

MICROINSURANCE - CASE STUDY OF BIRBHUM DISTRICT OF WEST BENGAL

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Abstract

Providing financial services to the excluded has come to be regarded as an important and inevitable milestone in achieving inclusive growth. Microinsurance is an important tool of financial inclusion. In West Bengal microinsurance is in an embryonic stage, and this study examines the provision, availability and impact of microinsurance in the Birbhum district of rural West Bengal. A mix of qualitative and quantitative methods such as household surveying, direct observation, key-informant interviews, were employed for data collection. With this in mind, the present study has been undertaken to examine the need for microinsurance products among the rural people in Birbhum. The primary data has been collected from respondents of villages of this district. Tools applied to analyse the primary data were percentage and chi square analysis. The main objective of the study is to estimate the demand for different microinsurance products.

Key Words: Demographic profile; Impact; Risk Coping Strategy

Introduction

Microinsurance is the protection of low-income people against specific perils in exchange of regular premium payments proportionate to the likelihood and cost of risk undertaken (Craig Churchill, 2007). According to International Labour Organization, microinsurance is a mechanism to protect poor people against risk in exchange of insurance premium payment tailored to their needs, income and level of risk. It is aimed primarily at the development of low-income workers, especially those in the informal economy who tend to be under-reserved by mainstream commercial and social insurance schemes.

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IRDA's definition of micro insurance:

In order to facilitate the penetration of micro insurance to the people at the bottom of the pyramid in India, the regulator-Insurance Regulatory Development Authority(IRDA) has formulated the Microinsurance Regulations 2005. The micro insurance products are broadly classified into two classes as per the Microinsurance Regulations 2005:

Life Microinsurance Products: This means any term insurance contract with or without return of premium, any endowment insurance contract or health insurance contract, with or without an accident benefit rider, either on individual or group basis.

General Microinsurance Product: insurance products which means any health insurance contract, any contract covering the belongings such as hut, livestock or tools or instruments or any other personal accident contract, either on individual or group basis.

The micro insurance regulations in India came into being on 10 November, 2005 and the IRDA mentions the business under micro insurance in its annual report from 2007-08 onwards. Microinsurance started as a minuscule portfolio, but it has been able to demonstrate growth in the last few years.

Review of Literature

Welfare costs due to shocks and foregone profitable opportunities have been found to be substantial, contributing to persistent poverty (**Dercon**, 1996; **Morduch**, 2004). Microinsurance has the potential to reduce these welfare costs. By offering a payout when an insured loss occurs, it avoids other costly ways of coping with the shock, leaving future income earning opportunities intact. Furthermore, the security linked to being insured can be expected to allow the avoidance of costly risk-management strategies with positive impact on poverty reduction. Microinsurance, in conjunction with micro savings and micro credit, can therefore go a long way in keeping this segment away from the poverty trap and would truly be an integral component of financial inclusion.

Microinsurance should, therefore, provide greater economic and psychological security to the poor, as it reduces exposure to multiple risks and cushions the impact of a disaster. Thus, insurance is fast emerging as a prepaid financing option for the risks facing the poor.

Microinsurance is defined in line with **Churchill** (2006) as an insurance that

- (i) operates by risk-pooling
- (ii) is financed through regular premiums, and
- (iii) is tailored to the poor who would otherwise not be able to take out insurance.

To understand the impact of insurance initiatives, it is instructive to put it in the context of how risk shapes the behaviour and decision outcomes of the poor. According to **Dercon**, (2008), it is necessary to link risk to its consequences in terms of outcomes in various dimensions of welfare in the short - and long-run. Households, communities, firms or societies as a whole, face a multitude of risks. Given their options and characteristics, they will make 'risk management decisions', or at least decisions with implications for risk management. People's responses or inability to respond will again have implications for outcomes, both in the short - run and in the long - run.

