CHAPTER - VIII

SUMMARY OF FINDINGS AND CONCLUSION

Green Revolution paved the way for introduction of chemical farming and the use of pesticides which diminished drastically the number of beneficial organisms in the field over a period of time. Insects also developed resistance to pesticides. Moreover, the chemical pesticides and fertilisers polluted the natural environment in various ways, causing a lot of health hazards. The fertility of soil was also affected to a great extent. The only solution to these myriad problems is to revert to organic methods of cultivation. Organic farming, however does not mean going ‘back’ to traditional methods, it takes the best of these and combine them with modern scientific knowledge. Organic farmers have to use all the knowledge, techniques and materials available to work with nature. In this way, organic farming seeks a healthy balance between nature and farming, where crops and animals can grow and thrive.

After realising the evil effects of modern commercial farming, more and more farmers are coming forward to take up organic farming. In this study the organic farming practices of the farmers who are also members of self help groups are taken in to consideration for in-depth study with following objectives:

i. To study the organic farming practices followed in the study area.

ii. To assess the socio-economic status of the Self Help Group (SHG) members practicing organic farming.
iii. To examine the factors influencing the SHG members to practice organic farming.

iv. To understand the perception of the SHG members about organic farming.

v. To analyse the problems and prospects of organic farming practiced by the SHG members.

Tirunelveli district was selected for this study as it enjoys the benefit of the perennial river Tamirabarani which flows throughout the year and conducive for organic cultivation. The primary data required for the study was collected from a total of 200 SHG members who are practicing organic farming in Tirunelveli district by using a structured interview schedule developed for the purpose of the present study.

SOCIO-ECONOMIC STATUS OF THE SHG MEMBER-FARMERS

- Regarding the age of the respondents, majority (80 per cent) of them are in the age group of 41 – 60 years; and among them 46% are in the age group of 41 – 50 years.

- As regards the gender of the respondents, 69 per cent of the respondents are males and the remaining 31 per cent of the respondents are females.

- Among the respondents, half (51 per cent) of them belong to Backward Castes.

- Majority (71 per cent) of the respondents are Hindus.

- Majority of the respondents (79.5 per cent) are married.

- As regards the type of family, three-fourth (76 per cent) of the respondents are living in nuclear family.
The study reveals that 77 per cent of the respondents have studied beyond Primary schooling level.

The study reveals that 60.3 per cent of the respondents are having 3-4 children and another 19 per cent of them are blessed with 5-6 children.

Majority of the respondents (72 per cent) are having large size families with 6 and above members.

As many as 71.5 per cent of the respondents live in own house.

Two-third (65.5 per cent) of the respondents are living in tiled house; another 24 per cent of them are living in terraced house.

As many as 84 per cent of the respondents are having toilet facility in their house.

Majority of the respondents (72.0 per cent) are having annual family income between Rs. 100000 to Rs. 200000; another 10 per cent of them are having annual family income of above Rs.200000.

All the respondents of the study have taken loan and yet to clear the dues against their credit account.

Regarding the period of membership in SHG, nearly two-third of the respondents (64.0 per cent) has been with SHGs for more than 5 years.

About half of the respondents are regularly involved in the activities of the SHGs. Another 39 per cent of the respondents are involving themselves very actively in the SHG activities.

Regarding the land use, as many as 71.0 per cent of the respondents are using up to one acre land for organic farming.

As many as 91 per cent of the respondents are practicing organic farming for less than 6 years now.
• About half of the respondents (49 per cent) have been cultivating food crops and another 43 per cent of them are cultivating vegetables under organic farming.

• Regarding the sources of irrigation 36 per cent of the respondents are using tanks and ponds while another 32 per cent of them are using river water for their organic crops.

• Regarding the ownership of cattle, as many as 58 per cent of the respondents own cattle.

• More than one-third (36 per cent) of the respondents are having bullock cart and 32.5 per cent of them are having plough bulls. Another 11 per cent of them have tractors.

• Majority of the male respondents were motivated to go for organic farming mainly by the awareness programmes conducted by the SHGs and the success stories of other organic farmers, while for the female respondents the dominant motivating factors are the awareness programmes conducted by the SHGs and NGOs.

• Regarding the motivation for practicing organic farming significant difference among the male and female respondents have been noticed.

• Regarding the motivation for practicing organic farming, significant difference among various age groups of the respondents have been noticed.

• Regarding the respondents view on various sources of motivation significant difference among the levels of education have been noticed.

