

An assessment of socio– economic effect of tiruchengode agricultural producers cooperative marketing society with reference to namakkal district in tamil nadu (tcms): An empirical study

Dr.S.Velanganni

*Assistant Professor, PG and Research Department of Cooperation
SRMV College of Arts and Science, Coimbatore- 20, Tamil Nadu, India.*

Abstract: Marketing societies have been creating, maintaining and enhancing the economic development among the community. They seek to raise agricultural output, create employment and eradicate poverty by providing market accessibility to farm producers, securing reasonable and remunerative prices, supplying adequate inputs like seeds, fertilizers, pesticides, agricultural implements at reasonable prices, implementing effective linking of credit with marketing, distributing consumer articles at reasonable prices through fair price shops, etc. They help to promote the growth and development even in the most remote rural areas. An attempt is made to analyze the demographic indicators (age, gender, education, community and family size), social indicators (social participation, exposure to mass media and contact with change agents) and economic indicators (occupation, family annual income, assets, size of land holdings and debts) influencing individuals. As regards to farmers categories, big farmers have high perception towards the economic contributions of marketing cooperatives, farm income, assets, occupation, knowledge about cooperative management, and participation in cooperative management have greatly effected to realize the economic contributions of marketing cooperatives. Thus the marketing cooperatives in the study area have made imprints on the economic lives of the farming community in the region. This study indicates the existence of significant level of differences among farmers in their socio, economic profile as well as cooperation indicator variables such as knowledge about cooperative, cooperative management and services availed from cooperatives

Keywords: Demographic, economic, social indicators, farmers perception and economic contribution

1.1. INTRODUCTION

‘Change’ is universal, inevitable, indispensable and never ending process. Change is the order of the day. Most of the times changes occur due to the influence of external forces namely change agents. The human urge for change is largely conditioned by the socio-economic, cultural and psychological factors governing the individuals called internal forces. Change in individual is the resultant effect of the fusion of external and internal forces. Cooperatives as

change agents, strive at bringing desired change among people by intensifying their innate feeling of urge for change. This process however, is affected by the social, economic and such other factors which influence individuals in the community. It is therefore, necessary to analyze and understand the socio-economic factors that influence the people who are involved either directly or indirectly in the development process of the cooperatives. What is the socio economic background of farmers of cooperatives? Are there differences in the socio-economic background among farmers? What are their cooperative characteristics? Are there differences in their cooperative characteristics? Similarly are there relationships between socio, economic characteristics and the cooperative characteristics of farmers? An analysis on these and other issues revolving around the socio-economic conditions of farmers will serve as a backdrop to enable for the further assessment of the socio-economic impact of cooperatives. Hence this Study. In this section, an attempt is made to analyze the demographic indicators (age, gender, education, community and family size), social indicators (social participation, exposure to mass media and contact with change agents) and economic indicators (occupation, family annual income, assets, size of land holdings and debts) influencing individuals.

1.2. STATEMENT OF THE PROBLEM

Agricultural marketing includes all those activities, arrangements and preparations which help the farmers in the disposal of the farm products. In fact, the process of marketing is more difficult than that of production (*Hajela, 1994*). Under the prevalent system of agricultural marketing, an individual producer can hardly stand to the exploitative measures of intermediaries. Thus promotion of cooperative marketing deserves high priority not merely because cooperative marketing is desirable as such, but also because it is an essential pre-requisite for the large-scale expansion of cooperative credit (*Singh, 2000*). The cooperative marketing societies assist the farmer members to secure reasonable prices for their agricultural produces. They function as a bridge between producers and consumers. Bestowing remunerative price and better services in turn help to generate myriad employment opportunities and improve the living standard of members.

Marketing societies have been creating, maintaining and enhancing the economic development among the community. They seek to raise agricultural output, create employment and eradicate poverty by providing market accessibility to farm producers, securing reasonable and remunerative prices, supplying adequate inputs like seeds, fertilizers, pesticides, agricultural implements at reasonable prices, implementing effective linking of credit with marketing, distributing consumer articles at reasonable prices through fair price shops, etc. They help to promote the growth and development even in the most remote rural areas. The Agricultural Producers' Cooperative Marketing Societies (APCMSs) stress their emphasis on business retention by enhancing and strengthening the volume of their business in input supply and output marketing. They also undertake business expansion activities like processing, distribution of consumer goods (under both Village Shop Program and Public Distribution System). Further, they focus their attention on encouraging the growth of all new businesses in the region. Thus, it is evident that APCMSs promote economic development in the region in general and among the

farmers in particular. With this broad context in view, an attempt is made to understand the nature and extent economic impact brought by APCMSs from the peoples' view point. Do the people realize the economic developments caused by APCMSs in the region? Have the APCMSs brought perfection in the agricultural producers marketing system? Do they serve better by holding the price line of farm produces in the region? Have they contributed for increased farm production? Do the people realize that the APCMSs have contributed for occupational stability by augmenting the farm income? If so, whether the APCMSs have contributed for better farming, better business and better living among farm producers or not? These and other such issues are addressed through field enquiry enabling for understanding the economic impact of Agricultural Cooperative Marketing Societies in the state. Hence in this study.

1.3. REVIEW OF LITERATURE

Perusal of documents, literatures and records available on the selected topic evidences that several studies have been conducted in the field of agricultural marketing in general and the agricultural cooperative marketing in particular over years. Many research institutions, researchers and academicians have brought out a huge number of research studies on the topic under reference. In addition, the government also conducted a number of studies since pre-independence era. Some such studies / research works are reviewed and summarized here.

Royal Commission on Agriculture (1928) remarked that the obstacles and malpractices in the agricultural marketing system were well known. The marketing malpractices were regarded as nothing less than scientific theft. **All India Rural Credit Survey Committee (1954)** among other facets, had observed the limited role of marketing cooperatives especially in the disposal of marketable surplus of members and more domination of commission agents and the indispensable need for the integrated rural credit with marketing, storage and warehousing development for agricultural produces in the cooperative marketing sector. **The National Cooperative Union of India (1964)** had appointed a committee on cooperative processing. It had identified the diverse problems in processing as a crucial issue for efficient marketing and also suggested the need for undertaking processing activity as an additional function by marketing cooperatives themselves. **Dantwala Committee on Cooperative Marketing (1966)** listed series of defects such as lack of poor organization among the farmers, forced sale of farm produces at village level, superfluous middlemen, multiplicity of market charges, improper weights and measures, adulteration and mixing, inadequate transport, storage and grading facilities, poor information and communication, delayed payment of sale proceeds, large samples taken away by buyers at free of cost, lack of credit facilities and several other defects and malpractices prevailing in the agricultural marketing system. A vibrant and vivacious marketing organization of a formal and an institutional marketing i.e., a cooperative way of marketing organization assumed a greater importance. **Government of India on Cooperative Marketing and Processing (1961)** tried to evaluate the performance of cooperative marketing societies on the basis of the opinions and responses gathered from the members. The evaluation pointed out that the need for suitable managerial personnel, inadequate support to primaries by apex organizations and scanty resources for making outright purchases were major weaknesses of

primary cooperative marketing societies. **National Cooperative Union of India (1963)** in its report of the All India Seminar on with reference to marketing of agricultural produce had drawn attention to the cruxes of cooperative marketing societies and marketing of agricultural produces. It had emphasized the need for standardization and grading of agricultural produces, strengthening of organizational and functional aspects of cooperative marketing. In addition, it had stressed the need for the provisions of technical assistances and necessary training to the marketing personnel. **A Study Team in Cooperatives (1965)** examined the working of primary cooperative marketing societies and their actual performance in Thanjavur District. It has projected the vital need for improvements in overall working in order to obtain more marketing-share in the disposal of the principal crops like paddy, groundnut and pulses. It is relatively an old study and it has probed the working aspects in a descriptive manner without much of statistical analysis. The primary data were not used. **Dantwala Committee (1966)** published a study report on the working of cooperative marketing societies in India. The study emphasized the pattern of development with particular reference to inter-relationship between the organisations at different levels for the successful working of credit and marketing cooperatives, integration of credit with cooperative marketing and processing as well and an effective role of cooperative marketing societies in linking of credit with marketing. **The National Cooperative Development Corporation (1966)** had appointed a committee on cooperative processing. It had identified the diverse problems in processing as a crucial issue for efficient marketing and also suggested the need for undertaking processing activity as an additional function by marketing cooperatives themselves. **Marimuthu M. (2010)** made an attempt to review about the rural agricultural marketing with respect to their scope, opportunities, strategies in details and challenges faced by them. Lack of capacity building to train entrepreneurs, existence of popular brands, high operating costs, high attrition and absence of local know how and relationships were highlighted. **Jasmeet Kaur and Navkiranjit Kaur dhaliwal (2011)** have studied the financial performance of the Punjab State Cooperative Supply and Marketing Federation (MARKFED).

1.4. OBJECTIVES OF THE STUDY

1. To understand the demographic, economic and social characteristics of the farmer members of the study institutions, including their Cooperative Characteristics.
2. To assess the economic effect of the study institutions among the beneficiaries particularly on their
 - Occupational stability and better living among
3. To identify the factors limiting the economic effect of the study institutions if any, and suggest remedial measures.