It is worth emphasizing that two distinct 'decision moments' are considered: one when there is still 'risk' (i.e., a potentially large number of different possible events or circumstances), and one when a 'shock' (i.e., a realization of one of these possible events or circumstances) has occurred. The decisions that need to be taken in the face of risk (risk management or '*ex-ante*' strategies) are potentially very different from those taken in the face of a shock (risk coping or '*ex-post*' strategies). Nevertheless, they cannot be viewed independently, as risk management decisions will have implications for the possible set of risk coping strategies, while risk coping will have implications for the type of risk management decisions that can be taken in the next period. These strategies have been widely acknowledged as a central part of people's livelihoods. Households have strategies to cope with *ex-post* risk, i.e., shocks, to smooth consumption and nutrition when shocks happen, even if formal credit and insurance markets or social protection schemes are not available. They may use savings, often in the form of live animals, built up as part of a precautionary strategy against risk. They may develop personalized informal credit arrangements. They also often engage in informal mutual support networks, for example, clan- or neighbourhood-based associations, or even more formal groups such as funeral societies. However, group-based systems cannot work effectively in the face of 'covariant' shocks, affecting the whole group, while the lack of

good stores of wealth, with limited risks, also means that building these 'buffer stocks' is highly costly and indeed not as effective as hoped. A well-known example of the latter is when households in Northern Wollo in Ethiopia tried to use their standard smoothing device – selling small and large livestock – to cope with the drought and famine in the mid-1980s. Livestock prices collapsed due to oversupply and lack of demand, in the face of high grain prices, providing a classic case of entitlement failures (Sen, 1981). In terms of risk management strategies, different forms of diversification are commonly observed – in crops, activities or assets. As long as the returns to these activities are not perfectly covariate, there will be benefits from diversification.

Research Problem

Though there are a few but serious studies on different aspects of *microinsurance*, the researcher has not come across any documented work on performance of microinsurance organisations in India vis-à-vis their most important role, i.e., protecting the low-income people. This has encouraged the researcher to take up an intensive study in this field.

Objectives of this paper

1. To study the awareness level of microinsurance among the rural people
2. To assess the need of microinsurance product among the low-income people
3. To identify the hindrances in the microinsurance policies as suggested by the low-income people.

Research Methodology:

The present paper is empirical in nature. This study is empirical and exploratory in nature. The study is based on primary data.

The data relating to the district-wise populations of the microinsured households served by each of those 4 MFIs were collected from their offices, the details of which are given below in parentheses.

After discussion with knowledgeable persons, the 4 MFIs key providers of microinsurance in Birbhum district of West Bengal were identified. The data relating to the MFI-wise populations of the microinsured households served by each of those 4 MFIs were collected from their offices, the details of which are given below in parentheses.

1. Sahara Utsarga Welfare Society(SUWS) [395]
2. Sarala Women Welfare Society (SWWS) [450]
3. Belgharia JanakalyanSamity (BJS) [425]
4. Anjali Microfinance (AM) [315]

The researchers set a target of drawing a sample of 20% of those microinsured households in a MFI-wise manner. However, in spite of repeated requests, the researchers could get cooperation from only 300 microinsured households, the MFI-wise break-up of which is given below. The percentages of microinsured households which finally responded, i.e., the respondents, are given in Table 1 below, which vary from 18% to 20%.

Therefore, in the true sense, real sampling of the microinsured households could not be done.

Table 1: MFI WISE BREAK UP OF HOUSEHOLDS

Name of MFI	Microinsured Household	Percentage targeted	Percentage sampled	Sample Size
SUWS	395	20%	18.99	75
SWWS	450	20%	18	81
BJS	425	20%	19.06	81
AM	315	20%	20	63
				300

The next section deals with the case study with the respondents i.e. the users of micro insurance. It is done through data collected by questionnaire. The SPSS package was used for statistical analysis of the primary data. Apart from the usual descriptive statistical tools, Hypotheses Testing was done for analysis and interpretation of the primary data.

Birbhum-At a Glance

Birbhum district is an administrative unit in the Indian state of West Bengal. It is the northernmost district of Burdwan division—one of the three administrative divisions of West Bengal. The district headquarters are located at Suri. Jamtara, Dumka and Pakur districts of the state of Jharkhand lie at the western border of this district, whereas the border in other directions is covered by the districts of Bardhaman and Murshidabad of West Bengal.

