

## IMPACT OF MICROINSURANCE IN RURAL AREAS: A CASE STUDY ON PURULIA DISTRICT, WEST BENGAL

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### Abstract

*This study examines the provision, availability and impact of microinsurance in the Purulia district of West Bengal by collecting primary from some selected villages. A mix of qualitative and quantitative methods, such as household surveying, direct observation, and key-informant interviews have been employed for collection of data.*

**Key Words :** *Demographic profile; Impact; Risk Coping Strategy; Role of MFIs*

### Introduction

Humans have always sought to reduce uncertainty. This innate risk reduction drive motivated the earliest formation of clans, tribes and other groups. Group mechanism ensured a less volatile source of life's necessities than that which atomized humans and families could provide. The group provided greater physical security and helped their less fortunate members in times of crisis. Insurance is an arrangement by which a company or state undertakes to provide a guarantee of compensation for specified loss, damage, illness in return for payment of a specified premium.

Usually, the poor face two types of risks one that is specific to the household and the other that is common, e.g., drought, epidemic, etc. To combat these risks, the poor do pro-active risk management – grain storage, savings, asset accumulation (especially bullocks), loans from friends and relatives, etc. However, the prevalent forms of risk management which were appropriate earlier are no longer adequate.

Micro-insurance is specifically designed for the protection of low-income people, with affordable insurance products to help them cope with and recover from common risks. Micro-insurance is a key element in the financial services package for people at the bottom of the pyramid. The poor face more risk than the well-off, but more importantly they are more vulnerable to same risks. Uninsured risk leaves poor households vulnerable to serious or even catastrophic losses from negative shocks. It also forces them to undertake costly strategies to manage their incomes

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and assets in the face of risk, lowering mean incomes earned. Welfare costs due to shocks and foregone profitable opportunities have been found to be substantial, contributing to persistent poverty (Morduch, 1990; Dercon, 1996, 2004). Micro-insurance 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 impacts on poverty reduction. Micro-insurance in conjunction with micro savings and micro credit could, therefore, go a long way in keeping this segment away from the poverty trap and would truly be an integral component of financial inclusion

Micro-insurance 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.

### **Research Methodology**

This study was conducted in Purulia district of West Bengal. Purulia came into being as a district of West Bengal in 1956. Purulia is the western most district of West Bengal with a national significance because of its tropical location, its shape as well as function like a funnel. It funnels not only the tropical monsoon current from the Bay of Bengal to the sub-tropical parts of the north-west India but also acts as a gateway between the developed industrial belts of West Bengal and the hinterlands in Orissa, Jharkhand, Madhya Pradesh and Uttar Pradesh. The total geographical area of the district is 6259 sq. kms. Out of this the urban and rural areas are 79.37 sq. kms (1.27%) [municipalities & non-municipalities] and 6179.63 sq. kms (98.73 %) respectively. The district headquarters is situated at Purulia town, having three administrative sub-divisions, viz., Sadar East, Sadar West and Raghunathpur. There are 21 police stations, 20 community development blocks, 3 municipalities (Purulia, Raghunathpur and Jhalda), 8 non-municipal towns, 170 gram panchayats, 2683 mouzas (2468 inhabited villages) and 1911 gram sansads.

Purulia is predominantly a mono-cropped region. About 60 per cent of the total cultivated land is upland. Out of the total agricultural holdings, about 73 per cent belongs to small and marginal farmers having scattered and fragmented small holdings. Paddy is the primary crop. Of the total area, 50 per cent is under the net-cropped area and only 17 per cent of the net cropped area is under multi-crop cultivation. Aman paddy cultivation accounts for 77 per cent of the net-cropped area. The crops are mainly rainfed, with low fertilizer consumption per unit area. Per hectare production is also low as compared to other districts in West Bengal.

Total 90 households have been selected on the basis of random sampling. 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 mixed gender. Although women were in some cases formally considered as the head of household, most often male members responded to the questions. In addition, data on socio-economic variables, like age, sex, 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 four districts are presented in the tables below.

