CHAPTER V

SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

Performance of implementation of crop insurance schemes in India- an analysis, using the primary data was examined and analyzed in the previous chapter. In this chapter key findings, suggestions and conclusion of this research are recapitulated. Based on these findings, suggestions have been proposed for improving the evaluation of crop insurance schemes in Nagapattinam district of Tamilnadu.

5.1 INTRODUCTION

The present study is accomplished in four stages. In the first stage, the demographic profile of the respondents was discussed. In the second stage, information pertaining to the study (type of insurance, type of crop loss, factors when deciding to buy crop insurance, risky factors, level of satisfaction of the (implementation) of Insurance schemes, problems relating to the crop insurance schemes and strategies to improve the crop insurance) were examined at ten different divisions were discussed at two different dimensions and were analyzed. In the third stage, farmers’ satisfaction towards crop insurance scheme, and farmers’ awareness towards crop insurance scheme were discussed in the final stage problems pertaining to the implementation of crop insurance scheme was discussed.
The study is mostly based on primary data. The interview schedules have been prepared on the specific objectives of the study, and they are (i) To study the performance of sample Primary Agricultural Cooperative Credit Societies where the crop loan is issued; (ii) To analyse the role of Primary Agricultural Cooperative Credit Societies in the implementation of crop insurance schemes in Sirkali block of Nagapattinam district; (iii) To analyse the farmers’ awareness towards implementation of crop insurance schemes in Sirkali block of Nagapattinam district; (iv) To identify the problems faced by the farmers relating to the implementation of crop insurance schemes in Sirkali block of Nagapattinam district, and (v) To offer suitable suggestions to improve the implementation of crop insurance scheme in Nagapattinam district. A pilot study was conducted among 50 agricultural farmers in Sirkali block of Nagapattinam district. On the basis of the result of the pilot study, certain modification, addition and deletion had been carried out. Random sampling method was adopted for the study. The study is confined to Sirkali block only. Since the size of universe is infinite, the researcher decided to select a sample size of 500 respondent farmers. The required information was collected with the help of structured and unstructured interviews and through discussions with these respondents.
5.2 SUMMARY OF FINDINGS

The following are the important findings of the study

5.2.1 Insured Farmers in the Crop Insurance in Sirkali block of Nagapattinam district

1. The total number of loanee small farmers in the Agani PACS was 81 farmers in 2008-09 and it increased to 209 in 2012-13 with a CAGR of 20.873 per cent and the total number of loanee big farmers was 53 farmers in 2008-09 which decreased to 34 farmers in 2009-10 and it increased to 114 farmers in 2012-13 with a CAGR of 16.553 per cent.

2. The total number of loanee small farmers in the Kondal PACS was 82 in 2008-09 and it increased to 203 in 2012-13 with a CAGR of 19.877 per cent. In the case of big loanee farmers the number increased from 54 farmers in 2008-09 to 109 farmers in 2012-13 with the lowest of 67 farmers in 2011-12 with a CAGR of 15.081 per cent.

3. The total number of loanee small farmers in the Nimeli PACS was 61 farmers in 2008-09 which increased to 122 in 2012-13 with a CAGR of 14.869 per cent. The total number of loanee big farmers was 41 in 2008-09 which increased to 72 farmers in 2011-12 and it decreased to 67 farmers in 2012-13 with a CAGR of 10.321 per cent.
4. The total number of loanee small farmers in the Vaitheswarankoil PACS was 67 in 2008-09 and it increased to 179 in 2012-13 with a CAGR of 21.718 per cent. As far as the total number of loanee big farmers is covered it was 45 in 2008-09, 119 in 2012-13 and 30 in 2009-10 with a CAGR of 21.469 per cent.

5. The total number of loanee small farmers in the Kathiruppu PACS was 94 in 2008-09 and it increased to 169 in 2012-13 with a CAGR of 12.448 per cent. In the case of total number of loanee big farmers, it increased from 50 to 91 with the lowest of 74 farmers from 2008-09 to 2012-13 with a CAGR of 12.723 per cent.

