4

RESULTS AND DISCUSSION

Microinsurance is designed with the objective of protecting poor people and also highlights the environment that surrounds them, their needs and possibilities. The product is developed for the people ignored by traditional insurance markets. Challenges for insurers emphasise the needs of the rural poor and that microinsurance is difficult to distribute. Without appropriate insurance services, the vast majority of the poor “do without” turn to patrons, the extended family or village moneylenders or temporarily migrate for work. “Development of the microinsurance sector needs a longer-term perspective that combines responsiveness to client priorities with market development and financial viability”.

The factors contributing to emerging opportunities for microinsurance in India includes robust economic growth, which is increasing income among rural households; a “silent revolution” of rapidly expanding self-help groups comprised mostly of poor women, which has led to more entrepreneurial activity in rural areas; and increased media exposure, which can boost marketing practices.

Government effort through the provisions of microfinance opportunities to rural population is a step in the right track in addressing poverty between its growing populations. Hence, adequate insurance is needed to protect these credit lines offered by microfinance institutions and banks; otherwise beneficiaries of such facilities may possibly go back to poverty. Rural population is exposed to such risks as health, fire, burglary, death and family responsibilities which are capable of eroding assets acquired over time.

The objectives of the study on risk management and demand for microinsurance among rural households are

1. To analyse the factors that influence the risk and risk management strategies.
2. To determine the awareness of microinsurance products.
3. To analyse the factors motivate to buy the microinsurance.
4. To identify the features of different microinsurance products.
5. To segment the market for microinsurance in the rural area.

This chapter is divided into six sections. They are depicted below to follow up the objectives:

4.1 Socio-economic Factors and Financial Behaviour of the Rural Households.

4.2 Risk and Risk Management Strategies of the Rural Households.

4.3 Awareness of Microinsurance Products.

4.4 Factors Motivate the Rural Households to buy Microinsurance Products.

4.5 Factors Determining the Demand for Microinsurance.

4.6 Market the Segment for Microinsurance in the Rural Area.

4.1 Socio-economic Factors and Financial Behaviour of the Rural Households

Socio-economic factors of the rural households and financial behaviour are discussed in the first part.

Socio-economic factors of the respondents are discussed under section namely demographic, social, economic and financial behaviour of the rural households.

4.1.1 Demographic Background

The study identified the following demographic background of the respondents namely the gender, age, marital status and educational status which is given in Table 6.

Table 6

Demographic Background

S. No	Particulars	Number of Respondents (N = 558)	Percentage
1.	**Gender**		
	Male	347	62.2
	Female	211	37.8
2.	**Age**		
	Less than 25 Years	42	7.5
	26 – 35 Years	221	39.6
	36 – 45 Years	230	41.2
	More than 45 Years	65	11.6
3.	**Marital status**		
	Married	325	58.2
	Unmarried	187	33.5
	Widow	24	4.3
	Divorce	22	3.9
4	**Educational status**		
	Illiterate	106	19.0
	High school	197	35.3
	Higher secondary	163	29.2
	Under Graduation	59	10.6
	Post Graduation	33	5.9

Source: Primary data

Gender

From Table 6, it is clear that 62.2 per cent of the respondents are male and 37.8 per cent of them are female.

It is identified that majority of the respondents are male.

Age

Table 6 indicates that 41.2 per cent of the respondents in the age group of 36 – 45 years, 39.6 per cent are in the age group of 26 – 35 years,

11.6 per cent are in the age group of more than 45 years and 7.5 per cent of respondents are in the age group of less than 25 years.

It is concluded that most of the respondents (41.2 per cent) in the age group of 36 - 45 years.

Marital Status

It is derived from Table 6 that 58.2 per cent of the respondents are married, 33.5 per cent of the respondents are unmarried, 4.3 per cent of the respondents are widow and only 3.9 per cent of the rural households are divorcees.

It is concluded that the majority of the rural households (58.2 per cent) interviewed for the study are married.

Educational Status

Education plays an important role in moulding an individual's life and creates better awareness about the opportunities and equips them to grab it. In order to study the percentage distribution of respondents by education level, the rural households are divided into five categories:

a) Those in which the household members are illiterate.

b) Those in which the household members studied upto High school.

c) Those in which the household members are with Higher Secondary Education.

d) Those in which the household members are Under Graduates.

e) Those in which the household members are Post Graduates.

It is revealed from Table 6 that a very small percentage (5.9 per cent) of rural households falls in the fifth category. While a higher percentage of rural households (35.3 per cent) fall into the second category, 19.0 per cent of the rural households are illiterate members and 10.6 per cent of the households are Under Graduate members.

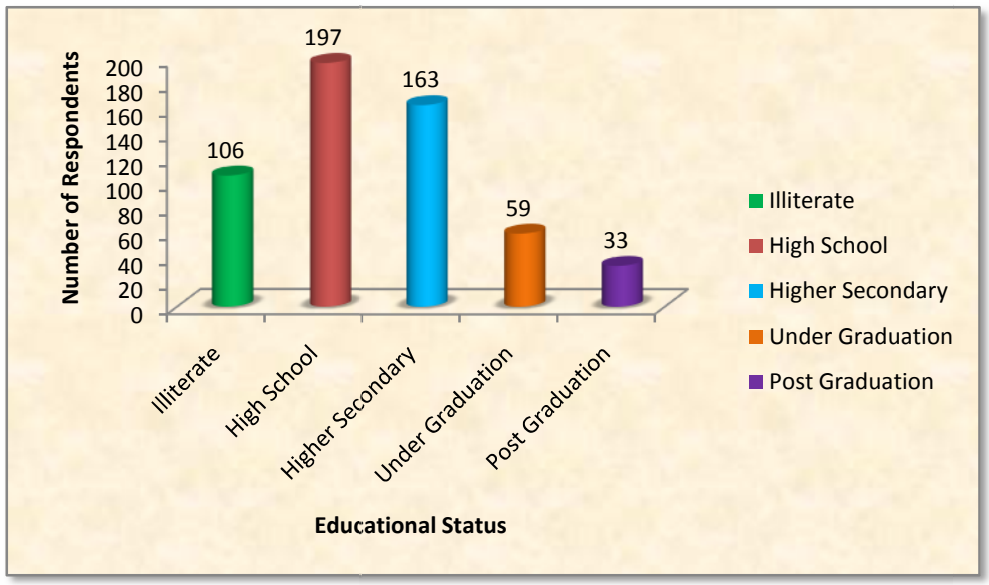


Figure 3

Educational Status

4.1.2 Social Background

Social background of the household is one of the important tool to measures the need for microinsurance. In the study, social background of the respondents' includes type of the family and family size. If a household is in joint family, there may be more number of dependents, hence this necessitates the person to take insurance and to safeguard the dependent at the time of risk.

Table 7

Social Background

Sl. No.	Particulars	Number of Respondents (N = 558)	Percentage
1.	**Type of family**		
	Nuclear	356	63.8
	Joint	202	36.2
2.	**Family size**		
	Two	23	4.1
	Three	165	29.6
	Four	183	32.8
	Above four	187	33.5

Source: Primary data

Type of Family

Behaviour a human influenced by their family setup, decision making and in many other ways. The major two types of families in existence are nuclear and joint family.

Table 7 reports that the types of the family in which majority of 63.8 per cent of the respondents are from nuclear family, while 36.2 per cent are from joint family.

Family Size

Based on the number of dependents on the family, the opportunities available for each member and their standard of living will change.

Among the total respondents, 33.5 per cent of respondents have above four members in their family. The respondents with four members in the family constitute to 32.8 per cent of the sample. About 29.6 per cent of the respondents have three members in their family and only 4.1 per cent of the respondents have two members in their family, as depicted in Figure 4.

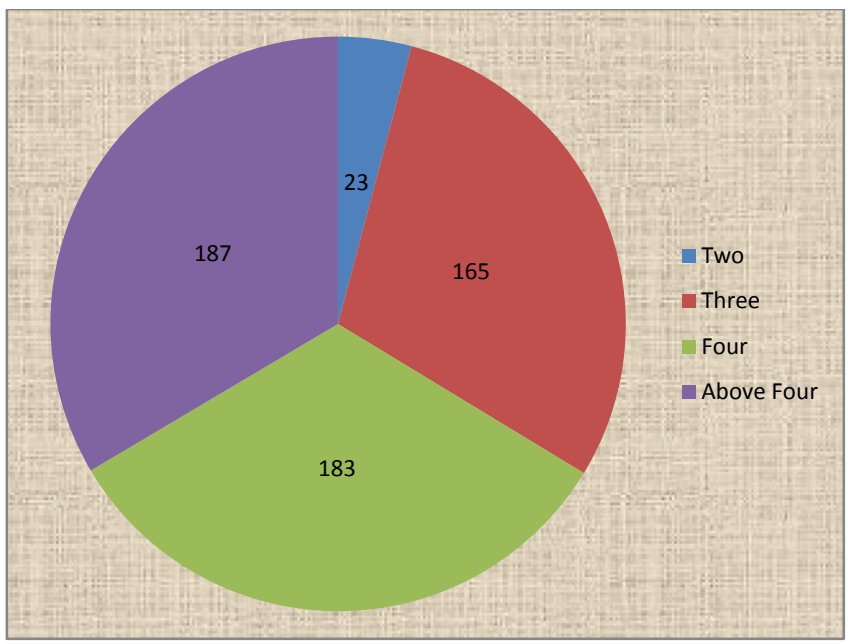


Figure 4

Family Size

4.1.3 Economic Background

Economic background of respondents include their occupation, monthly income, monthly expenses and agricultural land holding are given in Table 8.

Table 8

Economic Background

Sl. No	Particulars	Number of Respondents (N = 558)	Percentage
1.	**Occupation**		
	Agriculture	161	28.9
	Employed	74	13.3
	Business	171	30.6
	Professional	61	10.9
	Unemployed	91	16.3
2.	**Monthly income (in `)**		
	Below 5,000	78	14.0
	5,001 – 10,000	199	35.7
	10,001 – 15,000	182	32.6
	Above 15,000	99	17.7
3.	**Monthly expenses (in `)**		
	Less than 3,000	113	20.3
	3,001 – 6,000	266	47.7
	6,001 – 9,000	141	25.3
	More than 9,000	38	6.8
4.	**Agriculture land holding**		
	No land	113	20.3
	Below one acre	217	38.9
	One – two acre	173	31.0
	Two acre and above	55	9.9

Source: Primary data

Occupation

Occupation provides the basic income for living. Poverty, unrest and many problems occur due to unemployment. Occupation includes agricultural, employment, business, professional and unemployment.

Table 8 reveals that 30.6 per cent of the respondents are doing business. 28.9 per cent of the respondents are agriculturist. About 16.3 per cent of the respondents are unemployed, 13.3 per cent of the respondents stated that they are employed in Private or Government organisation and 10.9 per cent of the respondents are professionals.

Monthly Income

A family's income significantly influences the opportunities they have to thrive. While a households assets are not purely material and comprise much more than financial income, increasing incomes for poor families is still an important means for achieving better financial inclusion.

Table 8 shows that 35.7 per cent of the respondents have monthly income in the range of Rs. 5,001 – Rs.10, 000. 32.6 per cent of the respondents earn monthly income between Rs. 10,001 and Rs. 15,000. The respondents with a monthly income of above Rs. 15,000 are 17.7 per cent of the total sample. 14 per cent of the rural households have the monthly income of below Rs. 5,000.

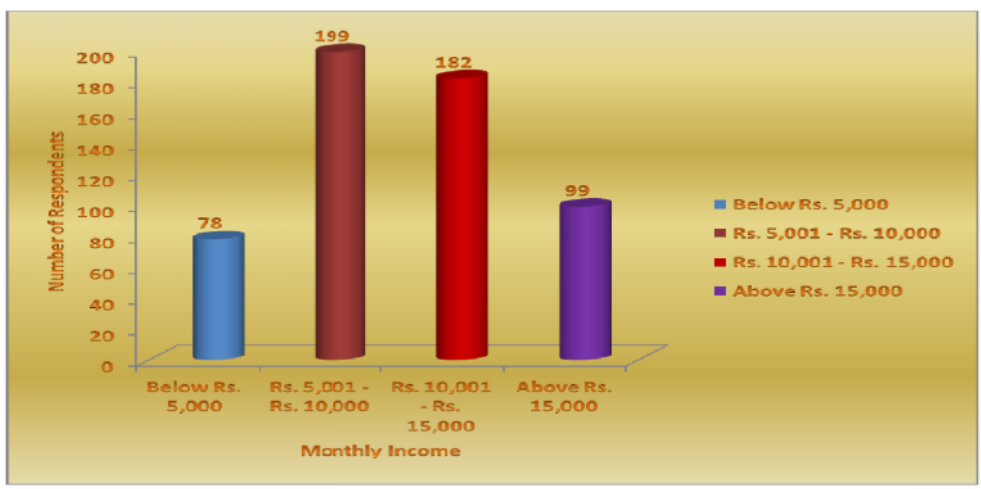


Figure 5

Monthly Income

Monthly Expenses

Monthly expenditure on food, health care, fuel, energy, education and others are important indicators which measures the economic conditions of the poor people. Improved financial inclusion and capability can help those living in poverty to achieve more with low income itself. Rural household's expenses consisting of food items and non food item such as education, health, transport, clothing, housing, etc., account for major expenses.

It is revealed from the table that 47.7 per cent of the respondents selected for the study spend between Rs. 3,001 – Rs. 6,000 as monthly expenses, 25.3 per cent of the respondents spend between Rs. 6,001 and Rs. 9,000, 20.3 per cent of the respondents spend less than Rs. 3,000 and only 6.8 per cent of the respondent spend above Rs. 9,000.

Agricultural Land

Agriculture is the backbone of Indian economy and normally the rural households will engage in agricultural activities.

It could be inferred from the table that 38.9 per cent of the respondents have less than one acre of agricultural land. 31.0 per cent of the respondents have one to two acres of agricultural land, only 9.9 per cent of them have above two acre of the agricultural land and rest do not having agricultural land.

4.1.4 Financial Behaviour

With inclusive financial system, the financially excluded individuals and enterprise with promising opportunities were limited to their own savings and earning.

Bakshi et al (2012) demonstrated that household incomes surveys are not showing reliable large - scale sources of data on household incomes. A methodological framework has been developed for the estimation of rural household's income in India. Income distribution based on findings from eight village surveys is conducted using the approach outlined. The two main findings from the study were that, (a) household incomes were underreported

in rural areas, and (b) household incomes were lower than the aggregate of consumption and savings.

This section assesses the financial behaviour of the respondents through their savings and borrowings activities.

4.1.4.1 Monthly Saving

Rural households want to save, borrow and invest funds for their family. It acts as a vehicle for very poor people to build up some savings. Savings can be known as the cash or physical products set aside for future use. People in rural and other low - income communities can save when they are guided and encouraged by the Government and financial institutions. The concept of microinsurance is based on the principle that the members will develop the habit of thrift before they avail themselves of loans.

Monthly saving of the respondents with the income level of the rural households is presented in cross tabulation.

Table 9

Monthly Saving of the Respondents with Income Level

Monthly Income (Rs.)	Monthly Saving (Rs.)					
	Less than Rs. 1000	Rs. 1001 to Rs. 2000	Rs. 2001 to Rs. 3000	Above Rs. 3000	Total	Mean score
Less than Rs. 5,000	15 (19.2)	32 (41.0)	23 (29.5)	8 (10.3)	**78 (100)**	2.3077
Rs. 5,001 to Rs. 10,000	48 (24.1)	91 (45.7)	52 (26.1)	8 (4.0)	**199 (100)**	2.1005
Rs. 10,001 to Rs. 15,000	36 (19.8)	63 (34.6)	68 (37.4)	15 (8.2)	**182 (100)**	2.3407
Above Rs. 15,000	20 (20.2)	30 (30.3)	18 (18.2)	31 (31.3)	**99 (100)**	2.6061
Total	**119 (21.3)**	**216 (38.7)**	**161 (28.9)**	**62 (11.1)**	**558 (100)**	**2.2975**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

It is inferred from Table 9 that the major proportion of the respondents, 41 per cent with monthly income range of less than Rs. 5000 and 45.7 per

cent of the respondents with monthly income range of Rs. 5001 to Rs. 10000 are saving from Rs. 1,001 to Rs. 2,000 in a month. 37.4 per cent of the respondent's monthly savings range between Rs. 2,001 to Rs. 3,000 and their monthly income is between Rs. 10,001 and Rs. 15,000 and 31.3 per cent who are earning monthly income of above Rs. 15,000 save more than of Rs. 3,000 per month.

It is concluded that majority of the respondents whose monthly income of above Rs.15, 000 are save more with the mean score of 2.6061.

4.1.4.2 Constraints to Save

One of the prime functions of finance is mobilizing savings. Rural and low income household's access to savings accounts and other basic financial services can manage unexpected events, invest in opportunities like education and also build financial security. But the rural households face more constraint to save. The constraint may be spouse, own temptation and unforeseen event.

Table 10

Constraints to Save

Main constraint	Number of Respondents	Percentage
Spouse	85	15.2
Own temptation	229	41.1
Unforeseen events	244	43.7
Total	**558**	**100**

Source: Primary data

Table 10 shows that, out of 558 respondents most of the respondents (43.7 per cent) stated that unforeseen events are the main constraint affecting the ability to save. 41.1 per cent of the respondents stated that their own temptation affecting the saving behaviour and only 15.2 per cent of the respondents stated that spouse is acting as the constraint to save for the future.

4.1.4.3 Availability of Bank Account

To assess the level of rural households in financial inclusion, the availability and accessibility level of bank account are identified.

Table 11

Availability of Bank Account

Bank Account	Number of Respondents	Percentage
Yes	451	80.8
No	107	19.2
Total	**558**	**100**

Source: Primary data

It is found from Table 11 that 80.8 per cent of the respondents have bank account due to the basic needs and 19.2 per cent of the respondents do not have bank account.