Often called "The land of red soil", Birbhum is noted for its topography and its cultural heritage which is unique and is somewhat different from that of the other districts in West Bengal. The western part of Birbhum is a bushy region, a part of the Chhota Nagpur Plateau. This region gradually merges with the fertile alluvial farmlands in the east. This district saw many cultural and religious movements in history. Birbhum is primarily an agricultural district with around 75% of the population being dependent on agriculture. Principal industries of the district include cotton and silk harvesting and weaving, rice and oilseed milling, lac harvesting, stone mining and metalware and pottery manufacture. Bakreshwar Thermal Power Station is the only heavy industry in the district.

Description	2011	2001
Actual Population	3,502,404	3,015,422
Male	1,790,920	1,546,633
Female	1,711,484	1,468,789
Population Growth	16.15%	17.99%
Area Sq. Km	4,545	4,545
Density/km2	771	663
Proportion to West Bengal Population	3.84%	3.76%
Sex Ratio (Per 1000)	956	950
Child Sex Ratio (0-6 Age)	959	964
Average Literacy	70.68	61.48
Male Literacy	76.92	70.89
Female Literacy	64.14	51.55

Source: Census 2011

Empirical Survey and Findings

The field work combined interviews in the form of questionnaire and discussions with the local people and interviews with local experts. In most households the interviewees were of mixed gender. Although women were in some cases formally considered the head of the household, most often male members responded to the questions. In addition, data on socio-economic variables, like age, gender, education, sources of credit, physical assets, livestock assets, income from various sources, adaptation measures have been collected from the field survey. The socioeconomic indicators and

adaptation diagram of the district are presented in the tables below.

Table 1:Age-wise Distribution of Respondents

Category	Frequency	Percentage
18-30	5	1.49
31-40	134	44.78
41-50	148	49.25
Above 50	13	4.48
TOTAL	300	100

Source : Owned Survey

From the above table it is clear that majority of the respondents fall in the age group of 41-50 where the earning capacity is the highest.

Table 2:Gender-wise Distribution of Respondents

Category	Frequency	Percentage
Male	49	16.42
Female	251	83.58
TOTAL	300	100

Source : Own Survey

Majority of the respondents are female stressing the fact that micro finance has done a lot for the women.

Analysis of Socio-economic Vulnerability of the Households

For the purpose of understanding the socio-economic vulnerability of the respondents, three important factors viz., occupation, education and income per month have been considered.

Vulnerability Indices have been constructed using the Three Categorized Ranking (TCR) Method, assigning scores of 1 to 3, the least vulnerable being 1. The basic assumptions are the following:

- First, service-employment is associated with lower vulnerability
- Second, lower level of education is associated with higher vulnerability
- Third, lesser income is associated with higher vulnerability

Table 3:Occupation-wise Distribution of Respondents

Category	Frequency	Percentage
Service	112	37.23
Self-Employed	188	62.77
TOTAL	300	100

Own Survey

Majority of the respondents are self-employed. This implies that they are more vulnerable as they do not have the guarantee of a fixed income. From the interview it came out that in case of any kind of negative event happening, the self-employed are more affected than the service employed.

Table 4:Education-wise Distribution of Respondents

Category	Frequency	Percentage
Illiterate	46	15.27
Primary	115	38.25
Secondary	118	39.23
Higher Secondary	21	7.25
TOTAL	300	100

Own Survey

Majority of the respondents have not even passed the primary level of education. The illiteracy rate in this district is high signifying higher vulnerability to risk.

Table 5:Income-wise Distribution of Respondents

Category	Frequency	Percentage
Less than 5000	139	46.21
5001-10000	118	39.23
10001-15000	36	11.96
More than 15000	7	2.6
TOTAL	300	100

Source :Own Survey

Majority of the respondents fall in the lowest and second lowest income slab. Low income is obviously related to higher vulnerability to risk.

Table 6: Vulnerability Assessment In Purulia District

District	Occupation	Education	Income p.m.	Combined	Vulnerability
Birbhum	2	2	3	2.33	H

Source: Field Survey

Note: H stands for high; M stands for medium; L stands for low

From the above analysis we can see that Birbhum district is highly vulnerable and hence the importance of microinsurance. Microinsurance can help the people of Birbhum to combat against vulnerabilities. In the following section we will study the awareness level, utility and success of microinsurance in this district.

