It is inferred that cultivators in other areas are using chemical fertilizers more than cultivators in river area. Chi-Square test reveals that use chemical and natural of fertilizers by sample growers does not significantly differ with regard to their type of cultivation.

It is found that among the sample river area cultivators, 8.00 per cent apply fertilizers once and 14.66 per cent apply fertilizers more than four times. Among the sample cultivators in other areas, 6.67 per cent apply fertilizers once and 12.00 per cent apply fertilizers more than four times.
Considering all sample cultivators, 7.33 per cent apply fertilizers once; 16.00 per cent apply fertilizers twice; 18.67 per cent apply fertilizers thrice; 44.67 per cent apply fertilizer four times and 13.33 per cent apply fertilizer more than four times.

It is inferred that majority of sample respondents are applying fertilizers four or more than four times. Chi-Square test reveals that the number of times of using fertilizer by sample growers does not significantly differ with regard to their type of cultivation.

It is found that among growers in river area, 17.33 per cent sell in direct markets; 49.34 per cent sell through pre-agents; 12.00 per cent sell through post agents; and 21.33 per cent through retailers. Among growers in other areas, 20.00 per cent sell in direct markets; 41.34 per cent sell through pre-agents; 25.33 per cent sell through post agents and 13.33 per cent through retailers.

As a whole, among all sample growers, 18.67 per cent sell in direct markets; 45.33 per cent sell through pre-agents; 18.67 per cent sell through post agents and 17.33 per cent sell through retailers.

It is inferred that nearly fifty per cent of growers are selling banana through pre agents or directly in the market. Chi-Square test reveals that Method of selling banana by sample growers does not significantly differ with regard to their type of cultivation.
Analysis reveals that among growers in river area, 61.33 per cent sell in direct markets; 16.00 per cent sell through pre-agents; 10.67 per cent sell through post agents; 5.33 per cent through retailers and 6.67 per cent sell through other modes.

It is found that among growers in other areas, 37.33 per cent sell in direct markets; 13.33 per cent sell through pre-agents; 12.00 per cent sell through post agents; 26.67 per cent through retailers and 10.67 per cent sell through other modes.

Considering all sample growers, 49.33 per cent sell in direct markets; 14.67 per cent sell through pre-agents; 11.33 per cent sell through post agents; 16.00 per cent through retailers and 8.67 per cent sell through other modes.

It is inferred that nearly fifty per cent of growers are selling other products directly in the market. Chi-Square test reveals that the type of selling other products by sample growers significantly differs with regard to their type of cultivation.

Analysis shows that for quantum of harvest, rank I is given by 76 respondents and rank V is given by 16 respondents. For size of banana, rank I is given by 24 respondents and rank V is given by 5 respondents. For demand, rank I is given by 16 respondents and rank V is given by 37 respondents. For seasons, rank I is given by 20 respondents and rank V is given by 47 respondents and for other factors, rank I is given by 14 respondents and rank V is given by 45 respondents.
Points are computed using Rank Order Scaling Technique. It is found that the point for quantum of harvest is 561; for size of banana is 496; for demand is 394; for season is 379 and for others is 420.

The coefficient computed for quantum of harvest is 4.675; for size of banana it is 4.133; for demand is 3.283; for season it is 3.158 and for other factors it is 3.500. This shows that the prime factor determining price of banana is quantum of harvest; then comes the size of banana. Other factors come as the third factor.

It is inferred that all the sample respondents have stated that cultivation expense is the prime expense. As regards transportation expense, 29 respondents rank it as second and 26 respondents rank it as fifth. For Watering expense, 43 respondents rank it as second and 28 respondents rank it as fifth. For loan interest, 46 respondents rank it as second and 31 respondents rank it as fifth. For others, 32 respondents rank it as second and 65 respondents rank it as fifth.

Points are calculated and it is found that the point for cultivation expense it is 750; for transport expense it is 370; for watering expense it is 404; for loan interest it is 386 and for others it is 340.

Coefficients are computed for expenses. It is found that the coefficient for cultivation expense it is 6.250; for transportation expense it is 3.08 ; for watering expense it is 3.367; for loan interest it is 3.217 and for others it is 2.833. It is found that the major expense is Cultivation expense and then comes watering etc.
Percentage is calculated and it is found that cultivation expense is 33.33 per cent; transportation expense is 16.44 per cent; watering expense is 17.96 per cent; loan interest expense is 17.16 per cent and others is 15.11 percent.