6. In the case of Semmangudi PACS the total number of loanee small farmers has increased from 67 to 272 from 2008-09 to 2012-13 with a highest CAGR of 32.342 among the PACS in Sirkali block.

7. As far as the total number of loanee big farmers is concerned in semangudi PACS it increased from 44 to 147 farmers with the lowest of 34 farmers from 2008-09 to 2012-13 with a CAGR of 27.283.

8. The total number of loanee small farmers in the Perunthottam PACS was 100 in 2008-09 and it increased to 118 in 2012-13 with a CAGR of 3.366 per cent. The total number of loanee big farmers increased from 66 in 2008-09 to 80 in 2012-13 with a CAGR of 3.922 per cent.
9. In the case of Manigramam PACS the total number of loanee small farmers has increased from 67 to 117 from 2008-09 to 2011-12 and decreased to 89 farmers in 2012-13. With a CAGR of 7.497 per cent. The total number of loanee big farmers was 40 in 2008-09 which decreased to 28 in 2009-10 and it increased in the next year (70 farmers) and again it decreased to 59 farmers in 2012-13 with a CAGR of 8.083 per cent.

10. As far as the Thiruvali PACS is concerned the total number of loanee farmers has increased from 86 to 163 from 2008-09 to 2012-13 with a CAGR of 13.642 per cent. The total number of loanee big farmers has increased from 57 to 109 from 2008-09 to 2012-13 excepting in 2009-10 (43 farmers) with a CAGR of 13.844 per cent.

11. In the case of Poompuhar PACS total number of loanee small farmers has decreased from 288 to 58 during the period 2008-09 to 2011-12 and increased to 90 farmers in 2012-13 with a negative CAGR -20.755 per cent. In the case of total number of loanee big farmers has decreased from 104 to 65 from 2008-09 to 2010-11 than it increased in the year 2011-12 and again it decreased to 86 farmers in the 2012-13 with a negative CAGR of -3.729 per cent. However, the total number of loanee small farmers of PACS in Sirkali Block shows continuous increasing trend from 988 farmers in 2008-09 to 1614 farmers in 2012-13 with a compound annual growth rate of 10.314 per cent. The total number of big farmers in Sirkali Block shows continuous
increasing trend from 554 big farmers in the year 2008-09 to 981 in 2012-13 with a compound annual growth rate of 12.106 per cent. The present study concludes that all the PACS except Poompuhar PACS has increased in their total number of loanee small farmers as well as loanee big farmers during the period of study which is from 2008-09 to 2012-13.

12. The total sum insured under crop insurance of Agani PACS was Rs.48.65 lakhs and it increased to Rs.99.66 lakhs in 2012-13 with the CAGR of 15.421 per cent. The Kondal PACSs total sum insured under crop insurance was Rs.21.46 lakhs in 2008-09 and it increased to Rs.45.00 lakhs in 2012-13 with a CAGR of 15.962 per cent during the period. The Nimeli PACSs total sum insured under crop insurance has increased from Rs.46.63 lakhs to Rs.81.46 lakhs during the period 2008-2013 with a CAGR of 11.803 per cent. The Vaitheswarankoil PACSs total sum insured under crop insurance has increased from Rs.47.48 lakhs in 2008-09 to Rs.96.82 lakhs in 2012-13 with a CAGR of 15.316 per cent. The total sum insured under crop insurance in the Kathiruppu PACS was Rs.23.28 lakhs in 2008-09 and it increased to Rs.41.00 lakhs in 2012-13 with a CAGR of 11.985 per cent during the period. The total sum insured under crop insurance in the Semmangudi PACS was Rs.49.01 lakhs in 2008-09 and it increased to Rs.82.58 lakhs in 2012-13 with a CAGR of 10.998 per cent. The total sum insured under crop insurance of Perunthottam PACS was Rs.14.23
lakhs in 2008-09 and it increased to Rs.55.60 lakhs in 2012-13 with an enormous CAGR of 31.333 per cent. The total sum insured under crop insurance in the Manigramam PACS was Rs.46.48 lakhs in 2008-09 and it increased to Rs.65.38 lakhs in 2012-13 with a CAGR of 7.062 per cent. In the case of Thiruvali PACS the total sum insured increased over the period from Rs.52.00 lakhs to Rs.100.03 with a CAGR of 13.979 per cent. As far as the Poompuhar PACS is concerned the total sum insured was Rs.69.36 lakhs in 2008-09 and it decreased to Rs.32.85 lakhs in 2012-13 with a CAGR of -13.884 per cent during the period of study. It can be concluded that the total sum insured under crop insurance in the Sirkali Block was Rs.418.58 lakhs in 2008-09 and it increased to 650.38 lakhs in 2012-13 with a small decrease of Rs. 413.20 lakhs in 2009-10 and with a CAGR of 9.213 per cent. Moreover, the total sum insured shows that the Perunthottam PACS has the highest CAGR of 31.333 per cent followed by Kondal with 15.962 per cent, Agani with 15.421 per cent, Vaitheswarankoil with 15.316 per cent, Thiruvali with 13.979 per cent, Kathiruppu with 11.985 per cent, Nimeli with 11.803 per cent, Semmangudi with 10.998 per cent, Manigramam with 7.062 per cent and Poompuhar with -13.884 per cent towards the crop Insurance.