Respondents Inclination Study

The households have been analysed as to how they cope with any kind of sudden shock or accidental crisis. From the analysis of the interview, the possible adaptation options were found to be accessibility to informal borrowings, microloans, selling of assets and loans from friends. Such adaptation options are presented in Table 8. It is also found from Table 8 that the adaptation capacities of the respondents in this district are low due to lack of formation of SHGs, lack of awareness of Micrifinance products.



Table 7:Adaptation Strategies of Households

Category	Frequency	Percentage
Informal Borrowing	122	40.82
Selling of Assets	83	27.52
Loan from Friends	24	7.95
Microloans	71	23.71
TOTAL	300	100

Source :Own Survey

Table 8: Crosstab of Risk Managemebnt Strategies and Risk Faced

		RISKS FACED					Total
		Asset	Employment	Health	Life	Others	
RISK MANAGING STRATEGIES	INFORMAL BORROWING	26	1	42	44	9	122
	LOAN FROM FRIENDS	0	18	27	38	0	83
	MICROLOAN S	1	0	7	12	4	24
	SELLING OF ASSETS	1	5	16	40	9	71
Total		28	24	92	134	22	300

Source : Own Survey

The above represents a contingency table, which cross-classifies 300 households in terms of their risk management strategies and risks faced by them. In the above table, the *risks faced* is an explanatory variable and the *risk managing strategies* is a response variable. The conditional distributions of risks managing strategies have been studied further on.

Null Hypothesis (H_0) – risk management strategies do not vary across types of risks faced
Alternative Hypothesis (H_1) – risk management strategies vary across types of risks faced
 If P value $< .05$, the *Null Hypothesis* is rejected.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	167.119	25	.000

Source: worked out by the researchers

On the basis of the above Chi-Square value, the *Null Hypothesis* is rejected (as $P < .05$), indicating that there is a systematic association between risk management strategies and types of risks faced. Whatever be the type of risk, majority of the respondents in the study either borrow from the local money lender or start selling their assets or mortgage their assets with the money lenders.

Table 9: Usefulness of Microinsurance Policies

Category	Frequency	Percentage
YES	218	72.57
NO	82	27.43
TOTAL	300	100

This table shows the success of micro insurance products.

Table 10: Types of Microinsurance Policies Available till Now

Category	Frequency	Percentage
Crop	36	12.15
Health	86	28.54
Life	139	46.21
Livestock	39	13.1
TOTAL	300	100

Source : Own Survey

Though there are lots of products, still from the analysis of the interview it came out that the respondents would want more risk specific products.

Table 11: Benefits Derived from Current Microinsurance Policies

Category	Frequency	Percentage
Better Education Facilities	44	14.52
—	26	8.72
Increase in present activity	95	31.52
Reduction of Risks	23	7.52
Reduction in impact of seasonality	112	37.72
TOTAL	300	100

Source : Own Survey

As per the respondents, micro insurance is associated with a lot of benefits.

Table 12:Difficulties Faced

Category	Frequency	Percentage
Product Design	26	8.52
Claim Settlement	78	26.15
Premium Amount	88	29.32
Product Awareness	108	36.01
TOTAL	300	100

Some respondents who are continuing with their present microinsurance policies however indicated the difficulties faced by them. It appears that the objective of the MFIs to reach the poorest and those who are in greatest need of it continues to remain a challenge.

Table 13 : Suggestions for Improving

Category	Frequency	Percentage
Easy Claim Settlement	-	-
Flexibility in Collection of Premium	73	24.21
Less Premium	178	59.32
Greater Awareness	2	0.73
More Products	47	15.74
TOTAL	300	100

Source :Own Survey

With respect to the suggestions for improving microinsurance policies, majority of the respondents mentioned the need for reduction in the premium amount, followed by the need for flexibility in premium collection.