The main providers of micro-insurance in this district are:

1. Sahara Utsarga Welfare Society (SUWS)
2. Society for Model Gram Bikash Kendra (GBK)
3. Sarala Women Welfare Society (SWWS)

**Table 1 - District Wise and MFI wise break up of 90 Households**

Name of MFI	Microinsured Household	Percentage targeted	Percentage sampled	Sample Size
SUWS	500	10%	9.6%	48
GBK	240	10%	9.17%	22
SWWS	300	10%	6.67%	20
TOTAL	1040			90

Source : Field Survey

The following sections analyse the data collected from the respondents i.e. the users of micro-insurance. The SPSS package was used for statistical analysis of the primary data.

### Empirical Survey and Findings

**Table 2: Age Distribution of Respondents**

Age	Frequency	Percentage
18-30	0	-
31-40	41	45.56
41-50	45	50
Above 50	4	4.44
Total	90	100

Source : Field Survey

Majority of the respondents interviewed are in the age group of 41-50 years.

**Table 3: Gender Distribution of Respondents**

Gender	Frequency	Percentage
Male	2	2.22
Female	88	97.78
Total	90	100

Source : Field Survey

97.78% of the respondents are female.

### **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 in each district under study.

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 4: Occupation-wise Distribution of the Respondents**

Occupation	Frequency	Percentage
Service	28	31.11
Self-Employed	62	68.89
TOTAL	90	100

Source : Field Survey

From the above table we can see that there is a higher percentage of self-employed who are highly vulnerable to risk.

**Table 5 - Educational Level-wise Distribution of the Respondents**

Education Level	Frequency	Percentage
Illiterate	6	6.67
Primary	39	43.33
Secondary	37	41.11
Higher Secondary	8	8.89
TOTAL	90	100

Source : Field Survey

Only 9.0 percent of the respondents has studied upto Higher Secondary level and a very less low percent of the respondents is illiterate. As far as education is concerned, this District appears to be moderately vulnerable.

**Table 6 - Income-wise Distribution of the Respondents**

Income(p.m.)	Frequency	Percentage
Below 5000	45	50
5001-10000	41	45.56
10001-15000	3	3.33
Above 15000	1	1.11
TOTAL	90	100

Source : Field Survey

Almost 95.56% of the respondents falls in the lowest and second lowest income slab. Purulia district is highly vulnerable to risk as far as income per month is concerned.

**Table 7: Vulnerability Assessment in Purulia District**

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

Source : Field Survey

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

### Analysis of Adaption options of the Households

In this section we analyse how day the adapted themselves to sudden or accidental crises, irrespective of their nature. From their responses, accessibility of informal borrowings, microloans, selling of assets and loans from friends were found to be the possible adaptation options. Such 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 and the occurrence of high migration in those districts.

**Table 8 - Adaptation Strategies of Households**

Risk Management Strategies	Frequency
Informal Borrowings	44
Selling of Assets	1
Loans from friends	27
Microloans	17
<b>Total</b>	90

Source : Field Survey

It is also found that for a particular risk situation, the respondents resorted to more than one risk management strategy.

**Table 9 - Crosstab of Risk Management Strategies and Risk Faced**

<b>RISK MANAGING STRATEGIES * RISKS FACED Cross tabulation</b>							
District		Risks Faced				Total	
		ASSET	Employment	Life	Health		
PURULIA	Risk Managing Strategies	Infomral Borrowing	9	1	15	16	41
			81.8%	100.0%	32.6%	59.3%	48.2%
	Loan From Friends	0	0	1	0	1	
		.0%	.0%	2.2%	.0%	1.2%	
	Micro-Loans	1	0	19	7	27	
		9.1%	.0%	41.3%	25.9%	31.8%	
	Selling of Assets	1	0	11	4	16	
		9.1%	.0%	23.9%	14.8%	18.8%	
	Total		11	1	46	27	85
			100.0%	100.0%	100.0%	100.0%	100.0%

Source : Field Survey

The above table represents a contingency table, which cross-classifies 90 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, given the risks faced.