13. The claims paid shows that there is no claim paid from 2008-09 to 2010-11 and it 2012-13. The claims are paid only in the year 2011-12 and in this year crops are heavily affected due to Thane cyclone. The
total amount paid was the highest in the Kondal PACS with Rs.41 lakhs followed by Vaitheswarankoil PACS with Rs.32.31 lakhs, Semmangudi PACS with Rs.30.87 lakhs, Thiruvali PACS with Rs.22.46 lakhs, Nimeli PACS with Rs.20.63 lakhs, Kathiruppu PACS with Rs.19.64 lakhs, Agani PACS with Rs.18.91 lakhs, Manigramam PACS with Rs.18.75 lakhs, Poompuhar PACS with Rs.14.87 lakhs and Perunthottam PACS with Rs.1.25 lakhs towards the settlement of claim amount in the crop insurance scheme of Sirkali block.

14. The total number of farmers benefited were the highest in the Kondal PACS with 250 farmers followed by Kathiruppu PACS with 236 farmers, Poompuhar PACS with 221 farmers, Vaitheswarankoil PACS with 204 farmers, Perunthottam PACS with 198 farmers, Agani PACS and Thiruvali PACS each of 192 farmers, Semmangudi PACS with 181 farmers, Nimeli PACS with 176 farmers, and the lowest number of farmers benefited in Nimeli PACS of 172 farmers, in the Sirkali block.

15. There was a growth in the loanee & non loanee farmers covered and area covered by crop insurance during the study period. In 2008-2009 the total farmers covered was only 6927 but it increased to 9541 in 2011-12 and then it declined to 8427 in 2012-13. There was a corresponding increase in area covered and premium paid. In 2011-12 the area under study faced a cyclone and the total claims was Rs.425.73 lakhs
5.2.2 Demographic Profile of the Respondents

1. Out of 500 respondents, 82.20 per cent were male and 17.80 per cent were female.

2. The predominant age group of the respondents (37.60 per cent) is 31 to 40 years and 31.80 per cent of the respondents are 41 to 50 years. The other age group of the respondents is above 50 years which constitutes 25.80 per cent and 20 to 30 years constitutes 4.80 per cent.

3. The majority of the respondents 57.60 per cent are from joint family and 42.40 per cent of the respondents are from nuclear family.

4. The literacy rate of the respondent shows that the majority of the respondent 28.60 per cent are from secondary school level, followed by 27.80 per cent from up to school level, 22.20 per cent are graduates or professional, 16.40 per cent are illiterates and 5 per cent have ITI or diploma or agriculture as their educational qualification.

5. The majority of the respondents family size (51.20 per cent) is 4 to 6 members, followed by 41.60 per cent respondent’s family size is above 6 members and 7.20 per cent respondents family size is up to 3 members.