Table 14:Reasons for not continuing Microinsurance Policies

Category	Frequency	Percentage
Collection Period		30
Lack of Flexibility in collection of premium	45	15
Premium amount		40
Too many policies	45	15
TOTAL		100

Source : Own Survey

The respondents who are dissatisfied with the microinsurance policies and had discontinued their policies, had mentioned the reasons for their discontinuation, the main reason being the premium amount. Given their irregular and uncertain income, a lower premium amount and flexibility in collection of premium will help those people to again purchase microinsurance products. Moreover, comprehensive policies covering a variety of risks may be suitable for those who are unable to purchase too many policies. The MFIs have to expand their activities net far and wide.

Limitation of the Study

- 1) The present study for determining the impact of microinsurance as a risk-coping strategy covers only a period of one year. Also there are some areas identified in the study that need further intensive analysis.
- 2) The study area is restricted to 4 districts of West Bengal only.

Conclusion

Microinsurance in the real sense is a panacea for the poor. Considering the huge population base of the informal sector workers, the penetration level of micro insurance in India has not been remarkable. These informal sector workers are still untapped, which throws an excellent business opportunity for the insurers to tap this market through microinsurance. At the same time society at large will be benefitted as these informal sector workers have limited social safety nets and micro insurance would provide an important means of managing the risk of the poor. Insurers may focus on sensitizing the masses on the factors affecting the demand for microinsurance as per this empirical study to enhance the take up.

Finally, microinsurance being a low price, high volume business, its success and sustainability depend mainly on keeping the transaction costs down.

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Appendix

Questionnaire for Respondents

1. **NAME:**
2. **AGE(yrs.):** a) 18-30 b) 31-40 c) 41-50 d) Above 50
3. **GENDER:** a)Male b)Female
4. **OCCUPATION:** a) Service b) Self-employed(agriculture/manufacture/others)
5. **EDUCATIONAL LEVEL:** a) Illiterate b)Primary c)Secondary
d) Higher Secondarye) Graduation f) Post Graduation
6. **Income p.m.:** a) below Rs. 5000 b) Rs. 5001-Rs.10000
c) Rs. 10001- Rs.15000 d) above Rs.15000
7. **What are major risks/shocks/problems relating to your livelihood and life you encountered during last 5 years? Explain briefly**

Relating To	Nature (mention the period)	Major Reason(s)	Major coping strategy(ies)
Life			
Health			
Education			
Employment			
Income			
Credit/Borrowing			
Assets			
Crop			
Livestock			
Any Other(specify)			

8. **How do you manage emergencies without formal insurance cover?**
9. **Have you heard about microinsurance?**
10. **If so, what is your idea about microinsurance?**

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11. **Do you think some microinsurance cover could have helped you to manage shocks or problems as mentioned above?**
a) Yes b) No
 12. **If yes, briefly, give your views**
-

13. What type of microinsurance policy have you availed of till now? Give details.

Insurance Product	Insurer	Coverage (self/ spouse/ children/ parents/entire family)	Policy Date	Maturity Date	Mode of Payment	Sum Assured (Rs.)	Present status of policy	Nominee
14. Would you like to continue with your current insurance policy?								

a) Yes b) No

15. If no, why?

16. From the list given below, identify the impacts/benefits of your current insurance policy (ies), product(s) on your life and livelihood. Give suggestions/remarks, wherever possible.

BENEFITS	YES/NO	SUGGESTIONS/REMARKS
Reduction of risks relating to employment & income		
Empowerment in decision making		
Expansion of present activity(ies)		
Improved security for education of child(ren)		
Reduction of vulnerability of risks		
Reduction of impact of seasonability		
Others (specify)		

17. What are the major difficulties/problems associated with the existing insurance/microinsurance policy with respect to the following:



a) **Product information/awareness**

b) **Premium**

c) **Product design**

d) **Claim settlement**

e) **Others**

18. **Have you made any insurance claim in case of any eventuality/incident?**

a) Yes b) No

19. **If yes, give details:**

Date of eventuality/incident: _____

Reasons _____

Claim made _____

Claim settled _____

Difficulty faced, if any _____

Sum Assured Rs. _____

Amount received after deduction of loan, if any, Rs. _____

20. **Suggestions for improvement of the microinsurance product(s):**