4.1.4.4 Trust with Bank

The rural household's extents of trust on banks and their activities are given in Table 12.

Table 12

Trust with the Bank

Trust with Bank	Number of Respondents	Percentage
Definitely not	24	4.3
Rather not	70	12.5
Neither yes nor not	65	11.6
Rather yes	158	28.3
Definitely yes	241	43.2
Total	**558**	**100**

Source: Primary data

Table 12 indicates that maximum of 43.2 per cent of the respondents have more trust on bank. Another 28.3 per cent of the respondents have some trust on banking activities. 12.5 per cent of the respondents have no trust on bank, 11.6 per cent of the respondents are neutral in their opinion and

only 4.3 per cent of the respondents do not trust the bank for the activity they rendered.

4.1.4.5 Socio-economic Factor and Trust with Bank

Chi-square test has been applied to study the association between socio-economic factors and the extent of trust with the bank by formulating the null hypothesis.

H_0: There is no significant association between socio-economic factors of the respondents and their trust with the bank.

H_1: There is significant association between socio-economic factors of the respondents and their trust with the bank.

Table 13

Socio-economic Factors and Trust with Bank

Socio-economic Factors	Chi-square value	p values	Significance
Gender	39.632	0.000	Significant
Age	75.496	0.000	Significant
Education	168.6	0.000	Significant
Marital Status	72.230	0.000	Significant
Type of Family	75.07	0.000	Significant
Family Size	76.928	0.000	Significant
Occupation	80.385	0.000	Significant
Monthly Income	89.307	0.000	Significant

Source: Computed data

It is found from Table 13 that the Chi-square value is greater than p value at one per cent level of significance, so the null hypothesis is rejected and the alternative hypothesis is accepted indicating that there is a significant association between socio-economic factors of the respondents and their trust with the bank.

4.1.4.6 Sources of borrowing

The rural households that plan or manage their money better tend to have lesser exposure to financial crisis and cope financially better than those whose do not plan or manage their money as well. Credit from formal sector allows the poor to escape from vicious cycle of “low income, low saving, low investment and low income”. Generally they start borrowing for consumption purpose and move on to the productive purpose once they are linked to banks.

Borrowing is an important feature of financial behaviour of households and access to credit is essential for consumption. Rural households borrow from various sources during emergencies which they cannot meet from their own funds. When the credit from formal sector are denied to the poor people, it widens the rich poor divide in availing institutional borrowing and also allows the money lenders (informal sectors) to exploit poor people by charging very high interest.

Sources of borrowing and monthly income of the rural households are presented in cross tabulation.

Table 14

Sources of Borrowing and Monthly Income

Monthly Income (`)	**Sources of Borrowing***				
	Micro Financial Institutions	**Banks**	**Private Money Lenders**	**Friends and Relatives**	**SHGs**
Less than 5,000	6 (9.7)	53 (13.8)	61 (14.7)	64 (13.6)	29 (50.0)
5,001-10,000	26 (41.9)	166 (43.3)	156 (37.7)	174 (37.0)	22 (37.9)
10,001-15,000	15 (24.2)	110 (28.7)	131 (31.6)	158 (33.6)	3 (5.2)
Above 15,000	15 (24.2)	54 (14.1)	66 (15.9)	74 (15.7)	4 (4.0)
Total	**62 (100)**	**383 (100)**	**414 (100)**	**470 (100)**	**58 (100)**

Source: Computed Data **Figures in the parenthesis represent column wise percentage**

***Multiple Responses**

It is found from Table 14 that, 41.9 per cent, 43.3 per cent, 37.7 per cent and 37.0 per cent of the respondents borrowed money from micro financial institutions, banks, private money lenders and friends, relatives and neighbours respectively whose monthly income range between Rs. 5,001 and Rs. 10,000. 50.0 per cent of respondents borrowed from SHGs whose monthly income is less than Rs. 5, 000. 9.7 per cent, 13.8 per cent, 14.7 per cent and 13.6 per cent of the respondents borrowed from micro financial institutions, banks, private money lenders and friends, relatives and neighbours respectively whose monthly income is less than Rs. 5,000.

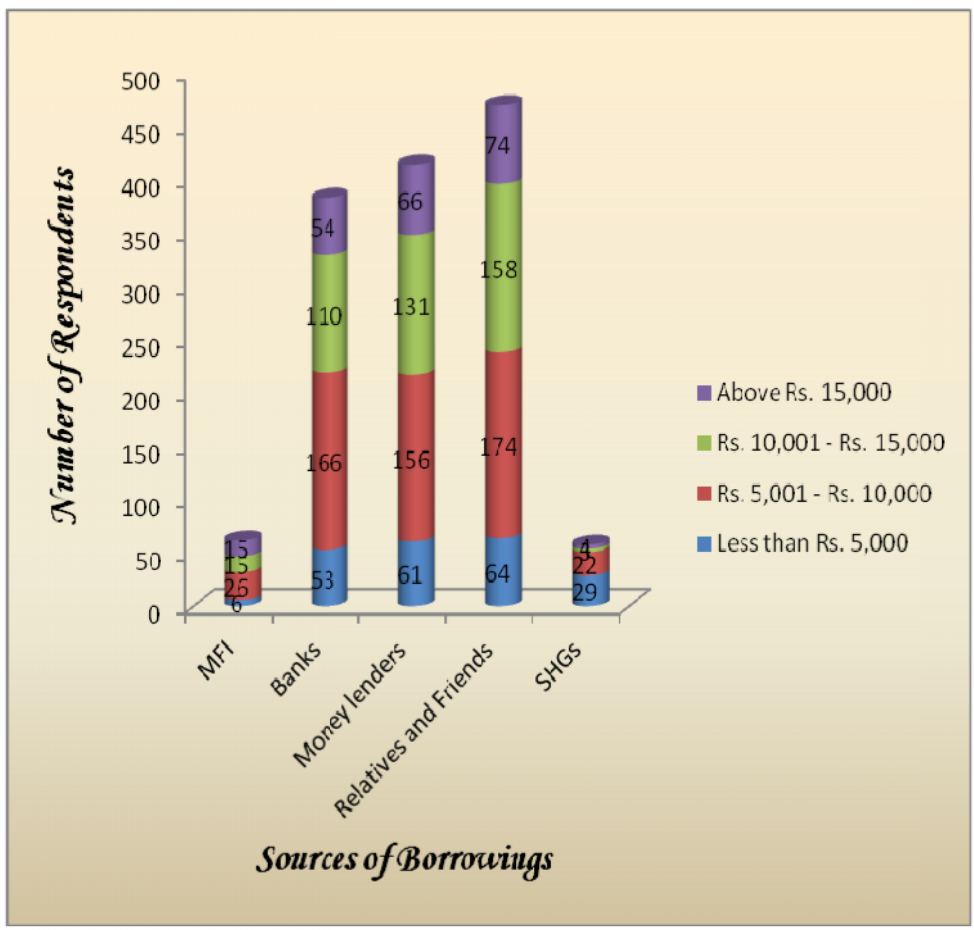


Figure 6

Sources of Borrowing and Monthly Income

It is inferred that, 33.9 per cent of the respondents borrow from friends, relatives and neighbours. 29.8 per cent of the respondents have borrow from private money lenders, 27.6 per cent of the respondents have borrow from banks, 4.5 per cent of the respondents borrow from micro financial institutions and 4.2 per cent of the respondents have borrow from SHGs.

4.1.4.7 Frequency of Borrowing

Often rural and low income households do not have enough money when they face a need, so they borrow. The rural household's family might borrow from relatives or money lenders than the formal financial sources because they usually do not have the collateral security which banks demand to avail loan. Table 15 discusses the frequency of borrowings of the rural households, based on the multiple responses given by the respondents.

Table 15

Frequency of Borrowing

Frequency of Borrowing (in times)	**Sources of Borrowing***					**Total**
	Micro Finance Institution	**Bank**	**Private Money Lenders**	**Relatives, Friends and Neighbours**	**SHGs**	
One	36 (10.8)	115 (34.7)	79 (23.8)	87 (26.2)	15 (4.5)	**332 (23.9)**
Two	23 (3.6)	186 (29.1)	207 (32.4)	201 (31.5)	22 (3.4)	**639 (46.1)**
Above Two	3 (0.7)	82 (19.7)	128 (30.8)	182 (43.8)	21 (5.0)	**416 (38.0)**
Total	**62**	**383**	**414**	**470**	**58**	**1387**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

***Multiple Responses**

It is found from Table 15 that, 46.1 per cent of the respondents availed loan for two times from all the available sources of borrowing. Out of which the maximum of the respondents (32.4 per cent) borrow from private money lenders and only 3.4 percent of the respondents borrow from SHG's. 38.0 per cent of the respondents borrow money more than two times from different sources, from this most of the respondents (43.8 percent) borrow from relatives, friends and neighbours and only 0.7 per cent borrows from micro financial institutions. 23.9 per cent of the respondents borrow from different sources only one time, of which maximum of the respondents (34.7 per cent) depended on banks and 4.5 per cent borrow from SHG's.

It is concluded that, majority of the respondents borrow several times from the friends, relatives and neighbours because they are easily approachable.

4.1.4.8 Household Indebtedness

The rural households need credit not only for agriculture but also for daily needs, to compensate for lack of knowledge and skills that affect productivity and for solving problems related to health and disasters. Table 16 shows how the households manage the debts with it or beyond their capability.

Table 16

Household Indebtedness with Income Level

Monthly Income (Rs.)	**Household Indebtedness**			
	No Debt	**Debt within Capacities**	**Debt beyond Capacity**	**Total**
Less than Rs. 5,000	6 (7.7)	20 (25.6)	52 (66.7)	**78 (100)**
Rs. 5,001- Rs. 10,000	22 (11.1)	98 (49.2)	79 (39.7)	**199 (100)**
Rs. 10,001 - Rs. 15,000	46 (25.2)	66 (36.3)	70 (38.5)	**182 (100)**
Above Rs. 15,000	15 (15.1)	55 (55.6)	29 (29.3)	**99 (100)**
Total	**89 (15.9)**	**239 (42.8)**	**230 (41.2)**	**558**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

It is derived from Table 16 that majority of the respondents (66.7 per cent) whose monthly income is less than Rs. 5,000 have borrow funds beyond their capacity, 55.6 per cent of the respondents whose monthly income is above Rs. 15,000 and 49.2 per cent of them whose monthly income range between Rs. 5,001 and Rs. 10,000 have debts within their capacity and 38.5 per cent of them whose monthly income ranges between Rs. 10,001 and Rs. 15,000 have debt beyond their capacity.

It is concluded that majority of the respondents have debt more than their capacity and also their earning are less than Rs.5, 000 per month. So it is understood, since the respondents monthly income is less, they are not able to meet their basic needs that have forced them to borrow beyond their repaying capacity to accomplish their basic needs.

Section 4.1 revealed the demographic, social, economic profile and financial behaviour of the rural households in the study area. It gives a wide view about the respondents. A cross tabulation is carried out for monthly income with monthly saving of the family, sources of borrowing and households indebtedness. Chi-square test was carried out to know the association between socio-economic factors and trust with banks.

4.2 Risk and Risk Management Strategies of the Rural Households

Risk and risk management strategies of the rural households are discussed under the following sections.

4.2.1 Households Affected by Different Risks.

4.2.2 Prevalence and Impact of Coping Mechanism on Risks Management

4.2.1 Households Affected by Different Risks

It is important to note that low income households, experience various nominal risks which are frequent in their normal course of life. However, related losses are financially negligible and therefore manageable by small holders and do not require microinsurance products, while the financial impact of these risks are low the frequency of their occurrence perpetuates poverty and may require the attention of other risk mitigating strategies offered by

Micro Financial Institutions and Non Governmental Organisations in order to be properly addressed.

4.2.1.1 Risk Affected by the Rural Households

Table 17 describes the distribution of respondents on various risk and risk management strategies adopted by them in the past. The response is classified as Yes and No. Risk management strategies are routed into three categories such as Health, Property and Agricultural loss.

Table 17

Risks Affected by the Rural Households

Risks	Response	
	Yes	No
HEALTH LOSS		
Death of the family members	83 (14.9)	475 (85.1)
Illness	95 (17.0)	463 (83.0)
Disability	81 (14.5)	477 (85.5)
Accidents	92 (16.5)	466 (83.5)
PROPERTY LOSS		
Damage to personal properties	78 (14.0)	480 (86.0)
Livestock disease	65 (11.6)	493 (88.4)
Business losses	54 (9.7)	504 (90.3)
AGRICULTURAL LOSS		
Natural disaster	56 (10.0)	502 (90.0)

Poor harvesting	48 (8.6)	510 (91.4)
Crop losses	41 (7.3)	517 (92.7)

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

It is found from Table 17 that under 'Health Loss', 17 per cent of the respondents are affected with Illness in the family, 16.5 per cent of the respondents are affected by accidental risk, 14.9 per cent of the respondents faced the risk due to the death of the family members and 14.5 per cent have disability risk.

Under 'Property Loss', 14.0 per cent of the respondents are involved with damages to personal properties, 11.6 per cent have the livestock disease like buffalo, bullock carts, etc., and 9.7 per cent of the respondents are involved with business loss due to mismanagement of business.

Under 'Agricultural Loss', 10 per cent of the respondents are affected by natural disaster, 8.6 per cent of them are faced poor harvesting and 7.3 per cent of them have crop losses.

In overall, maximum of the respondents have illness in the family under 'Health Loss' , damage to personal properties under 'Property Loss' and natural disaster under 'Agricultural Loss'.

4.2.1.2 Risk Management Mechanism Adopted by the Rural Households

Rural households follow variety of coping strategies to manage different kind and nature of risks that affect their income and smooth consumption. But many informal risk coping strategies come at a cost, as assets are depleted when trying to cope with risks such as death of the family members, illness, disability, accidents, property loss, agricultural loss, business loss, natural disaster, poor harvesting and crop losses. It has both short term and long term adverse effect on households.

Coping mechanism has been adopted by the respondents to manage their risk when occurred. The different risks faced by the respondents and

coping mechanism used by them are presented in Table 18. Coping mechanism includes saving utilization, reduce expenses, borrowed from friends and relatives, loan from private lenders, selling of their assets and policies taken from insurance company.

Table 18

Risk Management Mechanism

Risks	Saving Utilization	Reduce Expenses	Friends / Relatives	Loan	Selling Assets	Insurance	Total
HEALTH LOSS							
Death of the family members	16 (19.3)	20 (24.0)	11 (13.3)	10 (12.0)	15 (18.1)	11 (13.3)	**83 (100.0)**
Illness	18 (19.0)	16 (16.8)	29 (30.5)	13 (13.7)	11 (11.5)	8 (8.4)	**95 (100.0)**
Disability	14 (17.3)	13 (16.0)	20 (24.7)	8 (9.9)	15 (18.5)	11 (13.6)	**81 (100.0)**
Accidents	17 (18.5)	24 (26.1)	26 (28.2)	13 (14.1)	1 (1.1)	11 (12.0)	**92 (100.0)**
PROPERTY LOSS							
Damages to personal properties	15 (19.2)	12 (15.4)	7 (9.0)	11 (14.1)	19 (24.3)	14 (18.0)	**78 (100.0)**
Livestock disease	13 (20.0)	12 (18.5)	16 (24.6)	14 (21.5)	6 (9.2)	4 (6.2)	**65 (100.0)**
Business losses	8 (14.8)	4 (7.4)	12 (22.2)	15 (27.8)	8 (14.8)	7 (13.0)	**54 (100.0)**
AGRICULTURAL LOSS							

Natural disaster	6 (10.7)	10 (17.9)	18 (32.1)	12 (21.4)	7 (12.5)	3 (5.4)	**56 (100.0)**
Poor harvesting	-	13 (27.1)	13 (27.1)	7 (14.5)	14 (29.2)	1 (2.1)	**48 (100.0)**
Crop losses	2 (4.9)	3 (7.4)	14 (34.1)	8 (19.5)	14 (34.1)	-	**41 (100.0)**

Source: Primary Data **Figures in the parenthesis represent row wise percentage**

It is interpreted from Table 18 that 24.0 percent of the respondents are reducing their expenses when there was any death of the family members, 30.5 percent of the respondents received money from friends and relatives when they have risk of illness, 24.7 percent of the respondents received money from friends and relatives when they have suffered from disability and 28.2 percent of the respondents received money from friends and relatives when they have any risk of accidents under 'Health Loss'.

Under 'Property Loss' 24.3 percent of the respondents sell their assets when they have damage to personal properties, 24.6 percent of them are receive money from friends and relatives when they have livestock disease and 27.8 of the respondents receive loan when they have business losses.

Under 'Agricultural Loss' 32.1 percent of the respondents receive money from friends and relatives when they affected with the risk of natural disaster, 29.2 percent of the respondents sell their assets in case of poor harvesting and 34.1 percent of the respondents get money from friends and relatives and selling of assets in case of crop losses.