6. The majority of respondents (45.20 per cent) have monthly income between Rs.50,001 to Rs.1,00,000, followed by respondents of 26.60 per cent have monthly income between Rs.1,00,001 to Rs.1,50,000,
respondents of 16.40 per cent have monthly income of up to Rs.50,000 and 11.80 per cent respondents have monthly income of above of Rs.1,50,000.

7. The farming experience of the respondents shows a good percentage of respondents distributed to all level. Respondents with up to 10 years of farming experience are 19.60 per cent. Respondents with 11 to 20 years of experience is 26.40 per cent, respondent with 21 to 30 years of experience is 31.60 per cent and respondents with more than 30 years of experience is 22.40 per cent.

5.2.2.1 Farmers’ Perception towards Crop Insurance Scheme Implemented

1. Majority of the respondents have irrigated and unirrigated own land consists of 86 per cent of own land and lease land consists of 9.40 per cent and hypothecation land consists of 4.60 per cent of the respondents.

2. The crop loss experienced by the respondents shows highest average acceptance score of 3.95 for floods, followed by drought with acceptance score of 3.65, cyclone with acceptance score of 3.50, and least acceptance score for other losses (mean 1.35) such as spurious seeds, power problems, irrigation problems, and poor fertility of land etc., in the Sirkali block of Nagapattinam district.
3. The calculated t value 3.390 (Drought), 4.514 (Floods), -8.208 (Cyclone), 2.649 (Pests and Diseases), -3.382 (Canals or River Overflow) and 2.756 (Others) is significant at 5 per cent level. Therefore, the formulated hypothesis “there is no significant difference between experience and crop loss of the respondents” is rejected.

4. The season and crops are affected of the respondents shows that 75.20 per cent are highly affected in the Rabi season, 20.40 per cent in both seasons and 4.40 per cent in Kharif season.

5. All the respondents are insured in the National Agriculture Insurance Scheme in Sirkali block.

6. The information that the crop insurance is mandatory one when availing crop loan is known to most of the respondents (89.40 per cent) and only 10.60 per cent not aware the scheme.

7. In satisfaction by the service providers to the respondents, Primary Agriculture Co-operative Credit Societies have high mean score of 4.49, followed by NGOs, rural agent door step, rural agent at village level and other category of service providers with respective mean score of 3.88, 3.60, 3.33, and 2.85. The least score is for post office (2.74) and Self- Help Groups with mean score of 2.62 from the respondents in the insurance scheme.
8. The crops covered shows the highest numbers of respondents are satisfied 36.60 per cent and least of highly dissatisfied with 2 per cent in the implementation of the crop insurance.

9. The respondents are highly dissatisfied with mechanism for grievance redressal.

10. There is no significant different between the experience and satisfaction of area approach, sum insured, indemnity level, premium rate, documentation, type of risk covered, protection against crop loss, timing of settlement and claims grievances redressed and intermediately responsiveness of the crop insurance implemented.

11. However, there is significant difference observed between experience and explanation of insurance policy (t value 2.635), coverage of crops insurance (3.439), premium collection procedure (-3.930), facilities available at financial institution (3.164), and claim procedure (-1.341). Variables are significant at 5 per cent level and hence the formulated hypothesis “there is no significant different between the experience and satisfaction of the (explanation, coverage of crops, premium collection procedure financial institution facilities and claim procedure) crop insurance implemented” is rejected.

12. The mean value indicates that the respondents highly aware the agriculture insurance scheme through television, newspapers magazine etc. and radio programs.
13. The calculated F value for the variables such as workshops training by insurance company (40.443), radio programs (19.901), grama sabha (16.724), road shows (4.004), film shows in the village (6.298), kisansabhas (6.221), and television (6.367) are significant at 5 per cent level. Therefore the formulated hypothesis that there is no significant difference between experience of the respondents and the awareness level of the crop insurance scheme is rejected. However, there is no significant difference observed between experience and village melas (1.188), advertisement in newspaper magazine (.202) towards the awareness level of the insurance scheme is accepted.