• Regarding the SHG members' views about the organic farming, significant differences among the male and female respondents have been noticed.
SIGNIFICANCE OF THE RESPONDENTS’ SOCIO-ECONOMIC STATUS

- There is an association between the levels of perception of the respondents and their age, caste status, family type, marital status, level of education, annual family income, period of membership in SHG, nature of membership in SHG and participation in SHG activities.

SIGNIFICANCE OF THE LEVEL OF PERCEPTION AND THE INITIATIVES TAKEN BY SHGS TO PROMOTE ORGANIC FARMING

- There is an association between the levels of perception of respondents and the initiatives taken by SHGs to promote organic farming, size of land under organic cultivation, duration of organic cultivation and motivation for practising organic farming.

DISCRIMINANT FACTORS AMONG MALE AND FEMALE RESPONDENTS

- The significant mean differences are noticed in the case of cost of inputs and preparation of land, soil health and productivity, weed management and environmental protection.

- The important discriminant influencing factors are ‘cost of inputs and preparation of land’ and ‘soil health and productivity’.
ASSOCIATION BETWEEN THE RESPONDENTS’ PROFILE AND
THE FACTORS INFLUENCING ORGANIC FARMING

- The significantly associating profile variables with the ‘Cost of input and Preparation land’ factor are gender, age and family income.
- The significantly associating profile variables with ‘soil health and productivity’ factor is ‘gender’ and ‘age’.
- The significantly associating profile variables with the factor ‘biological pest control’ are gender, age, marital status and family income.
- Regarding the factor ‘weed management’, the significantly associating profile variable are gender, age and marital status.
- Regarding ‘food sufficiency and livelihood’ the associating profile variable are gender, age, marital status, and family income.
- The significantly associating profile variables with the factor ‘environment protection’ are gender, age, marital status and family income.

ASSOCIATION BETWEEN FACTORS INFLUENCING ORGANIC FARMING AND RESPONDENTS ASSOCIATION WITH SHGs

- Regarding the respondents’ ‘membership in SHG’, the significantly influencing organic farming factors are ‘soil health and productivity’ and ‘food self sufficiency and livelihood’.
- Regarding respondents’ ‘nature of membership’ the significantly influencing organic farming factors are ‘soil health and productivity’ and ‘Biological pest control’.
- Regarding the respondents’ ‘regularity of participation in SHG activities’, the significantly influencing organic farming factors are ‘Cost of inputs
and preparation of land’, ‘soil health and productivity’ and ‘biological pest control’.

ASSOCIATION BETWEEN THE FACTORS INFLUENCING ORGANIC FARMING AND INITIATIVES TAKEN BY THE SHGs FOR THE PROMOTION OF ORGANIC FARMING

- Regarding the SHGs initiatives for organising awareness meeting among the farmers, the significantly associating factors influencing organic farming are ‘Cost of inputs and preparation of land’, ‘Soil health and productivity’ and ‘Food self sufficiency and livelihood’.

- Regarding the SHGs’ initiatives for conducting organic farming training, the significantly associating factors influencing organic farming are ‘cost of inputs and preparation of land’, ‘soil health and productivity’ and ‘biological pest control’.

- Regarding the SHGs’ initiatives for organising field visit to organic farms, the significantly associating factors influencing organic farming are ‘cost of inputs and preparation of land’, ‘soil health and productivity’ and ‘biological pest control’.

- Regarding the SHGs’ initiatives for promoting traditional seed bank, the significantly associating factors influencing organic farming are ‘soil health and productivity’, ‘weed Management’ and ‘environmental protection’.

- Regarding the SHGs’ initiatives for the promotion of organic fertilizers and pesticides, the significantly associating factors influencing organic farming are ‘cost of inputs and preparation of land’, ‘soil health and productivity’ and ‘biological pest control’.
PROBLEMS OF ORGANIC FARMING

- The highly viewed problems are ‘lack of awareness about bio-fertilizers and bio-pesticides’ and ‘lack of knowledge on compost making using modern techniques and also its application’, ‘lack of training to the farmers to make vermi compost on the modern lines’, ‘Non-availability of bio-mass in all the places throughout the year’ and ‘organic inputs are not available in required quantities’.

ASSOCIATION BETWEEN THE RESPONDENTS’ PROFILE AND THEIR VIEWS ABOUT THE PROBLEMS RELATING TO ORGANIC FARMING

- The significantly associating profile variables in relation to ‘lack of awareness’ are age, level of education and family income.
- The significantly associating profile variables in relation to ‘shortage of bio-mass’ are ‘gender’, ‘level of education’ and ‘family income’.
- The significantly associating profile variables in relation to ‘high input costs’ are ‘gender’, age and ‘family income’.
- Regarding the problem ‘low yield’, the significantly associating profile variable are ‘gender’, ‘age’ and ‘level of education’ whereas in the case of problems relating to ‘lack of quality standards for bio-manures’ the associating profile variable are ‘age’, ‘level of education’, and ‘family income’.
- The significantly associating profile variables in relation to ‘inadequate supporting infrastructure’ are ‘age’, ‘level of education’, and ‘family income’.
• The significantly associating profile variables in relation to ‘marketing of organic produce’ are ‘gender’, ‘age’, ‘level of education’, and ‘family income’.