1.5. METHODOLOGY AND SAMPLING

The study is an empirical analysis. Field survey method was adopted. The tools such as Structured Interview Schedules (SIS), Data Sheet (DS) and the Personal Interview techniques were used to elicit data for the study. To select the geographical area, the Agricultural Producers Cooperative Marketing Societies (sampling institutions) and the individual farmers (sampling

respondents) appropriate sampling procedures were employed. The study intends to make an assessment of the economic impact of Agricultural Producers Cooperative Marketing Societies in the region in Tamil Nadu State (India), wherein the performance of these cooperative institutions are significantly better and unique as compared to those others serving elsewhere in Tamil Nadu. Hence the study employed purposive sampling procedure for the selection of a region / district in the State as the geographical area for the study. Out of 31 districts in the State, Namakkal district wherein there are three APMCSs whose performances are exemplary, is selected purposively to launch the study.

1.6. DATA ANALYSIS AND INTERPRETATION

The data collected were tabulated and analyzed with the help of appropriate statistical tools. Statistical Package for Social Sciences (SPSS) was used for data analysis. Percentages, averages, and statistical tests such as T-test, chi-square test, correlation and Linear Multiple Regression (LMR) model were used for analyze and interpretation of the data to draw meaningful conclusions on the Economic Impact of Agricultural Producers Cooperative Marketing.

1.7. SCOPE AND LIMITATION

The study has been undertaken with the thrust of disclosing the economic impact of Agricultural Producers Cooperative Marketing Societies among farmers in the Namakkal district, Tamil Nadu. This study was conducted in the Namakkal district in Tamil Nadu. Since the factors especially demographic, economic and social conditions contributing for the realization of the economic benefits of the APCMS differ from district to district or region to region or state to state, the researcher opinions that findings and conclusion arrived out in this study can not be generalized. However the design and execution of the study may be viewed as a model for this type of empirical research.

1.8. DEMOGRAPHIC INDICATORS

1.8.1. Age and Gender

Age is an important factor used by all for role assignments (*Elizabeth B. Hurlock, 1974*). It is an important symbol of self. To create the impression of identity and belongingness, people make use a few symbols of age such as appearance, degree of autonomy, and activities engaged in (*Lundberg, 1958*). Age is also considered as a factor while judging the degree of success a person has achieved (*Secord and Bukman, 1964*). Therefore, age and gender are identified as an important factors enabling for discriminating individuals from one another.

TABLE -1 AGE AND GENDER OF THE RESPONDENTS

Age \ Gender	Number of Respondents		Total
	Male	Female	
40 to 50 years	20(5.68)	12(25.00)	32(8.00)
50 to 60 Years	206(58.53)	27(56.25)	233(58.25)
above 60 years	126(35.79)	09(18.75)	135(33.75)
Total (N)	352(88)	48 (22)	400(100)

*Figures in parentheses are percentages to column total *Figures in parentheses are percentages to row total*

't' value of difference of mean between Male and Female is 0.568 which is not significant.

The study reveals that majority of farmers are males and belong to middle and old age groups. The test of significance shows that there is no significant difference in the age between male and female respondents. However women under 40 to 50 age category is found more among the sample respondents (Table 4.01). This shows that women are gradually taking up membership with cooperatives of late. Government's policy in promoting women empowerment through cooperatives could be the reasons for increased enrollment of women in cooperatives.

1.8.2. Level of Education

Education is one of the primary needs of all human societies (*Sumner and Keller, 1946, Ghosh 1987, and Debrata Das 2002*). Education is the social process by which an individual learns the things necessary to fit oneself to the life of the society. It is synonymous to socialization. It is a tool to shape development of younger generation in tune to the social ideal of life (*Anderson and Parker, 1964*). To study the educational, the respondents were identified on the basis of their level of formal education such as primary, secondary, collegiate and professional education and those who did not have formal education were termed as illiterates. An attempt also is made to find out difference in the formal educational levels of the respondents.

TABLE -2 EDUCATIONAL STATUS OF THE RESPONDENTS

Farmers Category Education	No. of Respondents			Total
	Small Farmers	Medium Farmers	Big Farmers	
Illiterate	2 (1.11)	0	2(2.00)	4(1.00)
Primary Level	26(14.44)	21(17.5)	17(17.00)	64(16.0)
Secondary level	39(21.66)	43(35.83)	23(23.00)	105(26.25)
Higher secondary	86(47.77)	25(20.83)	30(30.00)	141(35.25)
Diploma / ITI	20(11.14)	25(20.83)	20(20.00)	65(16.25)
Higher Education (UG/ PG)	5(2.77)	5(4.16)	6(6.00)	16(4.00)
Professional Education	2(1.11)	1(0.83)	2(2.00)	5(1.25)
Total	180 (45)*	120 (30)*	100 (25)*	400

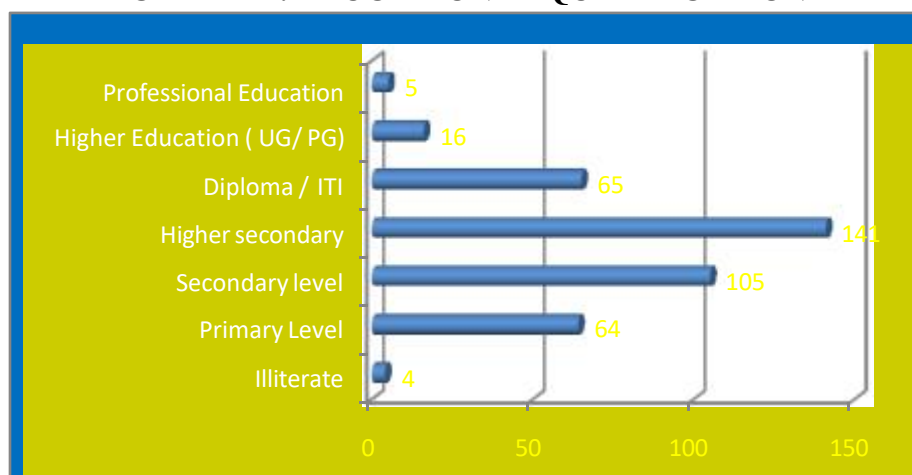
Figures in parentheses are percentages to column total

** Figures in parentheses are percentages to row total*

't' value of difference of mean among different categories of farmers is 32.305, which is significant at 0.05 level .

Legend: *Small farmers are those who operate land holdings below 3 acres for cultivation: and those who operate land holding ranging between 3 and 5 acres and who operates above 6 acres of land area are termed as medium and big farmers respectively.*

The study depicts that more number of member respondents (35.25%) in general and small farmers in particular (47.7%) are found educated up to the higher secondary level. The test of significance indicates significant difference in the educational level of farmers since the „t“ value of difference of mean between different categories of farmers is 32.305 which is significant at 0.05 level (Table 4.02). This indicates that literates and persons with some level of education are more likely to be members of cooperatives than illiterates or less educated persons. Similar findings were observed by V.M Rao (1996), C. Krishnan (1997), R.K.P. Singh (1998) and A.K. Koshta (1999) also.

CHART -1: EDUCATIONAL QUALIFICATION

1.8.3. Type and Size of Family

Family as a social institution forms the very basis for determining the social interactions like marriage and such other social aspects of individuals (*Green Arnold, 1956*). The type and size of family also determine income level, the pattern of expenditure and the standard of living. Studies by Eswara Prasad (1992), Sunitha Kaushik (1993), Aswini Kumar Mishra (1994) showed that type and size of family exerts greater influence on the socio-economic behaviour among farmers. The following tables present the family size of the respondents as follows;

TABLE -3 FAMILY SIZE OF THE RESPONDENTS

Farmers Category Family size	No. of Respondents			Total
	Small	Medium	Big	
Small (Up to 2 members/farmers)	15(8.33)	10(8.33)	58(58.00)	83(20.75)
Medium (Up to 4 members/farmers)	70(38.88)	49(40.83)	37(37.00)	156(39.00)
Big (above 4 members/farmers)	95(52.77)	61(50.83)	5(5.00)	161(40.25)
Total	180(100)	120(100)	100(100)	400(100)

Figures in brackets are percentages to column total

't' value between farmers category and family size of the respondents is (-)3.689 which is significant at 0.01 level

For the purpose of analysis, household with two members, up to four members and above four members are termed as small, medium and big family respectively. The majority of farmers in general (40.25 %) and small farmers in particular (52.77 %) have big size family followed by medium farmers (50.83 %). The test of significance shows that other than small farmers are likely to adopt small family norms since the „t“ value is (-) 3.689 which is significant at 0.01 level.

1.9. SOCIAL INDICATORS

1.9.1. Social Participation

Social participation of an individual refers to holding positions in various formal and informal social organisations like cooperatives, panchayat bodies, traditional panchayat, political party, NGO's, religious organisations, caste organisation, youth clubs, farmers association, mahila mandals, self-help group, educational institutions, government bodies, etc., The level of social participation has been measured by considering the nature of position / positions held and frequency of participation. Based on the social participation index score, respondents were grouped into three categories namely low level (index scores between 1 and 4), medium level (index scores between 5 and 8) and high level (index scores between 9 and 14) of social participation.