Analysis shows the opinion about the problems as perceived by sample respondents. It is found that cultivation problem is very high or high for 77 respondents whereas it is low or very low for 39 respondents. Transportation problem is very high or high for 61 respondents and it is low or very low for 61 respondents. Watering problem is very high or high for 71 respondents and is low or very low for 33 respondents. Loan interest problem is very high, or high for 72 respondents and is low or very low for 53 respondents.

Points are calculated and it is found that the point for cultivation problem it is 526; for transport problem it is 470; for watering problem it is 486 and for loan interest problem it is 496.

Coefficients are computed for problems. It is found that the coefficient for cultivation problem is 4.383; for transportation problem it is 3.917; for watering problem it is 4.050 and for loan interest problem it is 4.133

It is found that ploughing problem is very high or high for 52 respondents whereas it is low or very low for 57 respondents. Points are calculated and it is found that the point for ploughing problem is 429; for digging problem is 449; for planting problem is 436 and for irrigation problem is 416.
Coefficients are computed and it is found that the coefficient for ploughing problem is 3.575; for digging problem it is 3.742; for planting problem it is 3.633 and for irrigation problem it is 3.467. It is perceived that the prime problem is relating to digging; then comes planting and the third one is ploughing problem.

It is inferred that for suckers, 48 respondents say that the expense is very high or high and 57 respondents say that it is low or very low; for pesticides. Points are calculated and it is found that the point for sucker expense is 457; for pesticide expense it is 536; for fertilizer expense it is 528 and for propping expense it is 511. Coefficients are computed and it is found that the point for sucker expense is 3.808; for pesticide expense it is 4.467; for fertilizer expense it is 4.400 and for propping expense it is 4.258.

It is inferred that the major material expense perceived is pesticide expense; then comes fertilizer expense and the third is propping expense.

Analysis shows that the cost of labour for ploughing is very high or high for 70 respondents, whereas it is low or very low for 44 respondents. Points are computed for cost of labour and it is found that the point for ploughing it is 477; for applying pesticide it is 458; for applying fertilizer it is 427 and for cutting it is 492.

Coefficients are computed for cost of labour and it is found that the coefficient for ploughing it is 3.975; for applying pesticide it is 3.817; for applying fertilizer it is 3.558 and for cutting is 4.100. It is inferred that the prime cost of labour is for cutting; then comes ploughing and the third one is for applying pesticides.
It is inferred that the preserving problem is very high or high for 110 respondents and it is low or very low for 19 respondents. Space problem is very high or high for 43 respondents and it is low or very low for 53 respondents.

Point scored for preserving problem is 597; for space it is 431; for packing it is 469; for collection it is 501 and for others it is 404. Coefficient computed for preserving problem it is 4.975; for space it is 3.592; for packing it is 3.908; for collection it is 4.175 and for others it is 3.367.

Analysis reveals that the loan problems are very high or high for 88 respondents whereas it is low or very low for 38 respondents; insurance problems are very high or high for 70 respondents whereas it is low or very low for 53 respondents.

Point scored for loan problem is 539; for insurance problem it is 483; for tax problem it is 469; for commission problem is 540 and for rent problem is 489. Coefficient computed for loan problem is 4.492; for insurance problem is 4.025; for tax problem it is 3.908; for commission problem it is 4.500 and for rent problem it is 4.075. It is inferred that commission problem is higher and tax problem is the least for growers.

It is inferred that point scored for labour problems is 543; for revenue officials’ problem it is 411-; for transport officials problem it is 482; for agents problem is 555 and financiers problem it is 484. Coefficient computed for labour problems is 4.525; for revenue officials’ problem it is 3.425; for transport officials problem it is 4.017; for agents’ problem is 4.625 and financiers’ problem is 4.033. It is inferred that the major human problem is due to agents and then comes labour problems.
As per Discriminant function Analysis, Table value of chi-square at 5 per cent level of significant is 15.5 at 8 degree of freedom. As the calculated Value is more than Table Value, the hypothesis is rejected. This proves that the group means are significantly different in the case of cultivation areas.