• The significantly associating profile variables in relation to ‘financial problems and inadequate financial Support’ are ‘gender’ and ‘family income’.

• Regarding the problem ‘political and social issues’, the significantly associating profile variable are ‘gender’, ‘age’, ‘level of education’ and ‘marital status’.

• The significantly associating respondents’ perception about organic farming in relation to ‘lack of awareness’ are crops, organic fertilizers and pesticides and government encouragement.

• The significantly associating respondents’ perception about organic farming in relation to ‘shortage of bio-mass’ are soil and environment, organic fertilizers and pesticides and government encouragement’.

• The significantly associating respondents’ perception about organic farming in relation to ‘high input costs’ are soil and environment and organic fertilizers and pesticides.

• Regarding the problem ‘low yield’, the significantly associating respondents’ perception about organic farming are soil and environment, crops and organic fertilizers and pesticides, marketing of organic products whereas in the case of problems relating to ‘lack of quality standards for bio-manures’ the associating perception variable are organic fertilizers and pesticides and marketing of organic products.
• The significantly associating perception variables in relation to ‘inadequate supporting infrastructure’ are organic fertilizers, marketing of organic products and pesticides and government encouragement’.

• The significantly associating perception variable in relation to ‘marketing of organic produce’ are organic fertilizers, marketing of organic products and pesticides and government encouragement’.

• The significantly associating perception variables in relation to ‘financial problems and inadequate financial Support’ are marketing of organic products and government encouragement’.

• Regarding the problem ‘political and social issues’, the significantly associating perception variables are soil and environment, crops, marketing of organic products and government encouragement’.

MEASURES TO INCREASE THE PROSPECTS OF ORGANIC FARMING FROM THE RESPONDENTS’ PERSPECTIVE

• The highly viewed measures for increasing the prospects for organic farming are ‘promotion of Farmer Producer Organisation (FPO) for improved access to investments, technology, inputs and markets’ and ‘Imparting skills to the farmers on the techniques of post-harvest management, processing, value addition and grading through capacity-building programmes’.

• Regarding the views of SHG members who are practicing organic farming towards the measures to be taken for increasing the prospects of organic farming, significant difference among the male and female respondents have been noticed in the case of five out of ten variables.
ASSOCIATION BETWEEN THE RESPONDENTS’ PROFILE AND THEIR VIEWS ABOUT THE MEASURES FOR INCREASING THE PROSPECTS OF ORGANIC FARMING

- The significantly associating profile variables in relation to ‘imparting skills’ are gender, age and level of education.

- The significantly associating profile variables in relation to ‘development of infrastructure facilities’ are ‘gender’, ‘level of education’ and ‘family income’.

- The significantly associating profile variables in relation to ‘formation of commodity groups / clusterisation of growers’ are ‘gender’, ‘age’ and ‘family income’.

- Regarding the measures to increase the prospects of organic farming relating to ‘curtailing the post harvest losses’, the significantly associating profile variable are ‘gender’, ‘age’ and ‘level of education whereas in the case of measures to increase the prospects of organic farming relating to ‘rendering services to farmers’ the associating profile variable are ‘gender’, ‘age’, ‘level of education’, and ‘family income’.

- The significantly associating profile variables in relation to ‘promotion of Farmer Producer Organisation’ are ‘gender’, ‘age’ and ‘level of education’.

- The significantly associating profile variables in relation to ‘promoting the role of private players’ are ‘gender’, ‘age’ and ‘level of education’.

- The significantly associating profile variables in relation to ‘disseminating the dynamic and forecasted market price information’ are ‘gender’, ‘age’ and ‘family income’.


Regarding the measures to increase the prospects of organic farming relating to ‘sensitizing the farmers to adopt market-led agriculture’, the significantly associating profile variable are ‘gender’, ‘age’, ‘level of education’ and ‘marital status’.