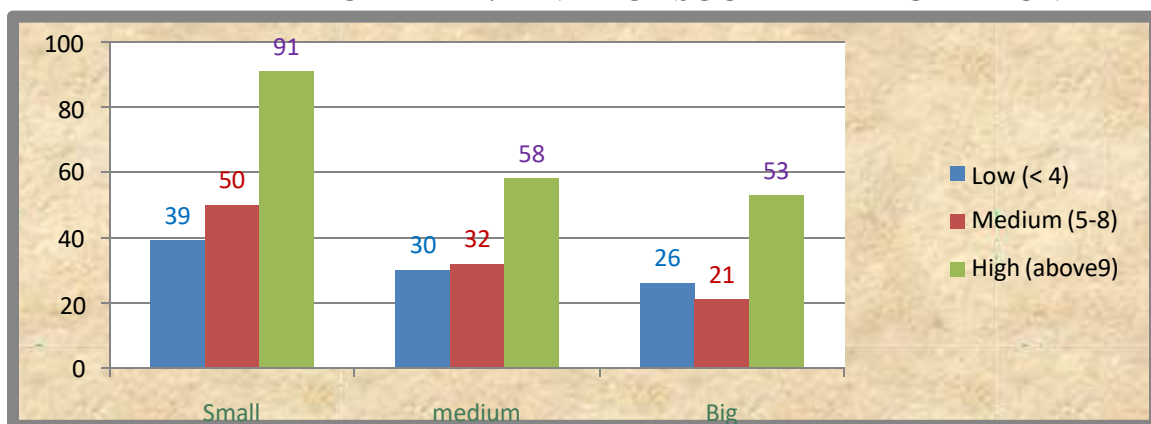
TABLE -4 LEVEL OF SOCIAL PARTICIPATION OF THE RESPONDENTS

Farmers Category Participation Level	No. of Respondents			Total
	Small	Medium	Big	
Low (< 4)	39(21.06)	30(25.00)	26(26.00)	95(23.75)
Medium (5-8)	50(27.00)	32(26.07)	21(21.00)	103(25.75)
High (above 8)	91 (50.05)	58 (48.03)	53(53.00)	202(50.05)
Total	180(100)	120(100)	100(100)	400(100)

Figures in brackets are percentages to column total

't' value between social participation and farmers category is 2.523 which is significant at 0.01 level

CHART -2: LEVEL OF SOCIAL PARTICIPATION



The survey identifies that as much as 50.5 per cent of respondents have high level social participation. Respondents with low level social participation are found high among small farmers than other farmers. Although there is less associations between small farmers than the others with regard to the level of social participation, the test of significant denotes that there is a significant difference between different categories of farmers and their level of social participation.

1.9.2. Exposure to Mass Media

Mass media play an important role today. It influences perception of individuals, community, society and the nation at large. It creates place, time and possession utilities. Use of mass media and frequency of usage have been considered to measure the level of exposure to mass media of respondents. Based on the index score, respondents were grouped into three categories viz., low level (scores between 1 and 5), medium (scores between 6 and 10) and high (scores between 11 and 16) level of exposure to mass media. Hence, with a view to find out the mass media exposure of the respondents, an analysis is made here.

TABLE – 5 MASS MEDIA EXPOSURE OF THE RESPONDENTS

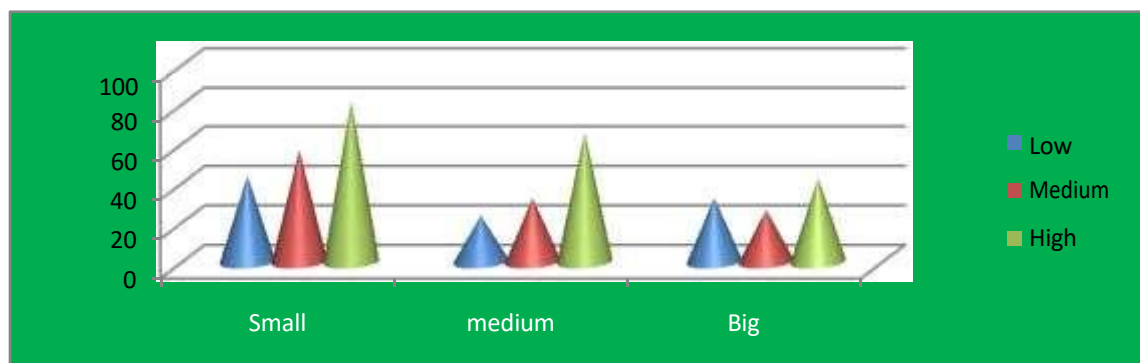
Type of farmers Level (score)	No. of Respondents			Total
	Small	Medium	Big	
Low (1-5)	43(23.09)	23(19.01)	32(32.0)	98(24.05)
Medium (6-10)	56(31.01)	32(26.06)	26(26.0)	114(28.05)
High (11-16)	81(45.00)	65(54.01)	42(42.0)	188(47.0)
Total	180(100)	120(100)	100(100)	400(100)

Figures in brackets are percentages to column total

't' value between exposure to mass media and farmers category is 5.421 which is significant at 0.01 level

The study reveals that majority of farmers under different categories have high level of exposure to mass media. However, the test of significance shows that existence of significant level of difference in the mass media exposure level among farmers .

CHART -3: MASS MEDIA EXPOSURE OF THE RESPONDENTS



1.9.3. Contact with Change Agents

The government departments such as Cooperation, Agriculture, Animal Husbandry, Health, Forestry, Horticulture, Sericulture, Fisheries and Revenue Officials, Religious Missionaries, Educational and Research Institutions, advertising agents and media people, etc. play a prominent role in effecting changes among people (Aswini Kumar Mishra, 1994). By considering the number of change agents met, frequency of visit to such agents and extent of

contact with such change agents have been measured and index scores have been estimated for all the respondents. Based on the index scores, respondents were grouped into three levels, namely low (scores between 1 and 5), medium (scores between 6 and 10) and high (scores between 11 and 16).. Here, an attempt is made to examine the contact with change agents of sample respondents.

TABLE -6 EXTENT OF CONTACT WITH CHANGE AGENTS OF THE RESPONDENTS

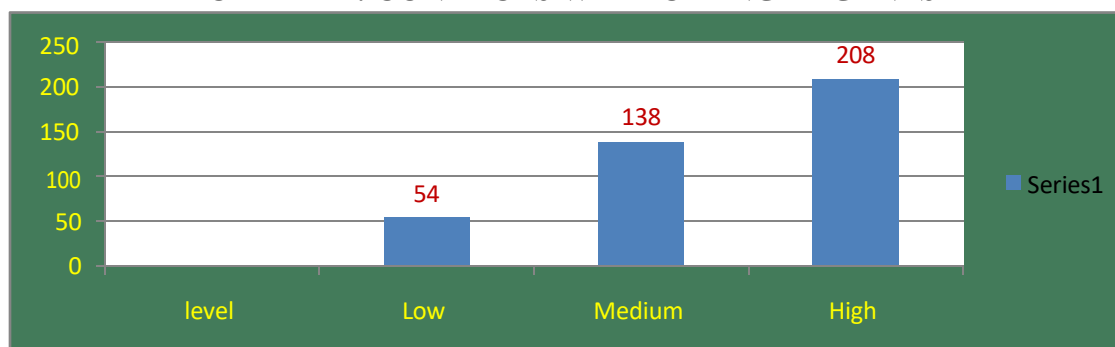
Farmers Category Level	No. of Respondents			Total
	Small	Medium	Big	
Low (1-5)	32(17.07)	13(10.08)	09(9.00)	54(13.05)
Medium (6-10)	56(31.01)	45(37.05)	37(37.00)	138(34.05)
High (11-16)	92(51.01)	62(51.06)	54(54.00)	208(52.0)
Total	180(100)	120(100)	100(100)	400(100)

Figures in brackets are percentages to column total

‘ t ’ value between contact with change agent and farmers category is 0.524 which is not significant

As far as contact with change agents is concerned, the survey exhibits that 52 per cent of the respondents have high level of contact with change agents and no significant level of difference in the change agents contact was observed among farmers .

CHART -4: CONTACTS WITH CHANGE AGENTS



1.9.4 Neighborliness

Neighborliness is defined as “neighboring” or patterns of interaction between neighbors (D’ Abbs, 1991). The neighborhood is the first in the community where a child comes into contact. It is a “loose integration of several family groups”. In large cities it is largely a group of “neighbor-dwellers” characterized chiefly by the fact that the members/farmers reside within a particular geographic area. In a city neighborhood the people generally do not come in close contact and sometimes do not even know each other. Some of us must have experienced the difficulty of finding the house of our relative in a big city if we did not know it already. To find out the neighborliness of farmer respondents, an analysis is made here.