It is found that among the wholesale agents, 5.0 per cent have less than SSLC qualification and 17.50 per cent are graduates. It is found that among the retail agents, 12.50 per cent have less than SSLC qualification and 30.00 per cent are graduates. On the whole, 8.75 have less than SSLC qualification and 23.75 per cent are graduates.

It is inferred that in the sample, retail agents are more qualified than wholesale agents to certain extent. Chi-Square test reveals that educational qualification of sample intermediaries does not significantly differ with regard to their type of marketing activity.

It is found that among the wholesale agents, 7.50 per cent have less than 5 years experience and 10.00 per cent have above 15 years of experience. It is found that among the retail agents, 12.50 per cent have less than 5 years experience and 22.50 per cent have above 15 years of experience.

On the whole, 10.00 per cent have less than 5 years experience; and 16.25 per cent have above 15 years of experience. It is inferred that majority of retail agents have more experience than wholesale agents. Chi-Square test reveals that experience in banana sales and agency of sample intermediaries does not significantly differ with regard to their type of marketing activity.
Analysis reveals that among the wholesale agents, 12.50 per cent have invested up to Rs.2 lakhs and 35.00 per cent have invested more than Rs.6 lakhs; Among the retail agents, 45.00 per cent have invested up to Rs.2 lakhs and another 12.50 per cent have invested more than Rs.6 lakhs. Considering all sample agents, 28.75 per cent have invested up to Rs.2 lakhs and Rs.6 lakhs and 23.75 per cent have invested more than Rs.6 lakhs.

The mean investment in banana business by wholesale agent is Rs.4.75 lakhs; by retail agent is Rs.2.85 lakhs and overall mean investment is Rs.3.80 lakhs. It is inferred that the mean investment is more in the case of wholesale agents than that of retail agents.

Chi-Square test reveals that investment in banana business by sample intermediaries significantly differs with regard to their type of marketing activity.

Analysis reveals that among the wholesale agents, 30.00 per cent have invested up to Rs.2 lakhs and 27.50 per cent have invested more than Rs. 6 lakhs; Among the retail agents, 40.00 per cent have invested up to Rs.2 lakhs; 20.00 per cent have invested between Rs.2 lakhs and Rs.4 lakhs and another 22.50 per cent have invested more than Rs.6 lakh.

Considering all sample agents, 35.00 per cent have invested up to Rs.2 lakhs; 20.00 per cent have invested between Rs.2 lakhs and Rs.4 lakhs; 20.00 per cent have invested between Rs.4 lakhs and Rs.6 lakhs and 25.00 per cent have invested more than Rs.6 lakhs.
The mean investment in related business by wholesale agent is Rs.3.95 lakhs; by retail agent is Rs.3.45 lakhs and overall mean investment is Rs.3.70 lakhs. It is inferred that the mean investment in related business is more in the case of wholesale agents than that of retail agents.

Chi-Square test reveals that investment in related business by sample intermediaries does not significantly differ with regard to their type of marketing activity.

Analysis reveals that among the wholesale agents, 12.50 per cent have invested up to Rs.4 lakhs and 32.50 per cent have invested more than Rs.8 lakhs. Among the retail agents, 7.50 per cent have invested up to Rs.4 lakhs and another 15.00 per cent have invested more than Rs.8 lakhs. Considering all sample agents, 10.00 per cent have invested up to Rs.2 lakh and 23.75 per cent have invested more than Rs.6 lakhs.

The mean total investment by wholesale agent is Rs.4.85 lakhs; by retail agent is Rs.4.15 lakhs and overall mean investment is Rs.4.50 lakhs. It is inferred that the mean total investment is more in the case of wholesale agents than that of retail agents.

Chi-Square test reveals that total investment by sample intermediaries significantly differs with regard to their type of marketing activity.

It is found that among the sample wholesale agents, 12.50 per cent have up to 3 years of experience in business and 32.50 per cent have experience of more than 9 years. Among the sample retail agents, 20.00 per cent have up to 3 years of experience in business and 12.50 per cent have experience of more than 9 years.
Considering all sample agents, 16.25 per cent have up to 3 years of experience in business; 37.50 per cent have experience between 3 and 6 years; 23.75 per cent have experience between 6 and 9 years and 22.50 per cent have experience of more than 9 years.