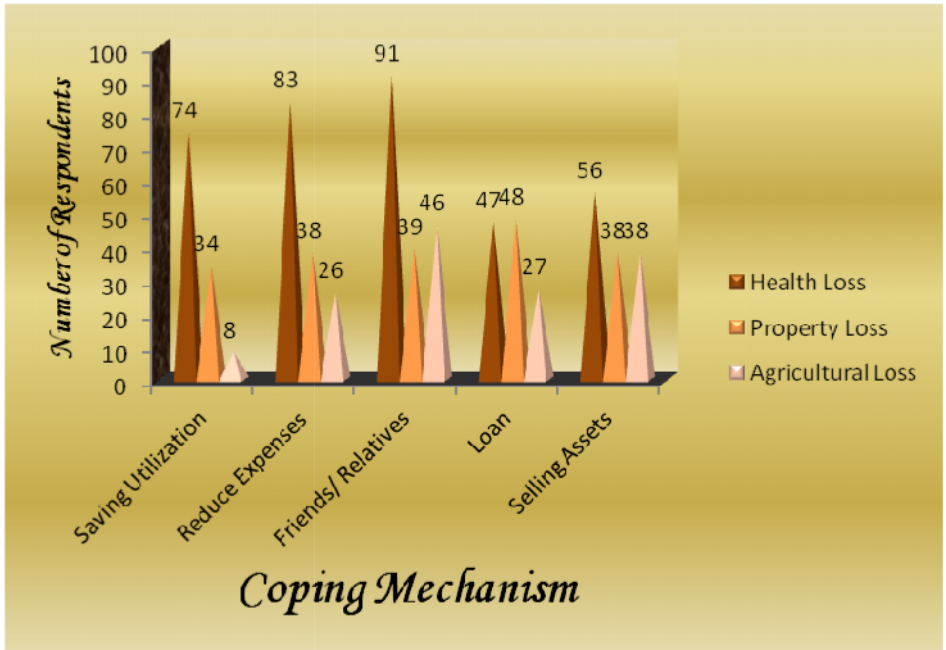


Figure 7

Risk and their Coping Mechanism

4.2.1.3 Risk and their Coping Mechanism

Risk of the rural households and coping mechanism adopted is analysed by applying of Chi-square test by framing a hypothesis.

H_0: There is no association between the risk of the rural households and coping mechanism.

H_1: There is an association between the risk of the rural households and coping mechanism.

Table 19

Risk and Coping Mechanism

Risk	Chi-square value	p value	Significance
HEALTH LOSS			
Death of the family members	5.410	0.368	Not Significant
Illness	17.105	0.004	Significant
Disability	6.037	0.303	Not Significant

Accidents	27.478	0.000	Significant
PROPERTY LOSS			
Damages to personal properties	6.308	0.2777	Not Significant
Livestock disease	10.415	0.064	Not Significant
Business losses	8.444	0.133	Not Significant
AGRICULTURAL LOSS			
Natural disaster	14.929	0.011	Significant
Poor harvesting	12.833	0.012	Significant
Crop losses	16.195	0.003	Significant

Source: Computed data

It is clear from Table 19 that the formulated null hypothesis is rejected for illness, accidents risk under 'Health Loss', natural disaster, poor harvesting and crop losses under 'Agricultural Loss' at five per cent level of significance. Hence, it shows that there is an association between illness, accidents, natural disasters, poor harvesting and crop losses with adoption of coping mechanism. Death of the family members, disability, damages to personal properties, livestock diseases and business losses do not have association between the risk of the rural households and coping mechanism adopted by the rural households.

4.2.2 Prevalence and Impact of Coping Mechanism on Risks Management

The risk of the rural households leads to financial requirement. In this scenario how the rural households are tackling their financial requirement has been studied through financial pressure on different risk and impact of risk by the rural households.

4.2.2.1 Financial Pressure on Different Risk

In order to evaluate the financial pressure of the respondents, Likert scaling technique was applied by adopting the scales as very high, high, moderate, low and very low.

Table 20

Financial Pressure on Different Risk

Risks	Financial Risk					Mean Score	Rank
	Very High	High	Moderate	Low	Very Low		
HEALTH LOSS							
Death of the family members	523 (93.7)	26 (4.7)	5 (0.9)	4 (0.7)	0	4.9140	IV
Illness	514 (92.1)	42 (7.5)	1 (0.2)	1 (0.2)	0	4.9158	III
Disability	531 (95.2)	16 (2.9)	7 (1.3)	4 (0.7)	0	4.9247	II
Accidents	528 (94.6)	25 (4.5)	2 (0.4)	2 (0.4)	2 (0.4)	4.9283	I

Continued.,

Table 20

Financial Pressure on Different Risk

Risks	Financial Risk					Mean Score	Rank
	Very High	High	Moderate	Low	Very Low		
PROPERTY LOSS							
Damages to personal properties	531 (95.2)	25 (4.5)	2 (0.4)	0	0	4.9480	II
Livestock disease	531 (95.2)	19 (3.4)	5 (0.9)	2 (0.4)	1 (0.2)	4.9301	III
Business losses	539 (96.6)	13 (2.3)	4 (0.7)	1 (0.2)	1 (0.2)	4.9498	I

AGRICULTURAL LOSS							
Natural disaster	553 (99.1)	5 (0.9)	0	0	0	4.9910	I
Poor harvesting	540 (96.8)	15 (2.9)	1 (0.2)	1 (0.2)	1 (0.2)	4.9570	II
Crop losses	536 (96.1)	18 (3.2)	3 (0.5)	1 (0.2)	0	4.9516	III

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

It is found from Table 20 that under 'Health Loss', majority of the respondents face high financial pressure with the risk of accident of family members ranked first with the highest mean score of 4.9283 because the financial risk is high for this type. The second rank is given to the disability of the family member with the mean score of 4.9247. The Illness of family member is ranked third with the mean score of 4.9158 and death of the family members are ranked fourth with the mean score of 4.9140. Under 'Property Loss', business loss is ranked first with the mean score of 4.9498, Damages to personal properties is ranked second with the mean score of 4.9480 and livestock disease is ranked third with the mean score of 4.9301. Under 'Agricultural Loss', natural disaster is ranked first with the mean score of 4.9910, poor harvesting is ranked second with the mean score of 4.9570 and crop loss is ranked third with the mean score of 4.9516.

It is concluded that, majority of the respondents have the financial pressure when any family members met with an accident under 'Health Loss' followed by the business loss under 'Property Loss' and suffered by natural disaster under 'Agricultural Loss'.

4.2.2.2 Impact of Coping Mechanism on Risk Management

Risk severity is an impact of risk when it happens. The rural households who are affected by risk are evaluated under 'Health Loss', 'Property Loss' and 'Agricultural Loss' and they have a biggest influence on the households. Low income rural households perceive the impact of risk slightly higher than others.

The impact of coping mechanism on risk management of rural households is analysed by applying three point scaling technique and score are ascertain as follows:

3 - Decreased Significantly, 2 - Decreased Slightly, 1 - No Influence

Table 21

Impact of Coping Mechanism on Risk Management

Risks	Impact of Risk			Mean Score	Rank
	Decreased Significantly	Decreased Slightly	No Influence		
HEALTH LOSS					
Death of the family members	495 (88.7)	49 (8.8)	14 (2.5)	2.8620	IV
Illness	521 (93.4)	28 (5.0)	9 (1.6)	2.9176	II
Disability	491 (88.0)	62 (11.1)	5 (0.9)	2.8710	III
Accidents	521 (93.4)	29 (5.2)	8 (1.4)	2.9194	I

Continued.,

Table 21

Impact of Coping Mechanism on Risk Management

Risks	Impact of Risk			Mean Score	Rank
	Decreased Significantly	Decreased Slightly	No Influence		
PROPERTY LOSS					
Damages to personal properties	497 (89.1)	50 (9.0)	11 (2.0)	2.8710	I
Livestock disease	496 (88.9)	46 (8.2)	16 (2.9)	2.8602	III
Business losses	496 (88.9)	50 (9.0)	12 (2.2)	2.8674	II
AGRICULTURAL LOSS					
Natural disaster	503 (90.1)	43 (7.7)	12 (2.2)	2.8799	I
Poor harvesting	478 (85.7)	69 (12.4)	11 (2.0)	2.8369	III
Crop losses	484 (86.7)	60 (10.8)	14 (2.5)	2.8423	II

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

It is found from the Table 21 that, majority of the respondents use different coping mechanism to reduce the risk of loss from health, property and agricultural losses. Accident of family member is ranked first with the highest mean score of 2.9194, illness of family members is ranked second with the mean score of 2.9176, disability of family members is ranked third with the mean score of 2.8710 and death of the family members is ranked fourth with the mean score of 2.8620 under 'Health Loss'. Damages to personal properties is ranked first with the mean score of 2.8710, business loss is ranked second with the mean score of 2.8674 and livestock disease is ranked third with the mean score of 2.8602 under 'Property Loss'. Natural disaster is ranked first with the mean score of 2.8799, crop losses is ranked second with the mean score of 2.8423 and poor harvesting is ranked third with the mean score of 2.8369 under 'Agricultural Loss'. Under health loss, property loss and agricultural loss, the adopted coping mechanism for risk management decreased risk significantly.

Coping mechanism has helped to manage the risk accident of family member under 'Health Loss', damages to personal properties under 'Property Loss' and natural disaster under 'Agricultural Loss' which are ranked first.

Risk and risk management by the rural households have studied in this section. In this, rural households affected by different risk were identified and risk management mechanism has been analysed by using different coping mechanism. The financial pressure of the respondents is also analysed with the association of the risk affected by them and the level of risk identified for various risk. Chi-square test is applied to test the association between risk and their coping mechanism. It further studied the impact of coping mechanism on risk management and it reveals that with coping mechanism, the respondents were able to manage and reduce the risk.

4.3 Awareness about Microinsurance Products

Microinsurance reduces the risks when unexpected things happen. Table 22 describes the awareness of microinsurance products by the

respondents in the study area. The different microinsurance are Health Insurance, Life Insurance, Property Insurance, Vehicle Insurance, Cattle Farm and Crop Insurance. The respondent's awareness about microinsurance products was analysed by applying five point scaling technique and scores were ascertained as follows:

Extremely aware - 5

Moderately aware - 4

Somewhat aware - 3

Slightly aware - 2

Not at all aware - 1

The mean score was found out and analysed and given in Table 22.

Table 22

Awareness on Microinsurance Products

Microinsurance	Extremely Aware	Moderately Aware	Somewhat Aware	Slightly Aware	Not at all Aware	Mean Score	Rank
Health Insurance	201 (36.0)	54 (9.7)	138 (24.7)	143 (25.6)	22 (3.9)	3.4821	IV
Life Insurance	253 (45.3)	65 (11.6)	104 (18.6)	107 (19.2)	29 (5.2)	3.7276	I
Property Insurance	184 (33.0)	69 (12.4)	84 (15.1)	134 (24.0)	87 (15.6)	3.2312	VI
Vehicle Insurance	231 (41.4)	77 (13.8)	90 (16.1)	139 (24.9)	21 (3.8)	3.6416	II

Cattle Farm	219 (39.2)	94 (16.8)	76 (13.6)	101 (18.1)	68 (12.2)	3.5287	III
Crop Insurance	187 (33.5)	92 (16.5)	63 (11.3)	101 (18.1)	115 (20.6)	3.2419	V

Source: Computer Data **Figures in the parenthesis represent row wise percentage**

Table 22 shows that maximum number of the respondents (36 per cent) extremely aware of health insurance and only 3.9 per cent of the respondents are unaware of health insurance. Maximum of 45.3 per cent of the respondents are extremely aware of life insurance and 5.2 per cent of the respondents are unaware of life insurance, 33 per cent of the respondents are aware about property insurance and 12.4 per cent of them are moderately aware of the products, 41.4 per cent of the respondents are extremely aware of vehicle insurance and only 3.8 per cent of the respondents are unaware, 39.2 per cent of the respondents are extremely aware of cattle farm and 12.2 per cent of the them are unaware and 33.5 per cent of the respondents are extremely aware of crop insurance and 11.3 per cent of them are somewhat aware of these products.

It is understood that the respondents have extreme awareness i.e., 45.3 per cent on life insurance, 41.4 per cent on vehicle insurance, 39.2 per cent on cattle farm, 36 per cent on health insurance, 33.5 per cent on crop insurance and 33 per cent on property insurance. Further it is noted that majority of the respondents aware of life insurance which is indicated with high mean score of 3.7276 followed by vehicle insurance with the mean score of 3.6416 and least is about property insurance with the mean score of 3.2312.

4.3.1 Socio-economic Factors and Awareness on Microinsurance Products

Socio-economic factor and awareness on microinsurance products are tested with analysis of variance by framing the following hypothesis:

H_0: There is no significant difference between socio-economic factors and awareness on insurance among rural households.

H_1: There is a significant difference between socio-economic factors and awareness on insurance among rural households.

Table 23

Gender and Awareness of Microinsurance Products

Microinsurance	F value	p value	Significance
Health Insurance	6.549	0.011	Significant
Life Insurance	3.214	0.074	Not Significant
Property Insurance	2.249	0.134	Not Significant
Vehicle Insurance	33.721	0.000	Significant
Cattle Farm	0.045	0.832	Not Significant
Crop Insurance	0.048	0.826	Not Significant

Source: Computed data

It is clear from the Table 23 that, F value for health insurance is 6.549 and p value is 0.011 and for vehicle insurance F value is 33.721 and p value is 0.000, it is found to be significant at five per cent level of significance, so the null hypothesis is rejected for health and vehicle insurance.

It is inferred that gender difference is existing for health and vehicle insurance and for all other insurance; the formulated null hypothesis is accepted.

Hence, there is no significant difference between gender and awareness on life, property, cattle and crop insurance.

Table 24

Age and Awareness of Microinsurance Products

Microinsurance	F value	p value	Significance
Health Insurance	7.881	0.000	Significant
Life Insurance	9.266	0.000	Significant
Property Insurance	15.490	0.000	Significant

Vehicle Insurance	12.983	0.000	Significant
Cattle Farm	1.360	0.254	Not Significant
Crop Insurance	9.584	0.000	Significant

Source: Computed data

It is clear from the Table 24 that F value for health insurance is 7.881 and p value is 0.000, F value for life insurance is 9.266 and p value is 0.000, F value for property insurance is 15.490 and p value is 0.000, F value for vehicle insurance is 12.983 and p value is 0.000 and for crop insurance F value is 9.584 and p value is 0.000, which are found to be significant at five per cent level of significance, so the null hypothesis is rejected for health, life, property, vehicle and crop insurance.

It is inferred that age difference is existing for all insurance except cattle farm insurance.

Hence, there is a significant difference between age and awareness on health, life, property, vehicle and crop insurance.

Table 25

Marital Status and Awareness of Microinsurance Products

Microinsurance	F value	p value	Significance
Health Insurance	4.484	0.004	Significant
Life Insurance	1.681	0.170	Not Significant
Property Insurance	4.706	0.003	Significant
Vehicle Insurance	11.300	0.000	Significant
Cattle Farm	5.288	0.001	Significant
Crop Insurance	13.523	0.000	Significant

Source: Computed data

It is understood from Table 25 that F value for health insurance is 4.484 and p value is 0.004, F value for property insurance is 4.706 and p value is 0.000, F value for vehicle insurance is 11.300 and p value is 0.000, F value for cattle insurance is 5.288 and p value is 0.001 and for crop

insurance F value is 13.523 and p value is 0.000 which are found to be significant at five per cent level of significance, so the null hypothesis is rejected for health, property, vehicle, cattle and crop insurance. It is inferred that marital status significantly influences awareness on all insurance except life insurance.

Hence, there is a significant difference between marital status of the respondents and awareness on health, property, vehicle, cattle and crop insurance.

Table 26

Educational Status and Awareness of Microinsurance Products

Microinsurance	F value	p value	Significance
Health Insurance	7.404	0.000	Significant
Life Insurance	0.799	0.526	Not Significant
Property Insurance	0.996	0.409	Not Significant
Vehicle Insurance	2.814	0.025	Significant
Cattle Farm	4.351	0.002	Significant
Crop Insurance	4.891	0.001	Significant

Source: Computed data

It is clear from Table 26 that F value for health insurance is 7.404 and p value is 0.000, F value for vehicle insurance is 2.814 and p value is 0.025, F value for cattle insurance is 4.351 and p value is 0.002 and for crop insurance F value is 4.891 and p value is 0.001 which are found to be significant at five per cent level of significance, so the null hypothesis is rejected for health, vehicle, cattle and crop insurance.

It is inferred that educational status of the respondent's differ significantly from awareness on insurance for life insurance and property insurance.

Hence, there is a significant difference between educational status of the respondents and awareness on health, vehicle, cattle and crop insurance.

Table 27

Type of Family and Awareness of Microinsurance Products

Microinsurance	F value	p value	Significance
Health Insurance	3.708	0.055	Not Significant
Life Insurance	1.719	0.190	Not Significant
Property Insurance	0.608	0.436	Not Significant
Vehicle Insurance	1.031	0.310	Not Significant
Cattle Farm	2.138	0.144	Not Significant
Crop Insurance	24.416	0.000	Significant

Source: Computed data

It is clear from Table 27 that F value for crop insurance is 24.416 and p value is 0.000 which is found to be significant at five per cent level of significance, so the null hypothesis is rejected for crop insurance. It is inferred that type of family differ significantly from awareness on microinsurance for only crop insurance.

Hence, there is a significant difference between type of family and awareness on crop insurance and for remaining all other insurance the null hypothesis is rejected so that there is no significant difference between type of family and awareness on health, life, property, vehicle and cattle insurance.

Table 28

Family Size and Awareness of Microinsurance Products

Microinsurance	F value	p value	Significance
Health Insurance	6.678	0.000	Significant
Life Insurance	11.375	0.000	Significant
Property Insurance	6.692	0.000	Significant
Vehicle Insurance	10.598	0.000	Significant
Cattle Farm	4.652	0.003	Significant
Crop Insurance	2.940	0.033	Significant

Source: Computed data

It is found from Table 28 that F value for health insurance is 6.678 and p value is 0.000, F value for life insurance is 11.375 and p value is 0.000, F value for property insurance is 6.692 and p value is 0.000, F value for vehicle insurance is 10.598 and p value is 0.000, F value for cattle insurance is 4.652 and p value is 0.003 and for crop insurance F value is 2.940 and p value is 0.033 which are found to be significant at five per cent level of significance, so the null hypothesis is rejected for health, life, property, vehicle, cattle and crop insurance.

Hence, it is inferred that family size significantly influences the level of awareness.

It is concluded that, there is a significant difference between family size of the respondents and awareness on health, life, property, vehicle, cattle and crop insurance.