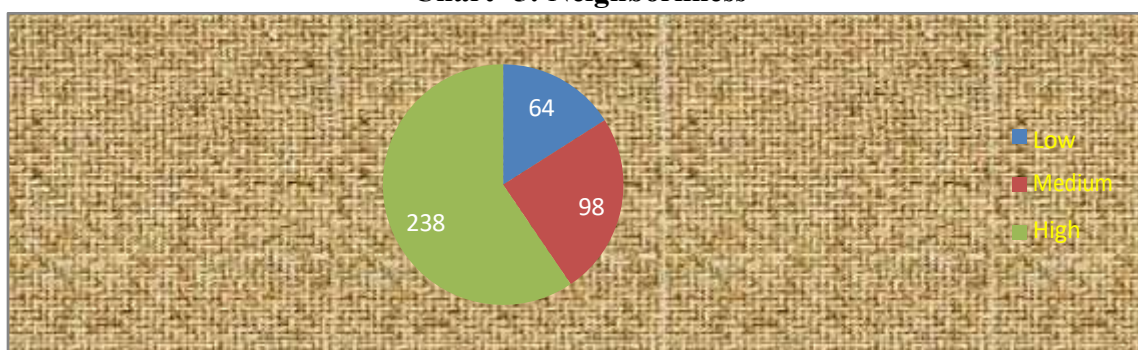
TABLE -7 NEIGHBORLINESS OF THE RESPONDENTS

Type of farmers Category	No. of Respondents			Total
	Small	Medium	Big	
Low	21(11.6)	24(20.00)	19(19.0)	64(16.00)
Medium	47(26.01)	39(32.05)	12(12.0)	98(24.05)
High	112(62.02)	57(47.05)	69(69.0)	238(59.5)
Total	180(100)	120(100)	100(100)	400(100)

Figures in brackets are percentages to column total

't' value between Neighborliness and farmers category is 3.102 which is significant at 0.01 level

The study indicates that almost all the respondents are friendly, social and helpful with their neighbors and farmers uphold higher values of neighborliness and maintain better neighborliness. However test of significance indicates significant level differences in the neighborliness among farmers.

Chart -5: Neighborliness

1.10. ECONOMIC INDICATORS

1.10.1. Occupation

Everyone in this world is with some occupation. However, the nature and type as well as status of the occupation are determined by one's demographic, social, economic, cultural and other bio – psychographics and agro-geophic factors.. However the Agricultural Producers Marketing Cooperatives extend their core services among the farm producers by enrolling them under „A“ category membership. However it was observed in the field that farm producers who have membership with APCMSs seem to have diversified occupation besides farming, i.e. the extent of dependency on farming vary among members. That is a few have adopted agriculture (farming) as their primary occupation and few others has it as their secondary occupation. As the study presumes differences in the services utilization behavior as well as economic impact of the APCMSs caused by differences in the extent of adoption of farming as occupation by farmers an analysis is made here.

TABLE – 8 OCCUPATION PATTERN OF THE RESPONDENTS

Farmers Category Occupation	No. of Respondents			Total
	Small	Medium	Big	
Agriculture (Primary)	142 (78.89)	87(72.5)	62(62.00)	291 (72.75)
Agriculture (secondary)	38(21.11)	33(27.5)	3838.00()	109(27.25)
Total	180(100)	120(100)	100(100)	400(100)

** Figures in brackets are percentages to column total*

‘ t ’ value between occupation and farmers category is 1.340 which is significant at 0.01 level

Agriculture including allied agricultural activities including self-employment through business, trading services and serving as employee in private, public sectors are the different occupations of respondents. However, a majority (72.75%), of the respondents have adopted farming (agriculture) as their primary occupation while only 27.25 percentage of the respondents have taken up farming as their secondary occupation. The,,t“ test shows significant differences in the occupation pattern among farmers.

1.10.2. Family Annual Income

Income is the most important deciding factor of standard of living. Access to food and shelter, economic comforts and social appreciations etc. greatly depend upon one“s income level. Therefore, aiming at bringing socio economic proliferation among people, cooperatives have the avowed objective of augmenting the income level of people. Hence, income level of members of cooperatives is likely to be higher than that of non members as the former has greater access to services / benefits of cooperatives than the latter.). Hence, there could be difference in the income level among farmers.

TABLE – 9 FAMILY ANNUAL INCOME OF THE RESPONDENTS

Farmers Category Annual Income (Rs)	No. of Respondents			Total
	Small	Medium	Big	
below 2 lakhs	23(12.7)	21(17.05)	22(22.00)	66(16.05)
2 lakhs to 4 lakhs	87(48.03)	64(53.03)	51(51.00)	202(50.05)
4 lakhs to 6 lakhs	17(9.04)	2(1.06)	5(5.00)	24(6.00)
6 lakhs to 8 lakhs	28(15.05)	13(10.08)	12(12.00)	53(13.25)
8lakhs to 10 lakhs	17(9.04)	15(12.05)	5(5.00)	37(9.25)
above 10 lakhs	8(4.04)	5(4.01)	5(5.00)	18(4.05)
Total	180(100)	120(100)	100(100)	400(100)

Figures in brackets are percentages to column total

't' value between income and farmers category is 47.104 which is significant at 0.01 level

The study reveals that majority of respondents have their family annual income ranging between Rs.2 lakhs and Rs.4 lakhs. However, the family annual mean income of members is Rs. Rs. 2.62 lakhs. The test of significance shows significant differences in the family annual income of respondents.

1.10.3. Borrowings

One of the factors of production is capital. Hence, all people require capital. When owned capital is not adequate enough to meet one's total capital requirements, then the need to find out external sources of capital arises. Since capital is required to meet both tactical and strategic operations, the quantity as well as quality of capital varies from individual to individual. Similarly as the borrowing capacity differs among individuals, the source of capital also differs. This could be the reason for the existence of several sources of capital available at the disposal of individuals today. The sources of capital can be broadly classified into two viz. organized sources and unorganized sources. Organized sources of capital are much appreciated on the grounds of their rationality, equity and cost. Further they are development oriented where as unorganized sources are profit oriented. Since farmers are provided with more than one credit sources, there could be significant differences in the sources as well as quantum of borrowing among farmers. The following table present the borrowing position of the respondents.

TABLE – 10 SOURCES OF BORROWINGS OF THE RESPONDENTS

Farmers Category Sources	No. of Respondents			
	Small	Medium	Big	Total
Cooperatives	102(56.6)	76(63.3)	50(50.0)	228(57.0)
Commercial Banks	61(33.8)	39(32.5)	34(34.0)	134(33.5)
Non – Institutional Sources	11(6.1)	2(1.6)	10(10.0)	23(5.75)
Other (neighbor)	6(3.3)	3(2.5)	6(6.0)	15(3.75)
Total	180(100)	120(100)	100(100)	400(100)

Figures in brackets are percentages to column total

As far as sources of borrowing are concerned, the study reveals that cooperatives (57 per cent) followed by commercial banks (33.5%) are the major sources of borrowings of the respondents, whereas it is only 5.15 per cent with non institutional sources (Table -10).

1.10.4. Membership with Cooperatives

Beneficiaries of cooperatives can be differentiated by among farmers, although in most cases the services of the cooperatives are offered to all without any discrimination. As per the laws an individual who is competent to enter into contract, (a registered society, the government, a firm, a company or any other body corporate) can have membership with cooperatives. Refusal

of membership merely on the grounds of religion, race, community, caste, sector domination is quiet against the principles of open and voluntary membership (*Weeraman, 1979*). However, open membership does not mean that anybody can demand admission to any cooperative society as a matter of right; it only means that cooperatives formed with certain definite objects shall keep the doors open for all people who share those objects (*Committee on Cooperation, 1964*). For example, a money lender cannot claim, as a matter of right, admission in to the membership of a credit society by invoking the principle of open membership. In the present study, based on the nature of services availed from cooperatives, five categories of members were identified viz., primary member user, associate member user, primary member non-user, associate member non user and non member users. The primary member users are those who have access and use the services of cooperatives and participate in the decision making process of the cooperative / cooperatives. Associate member users are those who avail the services without any stake in the management of cooperatives. Those who just retain membership without availing the services but exercise stake in the management are termed as primary member non-user. The following table shows the reasons for becoming members as follows;

TABLE - 11 REASONS FOR BECOMING MEMBER OF APMCSS

(Multiple response)

Reasons	No. of respondents		
	Small Farmers (N=180)	Medium Farmers (N=120)	Big Farmers (N=100)
To avail better prices for produces	155	65	31
To procure inputs	162	82	60
To market outputs	170	101	62
To increase production & productivity	153	78	54
To increase income	165	87	47
To avail subsidies	169	89	59
To avail value addition to products	158	90	54
To use government schemes	169	92	48
To keep deposits	65	32	12
To contest in the cooperative election	145	65	69
To enter in to politics	123	89	75
To keep up leadership	143	67	78

The survey result reveals that all the farmers category selected under survey have become membership with their marketing cooperatives with the intention of availing better prices for their produces, procure inputs, to market outputs, to avail subsidies and government schemes, to increase production and productivity, to increase income and to avail value addition services

TABLE -12 MEMBERSHIP WITH OTHER COOPERATIVES*(Multiple Response)*

Farmers Category Membership in other Cooperatives	Number of respondents				Total (N=400)
	Small Farmers (N=180)	Medium Farmers (N=120)	Big Farmers (N=100)	Nil	
Members/ in PACS	126	82	74	118	282
PACB	162	110	82	46	354
PCCS	65	42	38	255	145
PMPCS	160	108	84	48	352
PCMS	96	72	56	176	224
Weavers Cooperatives	26	18	15	341	59
Housing Cooperative	62	36	24	278	122
UCB	71	49	36	244	156

Source: Computed from survey data during 2011-12

PACS=Primary Agricultural Credit Society, PACB=Primary Agricultural Cooperative Bank, PCCS=Primary Cooperative Consumer Stores, PMPCS= Primary Milk Producers Cooperative Society and PCMS=Primary Cooperative Marketing Society

As shown in the table 4.12, the farmers have membership with more than one cooperative institution. However overwhelming majority of the farmers have membership with PACS/PACB, PMPCS and dairy cooperative societies.