It is inferred that majority of wholesale agents have more other business experience than that of retail agents. Chi-Square test reveals that year of service in other business by sample intermediaries does not significantly differ with regard to their type of marketing activity.

Among the sample wholesale agents, 22.50 per cent have up to 3 years of experience in business; 42.50 per cent have experience between 3 and 6 years; 22.50 per cent have experience between 6 and 9 years and 12.50 percent have experience of more than 9 years.

It is found that among the sample retail agents, 30.00 per cent have up to 3 years of experience in business; 27.50 per cent have experience between 3 and 6 years; 20.00 per cent have experience between 6 and 9 years and 22.50 per cent have experience of more than 9 years.

Considering all sample agents, 26.25 per cent have up to 3 years of experience in business; 35.00 per cent have experience between 3 and 6 years; 21 25 per cent have experience between 6 and 9 years and 17.50 per cent have experience of more than 9 years.

It is inferred that majority of wholesale agents have more banana business experience than that of retail agents. Chi-Square test reveals that years in banana business by sample intermediaries do not significantly differ with regard to their type of marketing activity.
It is inferred that among the sample wholesale agents, 32.50 per cent “always” market related products; 20.00 per cent “usually” market related products; 27.50 per cent “normally” market related products; 15.00 per cent “occasionally” market related products and 5.00 per cent “Never” market related products.

It is found that among the sample retail agents, 35.00 per cent “always” market related products; 12.50 per cent “usually” market related products; 17.50 per cent “normally” market related products; 27.50 per cent “occasionally” market related products and 7.50 per cent “Never” market related products.

Considering all sample agents, 33.75 per cent “always” market related products; 16.25 per cent “usually” market related products; 22.50 per cent “normally” market related products; 21.25 per cent “occasionally” market related products and 6.25 per cent “Never” market related products.

It is inferred that majority of wholesale agents are marketing banana related products and the ratio is higher than that of retail agents.

Chi-Square test reveals that frequency of marketing of banana related products by sample intermediaries does not significantly differ with regard to their type of marketing activity.

It is found that among the wholesale agents, 27.50 per cent procure daily; 50.00 per cent procure twice a week; 12.50 per cent procure weekly; 5 per cent procure twice a month and 5.00 per cent procure on monthly basis.
Among the retail agents, 20.00 per cent procure daily; 55.00 per cent procure twice a week; 7.50 per cent procure weekly; 10.00 per cent procure twice in a month and 7.50 per cent procure on monthly basis.

Considering all sample agents, 23.75 per cent procure daily; 52.50 per cent procure twice a week; 10.00 per cent procure weekly; 7.50 per cent procure twice a month and 6.25 per cent procure on monthly basis.

It is inferred that the procurement frequency is more than twice. It is found that among around 75 per cent of sample agents. This may be due to the reason that the product is a perishable food product and cannot be stored for a longer period.

Chi-Square test reveals that periodicity of buying the product by sample intermediaries significantly differs with regard to their type of marketing activity.

As regards procuring banana from other districts, it is found that among the sample wholesale agents, 20.00 per cent procure “always”; 27.50 per cent procure “usually”; 20.00 per cent procure “normally”; 20.00 per cent procure “occasionally” and per cent procure “Never”.

It is found that among the sample retail agents, 7.50 per cent procure ‘always”; 22.50 per cent procure “usually”; 37.50 per cent procure “normally”; 25.00 per cent procure “occasionally” and 7.50 per cent procure “Never”.

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Considering all sample agents, 13.75 per cent procure “always”; 25.00 per cent procure “usually”; 28.75 per cent procure “normally”; 22.50 per cent procure “occasionally” and 10.00 per cent procure “Never”.

It is inferred that ratio of wholesale agents is more than that of the ratio of retail agents in procuring banana from other districts.

Chi-Square test reveals that procuring banana from other districts by sample intermediaries does not significantly differ with regard to their type of marketing activity.

It is found that among the wholesale agent respondents, 27.50 per cent “always” market banana leaves; 32.50 per cent “usually” market banana leaves; 12.50 per cent “normally” market banana leaves; 12.50 per cent “Occasionally” market banana leaves and 15.00 per cent “Never” market banana leaves.