Table 29

Occupation and Awareness of Microinsurance Products

Microinsurance	F value	p value	Significance
Health Insurance	3.162	0.014	Significant
Life Insurance	9.833	0.000	Significant
Property Insurance	2.072	0.083	Not Significant
Vehicle Insurance	7.509	0.000	Significant
Cattle Farm	3.049	0.017	Significant
Crop Insurance	3.605	0.007	Significant

Source: Computed data

It is identified from Table 29 that F value for health insurance is 3.162 and p value is 0.014, F value for life insurance is 9.833 and p value is 0.000, F value for vehicle insurance is 7.509 and p value is 0.000, F value for cattle

insurance is 3.049 and p value is 0.017 and for crop insurance F value is 3.605 and p value is 0.007 which are found to be significant at five per cent level of significance, so the null hypothesis is rejected for health, life, vehicle, cattle and crop insurance. It is inferred that occupation of the respondent's influence the awareness of microinsurance except property insurance.

It is concluded that there is a significant difference between occupation of the respondents and awareness on health, life, vehicle, cattle and crop insurance.

Table 30

Monthly Income and Awareness of Microinsurance Products

Microinsurance	F value	p value	Significance
Health Insurance	3.095	0.027	Significant
Life Insurance	11.024	0.000	Significant
Property Insurance	3.935	0.009	Significant
Vehicle Insurance	5.160	0.002	Significant
Cattle Farm	0.527	0.664	Not Significant
Crop Insurance	6.364	0.000	Significant

Source: Computed data

It is clear from Table 30 that F value for health insurance is 3.095 and p value is 0.027, F value for life insurance is 11.024 and p value is 0.000, F value for property insurance is 3.935 and p value is 0.009, F value for vehicle insurance is 5.160 and p value is 0.002 and for crop insurance F value is 6.364 and p value is 0.000 which are found to be significant at five per cent level of significance, so the null hypothesis is rejected for health, life, property, vehicle and crop insurance. It is inferred that monthly income of the respondent's influence awareness on microinsurance except for cattle Farm.

It is identified that there is a significant difference between monthly income of the respondents and awareness on health, life, property, vehicle and crop insurance.

The awareness on various microinsurance products motivates the respondents to buy at high level. Hence the awareness on various

microinsurance products has been studied with the socio-economic factors of the respondents by using analysis of variance.

4.4 Factors Motivate the Rural Households to buy Microinsurance Products

The factors that motivate the rural households to buy microinsurance products are discussed under the following section:

4.4.1 Investment in Microinsurance Products

4.4.2 Reasons for Investment in Microinsurance Products

4.4.3 Motivational Factors to Invest in Microinsurance Products

4.4.4 Multiple Regression Analysis for Motivational Factor

4.4.1 Investment in Microinsurance Products

Table 31 describes the number of respondents invested in microinsurance products.

Table 31

Investment in Microinsurance Products

Response	Number of Respondents	Percentage
Yes	295	52.9
No	263	47.1
Total	**558**	**100**

Source: Primary data

Table 31 reveals that majority of 52.9 per cent of the respondents in the study area have the microinsurance policy and 47.1 per cent of the respondents do not possess it.

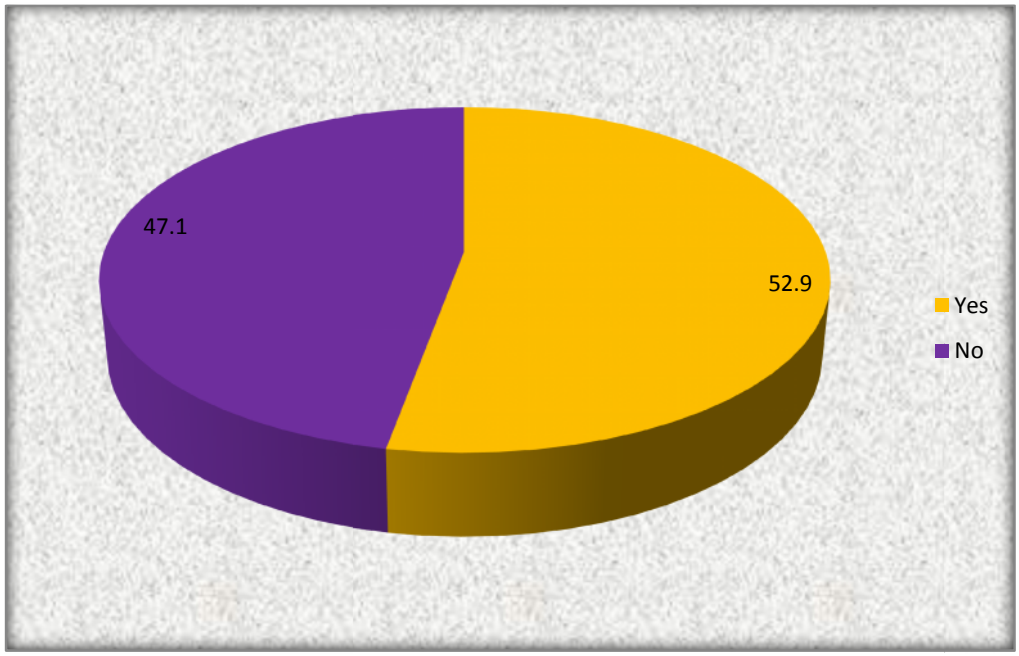


Figure 8

Investment in Microinsurance Products

4.4.2 Reasons for Investment in Microinsurance Products

It is inferred from the study that only 52.9 per cent of the respondents invest in microinsurance products. The reason to take microinsurance by these rural households can be studied through the inbuilt factors and trust on microinsurance. Reasons includes regular pension after retirement, save money for marriage of daughter or son, medical treatment, natural disaster, death of the family members, save money for education of children, business loss due to unforeseen event and save money without temptation. Reason for investment in microinsurance products by the respondents was analysed by applying five points Likert scaling technique and the score were ascertained as follows:

Strongly Agree – 5, Agree – 4, Neutral – 3, Disagree – 2, Strongly Disagree - 1

Table 32 describes the reasons for invest in microinsurance products by the respondents, who have invested in microinsurance products.

Table 32

Reasons for Investment in Microinsurance Products

Reasons	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean Score	Rank
To receive a regular pension when retired	235 (79.7)	50 (16.9)	8 (2.7)	2 (0.7)	0	4.7559	I
To save money for marriage of daughter / Son	213 (72.2)	65 (22.0)	0	15 (5.1)	2 (0.7)	4.6000	III
To have access to quality medical treatment in case I am sick	219 (74.3)	47 (15.9)	0	24 (8.1)	5 (1.7)	4.6271	II
To receive money in case of natural disaster	167 (56.6)	75 (25.4)	28 (9.5)	25 (8.5)	0	4.3017	VII
To receive money in case of death / accident of family member	180 (61.0)	35 (11.9)	37 (12.5)	43 (14.6)	0	4.1932	VIII
To save money for education of children	193 (65.4)	38 (12.9)	38 (12.9)	26 (14.6)	0	4.3492	V
To receive money when my business suffers from an unforeseen event	184 (62.4)	62 (21.0)	14 (4.7)	35 (11.9)	0	4.3390	VI
To save without temptation	205 (69.5)	37 (12.5)	28 (9.5)	12 (4.1)	13 (4.4)	4.3864	IV

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

It is inferred from Table 32 that, the majority of the respondents are take insurance policy due to various reasons. 79.7 per cent of the respondents invest in insurance products for the benefit ‘retirement’, 74.3 per cent of the respondents invest for medical treatment when they are sick, 72.2 per cent of the respondents invest to ‘save money for marriage of daughter or son’, 69.5 per cent of the respondents invest for ‘save without temptation’, 65.4 per cent of the respondents invest for ‘education of their children’, 62.4 per cent invest to meet ‘business losses’, 61.0 per cent invest to manage the family if there is ‘death of the any earning family members’ and 56.6 per cent of invest in case of natural disaster.

It is concluded that majority of the respondents (79.7 per cent) invest in microinsurance products to get regular pension after the retirement, 74.3 per cent invest for medical expenses and 72.2 per cent invest for marriage expenses.

4.4.3 Motivational Factors to Invest in Microinsurance Products

Factor analysis is performed to understand the factors which influence to buy microinsurance products. This process helped to identify the underlying factors leading to motivation. The analysis shows that when the principal component (PC) factors and varimax rotation are conduced, three factors are identified.

The reliability of scale items are tested by applying cronbach's alpha. The resulted value is 0.739, which states that the scale is reliable and appropriate. Further to test the sampling, Kaiser-Meyer-Olin measure of sampling adequacy is computed which is found to be 0.719. It indicates that sample is good enough for sampling. Moreover the overall significance of correlation matrices has been tested with Bartlett Test (approx. Chi-square = 593.132 and significant at 0.000) at 28 degree of freedom which provided as well as supported for the validity of data for factor analysis. So, the eight factors are highly significant at one per cent level of significance.

Table 33

KMO and Bartlett's Test for Motivational Factors

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.719
Bartlett's Test of Sphericity	Approx. Chi-Square	593.132
	Df	28
	Sig.	0.000

Source: Computed data

Table 34 shows the respective percentage of variance of motivational factors derived from factor analysis.

Table 34

Total Variance Explained for Motivational Factors

Component	Initial Eigen values		
	Total	% of variance	Cumulative %
To receive a regular pension when retired	2.911	36.388	36.388
To save money for marriage of daughter / Son	1.428	17.845	54.232
To have access to quality medical treatment in case I am sick	1.197	14.957	69.190
To receive money in case of natural disaster	0.625	7.811	77.001
To receive money in case of death / accident of family member	0.576	7.197	84.198
To save money for education of children	0.479	5.985	90.183
To receive money when my business suffers from an unforeseen event	0.444	5.555	95.738
To save without temptation	0.341	4.262	100.000

Source: Computed data

It is observed from Table 34 that, only three factors have Eigen value of more than one and the variance explained by these three factors are 36.388 per cent, 17.845 per cent and 14.957 per cent respectively and cumulative variance explained by all these three factors are 69.190 per cent.

Rotated component matrix of motivational factor is identified based on the difference from each other as possible and helps to interpret the factors by putting each variable primarily on one of the factors. The rotated solution gives the factor loadings for each individual variable in dataset, which are used to interpret the meaning of the different factors.

Table 35

Rotated Component Matrix of Motivational Factors

Motivational Factors	Component

	1	2	3
To receive money in case of death / accident of family members	0.831	0.274	-0.111
To receive a regular Pension when retired	0.745	-0.098	0.268
To receive money in case of natural disaster	0.728	0.190	0.314
To save money for marriage of daughter / son	0.108	0.784	0.236
To have access to quality medical treatment in case I am sick	-0.033	0.762	0.199
To save money for education of children	0.319	0.716	-0.231
To receive money when my business suffer from an unforeseen event	0.029	0.322	0.826
To save without temptation	0.343	-0.046	0.760

Source: Computed data

Table 35 shows that each statement corresponding to the highlighted factor loading is correlated with the factor corresponding to that factor loading. Higher the factor loading, stronger is the correlation between the factors and statement.

On the basis of rotated component matrix motivational factor extraction Table 36 has been prepared and presented:

Table 36

Factors Extracted Percentage of Variance and Loading on the Variables

Factor	Percentage of Variance	Factor Interpretation	Variable included in the Factors	Loading
F1	36.388	**RISK AVERSION**	To receive money in case of death / accident of family members	0.831

			To receive a regular Pension when retired	0.745
			To receive money in case of natural disaster	0.728
F2	17.845	**FUTURE CONTINGENCY**	To save money for marriage of daughter / son	0.784
			To have access to quality medical treatment in case I am sick	0.762
			To save money for education of children	0.716
F3	14.957	**INVESTMENT ATTITUDE**	To receive money when my business suffer from an unforeseen event	0.826
			To save without temptation	0.760

Source: Computed data

The extracted factors have been classified under three major heading based on their importance.

F1 - Risk Aversion
F2 - Future Contingency
F3 - Investment Attitude

Table 36 states the factors are in the order of degree of importance. Factor one has 25.097 percentage of variance which is the highest variance and grouped as risk aversion, Factor two as future contingency and Factor three as investment attitude where percentage of variance is 24.178 and 19.915 respectively. Table 36 concludes that risk aversion, future contingency and investment attitude are the main factors that motivate rural households to invest in microinsurance products.

4.4.4 Multiple Regression Analysis for Motivational Factor

It is a general linear model, which is commonly estimated using ordinary least square, has become one of the most widely used analytic techniques in social science. Most of the statistics used in social science are based on linear models, which means trying to fit a straight line to data collected ordinary least square and it is used to predict a function that relate dependent variables (Y) to one or more independent variables (X_1,X_2,X_3,……..X_n). It uses linear function that can be expressed as

$Y= a+bx_i+e_i$ where

a= Constant

b= Slope of line

x_i = Independent Variable

e_i = Error term

Hence by using ordinary least square technique, the regression model for motivated factors can be expressed as

Investment in Microinsurance (Y)	**= a+bX_1 (Risk Aversion) + X_2 (Future Contingency+X_3(Investment Attitude)**

Multiple regression analysis among different factors related to investment in microinsurance are analysed by framing the following hypothesis:

H_0: Motivational factor do not influences the rural households on investment in microinsurance.

H_1: Motivational factor influences the rural households on investment in microinsurance.

Table 37

Model Summary for Motivational Factors

Model	R	R Square	Adjusted R Square	Std error of the estimate
1	0.251	0.063	0.053	1.72135

Source: Computed Data

Regression analysis on the investment in microinsurance and various other factors

Predictions: (Constant), (i) Risk Aversion, (ii) Future Contingency and (iii) Investment Attitude

Information in the model summary Table 37 shows that the value of R square for the model is 0.063. It means that only 6.3 percent of the variation in the investment in microinsurance (dependent variables) can be explained from the three independent variables. R square is always increased as independent variables and added to a multiple regression model. To keep away from over estimating the impact of adding an independent variable to the model, adjusted R square value is used (it recalculates the R square value based on the number of predicted variables in the model). This makes it simple to compare the explanatory power of regression model with different number of independent variables. The adjusted R square for the model is 0.053 which shows only a small over estimate with the model.

Table 38

Analysis of Variance on Motivational Factors and Investment in Microinsurance

Model	Sum of Square	Degree of Freedom	Mean Square	F	Significance
1 Regression	57.937	3	19.312	6.518	0.000

Residual	862.246	291	2.963		
Total	920.183	294			

Source: Computed Data

Regression analysis between the investment in microinsurance and various other variables

Predictions: (Constant), (i) Risk Aversion, (ii) Future Contingency and (iii) Investment Attitude

Dependent Variable: Investment in Microinsurance

The overall regression results are revealed in Table 38. The regression model is statistically significant. (F = 6.518; Significant @ 1%) this means that the chances are almost zero and result of regression model is owing to random events as a substitute of a true relationship.

Table 39

Coefficients of Motivational Factors and Investment in Microinsurance

Model	Unstandardized coefficient		Standardized coefficient	t	Significant
	B	Std. Error	Beta		
1 Constant	2.827	0.100		28.209	0.000
Risk Aversion	-0.273	0.100	-0.155	-0.2724	0.007
Future Contingency	0.282	0.100	0.159	2.807	0.005
Investment Attitude	0.207	0.100	0.117	2.063	0.040

Source: Computed Data

Risk aversion (0.007), future contingency (0.005) and investment attitude (0.040) are significant predictors (or significantly related to) of overall satisfaction. Investment in microinsurance is positively correlated with future contingency and investment attitude and negatively correlated with risk aversion.

Multiple regression analysis conducted to examine whether motivational factors are influencing the investment in microinsurance. The

overall model explained 6.3 percent of variance in investment, which is revealed to be statistically significant, F = 6.518, P<0.05. An inspection of individual predictors revealed that risk aversion is negatively correlated (Beta = - 0.155, P<0.05) and positively correlated with future contingency (Beta = 0.159, P<0.05) and investment attitude (Beta = 0.117, P<0.05) are significant predictors of all predictors with dependent variables.