**TABLE -13 FARMERS' PERCEPTION TOWARDS AGRICULTURAL INPUTS
SERVICES OF CMSS**

Farmers Category Features	Number of Respondents								
	Small Farmers (N=180)			Medium Farmers (N=120)			Big Farmers (N=100)		
	A	DA	NA DA	A	DA	NAD A	A	DA	NAD A
CMSs supply adequate agricultural inputs	156 (86.6 7)	14 (07.7 8)	10 (05.5 5)	107 (89.1 6)	05 (04.1 6)	08 (06.6 6)	92 (92.0 0)	03 (03.0 0)	05 (05.0 0)
Supply agricultural inputs at fair price	167 (92.7 8)	03 (01.6 7)	10 (05.5 5)	111 (92.5 0)	00 -----	09 (07.5 0)	97 (97.0 0)	00 -----	03 (03.0 0)
CMSs supply agricultural inputs with good quality	164 (91.1 1)	09 (05.0 0)	07 (93.8 9)	101 (84.1 7)	08 (06.6 7)	11 (09.1 6)	90 (90.0 0)	07 (07.0 0)	03 (03.0 0)
The price of agricultural goods are cheaper when compared with open market price	175 (97.2 2)	00 -----	05 (02.7 8)	116 (96.6 7)	00 ----	04 (03.3 3)	94 (94.0 0)	02 (02.0 0)	04 (04.0 0)
Even during the period of shortage, the inputs are available with CMSs adequately	167 (92.7 8)	03 (01.6 7)	10 (05.5 5)	111 (92.5 0)	00 ----	09 (07.5 0)	94 (94.0 0)	04 (04.0 0)	02 (02.0 0)
CMSs supply hybrid seeds to farmers	164 (91.1 1)	09 (05.0 0)	07 (93.8 9)	101 (84.1 7)	08 (06.6 6)	11 (09.1 6)	91 (91.0 0)	03 (03.0 0)	06 (06.0 0)
CMSs provide information and instruction regarding usage and preservation of inputs	164 (91.1 1)	09 (05.0 0)	07 (93.8 9)	102 (85.0 0)	09 (07.5 0)	09 (07.5 0)	92 (92.0 0)	04 (04.0 0)	04 (04.0 0)
CMSs accept the purchase returns made by the members	175 (97.2 2)	00 ----	05 (02.7 8)	116 (96.6 7)	00 ----	04 (03.3 3)	97 (97.0 0)	00 ----	03 (03.0 0)
CMSs distribute agricultural inputs with certain	167 (92.7 8)	03 (01.6 7)	10 (05.5 5)	111 (92.5 0)	03 (02.5 0)	06 (05.0 0)	96 (96.0 0)	00 ----	04 (04.0 0)

concession to members										
CMSs distribute agricultural inputs in time without any delay	143 (79.4 4)	29 (16.1 1)	08 (04.4 4)	112 (93.3 3)	06 05.00)	02 (01.6 7)	96 (96.0 0)	03 (03.0 0)	01 (01.0 0)	

Source: Computed from survey data during 2011-12

Figures in brackets are percentages to the respective 'N' total

The survey result indicates that overwhelming majority of farmers had good perception towards the agricultural input services of CMSs in the study area. Only insignificant proportion of small farmers (16.11%) perceived that there was delay in distribution of agricultural inputs by the sample units. Thus, it may be inferred that the agricultural inputs services extended by the CMSs to the farming community in the study area is quite appreciable (Table -13).

1.10.5. Impact on Occupational Stability

“Cooperatives continue to play an important role in employment promotion and poverty alleviation, both as production enterprises – mainly of the self-employed – and as providers of services to members” (ILO, 1999). This section brings out the impact of cooperatives on occupational stability by discussing the results of statistical analysis. The responses regarding perception towards occupational stability were measured with the help of six point rating scale. For the purposes of statistical analysis, total score on occupational stability has been arrived at and high score of an individual denotes high perception on the occupational stability. The results of survey statements and statistical analysis are presented below:

TABLE-19 FARMERS' PERCEPTION TOWARDS OCCUPATIONAL STABILITY

Farmers' category Input Services	Small Farmers (N=180)			Medium Farmers (N=120)			Big Farmers (N = 100)		
	A	DA	NAD A	A	DA	NAD A	A	DA	NAD A
Supplies improved and hybrid seeds	161 (89.4 4)	14 (18.0 1)	05 (2.78)	120 (100)	00 (--)	00 (--)	100 (100)	00 (--)	00 (--)
Distributes required brand of fertilizers, pesticides and insecticides	170 (94.4 4)	08 (04.4 4)	02 (01.1 1)	116 (96.6 7)	03 (02.5 0)	01 (00.09)	96 (96.0 0)	00 00	04 (04.0 0)
Encourages to go for change in the cropping pattern	131 (72.7 8)	43 (23.8 9)	06 (33.3 3)	114 (95.0 0)	06 (05.0 0)	00 (--)	100 (100)	00 (--)	00 (--)

Advises about the use of improved technology on agriculture	164 (91.1 1)	14 (18.0 1)	02 (01.1 1)	110 (91.6 7)	07 (05.8 3)	03 (02.50)	94 (94.0 0)	02 (02.0 0)	04 (04.0 0)
Propagates about the modern irrigation methods and systems	160 (88.8 9)	13 (07.2 2)	07 (03.8 9)	120 (100)	00 (--)	00 (--)	100 (100)	00 (--)	00 (--)
Encourages to adopt mixed farming	161 (89.4 4)	15 (08.3 3)	04 (02.2 2)	112 (93.3 3)	06 (05.0 0)	02 (01.11)	88 (88.0 0)	10 (10.0 0)	02 (02.0 0)
Encourages to follow the integrated farming	163 (90.5 6)	04 (02.2 2)	13 (07.2 2)	114 (95.0 0)	00 (--)	06 (05.00)	100 (100)	00 (--)	00 (--)
Provides transportation facility enabling value addition to the agricultural produce	172 (95.5 6)	07 (03.8 9)	01 (00.5 6)	116 (96.6 7)	03 (02.5 0)	01 (00.09)	82 (82.0 0)	10 (10.0 0)	08 (08.0 0)
provides storage facility enabling value addition to the agricultural produce	147 (81.6 7)	30 (16.6 7)	03 (01.6 6)	116 (96.6 7)	04 (03.3 3)	00 (--)	100 (100)	00 (--)	00 (--)
Provides grading and packaging facilities enabling value addition to the agricultural produce	157 (87.2 2)	16 (08.8 9)	07 (03.8 9)	112 (93.3 3)	07 (05.8 3)	01 (00.09)	98 (98.0 0)	01 (01.0 0)	01 (01.0 0)
Checks price spread in market	160 (88.8 9)	19	01 (00.5 6)	120 (100)	00 (--)	00 (--)	100 (100)	00 (--)	00 (--)
Regulates the competition in the open market	172 (95.5 6)	07 (03.8 9)	01 (00.5 6)	110 (91.6 7)	07 (05.8 3)	03 (02.50)	90 (90.0 0)	08 (08.0 0)	02 (02.0 0)
Helps to bargain for better prices	163 (90.5 6)	14 (18.0 1)	03 (01.6 6)	120 (100)	00 (--)	00 (--)	100 (100)	00 (--)	00 (--)
Prevents forced sale by providing pledge finance and jewel loans	174 (96.6 7)	05 (2.78)	01 (01.6 6)	110 (91.6 7)	07 (05.8 3)	03 (02.50)	98 (98.0 0)	01 (01.0 0)	01 (01.0 0)
Eliminates middlemen in agricultural marketing	170 (94.4 4)	07 (03.8 9)	03 (01.6 6)	120 (100)	00 (--)	00 (--)	100 (100)	00 (--)	00 (--)

Source: Computed from survey data during 2011-12

Figures in brackets are percentages to the respective column total Legend:

A-Agree; DA-Disagree; NAND-Neither agree nor disagree

As regards to farmers' perception towards occupational stability, the survey results indicate that farmers under all categories have agreed that their occupation has been stabilized owing to the intervention of APCMS by supplying high breed seeds, adequate quantum of fertilizers, pesticides and insecticides, change in the cropping pattern, use of improved technology on agriculture, water resource management, adoption of mixed farming, integrated farming, provision of transportation, grading & packaging, value addition, checking price spread, control the competition in the open market, providing market finance, and elimination of middlemen. In the FGD conducted among farmers of TCMS, it was observed that there was a considerable decline of middlemen exploitation due to the price advantage, marketing finance, and other marketing infrastructure facilities offered by CMS. However, a very insignificant proportion of small farmers (16.67%) disagreed on the provision of storage facilities. Discussion with officials of the selected APCMS indicated that all the societies except TCMS do not have sufficient storage facilities.