It is found that among the retail agent respondents, 32.50 per cent “always” market banana leaves; 45.00 per cent “usually” market banana leaves; 5.00 per cent “normally” market banana leaves; 12.50 per cent “occasionally” market banana leaves and 5.00 per cent “Never” market banana leaves.

Considering all sample agent respondents, 30.00 per cent “always” market banana leaves; 38.75 per cent “usually” market banana leaves; 8.75 per cent “normally” market banana leaves; 12.50 per cent “occasionally” market banana leaves and 10.00 per cent “Never” market banana leaves.
It is inferred that the ratio of retail agents marketing banana leaves is more than that of the ratio of wholesale agents marketing banana leaves.

Chi-Square test reveals that marketing banana leaves etc by sample intermediaries does not significantly differ with regard to their type of marketing activity.

Analysis shows that it is found that among the sample wholesale agents, 37.50 per cent “always” market outside the district; 27.50 per cent “usually” market outside the district; 20.00 per cent “normally” market outside the district; 10.00 per cent “occasionally” market outside the district and 5.00 per cent “Never” market outside the district.

It is found that among the sample retail agents, 5.00 per cent “always” market outside the district; 12.50 per cent “usually” market outside the district; 20.00 per cent “normally” market outside the district; 40.00 per cent “occasionally” market outside the district and 22.50 per cent “Never” market outside the district.

Considering all sample agents, 21.25 per cent “always” market outside the district; 20.00 per cent “usually” market outside the district; 20.00 per cent “normally” market outside the state; 25.00 per cent “occasionally” market outside the district and 13.75 per cent “Never” market outside the district.

It is inferred that majority of wholesale agents market their products outside the district whereas only 80 per cent of retail agents market their products outside the district frequently.
Chi-Square test reveals that marketing activity outside the district by sample intermediaries significantly differs with regard to their type of agency.

It is found that among the sample wholesale agents, 37.50 per cent “always” use public transport facility; 15.00 per cent use “usually”; 5.00 per cent use “normally”; 30.00 per cent use “occasionally” and 12.50 per cent “Never” use public transport facility for marketing their products.

It is inferred that among the sample retail agents, 42.50 per cent “always” use public transport facility; 25.00 per cent use “usually”; 15.00 per cent use “normally”; 12.50 per cent use “occasionally’ and 5.00 per cent “Never” use public transport facility for marketing their products.

Considering all sample agents, 40.00 per cent “always” use public transport facility; 20.00 per cent “usually” use public transport facility; 10.00 per cent “normally” use public transport facility; 21.25 per cent “occasionally” use public transport facility and 8.75 per cent “Never” use public transport facility for marketing their products.

Analysis shows that the ratio of retail agents using public transport facility is more than that of the ratio of wholesale agents using public transport facility for transporting their products to the market.

Chi-Square test reveals that use of public transportation facility by sample intermediaries does not significantly differ with regard to their type of marketing activity.
It is found that among the wholesale agents, 20.00 per cent sell the products directly in the market; 45.00 per cent sell through retailers; 12.50 per cent sell through wholesalers and 22.50 per cent sell directly to consumers as well as to retailers.

It is found that among the retail agents, 17.50 per cent sell the products directly in the market; 27.50 per cent sell through retailers; 32.50 per cent sell through wholesalers and 22.50 per cent sell directly to consumers as well as to retailers.

Considering all sample agents, 18.75 per cent sell the products directly in the market; 36.25 per cent sell through retailers; 22.50 per cent sell through wholesalers and 22.50 per cent sell directly to consumers as well as to retailers.

It is inferred that majority of wholesale agents directly market their products or through retailers. Around 32.50 per cent of retail agents sell their products to the wholesalers. Chi-Square test reveals that marketing method of sample intermediaries does not significantly differ with regard to their type of marketing activity.

It is found that among the wholesale agents, 12.50 per cent sell the products directly in the market; 42.50 per cent sell through retailers; 22.50 per cent sell through wholesalers and 22.50 per cent sell directly to consumers as well as to retailers.

It is found that among the retail agents, 30.00 per cent sell the products directly in the market; 27.50 per cent sell through retailers; 32.50 percent sell through wholesalers and 10.00 per cent sell directly to consumer as well as to retailers.
Considering all sample agents, 21.25 per cent sell the products directly in the market; 35.00 per cent sell through retailers; 27.50 per cent sell through wholesalers and 16.25 per cent sell directly to consumers as well as to retailers.