ASSOCIATION BETWEEN THE RESPONDENTS’ PERCEPTION ABOUT ORGANIC FARMING AND THEIR VIEWS ABOUT THE MEASURES FOR INCREASING THE PROSPECTS OF ORGANIC FARMING

- The significantly associating respondents’ perception about organic farming in relation to ‘imparting skills’ are soil and environment, organic fertilizers and pesticides and government encouragement.
- The significantly associating respondents’ perception about organic farming in relation to ‘development of infrastructure facilities’ are organic fertilizers and pesticides, marketing of organic products and government encouragement.
- The significantly associating respondents’ perception about organic farming in relation to ‘formation of commodity groups / clusterisation of grower’ are crops, marketing of organic products and Government encouragement.
- Regarding the problem ‘curtailing the post harvest losses’, the significantly associating respondents’ perception about organic farming are crops and marketing of organic products whereas in the case of measures to increase the prospects of organic farming relating to ‘rendering services to farmers’ the associating perception variable are organic fertilizers and pesticides, marketing of organic products and government encouragement.
The significantly associating perception variables in relation to ‘promotion of Farmer Producer Organisation’ are organic fertilizers, marketing of organic products and pesticides and government encouragement.

The significantly associating perception variable in relation to ‘promoting the role of private players’ are organic fertilizers, marketing of organic products and pesticides and government encouragement.

The significantly associating perception variables in relation to ‘disseminating the dynamic and forecasted market price information’ are marketing of organic products and government encouragement.

Regarding the problem ‘sensitizing the farmers to adopt market-led agriculture’, the significantly associating perception variables are crops, marketing of organic products and government encouragement.

SUGGESTIONS

- As majority of the farmers get motivated to organic farming by the awareness programmes conducted by SHGs and NGOs, it is useful to intensify the awareness campaign among the farmers.

- SHGs and NGOs should also impart skills to the organic farmers on the techniques of post-harvest management, processing, value addition and grading through capacity-building programmes.

- The association between the perception on organic farming and the respondents’ level of involvement with the SHGs activities throws light on the thrust to be given to strengthen the SHG activities for enhancing the perception of farmers about organic farming.

- As there is a significant positive association of factors leading to organic farming on the perception of organic farming and motivation for practicing
organic farming among the SHG members, the SHGs must enhance the motivation activities among the members and other small and marginal farmers.

- Necessary steps need to be taken to introduce quality standards for bio-manure. The basic rules and regulations for accreditation and certification of organic products are to be put in place in India.

- Alternatives for organic soil nutrients like vermi-composts and bio-fertilizers are made available to increase the bio-mass. Low cost technologies to be developed to produce large quantities of these nutrients such as vermi-composting and bio-fertilizer so as to increase the supply of organic manure to meet the demand.

- High input cost is addressed by developing simple technologies with low input for the use of dry farming for organic cultivation. The resulting increases in productivity and sustainability contribute to the betterment of economic condition of dry land farming community.

- Market for the organic products is a crucial factor to promote domestic sales. Supplies do not match the demand for organic products and the absence of proper links between the two has been detrimental for the steady growth of organic farming. An important role of the government in this direction will ensure necessary support in coming together of the both producer as well as the consumer in dealing with organic products.

- The organic producer must be encouraged to get accredited for inspection and certification in a hassle-free manner. They can also have own standards and even symbols. This may also reduce the costs of certification besides the simplification of the process. A vigorous campaign to highlight
the benefits of organic farming against the conventional system is essential to increase the awareness of the farmers as well as consumers.

- Substantial financial support by the Governments (Central and state) and co-operative societies is absolutely necessary to promote organic farming. It is to be remembered that a major factor behind the progress made by the major countries involving in organic farming has been very liberal subsidies provided by the Governments.

- Given the low risk-bearing capacity of the organic farmers, the need to make the organic farming an attractive proposition at least during the initial period where the prospect of loss of productivity for some time looms large and the non-existence of marketing channels for organic produces the financial support must be adequate.

- Organic agriculture needs to be supported by full compensation both in cash and kind in the event of loss of production by introducing crop insurance scheme at free of cost.

- A fair, quick and efficient delivery system for such assistance, perhaps by keeping the government bureaucracy at a distance, should also be in place beforehand.

- The promotion of organic farming will improve the social benefits like generation of rural employment, arrest urban migration, improved household nutrition, local food security and reduced dependence on external inputs in addition to environment at protection and the consequent increase in the quality of human life.
The organic food stuff apparently has its roots in the philosophy of life i.e., natural products are good, whereas man-made chemical mixed stuff are not, or at least not as good as natural ones. This partially explains why organic farming avoids the use of synthetic fertilisers and pesticides. Certainly, organic farming has many benefits ranging from reduced environmental pollution to increased soil quality which ultimately open the doors for healthy life on earth. Organic farming deserves to be supported for a more productive, prosperous, sustainable and supportive future.