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 Test**

<b>Chi-Square Tests</b>				
DISTRICT		Value	df	P VALUE
PURULIA	Pearson Chi-Square	12.295	9	<.001

Source : Author's calculation

Based on the above Chi-Square value, the null hypothesis is rejected (as  $P < .05$ ) and the alternative hypothesis is accepted, 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 borrows from the local money lender or starts selling their assets or mortgage their assets with the money lenders.

### Respondents Inclination Study

In the respondents' inclination study, opinions and likings of the respondents, particularly in relation to usefulness, availability, reasons for not continuing, benefits derived, difficulties faced and suggestions for improvement in terms of their micro-insurance policies, have been shown. The statistical analyses and interpretations based on primary data are given below.

**Table 10 - Usefulness of Micro-Insurance Policies**

Opinion	Frequency	Percentage
Yes	70	77.78
No	20	22.22
Total	90	100%

Source : Field Survey

From the above table, it can be said that the majority of the respondents were satisfied with their micro-insurance policies. This says a lot about the success of the MFIs and their mission to reach out to the people at the bottom of the pyramid.

**Table 11: Types of Micro-Insurance Policies availed of till now**

Opinion	Frequency	Percentage
Crop	5	5.56
Health	28	31.11
Life	34	37.78
Livestock	13	14.45
<b>Total</b>	<b>90</b>	<b>100</b>

Source : Field Survey

The maximum demand is for the life micro-insurance products, followed by health. But during the interviews with the respondents, they preferred the more diverse and risk-specific Micro-insurance products.

**Table 12: Benefits derived from current Micro-Insurance Policies**

<b>Opinion</b>	<b>Frequency</b>	<b>Percentage</b>
Better Education for the Children	12	13.48
Daughter's Marriage	0	-
Increase in Present Activity	34	38.20
Increase of Present activity & Reduction of Risks	2	2.25
Reduce Impact of Seasonality	3	3.37
Reduction of Risks	38	42.69
<b>Total</b>	<b>89</b>	<b>100</b>

*Source : Field Survey*

From the above table, it can be said that micro-insurance has many benefits. But in the study, majority of the respondents benefit by reducing their risks, if they are self-employed. The respondents, who are in service, were found to think about starting something on their own.

**Table 13: Difficulties Faced**

<b>Opinion</b>	<b>Frequency</b>	<b>Percentage</b>
Better Product Design	1	1.16
Claim Settlement	22	25.58
Premium	26	30.23
Product Awareness	37	43.02
<b>Total</b>	<b>86</b>	<b>100</b>

*Source : Field Survey*

Respondents, who are continuing with their present Micro-insurance policies, faced quite a few difficulties. It appears that the objective of the MFIs to reach the poorest and those who are in greatest need of it continues still remains unfulfilled.

**Table 14: Suggestions For Improving Micro-Insurance Policies**

<b>Opinion</b>	<b>Frequency</b>	<b>Percentage</b>
Easy claim Settlement	0	-
Flexibility in Collection	21	23.33
Less Premium	58	64.45
More Awareness	0	-
More Products	11	12.22
<b>Total</b>	<b>90</b>	<b>100</b>

*Source : Field Survey*



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

**Table 15: Reasons for Not Continuing Micro-Insurance Policy**

<b>Opinion</b>	<b>Frequency</b>	<b>Percentage</b>
Collection Period	8	30.8
Flexibility in Payment of Premium	4	15.4
Premium Amount	10	38.5
Too many Policies	4	15.4
<b>Total</b>	<b>26</b>	<b>100.0</b>

*Source : Field Survey*

The respondents, who are dissatisfied with the micro-insurance policies, had given the reasons for their discontinuation, the main reason being the premium amount. Given their irregular and uncertain income, lower premium amount and flexibility in collection will help them to again purchase micro-insurance products, and the MFIs to expand their activity net far and wide.