TABLE – 20 FARMERS PERCEPTION LEVEL ON OCCUPATIONAL STABILITY

Farmers Level	No. of. respondents			Total
	Small	Medium	Big	
15 -35 (low level)	1 (6.00)	0(---)	0(---)	01(0.25)
36-55(moderate)	4 (2.02)	2(1.07)	2(2.0)	08(2.00)
56-75(high)	175(97.2)	118(98.3)	98(98.0)	391(97.75)
Total	180(100)	120(100)	100(100)	400(100)

Source: Computed from survey data during 2011-12

Figures in brackets are percentages to the respective column total

The survey reveals that majority of farmers (under all categories) do have high perception towards occupational stability. However, the result of ANOVA reveals that there is a significant variance between farmers' categories and their perception towards occupational stability. (The "f" value between groups is 14.445 which is significant at 0.01 level (Table 20).

1.11.RESULTS OF LINEAR MULTIPLE REGRESSION ANALYSIS – EFFECT ON OCCUPATIONAL STABILITY (OVERALL)

To understand the effect of independent variables on the dependent variable namely provision of occupational stability among farmers, Linear Multiple Regression model was employed. Twelve independent variables were statistically related to occupational stability as dependent variable.

**TABLE -21 MULTIPLE LINEAR REGRESSION ANALYSIS – EFFECT ON
OCCUPATIONAL STABILITY (OVERALL)**

Independent variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Demographic Indicator Variables					
Gender	.428	.431	.025	.993	.322
Education	-.017	.132	-.003	-.129	.898
Family Size	.431	.238	.046	1.810	.071
Economic Indicator Variables					
Landholding	.231	.093	-.063	2.479	.014
Annual Farm Income	1.030	.030	.881	34.419	.000
Assets	.484	.285	.043	1.696	.091
Occupation	.236	.227	.026	1.039	.300
Borrowings	.163	.155	.027	1.049	.295
Social Indicator Variables					
Exposure to mass media	-.099	.255	-.010	-.389	.697
Cooperation Indicator Variables					
Knowledge about Coop.Mgmt	.751	.217	.087	3.459	.001
Participation in Coop. Mgmt	-.202	.310	-.017	-.652	.515
Services mix index	.413	.160	.055	2.588	.010
Constant	20.843	2.022		10.306	.000
R ²	.799				
N					

Source: Computed from survey data during 2011-12

As shown in table 6.3, the model is significant and the R² value is 79 per cent i.e., the effect on the dependent variable has been explained at 79 per cent level. The results show that none of the demographic variables and the variables under economic indicators namely assets owned, nature of adoption of agriculture as occupation and the extent of borrowings and the social indicator variable namely exposure to mass media including the cooperative characteristics variables namely participation in cooperative management did have effect whereas the economic indicator variables such as size of landholding possessed and annual farm income level, knowledge about cooperative management and the extent of services availed from marketing cooperatives (Service mix index) have effected significantly for high realization of the economic benefits of the marketing cooperatives enabling for occupational stability among farmers. However, among these significant variables, the annual farm income level was found to be the prominent variable effecting significantly to a greater extent for high realization of the economic contributions of the marketing cooperatives enabling for occupational stability i.e., the

standardized coefficient β value is 0.881 which is greater than the other variables. Thus it may be stated that increase in annual farm income results to occupational stability. This is true that farmers can remain on farming only when farm income is appreciable and form significant proportion to annual family income.

1.12. RESULTS OF LINEAR MULTIPLE REGRESSION ANALYSIS – EFFECT ON OCCUPATIONAL STABILITY AMONG SMALL FARMERS

To have a further probe on the effect of demographic, social and economic indicators in general and the Cooperation indicators in particular on the perception of occupational stability provided by marketing cooperatives among small farmer respondents, LMR analysis was carried out.

TABLE -22 LMR ANALYSIS – EFFECT ON OCCUPATIONAL STABILITY AMONG SMALL FARMERS

Independent variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Demographic Indicator Variables					
Gender	1.180	.543	.066	2.175	.031
Education	.091	.162	.017	.562	.575
Family Size	.536	.312	.053	1.718	.088
Economic Indicator Variables					
Landholding	.286	.157	.056	1.826	.070
Annual Farm Income	1.045	.035	.918	30.153	.000
Assets	.622	.392	.050	1.590	.114
Occupation	1.012	.376	.091	2.692	.008
Borrowings	.339	.180	.058	1.885	.061
Social Indicator Variables					
Exposure to mass media	.892	.401	.069	2.223	.028
Cooperation Indicator Variables					
Knowledge about Coop.Mgmt	.985	.298	.100	3.304	.001
Participation in Coop. Mgmt	.288	.414	.022	.695	.488
Services mix index	.412	.243	.049	1.693	.092
Constant	12.258	3.007		4.077	.000
R ²	.857				
N	180				

Source: Computed from survey data during 2011-12

As shown in table 6.4, the model is significant and the R^2 value is 85 per cent i.e., the effect on the dependent variable has been explained at 85 per cent level. The results show that demographic variable namely education, and the variable under economic indicators namely assets owned including the cooperative characteristics variable namely participation in cooperative management did not have effect whereas the economic indicator variables such as size of landholding possessed, annual farm income level and agriculture as prime occupation and cooperation indicator variables such as knowledge about cooperative management and the extent of services availed from marketing cooperatives (Service mix index) have effected significantly for high realization of the economic benefits of the marketing cooperatives enabling for occupational stability among small farmers. However, among these significant variables, the annual farm income level and knowledge about cooperative management were found to be the prominent variables effecting significantly to a greater extent for high realization of the economic contributions of the marketing cooperatives enabling for occupational stability i.e., the standardized coefficient β value is 0.918 and 1.000 respectively which is greater than the other variables. Thus it may be stated that increase in annual farm income coupled with better knowledge and understanding about marketing cooperatives and its management results to occupational stability among small farmers. This is true that small farmers can remain on farming only when farm income is appreciable and form significant proportion to annual family income. Further long years of membership and availing one or more core services of marketing cooperatives could have helped small farmers to better their knowledge about management aspects of marketing cooperatives which would have ultimately resulted in realization of economic contributions of marketing cooperatives.

1.13. RESULTS OF LINEAR MULTIPLE REGRESSION ANALYSIS – EFFECT ON OCCUPATIONAL STABILITY AMONG MEDIUM FARMERS

To have a further probe on the effect of demographic, social and economic indicators in general and the Cooperation indicators in particular on the perception of occupational stability provided by marketing cooperatives among medium farmer respondents, LMR analysis was carried out.

TABLE -23 LINEAR MULTIPLE REGRESSION ANALYSIS – EFFECT ON OCCUPATIONAL STABILITY AMONG MEDIUM FARMERS

Independent variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Demographic Indicator Variables					
Gender	1.285	3.203	.036	.401	.690
Education	.961	.508	.195	1.890	.064
Family Size	-.099	.572	-.015	-.173	.864
Economic Indicator Variables					
Landholding	-.150	.405	-.034	-.369	.714
Annual Farm Income	1.029	.116	.931	8.830	.000

Assets	-.114	.620	-.016	-.184	.855
Occupation	-1.242	.750	-.169	-1.656	.104
Borrowings	-.526	.534	-.093	-.986	.329
Social Indicator Variables					
Exposure to Mass media	.920	.546	.140	1.685	.098
Cooperation Indicator Variables					
Knowledge about Coop.Mgmt	1.900	.842	.227	2.257	.028
Participation in Coop Mgmt	-.599	.958	-.064	-.626	.534
Services mix index	1.209	.072	.128	2.371	.020
(Constant)	31.518	6.307		4.997	.000
R²	.666				
N	120				

Source: Computed from survey data during 2011-12

As shown in table 23, the model is significant and the R^2 value is 66 per cent i.e., the effect on the dependent variable has been explained at 66 per cent level. The results show that demographic variables namely gender and family size and the variable under economic indicators namely land holding possessed, assets owned, nature of adoption of agriculture as occupation and extent of borrowings including the cooperative characteristics variable namely participation in cooperative management did not have effect whereas the economic indicator variables such as annual farm income level, social indicator variable namely exposure to mass media and cooperation indicator variables such as knowledge about cooperative management and the extent of services availed from marketing cooperatives (Service mix index) have effected significantly for high realization of the economic benefits of the marketing cooperatives enabling for occupational stability among medium farmers. However, among these significant variables, the annual farm income level was found to be the prominent variables effecting significantly to a greater extent for high realization of the economic contributions of the marketing cooperatives enabling for occupational stability among medium farmers i.e., the standardized coefficient β value is 0.931 which is greater than the other variables. Thus it may be stated that increase in annual farm income results to occupational stability among small farmers. This is true that medium farmers can remain on farming only when farm income is appreciable and form significant proportion to annual family income.