The equation formed by

$$Y = 2.827-0.273X_1+0.282X_2+0.207X_3$$

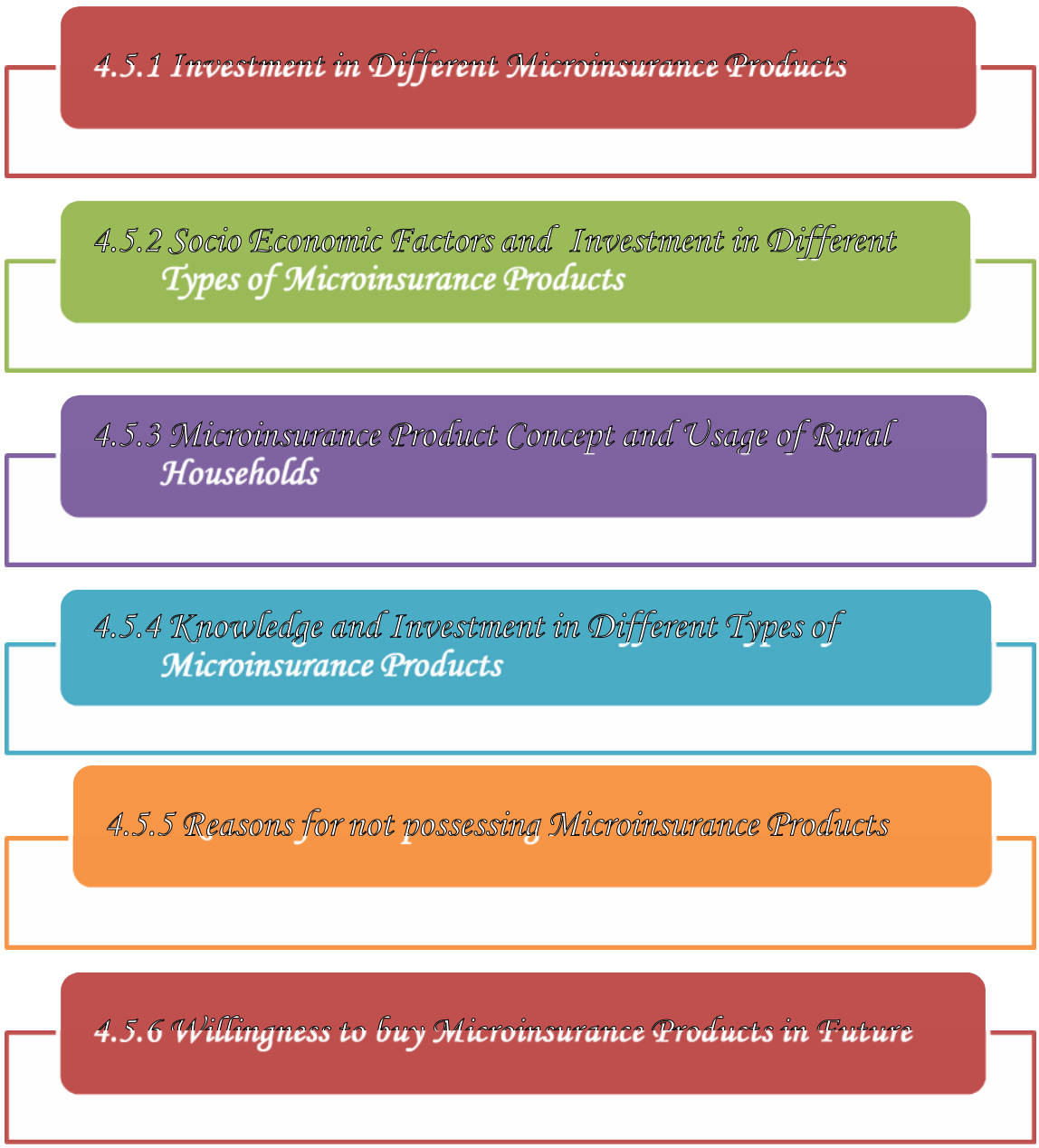
By looking at the regression coefficient of the independent variables it is understood that risk aversion score has negative effect on investment in microinsurance and future contingency and investment attitude has positive effect on investment in microinsurance by the respondents.

Hence, the null hypothesis is rejected and alternative hypothesis is accepted that the motivational factor influences the rural households on their investment in microinsurance.

Reasons for investing in microinsurance have been analysed and categorised into different motivational factors by using factor analysis and the regression analysis is used to study the influence of motivational factors on investment in microinsurance. The analysis revealed that the rural households have been motivated by different factors while investing in microinsurance products.

4.5 Factors Determining the Demand for Microinsurance Products

Factors determining the demand for microinsurance products has been analysed in the following section:



4.5.1 Investment in Different Microinsurance Products

Microinsurance products are classified as health insurance, life insurance, property insurance, vehicle insurance, cattle farm and crop

insurance. Table 40 presents the investment of rural households in different microinsurance products.

Table 40

Investment in Different Microinsurance Products

Microinsurance Products	Number of Respondents*	Percentage
Health Insurance	68	16.3
Life Insurance	103	24.7
Property Insurance	45	10.8
Vehicle Insurance	92	22.1
Cattle Farm	53	12.7
Crop Insurance	56	13.4

Source: Primary Data ***Multiple responses**

Table 40 shows that 24.7 per cent of the respondents invest in life insurance. 22.1 per cent of the respondents invest in vehicle insurance, 16.3 per cent of the respondents invest in health insurance to meet out the heavy medical expenses, 13.4 per cent of the respondents invest in crop insurance to meet out the cultivation risk in agriculture, 12.7 per cent of the respondents invest in cattle farm to minimise the loss from cattle rearing and only 10.8 per cent of the respondents invest in property insurance to manage the risk of the disaster.

It is concluded that maximum of 24.7 per cent of the rural households invest in life insurance to give financial assurance to their family in their absence and only 10.8 per cent of invest in property insurance.

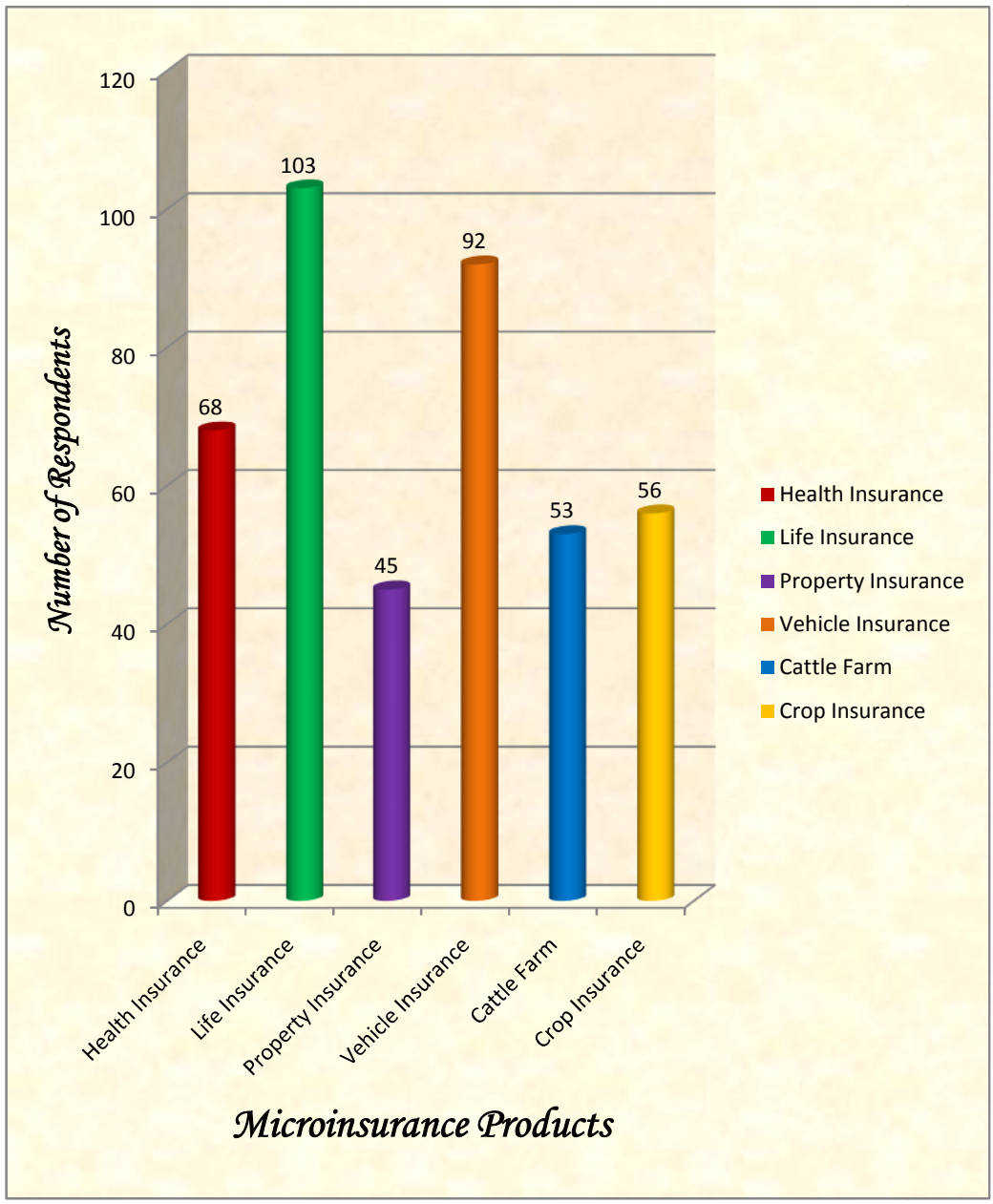


Figure 9

Investment in Different Microinsurance Products

4.5.1.1 Value of Microinsurance Policy

Value of policy is categorized as less than Rs. 5,000, Rs. 5,001 to Rs. 10,000, Rs. 10,001 to Rs. 15,000 and above Rs. 15,000. Table 41 describes the distribution of respondents based on the type of insurance and the value of policy.

Table 41

Sum Assured and Type of Microinsurance

Microinsurance	Sum Assured				
	Less than Rs. 5,000	Rs. 5001 - Rs. 10000	Rs. 10001 – Rs. 15000	Above Rs. 15000	Total
Health Insurance	29 (42.6)	10 (14.7)	21 (30.9)	8 (11.8)	**68 (16.3)**
Life Insurance	28 (27.2)	34 (33.0)	30 (29.1)	11 (10.7)	**103 (24.7)**
Property Insurance	15 (33.3)	22 (48.9)	0	8 (17.8)	**45 (10.8)**
Vehicle Insurance	48 (52.1)	26 (28.3)	10 (10.9)	8 (8.7)	**92 (22.1)**
Cattle Farm	21 (39.6)	8 (15.1)	21 (39.6)	3 (5.7)	**53 (12.7)**
Crop Insurance	26 (46.4)	24 (42.8)	3 (5.4)	3 (5.4)	**56 (13.4)**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

It is found from Table 41 that maximum of 24.7 per cent of the respondents invest in life insurance, out of this 33 per cent of the respondents have policy value in between Rs. 5,001 and Rs. 10,000. 22.1 per cent of the respondents invest in property insurance; out of this 52.0 per cent of the respondents have policy value of less than Rs. 5,000. 16.3 per cent of the respondents invest in health insurance; out of this 42.6 per cent of the respondents have taken the policy amount of less than Rs. 5,000. 13.4 percent of the respondents invest in crop insurance; out of this 46.4 per cent of the respondents have taken the policy value of less than Rs.5, 000. 12.7 per cent of the respondents invest in cattle farm; out of this 39.6 per cent of them have taken the policy value of less than Rs. 5,000 and also invested the amount of Rs. 10001 to Rs. 15,000. Only 10.8 per cent have opted for property insurance, out of this 48.9 per cent of the respondents have taken the policy amount of between Rs. 5,001 and Rs. 10,000.

It is concluded that under vehicle insurance, 52.1 per cent of the respondents invest with the policy amount of less than Rs. 5000, under health insurance, 42.6 per cent of have taken the insurance policy amount of less than Rs. 5000, under crop insurance, 46.4 per cent have taken the policy amount of less than Rs. 5000, under cattle farm, 39.6 per cent have invested less than Rs. 5000 and between Rs. 10001 and Rs. 15000 amount as insurance policy, under property insurance, 48.9 per cent invest the policy amount between Rs. 5001 and Rs. 10000.

4.5.2 Cross Tabulation of Socio-economic Factors and Investment in Different Types of Microinsurance Products

The socio-economic factors and investment in different microinsurance products is discussed in this section. Socio-economic factor includes gender, age, education, marital status, type of family, family size, occupation and monthly income. Different types of microinsurance products are Health Insurance, Life Insurance, Property Insurance, Vehicle Insurance, Cattle Farm and Crop Insurance.

4.5.2.1 Gender and Investment in Microinsurance Products

Gender wise investment in different types of microinsurance products is presented in Table 42.

Table 42

Gender and Investment in Microinsurance Products

Gender	Types of Microinsurance Products						Total
	Health Insurance	Life Insurance	Property Insurance	Vehicle Insurance	Cattle Farm	Crop Insurance	
Male	32 (15.1)	49 (23.1)	42 (19.8)	43 (20.3)	37 (17.5)	9 (4.2)	212 (50.8)
Female	36 (17.6)	54 (26.3)	3 (1.5)	49 (23.9)	16 (7.8)	47 (22.9)	205 (49.2)
Total	**68**	**103**	**45**	**92**	**53**	**56**	**417**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

It is revealed from Table 42 that, majority of the male respondents (50.8 per cent) invested in microinsurance products, out of which 23.1per cent of the respondents have taken life insurance, because of the awareness created by various insurance companies and 20.3 per cent have taken vehicle insurance. It is understood that male respondents have given more importance for vehicle to meet the unforced event, 19.8 per cent of the respondents have taken property insurance and minimum of 4.2 per cent have taken crop insurance. 49.2 per cent of the female invest in microinsurance products, out of which 26.3 per cent of the respondents have taken life insurance and 23.9 per cent have taken vehicle insurance and minimum of 1.5 per cent have taken property insurance.

It is inferred that majority of both male and female respondents invest in life insurance and minimum number of respondents invest in crop insurance under male category and minimum number of female respondents have property insurance.

4.5.2.2 Age and Investment in Microinsurance Products

Age wise investment in different types of microinsurance products is presented in Table 43.

Table 43

Age and Investment in Microinsurance Products

Age (in years)	Types of Microinsurance Products						Total
	Health Insurance	Life Insurance	Property Insurance	Vehicle Insurance	Cattle Farm	Crop Insurance	
Less than 25	11 (29.0)	1 (2.6)	0	14 (36.8)	12 (31.6)	0	38 (9.1)
26 – 35	17 (12.1)	38 (27.1)	28 (20.0)	22 (15.7)	25 (17.9)	10 (7.1)	140 (33.6)
36 – 45	40 (18.9)	50 (23.7)	17 (8.1)	50 (23.7)	16 (7.6)	38 (18.0)	211 (50.6)
More than 45	0	14 (50.0)	0	6 (21.4)	0	8 (28.6)	28 (6.7)
Total	**68**	**103**	**45**	**92**	**53**	**56**	**417**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

Table 43 revealed that, majority of 50.6 per cent of the respondents invest in microinsurance products is between age group of 36 and 45 years, out of which 23.7 per cent of the respondents have taken both life and vehicle insurance, 18.9 per cent have taken health insurance and minimum of 7.6 per cent of the respondents have taken cattle farm insurance. 33.6 per cent of the respondents invest in microinsurance is between the age group of 26 and 35 years, of this maximum of 27.1 per cent of the respondents have taken life insurance, 20 per cent have taken property insurance and minimum of 7.1 per cent have taken crop insurance. 9.1 per cent of the respondents invest in microinsurance is in the age group of below 25 years, out of which 36.8 per cent of the respondents have taken vehicle insurance, 31.6 per cent have taken cattle farm and no respondent preferred property and crop insurance. Only 6.7 per cent of the respondents invest in microinsurance products is in the age group of above 45 years, out of which 50 per cent of the respondents invest in life insurance and no insurance is taken for health, property and cattle farm.

It is concluded that majority of the respondents (50.6 per cent) who are in the age group between 36 and 45 years, invest in microinsurance products. Out of which 23.7 per cent have taken both life insurance and vehicle insurance, 33.6 per cent of the respondents who are in the age group between 26 and 35 years, out of this 27.1 per cent have taken life insurance, 9.1 per cent of the respondents who are in the age group of less than 25 years, out of this 36.8 per cent have taken vehicle insurance and only 6.7 per cent of the respondents who are in the age group of above 45 years, out of this 50 per cent have taken life insurance.

It is understood that rural households in the age group between 36 and 45 year, majority of the respondents (50.6 per cent) invest in different microinsurance products.

4.5.2.3 Marital Status and Investment in Microinsurance Products

Marital status and their investment in different types of microinsurance products are presented in Table 44.

Table 44

Marital Status and Investment in Microinsurance Products

Marital Status	Types of Microinsurance Products						Total
	Health Insurance	Life Insurance	Property Insurance	Vehicle Insurance	Cattle Farm	Crop Insurance	
Married	42 (18.7)	54 (24.0)	25 (11.1)	41 (18.2)	29 (12.9)	34 (15.1)	225 (53.9)
Unmarried	25 (15.3)	34 (20.9)	20 (12.2)	41 (25.5)	24 (14.7)	19 (11.7)	163 (39.1)
Widow	1 (12.5)	2 (25.0)	0	2 (25.0)	0	3 (37.5)	8 (1.9)
Divorce	0	13 (61.9)	0	8 (38.1)	0	0	21 (5.0)
Total	**68**	**103**	**45**	**92**	**53**	**56**	**417**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

Table 44 shows that, 53.9 per cent of the respondents are married and invest in different microinsurance products, out of this 24 per cent of the respondents have taken life insurance, 18.7 per cent have taken health insurance and minimum of 11.1 per cent have taken property insurance. 39.1 per cent of the respondents are unmarried and invested in microinsurance, of this 25.5 per cent of the respondents have taken vehicle insurance, 20.9 per cent have taken life insurance and minimum of 11.7 per cent have taken crop insurance, 5 per cent of the respondents invested in microinsurance are in the category of divorcees, out of this 61.9 per cent of the respondents invest in life insurance and no respondents invested in health, property, cattle farm and crop insurance. Only 1.9 per cent of the respondents are widow, invest in microinsurance, and out of this 37.5 per cent of the respondents have taken crop insurance and no respondents invested in property insurance and cattle farm.

It is concluded that 53.9 per cent of the respondents who are married invest in different microinsurance products, out of this 24 per cent have taken life insurance, 39.1 per cent of the unmarried respondents invest in microinsurance, out of this 25.5 per cent have taken vehicle insurance, 5.0 per cent of the respondents are in the category of divorcees, out of this 61.9 per cent have taken life insurance and 1.9 per cent of the widow respondents invest in microinsurance, out of this 37.5 per cent of them have taken crop insurance.

It is understood that majority of the rural households (53.9 per cent) are married and invest in different microinsurance products.

4.5.2.4 Educational Status and Investment in Microinsurance Products

Education status and investment in different types of microinsurance products is presented in Table 45.