It is inferred that around 42.40 per cent of wholesale agents sell other products through retailers and 32.50 per cent of retail agents sell their products to the wholesalers in bulk.

Chi-Square test reveals that Marketing of other products by sample intermediaries does not significantly differ with regard to their type of marketing activity.

For the quantum of harvest 31 respondents have given I rank and 8 respondents have given V rank. The total point scored is 278. For the size of banana, 21 respondents have given I rank and 7 respondents have given V rank. The total point scored is 283. For demand, 8 respondents have given I rank and 20 respondents have given V rank. The total point scored is 201.

Co-efficient is computed and it is found that coefficient for harvest is 2.317; for size is 2.358; for demand is 1.675; for season is 1.917 and for others is 1.733. This shows that the price factor influencing the price of banana is its size; then comes the harvest. The third factor is season and the fourth factor is others. Demand comes as the fifth factor.

For the size of banana, 21 respondents have given I rank and 12 respondents have given V rank. The point scored is 252. For the colour of banana, 18 respondents have given I rank and 21 respondents have given V rank. The point scored is 229.
For the taste of banana, 29 respondents have given I rank and 5 respondents have given V rank. The point scored is 293. For the production area, 8 respondents have given I rank and 28 respondents have given V rank. The point scored is 211. For the utility of banana, 4 respondents have given I rank and 14 respondents have given V rank. The point scored is 215.

The coefficient for size is 2.100; for colour is 1.908; for taste is 2.442; for production area is 1.758 and utility is 1.792. This shows that the prime criterion for grading is taste; then comes size. The third one is colour, the fourth is utility and the fifth is production area.

For Transport problem, 23 respondents give high place and 2 respondents give low place. The point scored is 298. For preservation problem, 5 respondents give low place and 4 respondents give low place. The point scored is 325.

For marketing problem, 13 respondents give high place and 12 respondents give low place. The point scored is 250. For packing problem, 8 respondents give high place and 15 respondents give low place. The point scored is 215.

The coefficient computed for transport problem is 2.483; for preservation is 2.708; for marketing is 2.083 and for packing is 1.792. It is inferred that the prime problem is preservation; then comes transportation; the third is marketing and the fourth is packing.

For the quantum of loan, 35 respondents give high place and 8 respondents give low place. The point scored is 289. For problem relating to rate of interest, 11 respondents give high place and 5 respondents give low place. The point scored is 255. For problem relating to tax, 15 respondents give high place and 6 respondents give low place. The point scored is 264.
The coefficient for problem of quantum of loan is 2.408; rate of interest is 2.125; tax is 2.200; commission is 2.317 and rent is 2.050. This shows that the prime financial problem is the quantum of loan; then comes commission; the third is tax; the fourth is rate of interest and the fifth is rent.

For producer problems, 24 respondents, mention it to be very high and 12 respondents say that it is very low. The point scored is 270. For revenue official problems, 6 respondents mention it to be very high and 21 respondents say that it is low. The point scored is 213.

For labour problems, 30 respondents mention it to be very high; 12 respondents say that it is high; 13 respondents mention it to be normal; 17 respondents say that it is low and 8 respondents mention it to be very low. The point scored is 2.325.

Coefficient for producer problem is 2.250; revenue official problem is 1.775; transport official problem is 2.050; labour problem is 2.325 and financier problem is 2.133. This shows that the major problem is labour; then comes producer; the third is financiers; the fourth is transport officials and the fifth is revenue official.

For marketing problems, 21 respondents mention it to be very high and 19 respondents say that it is very low. The point scored is 264. For storage problems and 6 respondents say that it is very low. The point scored is 253. For seasonal problems, 25 respondents mention it to be very high and 8 respondents say that it is very low. The point scored is 266.
For natural calamities problems, 21 respondents have stated as very high and 20 respondents say that it is very low. The point scored is 2.067. For consumer behaviour changes, 15 respondents mention it to be very high and 14 respondents say that it is very low. The point scored is 226.