1.14. RESULTS OF LINEAR MULTIPLE REGRESSION ANALYSIS – EFFECT ON OCCUPATIONAL STABILITY AMONG BIG FARMERS

To have a further probe on the effect of demographic, social and economic indicators in general and the Cooperation indicators in particular on the perception of occupational stability provided by marketing cooperatives among big farmer respondents, LMR analysis was carried out.

**TABLE 24 MULTIPLE LINEAR REGRESSION ANALYSIS – EFFECT ON
OCCUPATIONAL STABILITY AMONG BIG FARMERS**

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Demographic Indicator Variables					
Gender	-.785	.758	-.067	-1.035	.303
Education	-.354	.325	-.068	-1.090	.279
Family Size	.313	.414	.042	.755	.452
Economic Indicator Variables					
Landholding	-.109	.113	-.054	-.963	.338
Income	1.017	.072	.780	14.152	.000
Assets	1.413	.622	.128	2.271	.026
Occupation	.309	.365	.054	.844	.401
Borrowings	-.124	.344	-.020	-.362	.718
Social Indicator Variables					
Exposure to mass media	-.047	.456	-.006	-.104	.918
Cooperation Indicator Variables					
Knowledge about Coop.Mgmt	1.170	.362	.197	3.233	.002
Participation in Coop.Mgmt	.463	.583	.046	.795	.429
Services mix index	.206	.130	.057	1.578	.119
(Constant)	19.321	4.215		4.584	.000
R ²	.765				
N	100				

Source: Computed from survey data during 2011-12

As shown in table -24, the model is significant and the R² value is 76 per cent i.e., the effect on the dependent variable has been explained at 76 per cent significance level. The results show that none of the demographic variables and the variables under economic indicators namely nature of adoption of agriculture as occupation and the extent of borrowings and the social indicator variable namely exposure to mass media including the cooperative characteristics variables namely participation in cooperative management and extent of services availed from marketing cooperatives (service mix index) did have effect whereas the economic indicator variables such as annual farm income level and assets possessed and cooperation indicator variable namely knowledge about cooperative management have effected significantly for high realization of the economic benefits of the marketing cooperatives enabling for occupational stability among big farmers. However, among these significant variables, the annual farm income level and knowledge about cooperative management were found to be the

prominent variable effecting significantly to a greater extent for high realization of the economic contributions of the marketing cooperatives enabling for occupational stability among big farmers i.e., the standardized coefficient β value is 0.780 and 0.197 which is greater than the other variables. Thus it may be stated that increase in annual farm income results to occupational stability. This is true that big farmers can remain on farming only when farm income is appreciable and form significant proportion to annual family income. Further long years of membership and availing one or more core services of marketing cooperatives could have helped big farmers to better their knowledge about management aspects of marketing cooperatives which would have ultimately resulted in realization of economic contributions of marketing cooperatives.

1.15. IMPACT ON LIVING STANDARD

Marketing Co-operatives offer enormous economic services. No economic activity is left out of the purview of cooperatives today. They render required services at a low cost. The quality of services is quite reasonable because they are meant to be used by members who are the owners of the marketing co-operative societies. Moreover, co-operatives through their own network of organizations have bridged the gap between producers and consumers. There is very little place for middlemen. As such, marketing co-operatives acquire importance as the organizations of people ensuring a quality standard of living. This section brings out the economic impact of marketing cooperatives in the context of their contribution to increase in living standard among member users. Statements on increase in living standard like, CMS enables increase economic status, promotes saving habits, etc were administered among respondents to be responded on six point scale. Total scores for respondents were arrived at. Higher score of a respondent denotes greater improvements in standard of living.

TABLE -25 MEMBERS' PERCEPTION TOWARDS LIVING STANDARD

Farmers category Items	Small Farmers (N=180)			Medium Farmers (N=120)			Big Farmers (N=100)		
	A	DA	NAD A	A	DA	NAD A	A	DA	NAD A
Enables for high economic status	145 (80.56)	31 (17.2 2)	04 (02.2 2)	112 (93.33)	06 (05.0 0)	02 (01.6 7)	96 (96.0 0)	03 (03.0 0)	01 (01.0 0)
Promotes saving habits	157 (87.22)	17 (09.4 4)	06 (03.3 3)	103 (85.83)	10 (08.3 3)	07 (05.8 3)	94 (94.0 0)	04 (04.0 0)	02 (02.0 0)
Increases consumption of milk/ milk products	174 (96.67)	05 (02.7 8)	01 (00.5 5)	116 (96.67)	03 (02.5 0)	01 (00.8 3)	93 (93.0 0)	05 (05.0 0)	02 (02.0 0)
Increases consumption of	140	30	10	114	05	01	97	02	01

pulses /beans/ vegetables	((77.7 8)	(16.6 7)	(05.5 5)	(95.00)	(04.1 7)	(00.8 3)	(97.0 0)	(02.0 0)	(01.0 0)
Enables to keep stock of groceries to meet daily requirements	152 (84.44)	17 (09.4 4)	11 (06.1 1)	113 (94.17)	05 (04.1 7)	02 (01.6 7)	98 (98.0 0)	01 (01.0 0)	01 (01.0 0)
Enables to treat ailments through professional medical practitioner	127 (70.56)	47 (26.1 1)	06 (03.3 3)	114 (95.00)	06 (05.0 0)	00	94 (94.0 0)	04 (04.0 0)	02 (02.0 0)
Ensures education to children	170 (94.44)	08 (04.4 4)	02 (01.1 1)	110 (91.67)	07 (05.8 3)	03 (02.5 0)	96 (96.0 0)	04 (04.0 0)	01 (01.0 0)
Provides for spending on ceremonial and festivals	131 (72.78)	43 (23.8 9)	06 (03.3 3)	111 (92.50)	08 (06.6 7)	01 (00.8 3)	97 (97.0 0)	02 (02.0 0)	01 (01.0 0)
Enables to spend on religious functions	142 (78.89)	34 (18.8 9)	04 (02.2 2)	110 (91.67)	07 (05.8 3)	03 (02.5 0)	92 (92.0 0)	05 (05.0 0)	03 (03.0 0)
Enables to spend money on tours	136 (75.56)	41 (22.7 8)	03 (01.6 6)	120 (100)	00 00	00 00	100 (100)	00 00	00 00
Enables to spend on sports and games	145 (80.56)	35 (19.4 4)	00 00	108 (90.00)	06 (05.0 0)	06 (05.0 0)	92 (92.0 0)	06 (06.0 0)	02 (02.0 0)
Helps to spend on cloth and dress materials	150 (83.33)	25 (13.8 9)	05 (02.7 8)	106 (88.33)	08 (06.6 7)	06 (05.0 0)	97 (97.0 0)	02 (02.0 0)	01 (01.0 0)
Enables to spend on household consumer durables	172 (95.56)	07 (03.8 9)	01 (00.5 5)	116 (96.67)	03 (02.5 0)	01 (00.8 3)	83 (83.0 0)	15 (15.0 0)	02 (02.0 0)
Enables to feel of comfortable standard of living	162 (90.00)	15 (08.3 3)	03 (01.6 7)	112 (93.33)	08 (06.6 7)	00 00	95 (95.0 0)	03 (03.0 0)	02 (02.0 0)

Source: Computed from survey data during 2011-12

Figures in brackets are percentages to the respective column total Legend:

A-Agree; DA-Disagree; NAND-Neither agree nor disagree

As to members' perception towards increase in living standard, the survey results indicate that farmers under all categories have agreed that their living standard has been increased by the services availed from APMCS. However, more than 20 per cent of small farmers disagreed on CMS enables to treat ailments through professional medical practitioner, provides support to spend on ceremonies and festivals, enables spend money on tours, and enabled purchasing vehicles.

TABLE -26 FARMERS PERCEPTION LEVEL ON LIVING STANDARD

Type of farmers Level	No. of. respondents		
	Small	Medium	Big
15 -35 (low)	-	-	-
36-55(moderate)	15 (08.50)	02 (01.70)	02 (02.00)
56-75(high)	165 (94.70)	118 (98.30)	98 (98.00)
Total	180 (100)	120 (100)	100 (100)

Source: Computed from survey data during 2011-12

Figures in brackets are percentages to the respective column total

The survey result reveals that majority of farmers under all categories do have high perception towards increase in living standard, and none of them found under low level perception category. Further, 8.3 per cent of small farmers were found to have moderate perception on the increase in living standard. However, the result of ANOVA reveals that there is a significant variance between farmers' categories and their perception towards increase in living standard. (The "f" value between groups is 26.265 which is significant at 0.01 level)

1.16. RESULTS OF LINEAR MULTIPLE REGRESSION ANALYSIS – EFFECT ON INCREASE IN LIVING STANDARD (OVERALL)

To understand the effect of independent variables on the dependent variable namely increase in living standard among farmers, Linear Multiple Regression model was employed. Twelve independent variables were statistically related to increase in living standard as dependent variable.