Table 45

Educational Status and Investment in Microinsurance Products

Education	Types of Microinsurance Products						Total
	Health Insurance	Life Insurance	Property Insurance	Vehicle Insurance	Cattle Farm	Crop Insurance	
Illiterate	19 (16.5)	27 (23.5)	11 (9.6)	28 (24.3)	17 (14.8)	13 (11.3)	115 (27.6)
High School	24 (16.6)	27 (18.6)	14 (9.7)	35 (24.1)	20 (13.8)	25 (17.2)	145 (34.8)
Higher Secondary	17 (18.8)	33 (36.7)	14 (15.6)	12 (13.3)	5 (5.6)	9 (10.0)	90 (21.6)
Under Graduates	8 (14.2)	7 (12.5)	6 (10.7)	16 (28.6)	10 (17.9)	9 (16.1)	56 (13.4)
Post Graduates	0	9 (81.8)	0	1 (9.1)	1 (9.1)	0	11 (2.6)
Total	**68**	**103**	**45**	**92**	**53**	**56**	**417**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

Table 45 describes the rural household's investment in different types of microinsurance products based on level of education. 34.8 per cent of the respondents who studied upto high school level invest in microinsurance, out of this 24.1 per cent of the respondents have taken vehicle insurance and 18.6 per cent have taken life insurance and minimum of 9.7 per cent and they have taken property insurance. 27.6 per cent of the respondents are illiterate invest in microinsurance, out of this 24.3 per cent of the respondents have taken vehicle insurance, 23.5 per cent have taken life insurance and minimum of 9.6 per cent have taken property insurance. 21.6 per cent of the respondents who studied higher secondary level of education invest in microinsurance, of this 36.7 per cent of respondents have taken life insurance, 18.8 per cent have taken health insurance and minimum of 5.6 per cent have taken cattle farm, 13.4 percent of the respondents are Under Graduate level of education invest in microinsurance, out of which 28.6 per cent of the respondents have taken vehicle insurance, 17.9 per cent have taken cattle farm and minimum of 10.7 per cent have taken property insurance. Only 2.6 per cent of the respondents who are professional invest in microinsurance products, out of this 81.8 per cent of respondent have taken life insurance and none of the respondents invested in health insurance, property insurance and crop insurance.

It is concluded that maximum of the respondents (34.8) who studied high school level of education invest in microinsurance, out of this, 24.1 per cent have taken vehicle insurance, 27.6 per cent of respondents are illiterates, out of this 24.3 per cent have taken vehicle insurance, 21.6 per cent of the respondents studied higher secondary level, out of this 36.7 per cent have taken life insurance, 13.4 per cent of the respondents studied Under Graduation, out of this 28.6 per cent have taken vehicle insurance and 2.6 per cent of the respondents are Post Graduates, out of this 81.8 per cent have taken life insurance.

It is understood that majority of the rural households have high school level education invest in different microinsurance property.

4.5.2.5 Type of Family and Investment in Microinsurance Products

Type of family of the respondents and investment in different types of microinsurance products is presented in Table 46.

Table 46

Type of Family and Investment in Microinsurance Products

Family Type	Types of microinsurance products						Total
	Health Insurance	Life Insurance	Property Insurance	Vehicle Insurance	Cattle Farm	Crop Insurance	
Nuclear	54 (17.1)	74 (24.0)	39 (12.4)	57 (18.1)	37 (11.8)	54 (17.1)	315 (75.5)
Joint	14 (13.7)	29 (28.4)	6 (5.9)	35 (34.3)	16 (15.7)	2 (2.0)	102 (24.5)
Total	**68**	**103**	**45**	**92**	**53**	**56**	**417**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

From Table 46 it is inferred that majority of the respondents (75.5 per cent) who live in nuclear family have invested in microinsurance products, out of this 24 per cent of the respondents have taken life insurance and 18.1 per cent have taken vehicle insurance and minimum of 11.8 per cent have taken cattle farm. 24.5 per cent of the respondents are from joint families invest in microinsurance, out of this 34.3 per cent of the respondents have taken vehicle insurance, 28.4 per cent have invested in life insurance and minimum of 2.0 per cent have taken crop insurance.

It is concluded that, majority of the respondents (75.5 per cent) are from nuclear family that invest in microinsurance, out of this 24 per cent have

taken life insurance and 24.5 per cent of the respondents are joint families, out of this 34.3 per cent have taken vehicle insurance.

It is understood that majority of the rural households (75.5 per cent) are from nuclear family invest in different microinsurance products.

4.5.2.6 Family size and Investment in Microinsurance Products

Family size of the respondents and investment in different types of microinsurance products is presented in Table 47.

Table 47

Family Size and Investment in Microinsurance Products

Family Size	Types of Microinsurance Products						Total
	Health Insurance	Life Insurance	Property Insurance	Vehicle Insurance	Cattle Farm	Crop Insurance	
Two	0	7 (70.0)	0	3 (30.0)	0	0	10 (2.4)
Three	29 (22.1)	25 (19.1)	23 (17.6)	11 (8.4)	17 (13.0)	26 (19.8)	131 (31.4)
Four	19 (14.8)	28 (21.8)	11 (8.6)	40 (31.3)	22 (17.2)	8 (6.3)	128 (30.7)
Above four	20 (13.4)	43 (29.1)	11 (7.4)	38 (25.7)	14 (9.5)	22 (14.9)	148 (35.5)
Total	**68**	**103**	**45**	**92**	**53**	**56**	**417**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

Table 47 states that maximum of 35.5 per cent of the respondents have above four members in the family invest in microinsurance products, out

of this 29.1 per cent of the respondents have taken life insurance, 25.7 per cent have taken vehicle insurance and minimum of 7.4 per cent have taken property insurance. 31.4 per cent of the respondents have three members in the family invest in microinsurance, of which 22.1 per cent of the respondents have taken health insurance, 19.8 per cent have taken crop insurance and minimum of 8.4 per cent have taken vehicle insurance. Another 30.7 per cent of the respondents are four members in the family and invest in microinsurance, out of which 29.1 per cent of the respondents have taken life insurance, 25.7 per cent of the respondents have taken vehicle insurance and minimum of 6.3 per cent have taken crop insurance. Only 2.4 per cent of the respondents have invested in microinsurance products of two members in the family, of this 70 per cent of the respondents have taken life insurance, 30.0 per cent have taken property insurance and minimum of 8.4 per cent have taken vehicle insurance.

It is revealed that maximum of the respondents (35.5 per cent) have above four members in the family invested in microinsurance products, out of this 29.1 per cent have taken life insurance. 31.4 per cent of the respondents have three members in the family, of which 22.1 per cent have taken health insurance. 30.7 per cent of the respondents have above four members in the family, out of which 29.1 per cent have taken life insurance and only 2.4 per cent of the respondents have two members in the family invest in microinsurance products, of this 70 per cent have taken life insurance.

It is understood that majority of the rural households (35.5 per cent) have above four members in the family invest in different microinsurance products.

4.5.2.7 Occupation and Investment in Microinsurance Products

Occupation of the respondents and investment in different types of microinsurance products is presented in Table 48.

Table 48

Occupation and Investment in Microinsurance Products

Occupation	Types of Microinsurance Products						Total
	Health Insurance	Life Insurance	Property Insurance	Vehicle Insurance	Cattle Farm	Crop Insurance	
Agriculture	16 (27.1)	8 (13.6)	0	23 (38.9)	4 (6.8)	8 (13.6)	59 (14.1)
Employment	18 (14.2)	36 (28.3)	28 (22.0)	27 (21.3)	9 (7.1)	9 (7.1)	127 (30.5)
Business	10 (8.5)	31 (26.5)	11 (9.4)	38 (32.5)	24 (20.5)	3 (2.6)	117 (28.1)
Professional	10 (20.7)	17 (35.4)	6 (12.5)	3 (6.3)	3 (6.3)	9 (18.8)	48 (11.5)
Unemployment	14 (21.2)	11 (16.7)	0	1 (1.5)	13 (19.7)	27 (40.9)	66 (15.8)
Total	**68**	**103**	**45**	**92**	**53**	**56**	**417**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

Table 48 clearly states that most of the respondents (30.5 per cent) occupation as employment invests in microinsurance, of which 28.3 per cent of the respondents have taken life insurance, 22 per cent have taken property insurance and minimum of 7.1 per cent have taken cattle farm and crop insurance. 28.1 per cent of the respondents are doing business, out of which 32.5 per cent of the respondents have taken vehicle insurance, 26.5 per cent have taken life insurance and minimum of 2.6 per cent of the respondents have taken crop insurance. 15.8 per cent of the respondents are under unemployment category; out of this 40.9 per cent of the respondents have taken crop insurance, 21.2 per cent have taken health insurance and no investment in property insurance. 14.1 per cent of the respondents are agriculturists invest in microinsurance, of which 38.9 per cent of the respondents have taken vehicle insurance, 27.1 per cent have taken health insurance and no respondents prefer to invest in property insurance. 11.5 per cent of the respondents are professional invest in microinsurance, out of this 35.4 per cent of the respondents have taken life insurance, 20.7 per cent have

taken health insurance and a minimum of 6.3 per cent have taken vehicle and cattle farm.

It is concluded that, 30.5 per cent of the respondents from occupational status of employed invest in microinsurance, of which 28.3 per cent of them have taken life insurance, 28.1 per cent of the respondents are doing business, of this 32.5 per cent have taken vehicle insurance, 15.8 per cent of the respondents are under unemployed category, of this 40.9 per cent have taken crop insurance, 14.1 per cent of the respondents are agriculturists, of which 38.9 per cent have taken vehicle insurance and 11.5 per cent of the respondents are professionals, out of which 35.4 per cent have taken life insurance.

It is understood that majority of the rural households (30.5 per cent) from the occupational status of employed invest in different microinsurance products.

4.5.2.8 Monthly Income and Investment in Microinsurance Products

Monthly income of the respondents and investment in different types of microinsurance products is presented in Table 49.

Table 49

Monthly Income and Investment in Microinsurance Products

Monthly Income (in `)	Types of Microinsurance Products						Total
	Health Insurance	Life Insurance	Property Insurance	Vehicle Insurance	Cattle Farm	Crop Insurance	
Less than 5,000	8 (15.5)	19 (36.5)	6 (11.5)	19 (36.5)	0	0	52 (12.5)
5,001–10,000	40 (23.1)	40 (23.1)	8 (4.6)	23 (13.4)	18 (10.4)	44 (25.4)	173 (41.5)
10,001-15,000	3 (2.8)	27 (25.0)	25 (23.1)	32 (29.6)	19 (17.6)	2 (1.9)	108 (25.9)
More than 15,000	17 (20.3)	17 (20.3)	6 (7.1)	18 (21.4)	16 (19.0)	10 (11.9)	84 (20.1)
Total	**68**	**103**	**45**	**92**	**53**	**56**	**417**

Source: Computed Data **Figures in the parenthesis represent row wise percentage**

Table 49 reveals that 41.5 per cent of the respondent whose monthly income range between Rs.5, 000 and Rs.10, 000 invest in microinsurance products, out of this 25.4 per cent of the respondents have taken crop insurance, 23.1 per cent have taken life and health insurance and minimum of 4.6 per cent have taken property insurance. 25.9 per cent of the respondents have the monthly income between Rs.10, 001 and Rs. 15,000, out of this 29.6 per cent of the respondents have taken vehicle insurance, 25 per cent have taken life insurance and minimum of 1.9 per cent have taken crop insurance. 20.1 per cent of the respondents whose monthly income of more than Rs. 15, 000 invest in microinsurance, of which 21.4 per cent of the respondents have taken vehicle insurance, 20.3 per cent have taken life and health insurance and minimum of 7.1 per cent have taken property insurance. Only 12.5 per cent of the respondents whose monthly income of less than Rs. 5, 000 invest in microinsurance, out of which 36.5 per cent of the respondents have taken life and vehicle insurance, 15.5 per cent of them have taken health insurance and none of the respondents invest in cattle farm and crop insurance.

It is interpreted that 41.5 per cent of the respondents whose monthly income range between Rs. 5,000 and Rs. 10,000 invest in microinsurance products, out of this 25.4 per cent have taken crop insurance and all other categories of monthly income group the maximum per cent have taken vehicle insurance.

It is understood that majority of the rural households (41.5 per cent) have monthly income between Rs. 5,001 and Rs. 10,000 invest in different microinsurance products.

4.5.3 Features of Microinsurance Products by Rural Households

In 2003, Government of India constituted a Consultative Group on Microinsurance to examine existing insurance schemes for rural and urban poor with specific reference to outreach, pricing, products, servicing and promotion and to examine existing regulations with a view to promoting microinsurance organisations with specific reference to capital requirements, licensing, monitoring and review, etc.,

The features of major microinsurance products namely life, health and property insurance are discussed under this section. To find out the most influencing products features which induces the respondent to invest is analysed by using Likert scaling technique.

4.5.3.1 Features of Micro Life Insurance Products

Table 50 describes the distribution of the opinion of the respondents on their liking towards the features of micro life insurance products. Various features considered are coverage, sum assured, claim processing, insurance provider, trust, premium and frequency of premium payment.

Table 50

Features of Micro Life Insurance Products

Features	Mean Score	Standard Deviation	Rank
Coverage	4.942	0.416	II
Sum assured	4.913	0.316	III
Claim processing	4.816	0.459	VII
Insurance Provider	4.854	0.452	V
Trust	4.903	0.329	IV
Premium	4.854	0.430	V
Frequency of premium payment	4.990	0.099	I

Source: Computed Data

It is found from Table 50 that, the frequency of premium payment in life insurance is ranked first with the mean score of 4.990, cover for risk of life of the person is ranked second with the mean score of 4.942, sum assured received from the insurance company is ranked third with the mean score of 4.913, trust on insurance company is given fourth rank with the mean score of 4.903, fifth rank is given to insurance provider and amount of premium with the mean score of 4.854 and claim processing ranked seventh with the mean score of 4.816.

It is concluded that, frequency of premium payment, coverage and sum assured are the main features that influences the respondents to invest in micro life insurance.

4.5.3.2 Features of Micro Health Insurance Products

Table 51 presents the distribution of the opinion of the respondents on their liking towards the features of micro health insurance products.

Table 51

Features of Micro Health Insurance Products

Features	Mean Score	Standard Deviation	Rank
Coverage	4.956	0.207	II
Sum assured	4.882	0.325	III
Claim processing	4.838	0.371	VII
Insurance Provider	4.853	0.357	VI
Trust	4.868	0.454	IV
Premium	4.868	0.341	IV
Frequency of premium payment	4.971	0.170	I

Source: Computed Data

It is found from Table 51 that, the frequency of premium payment in health insurance is ranked first with the mean score of 4.971, the coverage of the policy is ranked second with the mean score of 4.956, sum assured received from the insurance company is ranked third with the mean score of 4.882, trust on insurance company and the payment of premium amount ranked fourth with the mean score of 4.868, insurance provider is ranked sixth with the mean score of 4.853 and claiming procedures ranked seventh with the mean score of 4.838.

It is concluded that, frequency of premium payment, coverage and sum assured are the main features that influences the respondents to invest micro health insurance.

4.5.3.3 Features of Micro Property Insurance Products

Table 52 portraits the distribution of the opinion of the respondent on their liking towards the features of Micro property insurance products.

Table 52

Features of Property Insurance Products

Features	Mean Score	Standard Deviation	Rank
Coverage	4.971	0.170	I
Benefit	4.667	0.477	V
Claim processing	4.971	0.170	I
Insurance Provider	4.667	0.477	V
Trust	4.971	0.170	I
Premium	4.600	0.495	VII
Frequency of premium payment	4.867	0.344	IV

Source: Computed Data

It is found from Table 52 that, the coverage, claim processing and trust are ranked first with the mean score of 4.971 under property insurance, frequency of premium amount is ranked fourth with the mean score of 4.867, insurance providers and benefit received from the property insurance is ranked fifth with the mean score of 4.667 and final rank is given to payment of premium with the mean score of 4.600.

It is concluded that, coverage, claim procedure and trust are the main features that influences the respondents to invest in micro property insurance.

4.5.3.4 Analysis of Variance on Investment in Microinsurance Products with their Features

a) Investment in Micro Life Insurance Products with their Features

Significant difference between investment in micro life insurance and their features are analysed with the help of analysis of variance by framing the following hypothesis:

H_0: There is no significant difference between investment in micro life insurance and features of micro life insurance.

H_1: There is a significant difference between investment in micro life insurance and features of micro life insurance.

Table 53

Investment in Micro Life Insurance with their Features

Features	F value	p value	Significance
Coverage	0.476	0.700	Not Significant
Sum assured	0.167	0.919	Not Significant
Claim processing	4.314	0.007	Significant
Insurance Provider	1.306	0.277	Not Significant
Trust	1.204	0.312	Not Significant
Premium	0.579	0.630	Not Significant
Frequency of Premium Payment	2.948	0.037	Significant

Source: Computed data

From Table 53 it is inferred that, F value for claim process is 4.314 and p value is 0.007 and F value for frequency of premium payment is 2.948 and p value is 0.037, so it is found to be significant at five per cent level of significance, therefore the null hypothesis is rejected. The alternative hypothesis is accepted and it is concluded that there is a significant difference between investment in micro life insurance with claim processing and frequency of premium payment.

There is no significant difference between coverage, sum assured, insurance provider, trust and premium with investment in micro life insurance.

b) Investment in Micro Health Insurance with their Features

Significant difference between investment in micro health insurance and their feature are analysed with the help of analysis of variance by framing the following hypothesis:

H_0: There is no significant difference between investments in micro health insurance with features of micro health insurance.

H_1: There is a significant difference between investments in micro health insurance with features of micro health insurance.

Table 54

Investment in Micro Health Insurance with their Features

Features	F value	p value	Significance
Coverage	1.412	0.247	Not Significant
Sum assured	4.661	0.005	Significant
Claim processing	3.417	0.022	Significant
Insurance Provider	3.738	0.015	Significant
Proximity	1.780	0.160	Not Significant
Premium	1.924	0.135	Not Significant
Frequency of Premium Payment	0.259	0.855	Not Significant

Source: Computed data

From Table 54 it is inferred that, F value for sum assured is 4.661 and p value is 0.005, for claim processing F value is 3.417 and p value is 0.022 and for insurance provider F value is 3.738 and p value is 0.015, so it is found to be significant at five per cent level of significance, therefore the null hypothesis is rejected. The alternative hypothesis is accepted and it is inferred that there is a significant difference between investment in micro health

insurance with sum assured, claim processing and insurance provider of micro health insurance.