Coefficients for marketing problem is 2.200; storage problem is 2.108; seasonal problem is 2.217; natural calamity problem is 2.067 and consumer behaviour change problem is 1.883. This shows that the major

It is found that among semi-urban consumers 51368 percent buy banana for taste; 18.33 per cent buy for food; 13.33 per cent buy for vitamin value; another 13.33 per cent buy for digestion and 3.33 per cent buy for other purposes.

It is found that among rural consumers, 15.00 per cent buy banana for taste; 58.33 per cent buy for food; 15.00 per cent buy for vitamin value; another 6.67 per cent buy for digestion and 5.00 per cent buy for other purposes.

Considering all consumer respondents, 33.33 per cent buy banana for taste; 38.33 per cent buy for food; 14.17 per cent buy for vitamin value; another 10.00 per cent buy for digestion and 4.17 per cent buy for other purposes.

It is found that among sample semi urban consumers, 3.33 per cent “always” buy in bulk; 6.67 per cent “usually” buy in bulk; 5.00 per cent “normally” 75.00 per cent buy “occasionally” and 10.00 per cent “Never” buy in bulk. It is found that among rural consumer respondents, 5.00 per cent “always” buy; 8.33 per cent “usually” buy in bulk; 11.67 per cent “normally”
buy; 61.67 per cent buy “occasionally” and 13.33 per cent “Never” buy. Considering all consumer respondents, 4.17 per cent “always” bulk; 7.50 per cent “usually” buy in bulk; 8.33 per cent buy in bulk; 68.33 per cent buy “occasionally” and 11.67 per cent “Never” buy in bulk.

It is found that among semi-urban consumer respondents, 13.33 per cent buy daily; 38.34 per cent buy twice weekly; 25.00 per cent buy weekly; 5.00 per cent buy bi-monthly and 8.33 per cent buy monthly. It is found that among rural consumer respondents, 11.67 per cent buy daily; 51.33 per cent buy twice weekly; 13.33 per cent buy weekly; 15.00 per cent buy bi-monthly and 6.67 per cent buy monthly.

Considering all sample consumer respondents, 12.50 per cent buy daily; 45.83 per cent buy twice weekly; 19.17 per cent buy weekly; 15.00 per cent buy bi-monthly and 7.50 per cent buy monthly.

It is found that in the semi-urban areas, 13.33 per cent buy direct in the market and 15.00 per cent buy from all sources. It is found that among rural areas, 3.33 per cent buy direct in the market and 6.67 per cent buy from all sources. On the whole, 83.33 per cent buy direct in the market and 10.83 per cent buy from all sources.

It is found that most of the consumers buy banana from the retail agents in both areas. Chi-Square test reveals that method of buying banana significantly differs. It is found that among the semi-urban and rural areas.

As per the opinion of the consumers, it is inferred that the prime factor for price is season, then size- demand. The third factor is size and the fourth is ‘others’.
For ‘Size’ I rank is given by 39 consumers, II rank is given by 21 consumers, III rank is given by 23 consumers; IV rank is given by 15 respondents and V rank is given by 22 respondents.

As per the opinion of the consumers, it is inferred that the prime factor for grading is taste, then comes size. The third factor is Cost and the fourth is ‘Colour.

It is found that for ‘Poovan’ 25 consumers “always” purchase; 34 respondents purchase “usually” and 21 respondents “Never” purchase it. The points are computed and the Poovan is 388; for Rasthali is 316; for Nethian is 357; for ‘Others’ is 349 and for any type is 382. The coefficient computed is for Poovan is 3.233; for Rasthali it is 2.633; for Nethiran it is 2.975; for ‘Others’ it is 2.908 and any type is 3.183. It is inferred that highest demand is for ‘Poovan’, then comes “Any variety’. The third is ‘Nenthiran’ and the fourth is ‘Others’.

**SUGGESTIONS**

- India has very fertile lands and growing banana can be a profitable cultivation to the growers, if other aspects exist. The governments can think in terms of promoting separate organizations such as ‘Banana Cultivation Research Centre’ in many areas and develop banana cultivation.

- Middlemen play a vital role in the marketing of banana products. There are pre-harvest and post-harvest agents. The cultivators lose heavily in their hands. Financial agencies may come forward to assist financially so that the exploitation is minimized. Common godowns to
store and preserve banana may help the marketing people to minimize their risk to a certain extent.