### **Second Part**

In order to assess the performance of the Micro-insurance providers in West Bengal, the researcher interviewed, using a structured questionnaire, 3 microfinance institutions (MFIs) in Purulia.

In this particular study of the district all the MFIs have been operating for more than 3 years.

It can be observed that the MFIs work for all classes of people whether they are unemployed, self-employed or in service. Different insurance products are designed for different classes. This is actually a challenging task for the MFIs.

Majority of the MFIs engage in promotional campaigns, indicating increasing competition among them in recent times. Their clients are not highly educated and, therefore, they have to be continuously educated about the new products and their features.

It has been gathered from the interviews with the insurance officials of the MFIs that majority of the clients of the MFIs fall in the highest income group. During the interviews with the concerned MFI officials, they pointed out that income of their clients has increased considerably due to micro-finance activities.

During the interviews with them, it was also found that their customer awareness strategies are mainly references and repeat clients, and their product marketing strategies are door to door campaign, distribution of leaflets/brochures, and word of mouth.

### **Conclusion**

Although the current reach of 'micro-insurance' is limited, the trend in this respect suggests that the insurance companies, both public and private, operating with commercial considerations, can insure a significant percentage of the poor. Serving low-income people who can pay the premium certainly makes a sound commercial sense to insurance providers. To that extent imposing social and rural obligations by insurance regulator (IRDA) is helping all insurance companies appreciate the vast untapped potential in serving the lower end of the market.

Endowment policies are most liked by respondents because it gives death benefits as well as survival benefits. Most of the respondents believes in government banks and insurance companies as they think that private companies charges more than government owned companies and their hard earned money will be more safe in government firms than private companies. Many of them want to pay Rs. 10-20 for premium on daily or weekly at their shops or at home.

The other observations are:

- (i) Life micro-insurance has generated great interests among the present and potential clients. During the interviews, many of the respondents expressed their interests in having life micro-insurance as a form of investment. Throughout the survey, it was found that most of the clients are willing to pay a higher premium when it compensates for greater interests and benefits.
- (ii) The survey of 90 users of micro-insurance revealed that most of the respondents are in the age group of 41-50 years, female, in service and do not have the basic education.
- (iii) It has been observed that self-employment, illiteracy and low income make the respondents vulnerable to risks.
- (iv) The respondents in the district under study have different risk-coping mechanisms, in the form of informal borrowings, micro-loans, selling of assets, etc.
- (v) Majority of the MFIs covered in the study have been operating for more than 3 years, provide services for all classes of people (whether they are unemployed, self-employed or in service), and engage in promotional campaigns in less than one year period.

### **Recommendation**

- 1) Designing Micro-insurance policies requires intensive work and is not simply a question of reducing the price of the existing insurance policies. It requires, *italics*, different marketing strategies and different distribution and servicing channels.
- 2) Because of the quota system, the largest and the best known intermediaries (NGOs/MFIs) already have relationships with the commercial insurers that they often wish to maintain. The implication is that the commercial insurers will need to think more creatively about their products and relationships with the intermediaries. It also implies that the commercial insurers should start exploring newer distribution models not just based on partnership or agency.
- 3) Public reimbursement of claims, for example, at village gatherings, is important. It demonstrates the advantages of having insurance with a real example.
- 4) Other micro-insurance marketing tools can be exposure tours where village leaders from villages along with policyholders are sent to other villages to show the advantages of having insurance.
- 5) Also important is careful, well-managed rejection of claims, where the reasons are made clear to all the villagers.
- 6) With high-premium insurance, monitoring of customer satisfaction is critical, especially with respect to lapses and non-renewals, reinforced by a mechanism to act on the information that emerges from such monitoring.
- 7) Because many of the concerns of women are not easily insurable, e.g., maternity costs, it would make sense to consider combining insurance and savings. In this way, for example, a woman can use her savings to cover the cost of a normal delivery and use insurance to cover the cost of unexpected complications.

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