There is no significant difference between coverage, trust, premium and frequency of premium payment with investment in micro health insurance.

c) Investment in Micro Property Insurance with their Features

Significant differences between investments in micro property insurance with their feature are discussed with the help of analysis of variance by framing the following hypothesis:

H_0: There is no significant difference between investments in micro property insurance with features of micro property insurance.

H_1: There is significant difference between investments in micro property insurance with features of micro property insurance.

Table 55

Investment in Micro Property Insurance with their Features

Features	F value	p value	Significance
Coverage	0.652	0.526	Not Significant
Sum assured	11.344	0.000	Significant
Claim processing	0.328	0.722	Not Significant
Insurance Provider	7.113	0.002	Significant
Trust	0.219	0.804	Not Significant
Premium	12.532	0.000	Significant
Frequency of Premium Payment	9.333	0.000	Significant

Source: Computed data

Table 55 it is inferred that, F value for sum assured is 11.344 and p value is 0.000, for insurance provider F value is 7.113 and p value is 0.002, for premium F value is 12.532 and p value is 0.000 and for frequency of premium payment F value is 9.333 and p value is 0.000, so it is found to be significant at five per cent level of significance, therefore the null hypothesis is

rejected. The alternative hypothesis is accepted and it is concluded that there is a significant difference between investment in micro health insurance with sum assured, insurance provider and frequency of premium payment of micro health insurance.

There is no significant difference between coverage, claim processing and trust with investment in micro property insurance.

4.5.3.5 Sources of Information about Microinsurance Products

Various sources of information from where the respondents have gathered a required detail about microinsurance products is given in Table 56.

Table 56

Sources of Information about Microinsurance Products

Sources	Number of Respondents	Percentage
Friends and neighbours	87	29.5
Insurance agents	97	32.9
Colleagues at work	63	21.4
Advertisement	48	16.2
Total	**295**	**100**

Source: Primary Data

Table 56 reveals that maximum of 32.9 per cent of the respondents receive information from insurance agents, 29.5 per cent of the respondents from friends and neighbours, 21.4 per cent of the respondents collect information from colleagues and 16.2 per cent of the respondents receive information through advertisements.

It is concluded that majority of the respondents (32.8 per cent) are receiving the information from insurance agents regarding microinsurance products.

4.5.3.6 Trust with Insurance Companies

Microinsurance is designed to address the potential drivers of the low income people. It is aimed to identifying the extent at which the respondents have trust on the insurance company. The details of the respondents trust with insurance company are given in Table 57.

Table 57

Trust with Insurance Companies

Trust on the insurance companies	Number of the Respondents	Percentage
I trust them completely	91	30.8
I trust them	68	23.1
I have no reason to trust them or not	48	16.3
I do not trust them	67	22.7
I do not trust them at all	21	7.1
Total	**295**	**100**

Source: Primary data

Table 57 shows that, 30.8 per cent of the respondents selected for the study have complete trust on insurance company. 23.1 per cent of them have trust on insurance companies, 22.7 per cent of the respondents do not have trust on insurance activities, 16.3 per cent of the respondents are neutral in their opinion and only 7.1 per cent of the respondents never have trust on the insurance companies for the service they render.

It is concluded that maximum of the respondents (30.8 per cent) have complete trust with insurance company in which they invested.

4.5.3.7 Socio-economic Factors and Trust with Insurance Companies

Chi-square analysis has done to find out the respondents trust on insurance companies influenced by their socio-economic status by formulating the hypothesis is given in Table 58.

H_0: There is no association between socio-economic factors of the respondents and trust with insurance companies.

H_1: There is an association between socio-economic factors of the respondents and trust with insurance companies.

Table 58

Socio-economic Factors and Trust with Insurance Companies

Socio-economic Factors	Chi-square Values	p Value	Significance
Gender	4.566	0.335	Not Significant
Age	40.498	0.000	Significant
Marital status	70.686	0.000	Significant
Education	63.789	0.000	Significant
Type of family	9.618	0.047	Significant
Family size	77.233	0.000	Significant
Occupation	102.2	0.000	Significant
Monthly Income	43.176	0.000	Significant

Source: Computed Data

It is found from Table 58 that p value is less than the significant value at five per cent level of significance for all socio-economic factors except for gender. Hence the null hypothesis is rejected and it is concluded that trust with insurance companies is associated with the socio-economic factors namely age, marital status, education, type of family, family size and occupation.

Gender is the only factors which is not associated with the trust with insurance companies.

It is concluded that there is an association between socio-economic factors of the respondents of age, marital status, education, type of family, family size, occupation and monthly income with trust on insurance companies.

4.5.4 Knowledge on Investment in Different Types of Microinsurance Products

The respondent's knowledge on investment in different microinsurance product is discussed under the following subsection:

4.5.4.1 Classification of Respondents

In order to classify the respondents as per level of knowledge on investment in microinsurance products, quartiles are used. The responses of respondents are given scores to their expression and the total variable is obtained and classified as follows:

- The respondents whose total score less than 17 are under first quartile and classified as poor level in knowledge on investments in microinsurance products.
- The respondent whose total score is higher than 23 are under third quartile and classified as rich level in knowledge on investment in microinsurance products.
- The respondents whose score between the first and third quartiles are taken as second quartiles and classified as average level knowledge on investment in microinsurance products.

4.5.4.2 Respondents Level of Knowledge on Investment in Microinsurance Products

Knowledge on investment in different microinsurance products of the respondents are shown in Table 59. The respondent's knowledge on investment of microinsurance products are classified into three categories such as poor, average and rich.

Table 59

Level of Knowledge on Investment in Microinsurance Products

Level of Knowledge	Number of Respondents	Percentage
Poor	148	26.5
Average	246	44.1
Rich	164	29.4
Total	**558**	**100.0**

Source: Computed Data

Table 59 reveals that out of 558 respondents, 246 respondents (44.1 percent) have knowledge on investment in microinsurance products at average level, 164 respondents (29.4 percent) have knowledge on investment in microinsurance products at rich level and 148 respondents (26.5 percent) have knowledge on investment in microinsurance products at poor level. It is observed that maximum of the respondents (44.1 percent) have the knowledge on investment in microinsurance products at an average level.

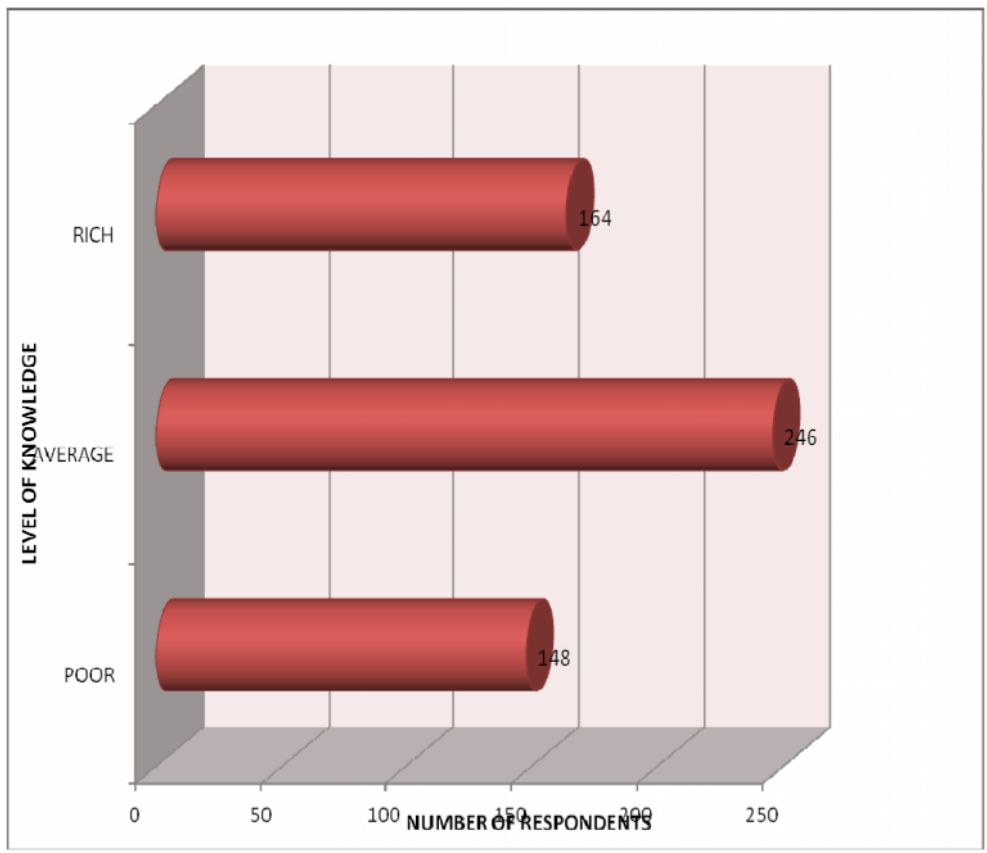


Figure 10

Level of Knowledge on Investment in Microinsurance Products

4.5.4.3 Relationship between Respondents Knowledge and Investment in different Microinsurance Products

Respondent's level of knowledge and investment in microinsurance products is studied and presented in Table 60.

Table 60

Respondents level of Knowledge and Investment in different Microinsurance Products

Microinsurance products	Poor	Average	Rich	Total
Health Insurance	6 (6.1)	42 (18.8)	20 (21.3)	**68 (16.3)**
Life Insurance	29 (29.3)	48 (21.4)	26 (27.7)	**103 (24.7)**
Property Insurance	21 (21.2)	21 (9.4)	3 (3.2)	**45 (10.8)**
Vehicle Insurance	19 (19.2)	50 (22.3)	23 (24.4)	**92 (22.1)**
Cattle Farm	11 (11.1)	26 (11.6)	16 (17.0)	**53 (12.7)**
Crop Insurance	13 (13.1)	37 (16.5)	6 (6.4)	**56 (13.4)**
Total	**99 (23.8)**	**224 (53.7)**	**94 (22.5)**	**417 (100)**

Source: Computed Data **The values in the parenthesis represent column wise percentage**

Table 60 reveals that, maximum of the respondents (29.3 percent) who have taken life insurance have poor knowledge. Further, the respondents (22.3 per cent) who have taken vehicle insurance have average level of knowledge. In respect of knowledge at rich level, respondents have taken life insurance with the percent of 27.7 percent. It is observed that majority of the respondents (53.7 percent) have average knowledge on investment in various microinsurance products.

4.5.4.4 Knowledge and Investment in Microinsurance Products

Association between the knowledge and investment in microinsurance products has been analysed with Chi-square test by framing the following hypothesis:

H_0: There is no association between the knowledge of the respondents and investment in microinsurance products.

H_1: There is an association between the knowledge of the respondents and investment in microinsurance products.

Table 61

Knowledge and Investment in Microinsurance Products

Microinsurance Products	Chi-square value	p value	Significance
Health Insurance	21.642	0.001	Significant
Life Insurance	34.194	0.000	Significant
Property Insurance	23.289	0.000	Significant
Vehicle Insurance	20.792	0.002	Significant
Cattle Farm	11.065	0.086	Not Significant
Crop Insurance	21.769	0.001	Significant

Source: Computed Data

It is inferred from Table 61 that, p value is less than the significant value at five per cent level for health insurance, life insurance, property insurance, vehicle insurance and crop insurance. Hence the null hypothesis is rejected and it is concluded that there is an association between the knowledge of the respondents and their investment in microinsurance products in the study area and not significant for cattle farm.

Hence, it is concluded that all microinsurance products except cattle farm have supported the association with the knowledge and investment in microinsurance products of the respondents.

4.5.5 Reasons for not Possessing Microinsurance Products

Microinsurance product provides lot of benefits and advantage to the rural households. In the study area, out of the total sample respondents, 47.1 per cent of the rural households have not invested in microinsurance products. The reasons for not possessing the microinsurance products have been analysed with Garret ranking technique and results have been given in Table 62.

Table 62

Reason for not possessing Microinsurance Products

Sl No	Factors	Rank									Total Score	Mean score	Rank
		1	2	3	4	5	6	7	8	9			
		81	69	62	56	50	45	38	31	19			
1	Unawareness of insurance	134	58	33	8	4	15	0	0	11	18434	70.09	I
2	Non availability of information	72	106	19	22	27	6	4	7	0	17545	66.71	II
3	Non availability of agent	16	40	93	61	27	15	7	0	4	15605	59.33	III
4	No need of insurance	8	11	45	111	41	39	0	8	0	14466	55.00	IV
5	Manage problems by themselves	4	12	9	21	92	48	7	39	31	11710	44.52	V
6	Very expensive	4	0	31	3	25	86	47	41	26	11085	42.15	VI
7	Long procedure	0	0	6	7	14	12	93	48	83	8603	32.71	IX
8	No trust	19	11	16	27	0	10	64	78	38	10824	41.16	VII
9	Third party risk	6	25	11	9	33	28	41	42	68	10459	39.77	VIII

Source: Computed Data

It is understood from table that, the respondents 'unawareness' about the insurance products is ranked first with the mean score of 70.09 under Garret Ranking Technique, 'non availability of information' is ranked second with the mean score of 66.71, 'non availability of agent' is ranked third with the mean score of 59.33 and other factors like no need of insurance, manage their problems by themselves, no trust on insurance, third party risk and long procedure were ranked fourth, fifth, sixth, seventh, eighth and ninth respectively.

It is concluded that the rural household's unawareness about microinsurance products and non availability of information are the main reasons for not investing in microinsurance products.

4.5.6 Willingness to buy Microinsurance Products in Future

The rural household willingness to buy microinsurance products of life, health and property in future are identified and given in the following table.

4.5.6.1 Willingness to buy Micro Life Insurance Products

Respondent's willingness to buy micro life insurance products are presented in Table 63.

Table 63

Willingness to buy Micro Life Insurance Products

Willingness	Number of Respondents	Percentage
Definitely willing	54	20.5
Definitely not willing	209	79.5
Total	**263**	**100**

Source: Primary data

Table 63 revealed that out of 263 respondents, only 20.5 per cent of the respondents are definitely willing to buy the micro life insurance products to face future risk related to life. It is indicated that the majority of the respondents (79.5 per cent) are not definitely willing to buy due to their low level of income, trust with insurer and no need of insurance.

4.5.6.2 Willingness to buy Micro Health Insurance Products

Table 64 describes willingness of the respondents to buy micro health insurance products and the responses are classified as definitely willing and definitely not willing in future.

Table 64
Willingness to buy Micro Health Insurance Products

Willingness	Number of Respondents	Percentage
Definitely willing	31	11.8
Definitely not willing	232	88.2
Total	**263**	**100**

Source: Primary data

It is found from Table 64 that out of 263 respondents, only 11.8 per cent of the respondents are definitely willing to buy micro health insurance products, because of the influencing factors namely the frequency of premium payment, coverage and sum assured. Majority of the respondents (88.2 per cent) are definitely not willing to buy in future micro health insurance products because the respondents expressed that insurance is not required and they do not have trust on insurer.

4.5.6.3 Willingness to buy Micro Property Insurance Products

Table 65 presents willingness of the respondents to buy micro property insurance products and the responses are classified as definitely willing and definitely not willing in future.

Table 65
Willingness to buy Micro Property Insurance Products

Willingness	Number of Respondents	Percentage
Definitely willing	25	9.5
Definitely not willing	238	90.5
Total	**263**	**100**

Source: Primary data

It could be noted that, out of 263 respondents in the rural households, only 9.5 per cent of the respondents are definitely willing to buy property insurance because coverage, claim procedure and trust on the insurance and 90.5 per cent of the respondents are definitely not willing to buy property insurance, because they expressed that insurance is not required for them.

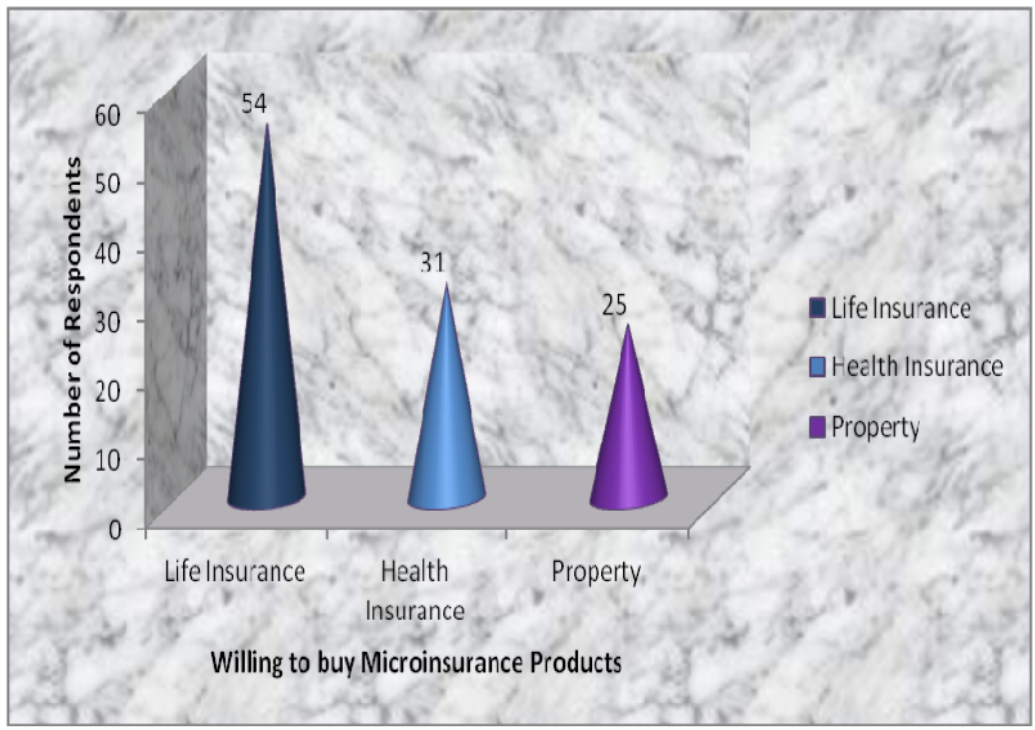


Figure 11

Willingness to buy different Microinsurance Products

4.5.6.4 Chi-square Analysis for the Respondents Willingness to Buy

Chi-square analysis has been applied to test the association between the respondent's perception on investment and investment in microinsurance products with the help of following hypothesis.