14. The highest risk corps among the respondents is banana with highest acceptance score of 4.31 followed by pulses, cotton, groundnut and paddy with respective mean score of 4.27, 4.10, 4.01 and 3.95 of the respondents. The moderate level of cultivation risks is in sugarcane, chillies, gingili, other crop and other cereals of the respondents. The low mean score is for ragi, cumbu, and cholam, with respective mean score of 2.71, 2.70, and 2.60.

15. The t values of the cultivation risk in banana has the highest value of 208.45 and the lowest value is for gingili with 69.90.

16. The highest problem in the crop insurance scheme is with premium rates which is higher with mean score of 4.45 followed by delayed payment of compensation, settlement of the claims is a time taking
process, and the least score for being a non-contract farmer, they were unable to avail crop insurance with mean score of 2.54.

17. The calculated F value of 25.228 (problems in the premium rates), 13.568 (insurance policies complex paper work), 19.552 (problem in maintaining the cash receipt), 11.716 (premium and Indemnity disproportionate), 24.519 (delayed compensation), 3.990 (non contract farmer unable to avail crop insurance), 4.413 (lack of information about insurance policies) and 48.773 (details about weather insurance scheme not known) is significant at 5 per cent level. Therefore the formulated hypothesis that there is a significant difference observed between problems in the crop insurance scheme is rejected except in settlement is a time taking process is accepted.

18. Among the cultivation problems of the respondents the highest problem is the water scarcity and drought and the least problems are the irrigation, spurious seeds, loss due to livestock, poor fertility of land and non-availability of inputs.

19. The strategies to improve the crop insurance implemented had it cover the market risk and early settlement of compensation,
5.2.3 FACTOR ANALYSIS

5.2.3.1 Satisfaction Level of Crop Insurance Implemented

The factor analysis shows that there are six components towards the satisfaction of the crop insurance scheme implemented. The first factor shows strong loadings on the first five factors which are types of risk covered (-0.748), facilities available at financial institution (0.739), documentation (0.649), coverage of crops insurance (0.645) and explanation of Insurance policy (0.546). The second factor shows loading on second four items which are area approach (0.623), responsiveness of intermediary (0.626), claim procedure (-0.591) and mechanism for grievance redressal (0.551). The third factor loading one item which is timing of settlement and claims (0.739) and the fourth factor shows premium rate (0.788). The fifth factor shows three factors such as sum assured (-0.623), protection against crop losses (0.579) and premium collection procedure (0.455). The last factor shows indemnity level (0.537) as less statistical significance in the satisfaction of the crop insurance implemented. The negative loading indicates not significant. A positive loading indicates that greater the value of the variable, greater is the contribution to the factor. On the other hand, a negative loading implies that greater the value, lesser its contribution to the factor or vice versa.
5.2.4 Problems of Crop Insurance Scheme Implemented

The problems in the crop insurance implemented through factor analysis shows the strong loadings on four factors which are settlement of the claims is a time taking process (0.676), premium and indemnity rates are disproportionate (-0.651), the premium rates are higher (-0.650) and the insurance policies have complex paper work (0.565) are statistically significant.

5.2.5 Problems in the Crop Cultivation

The first factor shows the strong positive loadings on the first three items, which are low price of the products (0.673), pest and diseases (0.628), and irrigation problems (0.529) that are statistically significant.

5.2.6 Strategies to Improve the Scheme

Among the strategies to improve the crop insurance scheme the first factor shows strong loadings on the first three items which are loss assessment to individual (0.694), early settlement of compensation (-0.657) and loss assessment by group of various experts (0.598) as they are statistically significant.
5.3 SUGGESTIONS

Based on the above findings the following suggestions are made to improve the implementation of crop insurance schemes in Nagapattinam district of Tamil Nadu.

1. Coverage of farmers, particularly small, marginal and big farmers and landless agricultural workers, under a comprehensive national social security scheme, is essential for ensuring livelihood security. Such a scheme should take care of expenses up to a ceiling for hospitalization in case of illness of a family member, maternity, life insurance and old age pension.