TABLE -27 MULTIPLE LINEAR REGRESSION ANALYSIS – EFFECT ON INCREASE IN LIVING STANDARD (OVERALL)

Independent variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Gender	-.113	.500	-.005	-.226	.822

Education	-.003	.153	.000	-.018	.986
Family Size	.763	.275	.068	2.769	.006
Landholding	-.063	.108	-.014	-.586	.558
Income	1.248	.035	.888	36.005	.000
Assets	-.029	.330	-.002	-.088	.930
Occupation	-.168	.263	-.016	-.639	.523
Borrowings	-.059	.180	-.008	-.328	.743
Exposure to mass media	.821	.296	.067	2.774	.006
Knowledge about Coop.Mgmt	.250	.251	.024	.995	.321
Participation in Coop.Mgmt	.954	.359	.065	2.662	.008
Services mix index	.750	.121	.302	6.188	.000
Constant	11.421	2.342		4.876	.000
R²	.813				
N	400				

Source: Computed from survey data during 2011-12

As shown in table 27, the model is significant and the R^2 value is 81.3 per cent i.e., the effect on the dependent variable has been explained at 81.3 per cent level. The results show that demographic variables such as gender and education, the variables under economic indicators namely size of landholdings, assets owned, nature of adoption of agriculture as occupation and the extent of borrowings including the cooperative characteristics variables namely knowledge about cooperative management did not have effect whereas the economic indicator variable namely annual farm income level, social variable namely exposure to mass media and cooperation indicator variables such as participation in cooperative management, and the extent of services availed from marketing cooperatives (Service mix index) have effected significantly for high realization of the economic benefits of the marketing cooperatives enabling for increase in living standard among farmers. However, among these significant variables, the annual farm income level and services availed from marketing cooperatives (service mix index) were found to be the prominent variables effecting significantly to a greater extent for high realization of the economic contributions of the marketing cooperatives enabling for increase in living standard i.e., the standardized coefficient β value is 0.888 and 0.302 respectively which is greater than the other variables. Thus it may be stated that increase in annual farm income level blended with continuous utilization of services of marketing cooperatives results to increase in living standard.

1.17. TO SUM UP

The analysis of the socio, economic profile of the farmers (respondents) reveals that majority of the farmers under survey belong to middle age category operating small and medium size land holdings having agriculture (cultivation) as their primary occupation. Majority of them have fair level of formal education and adopted nuclear type family. Majority of them belonged to Backward Community and have high level of social participation, high level of mass media

exposure, high level of neighborliness and high level of contact with change agents. However significant level of difference in the social profile is found among farmers. So far as economic profile is concerned, agriculture (cultivation) is the major source of income and the family annual mean income is Rs.2.62 lakhs, their mean assets value is Rs.9.75 lakhs. They have borrowed credit from more than one source, and the cooperatives are the prominent source. They have membership with more than one cooperative in general and prominently with PACS and PMCSs in particular. They have availed more than one service from their cooperatives and also have high level of knowledge about the cooperatives and cooperative management. The economic variables namely annual farm income, occupation and cooperation indicator variables such as knowledge about cooperative management, and services mix index variables do have significant positive effect on the perception of small farmers towards occupational stability whereas demographic variable namely education, economic variable namely income and cooperation indicator variables namely knowledge about cooperative management and services mix index were found to have significant positive effect on the perception of medium farmers towards occupational stability. As far as big farmers are concerned, economic variables such as income, assets and cooperation indicator variable namely knowledge about cooperative management were found to be dominant influencing independent variables.

1.18. CONCLUSION

Services availed from marketing cooperatives (Services mix index), management, farm income, and family size were the prominent independent variables influencing to realize the economic contributions of marketing cooperatives in terms of occupational stability and increase in living standard among small farmers. On the other hand, to realize the economic contributions of marketing cooperatives by medium farmers with respect to occupational stability, productivity increase, income increase, and increase in living standard the variables such as education, farm income, occupation, knowledge about cooperative management, participation in cooperative management, family size, and services availed from marketing cooperatives have effected significantly. As regards to big farmers, although they do have high perception towards the economic contributions of marketing cooperatives, farm income, assets, occupation, knowledge about cooperative management, and participation in cooperative management have greatly effected to realize the economic contributions of marketing cooperatives. Thus the marketing cooperatives in the study area have made imprints on the economic lives of the farming community in the region. Further, the analysis made in this study indicates the existence of significant level of differences among farmers in their socio, economic profile as well as cooperation indicator variables such as knowledge about cooperative, cooperative management and services availed from cooperatives. Thus the analysis serves as backdrop for further analysis in the study.

1.19. REFERENCE

- [1] Anderson and Pasker (1964), *Society*, Van Nostrand Company, New York.
- [2] Calvert H (1959), *The Law and Principles of Cooperation*, Thacker Spink & Co Pvt. Ltd, Calcutta.
- [3] Debrata Das (2002), “*Dairying : An Instrument of Economic Change: A case study of the leading Modern Dairies*” Dairy Cooperativisation, Rawat Publications, Jaipur.
- [4] Elladin. H (1946), The importance of Education and the Cooperative Movement, quoted in
- [5] Krishnaswami, O.R. and V.Kulandaisamy. 1992. *Theory of Cooperation – An In-depth Analysis*, Coimbatore: Shanma publications.
- [6] Ghurye G.S (1950), *Caste and Class in India*, Popular Book Depot, Bombay.
- [7] Herrring (1977), *Land Tenure and Credit : Capital in Contemporary India* in R.E. Frykenberg (ed), *Land Tenure and Peasants in South Asia*, Manohar., New Delhi.
- [8] Joshi P. 1985. *Institutional Finance in India*, Manohar, New Delhi.
- [9] Krishnaswami O.R (1985), *Fundamendals of Cooperation*, S. Chand & Co Ltd, New Delhi.
- [10] Krishnaswami O.R. and Kulandaiswamy V (2000), *Cooperation Concept and Theory*, Arudra Academy, Coimbatore.
- [11] Kulkarani K.R. 1962. *Theory and Practice of Cooperation in India and Abroad Vol. I*, Cooperators” Book Depot, Bombay.
- [12] Lundberg G.A. Schrag C.C., Larsen Otto N (1958), *Sociology*, Harper and Brothers, New York.
- [13] Maciver R.M (1960), *The Elements of Social Science*, Methu, En & Co Ltd, London.
- [14] Madan G.R (1989), *India’s Social Transformation, Vol.I, Problems of Development*, Allied Publications Ltd, Ahamedabad.
- [15] Mathur B.S (2000), *Cooperation in India*, Sahithya Bhawan, Allahabad.
- [16] Nilkant V. and A.N. Das (1979), *Subversion of Cooperative Institute – Case Study from Purnia* in A. Nilkant and A.N. Das (ed), *Agrarian Relations in India*, Manohar, New Delhi.
- [17] Secord and Buckman (1964), *Social Psychology*, Mc Graw Hill Book Company, New York.
- [18] Sumner W.G. and Keller A.G (1946), *The Science of Society*, 4 Vols, Yale University Press, New Haven.
- [19] Thorner, Daniel (1964), *Agricultural Cooperatives in India*, Asia Publishing House, Bombay.
- [20] Vidhya Bhusan and D.R. Sachdeva (1999), *An Introduction to Sociology*, Kitabmahal, Allahabad.
- [21] Weeraman P. E (1979), *The Aims and Principles of Cooperatives and their Application in the Developing Countries- Speeches on Cooperation 15*, ICA ,New Delhi.
- [22] Allan (1983). “Informal Networks of Care; Issues raised by Barclay”, *British Journal of Social Work*, 13.

- [23] Arunachalem (1999), "Empowering Women for Food Security" *Social Welfare*, 46(6) September.
- [24] Aswini Kumar Mishra (1994), "Social Impact of Handloom Weavers" Cooperatives on Weavers in Western Orissa: An Empirical Study", *Indian Cooperative Review*, 32(2), October.
- [25] Bhatt S.C (2001), "Media and Rural Technology", *Kurukshetra*, October.
- [26] Bhople R.S (1993), "Socio-Economic Impact of Weavers Cooperatives on Member Weavers", *Indian Cooperative Review*, January, 238-243.
- [27] Dash A.P. and Basantha Kumar (1996), "Development of Industrial Cooperatives in the informal Sector – Need for Policy Change", *Cooperative Perspective*, July –September.
- [28] Deepak shah and Alok Shah (1996), Impact of Dairy Cooperatives on Marketing pattern of Milk – A Case Study, *Indian Cooperative Review*, 33 (3).
- [29] Elizabeth B.Hurlock (1974), "Impact of Milk Cooperatives on the Rural Economy of Rajasthan", *Indian Cooperative Review*, January.
- [30] Eswara Prasad (1992), "Credit Screening: Application of Discriminant Analysis to Identify Potential Defaulters of IRDP Assistance in Anaparthi District, A.P". *Indian Cooperative Review*, October 30(2).
- [31] Gangrade (1997), Power to Powerless- A Silent Revolution through Panchayat Raj System, *Journal of Rural Development*, Oct- Dec, 16 (4).
- [32] Ghosh A.K(1987), "Socio – Economic Impact of Fishermen's Cooperatives in West Bengal", *The Cooperator*, April, 24(19).