H_0: There is no association between the respondent's perception on investment and investment in microinsurance products.

H_1: There is an association between the respondent's perception on investment and investment in microinsurance products.

Table 66

Willingness to buy Microinsurance Products

	Micro Life Insurance	Micro Health Insurance	Micro Property Insurance	Total
Definitely Willing	54 (20.5)	31 (11.8)	25 (9.5)	**110**
Definitely Not Willing	209 (79.5)	232 (88.2)	238 (90.5)	**679**
Total	**263**			**789**

Source: Primary Data

Table 67

Chi-square Values for Willingness to buy Microinsurance Products

Chi Square Value	Degree of Freedom	Significance
14.75	2	Significant

Source: Computed Data

The analysis reveals that the calculated value (14.75) is greater than the table value (5.99), so the null hypothesis is rejected and the alternative hypothesis is accepted at five per cent level of significance. Hence, there is an association between the respondent's perception on investment and investment in microinsurance products.

4.5.6.5 Reasons for not willing to buy Microinsurance Products

Respondent's reasons for not willing to buy microinsurance products have been analysed by applying Garret Ranking Technique. Microinsurance products include life, health and property. Reasons includes no need insurance, bad experience, trust with insurance, scope of coverage, benefit, sum assured, claim processing, insurance provider, premium and frequency of premium payment.

a) Reasons for not willing to buy Micro Life Insurance Products

Table 68 describes the priority of the various reasons of the respondents for not willing to buy micro life insurance products.

Table 68

Reasons for not willing to buy Micro Life Insurance Product

Sl.No.	Reasons	Rank										Total Score	Mean score	Rank
		1	2	3	4	5	6	7	8	9	10			
		82	70	63	58	52	47	42	37	30	19			
1	No need insurance	117	59	33	0	0	0	0	0	0	0	15803	75.6	I
2	Bad experience	78	77	31	0	0	0	0	0	0	23	14176	67.8	II
3	Trust	2	34	104	57	0	0	0	0	0	12	12630	60.4	III
4	Scope of Coverage	12	23	0	102	67	5	0	0	0	0	12229	58.5	IV
5	Benefit	0	16	0	15	63	48	0	23	23	21	9462	45.3	V
6	Sum assured	0	0	0	0	12	95	47	35	5	15	8793	42.1	VI
7	Claim processing	0	0	0	12	0	33	120	31	0	13	8681	41.5	VII
8	Insurance provider	0	0	0	0	0	28	17	64	84	16	7222	34.6	IX
9	Premium	0	0	36	0	28	0	25	31	66	23	8338	39.9	VIII
10	Frequency of premium payment	0	0	36	0	28	0	25	31	66	23	7166	34.3	X

Source: Computed Data

b) Reasons for not willing to buy Micro Health Insurance Products

Table 69 describes the priority of the various reasons of the respondents for not willing to buy micro health insurance products.

Table 69

Reasons for not willing to buy Micro Health Insurance Product

Sl.No	Reasons	Rank										Total Score	Mean score	Rank
		1	2	3	4	5	6	7	8	9	10			
		82	70	63	58	52	47	42	37	30	19			
1	No need insurance	116	81	35	0	0	0	0	0	0	0	17387	74.9	I
2	Bad experience	93	76	38	0	0	0	0	0	0	25	15815	68.2	II
3	Trust	3	34	110	65	0	8	0	0	0	12	13930	60.0	III
4	Scope of Coverage	12	25	0	108	82	5	0	0	0	0	13497	58.2	IV
5	Benefit	0	16	0	22	66	56	0	24	25	23	10535	45.4	V
6	Sum assured	8	0	0	0	12	93	53	40	8	18	9939	42.8	VI
7	Claim processing	0	0	8	12	0	37	135	29	0	11	9891	42.6	VII
8	Insurance provider	0	0	0	0	0	30	21	79	83	19	8066	34.8	IX
9	Premium	0	0	36	0	30	0	23	34	82	27	9025	38.9	VIII
10	Frequency of premium payment	0	0	5	25	42	3	0	26	34	97	7915	34.1	X

Source: Computed data

c) Reasons for not willing to buy Micro Property Insurance Products

Table 70 describes the priority of the various reasons of the respondents for not willing to buy micro property insurance products.

Table 70

Reasons for not willing to buy Micro Property Insurance Product

Sl.No	Reasons	Rank										Total Score	Mean score	Rank
		1	2	3	4	5	6	7	8	9	10			
		82	70	63	58	52	47	42	37	30	19			
1	No need insurance	116	82	39	0	0	1	0	0	0	0	17756	76.5	I
2	Bad experience	100	74	38	0	1	0	0	0	0	25	16301	70.3	II
3	Trust	2	40	111	66	0	8	0	0	0	11	14370	61.9	III
4	Scope of Coverage	11	25	0	116	81	5	0	0	0	0	13827	59.6	IV
5	Benefit	0	17	0	20	67	56	0	25	25	28	10673	46.0	V
6	Sum assured	8	0	1	0	12	97	55	40	8	17	10255	44.2	VI
7	Claim processing	0	0	8	11	0	37	139	31	1	11	10105	43.6	VII
8	Insurance provider	0	0	0	0	0	30	21	83	84	20	8263	35.6	IX
9	Premium	1	0	36	0	30	0	22	34	87	28	9234	39.8	VIII
10	Frequency of premium payment	0	0	5	25	47	4	1	25	33	98	8216	35.4	X

Source: Computed data

Reasons for not willing to buy Micro Life Insurance

It is inferred from Table 68 that, the respondent's expression of 'no need of insurance' ranked first with the mean score of 75.6 for not willing to buy micro life insurance products, followed by 'bad experience' is ranked second with the mean score of 67.8, 'trust with insurance company' is ranked third with the mean score of 60.4, 'scope of coverage' of micro life insurance products is ranked fourth with the mean score of 58.5, 'benefits received from the microinsurance' is ranked fifth with the mean score of 45.3, 'sum assured', 'claim processing', 'premium amount', 'insurance provider' and 'frequency of premium payment' are ranked sixth, seventh, eighth, ninth and tenth respectively.

It is inferred that 79.5 per cent of the respondents are definitely not willing to buy micro life insurance is due to the reason 'no need of insurance', 'bad experience' and 'trust with the insurance companies' with the high mean score.

Reasons for not Willing to buy Micro Health Insurance

Table 69 shows that the reason for not willing to buy the micro health insurance under Garret ranking technique. The respondents expressed that those who do 'not need micro health insurance' is ranked first with the mean score of 77.9, 'bad experience' is ranked second with the mean score of 68.2, 'trust with insurance company' is ranked third with the mean score of 60, 'coverage' under this microinsurance products is ranked fourth with the mean score of 58.2, 'benefits received from the microinsurance' is ranked fifth with the mean score of 45.4, 'sum assures', 'claim processing', 'premium amount', 'insurance provider' and 'frequency of premium payment' are ranked sixth, seventh, eighth, ninth and tenth respectively.

It is inferred that 88.2 per cent of the respondents are definitely not willing to buy micro health insurance is due to the reasons 'no need of insurance',' bad experience' and 'trust with the insurance companies' with the high score.

Reasons for not Willing to buy Micro Property Insurance

Table 70 found that the reason for not willing to buy the micro property insurance under Garret ranking technique. Respondents expressed that those who 'do not need micro property insurance' is ranked first with the mean score of 76.5, 'bad experience' is ranked second with the mean score of 70.3, 'trust with insurance company' is ranked third with the mean score of 61.9, 'coverage' under this microinsurance products is ranked fourth with the mean score of 59.6, 'benefits received from the microinsurance' is ranked fifth with the mean score of 46.0, 'sum assures', 'claim processing', 'premium amount', 'insurance provider' and 'frequency of premium payment' are ranked sixth, seventh, eighth, ninth and tenth respectively.

It is revealed that the 90.5 per cent of the respondents are definitely not willing to buy micro property insurance is due to the reasons 'no need of insurance', ,bad experience' and 'trust with the insurance companies' with the high score.

To have an in-depth knowledge on microinsurance products, the various features and the value of investment in microinsurance have been analysed by applying analysis of variance test. Influence of socio-economic factors on investment in microinsurance and the trust with insurance companies have been analysed through Chi-square test. Finally the research study identified whether the rural households are willing to buy microinsurance products in future or not willing to buy.

4.6 Market Segment for Microinsurance in the Rural Area

Market segmentation is a marketing strategy that involves dividing a broad target market into subsets of consumers, businesses or countries that have common needs and priorities and then designing and implementing strategies to target them. A market segment consists of a large area within a market, with similar wants, purchasing power, geographical location, buying attitudes or buying habits. Segment marketing allows a firm to create a more fine-tuned products or service offering and value appropriately for the target audience.

4.6.1 Measurement of the Effective Demand and Evaluation of Market Preferences for Microinsurance

Access Frontier Approach developed by David Porteous is adopted in projecting the market development for microinsurance. The approach is applied to determine the size of the market for the group within access frontier for different types of microinsurance products namely health, life and property insurance and to develop marketing strategies to reach those within Access Frontier Now and in Future.

Under this approach the total market is divided into four segments as given below:

Table 71

Result of Market Segment for Microinsurance in the Rural Area

Main market segments	Description of the segment	Defined by the study
Within Access Frontier Now	Maximum percentage of households who can access the suggested microinsurance product concepts on current terms and conditions.	**52.9 per cent of the rural households have invested in different Microinsurance product supported by** Health Insurance: 16.3 per cent Life Insurance: 24.7 per cent Property Insurance: 10.8 per cent Vehicle Insurance: 22.1 per cent Cattle Farm: 12.7 per cent Crop Insurance: 13.4 per cent
Within Access Frontier in the Future	A group of households who are likely to access the suggested microinsurance product concepts if terms and conditions are more adapted to them. In the case of microinsurance, they are reluctant to buy now due to limited knowledge, distrust or underestimation of their capacities to pay due to poor money management.	**Willing to buy in the future** to meet out their risk and benefits available in the different insurance products. Life Insurance: 20.5 per cent Health Insurance: 11.8 per cent Vehicle Insurance: 9.5 per cent

Continued.,

Table 71

Result of Market Segment for Microinsurance in the Rural Area

Main market segments	Description of the segment	Defined by the study
Supra-Market	A group of households who may wish to buy microinsurance but are unable to, mostly due to lack of surplus income.	**14.0 per cent of the respondents are from low income category** (i.e., Monthly income of less than Rs.5,000) supported by Life: 57.5 per cent Health: 100 per cent and Property: 85 per cent of the respondents are not willing to buy microinsurance products due to low level of income. It is estimated based on the income sources, financial behaviour, and price sensitivity.
Natural Limit	Maximum extent of usage possible after eliminating those who can but choose not to use the microinsurance.	**Definitely not willing to buy** different microinsurance products because the respondents expressed that "no need of microinsurance products" supported Life Insurance: 75.6 per cent, Health Insurance: 74.9 per cent Property Insurance: 76.5 per cent

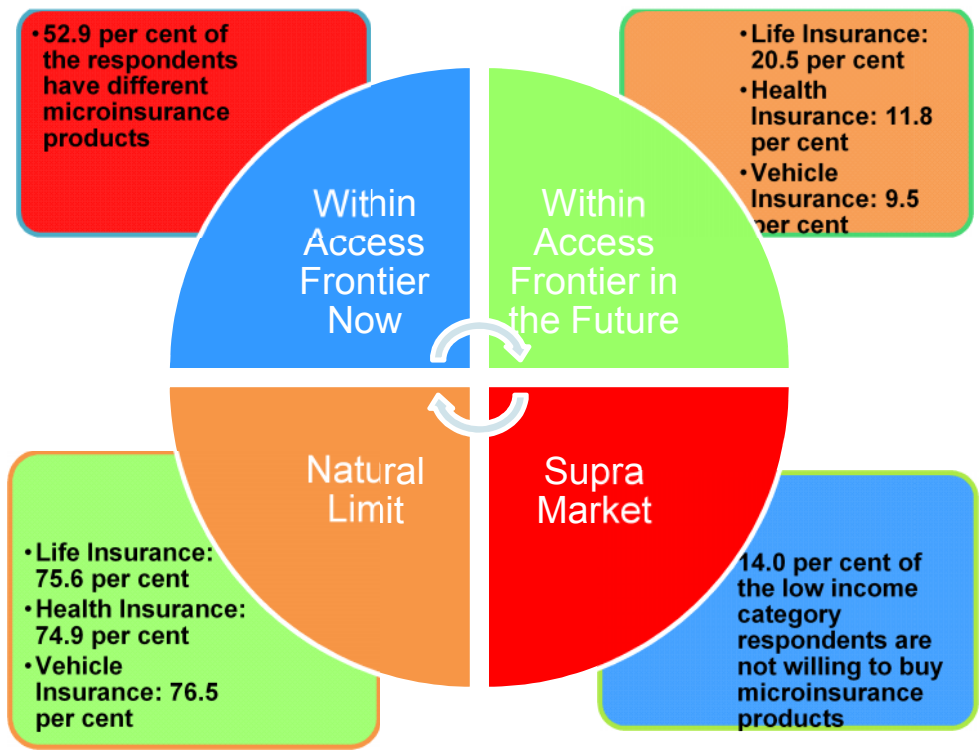


Figure 12

Market Segment for Microinsurance in the Rural Area

4.6.2 Market Development Projections

Analysis of total insurance market development scenario reflects opportunities and threats to microinsurance provision. The Access Frontier approach distinguishes three zones in a market based on market enablement zone, market development zone and market redistribution zone.

Access Frontier approach identifies three zones on the market and it is discussed as follows:

- **Market Enablement Zone** – This is a group that can be reached now (within access frontier now) because it is easy to be covered with new microinsurance products that are demanded by enthusiastic respondents. 52.9 per cent of the respondents have invested in different microinsurance products i.e., Health Insurance: 16.3 per cent, Life Insurance:

24.7 per cent, Property Insurance: 10.8 per cent, Vehicle Insurance: 22.1 per cent, Cattle Farm Insurance: 12.7 per cent and Crop Insurance: 13.4 per cent.

- **Market Development Zone** – This is a group within access frontier that might be covered if the new products are well-adapted and effective marketing strategies are in place and there is an enabling environment. Microinsurance sector can develop the market based on their needs so that the rural households willing to buy the products and can able to satisfy to their needs. Most of the respondents were willing to buy microinsurance in future Life Insurance: 20.5 per cent, Health Insurance: 11.8 per cent and Property Insurance: 9.5 per cent to meet out their risk and benefits available in the different insurance products.

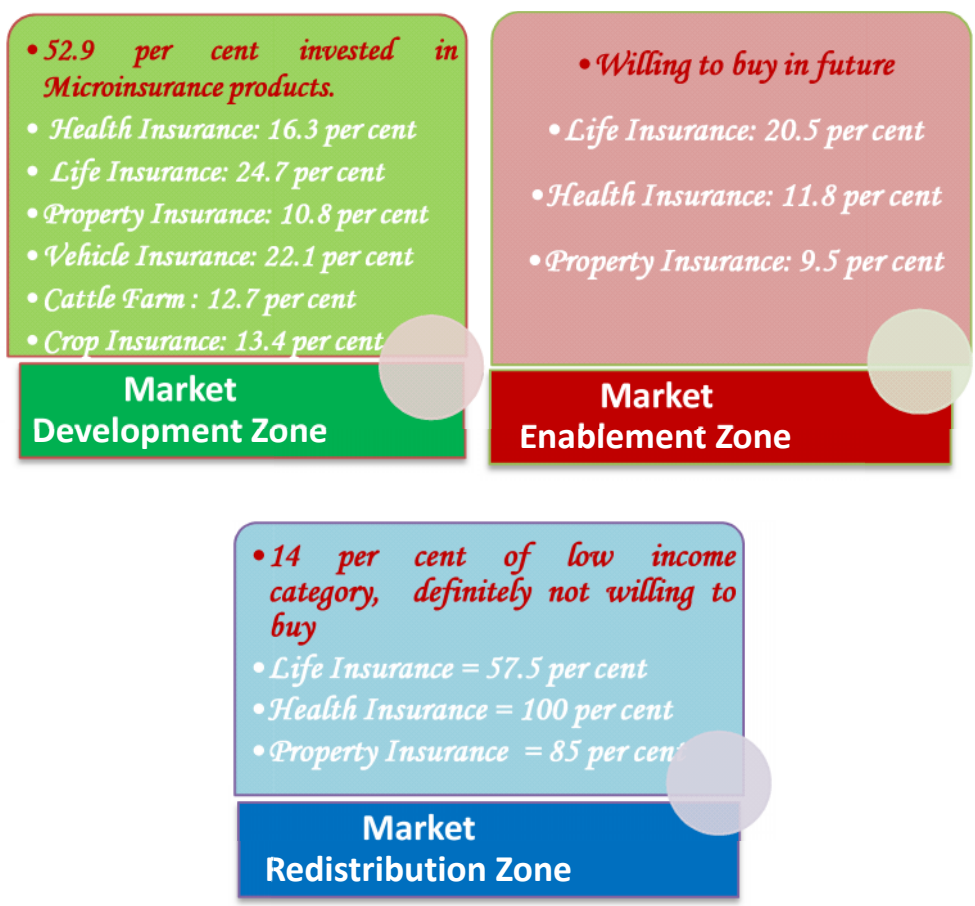


Figure 13

Market Development Projections