2. As there is a close relationship between the crop loss and extent of utilizing crop insurance, it is suggested that:

   a) The crop loss assessment based on threshold/average yield data of various indemnity levels as followed, at present, should be rationalized based on best five years out of preceding seven years yield data.

   b) Post-harvest losses on account of cyclone are to be covered in coastal areas for a period of two week from harvesting, provided the harvested crop is lying on the field. An individual assessment of claims should be carried out in case of specified localized calamities such as hailstorm, landslide and damage due to wild animals.
3. The study reveals that the natural calamities have a direct effect on agricultural production and is positively related to crop insurance. In order to minimize the loss due to natural calamities, proper drainage should be made by repairing the canals, and rivers. In case of flood and inundation and to avoid drought and dry spells, the existing tanks, ponds, and lakes should also be renovated to store water.

4. Most of the farmers say that the crop insurance scheme is governed by excessive rules and regulations is not easily understandable, and the formalities involve long time. In order to avoid these problems, the authorities should frame user friendly rules and regulations having in mind the illiterate mass of the farming community.

5. The farmers are of the opinion that the premium collected is very high. The premium on annual commercial/horticulture crop which is calculated on the actuarial rates is very high. This high rate together with interest is unaffordable by the farmers with the result that they are not inclined to avail the financial assistance from banks and ultimately were not able to derive the benefits of the scheme. Therefore, the Government should reduce the premium rate on annual commercial/horticulture crops to the possible extent.
6. The farmers compensate the crop loss mostly through the sale of livestock and through borrowings. Hence, extending livestock insurance cover wherever applicable may be vigorously pursued by the Government in order to prevent the evil effects of borrowings by the farmers, which lead to suicide in some cases as reported by newspapers.

7. The level of satisfaction of the farmers regarding crops covered, area covered, crop loss adjusted, premium rates, subsidies, settlement of claims and loss assessment shows the most unfavourable attitude in this study. Hence, it is suggested that:

   a. Crops of selected areas right from sowing to post-harvest operations should also be under crop insurance purview and also cover the market risks for all crops throughout the country. The scope of agricultural insurance policies should become wider and as far as possible, in all field.

   b. Annual crops, commercial/horticulture crops, medical crops, agricultural allied activities like aquaculture, animal husbandry and poultry and so on, should be included in the ambit of the scheme.
8. Regarding settlements of claims, it is suggested that;

a. Since the claim involves complaints from farmers, the data entry and processing of insurance claims may be computerized and the claims may be settled and disbursed within the stipulated time. As far as possible, steps may be taken to settle the claims before the start of the next season so that the farmers can prepare for the next cultivation.

b. Disputed claims might be referred to the redressal cell for the settlement. While referring the case to such cell, all the facts and documents may be submitted to it, so that the disputes could be resolved expeditiously.

9. The scheme should be extended to all types of farmers including landless, share croppers and tenant farmers.

5.4 CONCLUSION

Agricultural crop insurance in future is likely to be largely demand driven. The efforts of the Government to support and finance insurance products and facilitate congenial environment as meaningful risk management tool would further enhance the potential and credibility of agricultural crop insurance. Also there is a need to develop calamity mitigation strategies and risk bearing mechanisms. Natural calamities cannot be eliminated, but their impact can be reduced through implementation of pro-active and pro-poor risk management policy programmes. Rather than treating the natural
calamity as a natural disaster that warrants emergency actions whenever it strikes, in country like India, where agriculture is the main source food activity, could alter its policy to embrace natural calamity as an integral part, and existing policies covering the crop loss could be made full receptive and adaptive to the farmers’ expectations.

The researcher has made a sincere attempt to analyze the extent of utilization of crop insurance by the farmers (loanee and non loanee) through Primary Agricultural Cooperative Credit Societies in Sirkali block of Nagapattinam district of Tamilnadu and to identify the causes for their problems. On the basis of the results of the study, the researcher has made some definite suggestions to the Government and the implementing agencies. The researcher earnestly hopes that if all the suggestions are implemented not only in the study area, but throughout the nation, the problems faced by the farmers in the utilization of the crop insurance can be reduced to some extent.

5.5 SCOPE FOR FUTURE DIRECTIONS


3. A Study on the farmers Awareness and attitude towards Crop Insurance Schemes in Tamilnadu.