- Agri-related educational qualification may be provided to suitable growers to increase the production and improve the quality of banana.

- Many young people have entered into marketing of banana. The Governments may come forward to buy the fruits in bulk and supply in noon meal centres so that the risk of cultivators is minimized and the health of children is improved at a lesser cost.

- Land reforms may be done by inducing growers to pool their lands and get the advantage of economies of scale in farming also.

- Other crop cultivation in the lean periods may be done so that the cultivator-seller is kept busy throughout the year. This will, in turn, increase rural employment to a higher extent.

- The growers may be advised periodically to change the type of banana and the quality of banana with modem techniques so that the consumers get better fruits continuously throughout the year.

- The results of research and extension activities may be disseminated to the grower sellers so that they get the technical knowledge of cultivation and marketing.

- Quality of suckers may be improved and standards may be fixed to market suckers so that there is higher output and the marketing is carried out with the least paid by the grower sellers.

- Other products of banana tree can be marketed profitably and necessary storage and transport facilities may be provided by the concerned authorities near cultivation areas.
➢ The growers-sellers may be advised suitably to go in for inter crop cultivation so that their income will be improved substantially.

➢ The grower-seller may be taught the impact of chemical fertilizers and their influence on the health of users and consumers. This may improve the quality and standards of the fruits to a higher extent.

➢ The functioning of wholesale and retail agent markets may be regulated and they should function in such a way that there is no huge loss either to grower sellers or to consumers.

➢ To ensure that the cost does not fluctuate during dull seasons, the storage facility aspects may be improved to higher extent.

➢ The Governments can provide concessional transport, storage and packing products so that the cost is reduced in their hands or consumers and the grower-seller and agents do not suffer due to higher transportation and storage cost.

➢ There seems to be shortage of labour and availability of labour at a specific cost seems to be a real problem in rural and semi-urban areas. The grower-seller and agents may be trained to use modern technical machines and equipment to minimize their distress.

➢ Investment seems to be higher in the case of wholesale and retail agents and hence financial organizations may come forward to provide financial assistance to pre-harvest and post harvest agents for minimizing their problems relating to finance.

➢ Agents may gain more if they deal with banana and the related banana products. Suitable training facilities to handle banana in various forms may improve their profitability to certain extent.
Use of public transport facility for transporting banana by the agents may be allowed at concessional rate.

A number of agro-business enterprises have to be promoted to use agricultural produce as raw material and generate value added products which enjoy a steady market within and outside the country. Food processing industry has potentials to generate employment for several millions and add value to the economy in large measure. Such strategies will create a steady demand for agricultural produce.

A number of agro-business enterprises have to be promoted to use agricultural produce as raw material and generate value added products which enjoy a steady market within and outside the country.

Assured market with a minimum support price was not available for, most of the fruit crops. Consequently the growth of those produce has been small.

Fruit processing industry has potentials to generate employment for several millions and add value to the economy in a large measure. Such strategies will create a steady demand for agricultural produce.

Most farmers continue to dispose of the produce at the farm gate soon after harvesting. This practice deprives them of fair price for their produce. They should be guided to process, package and market them through a network of departmental stores.

Most important sector of our economy is agriculture. Success in our economic policies mainly depends on performance of agriculture. Hence concessions to agricultural sector may provide benefits to majority of people in India.
The processes of motorization and diversification of Indian agricultural has to be speeded up. The productivity of most agricultural crops remain lower at 30% than what is achieved by developed economies. Scientific cultivation practices supported by conducive policies of the government will improve productivity an standard of living of the farmers.

CONCLUSION
Fruits have become the part and parcel of human food items. The taste, vitamins, minerals, carbohydrates and ingredients are highly needed for human beings. The efficient marketing of banana improves the health and welfare of the people, growers, agents and related people and hence the growth in this field is highly required. Studies also reveal that the use of fruits in our day to day food will be highest in the near future and hence the marketers have to come forward to market fruit products to the entire satisfaction to the consumers through different methods of marketing.

Consumers may be educated with the use of fruits to enrich their food habits. This marketing field provides tremendous employment facilities and has generated employment in direct and indirect areas. The manufacturers and marketers have to utilize this opportunity to provide better quality fruits to the consumers so that there is consistent and increasing demand for this fruit product in future years.