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# RISK FACED BY RURAL HOUSEHOLDS AND PRIVATE SECTOR INSURANCE INITIATIVES IN INDIA

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# Risks faced by Rural Households and Private Sector Insurance Initiatives in India

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## 1 BACKGROUND:

This paper is written on invitation to attend the policy forum organized by IFPRI on "*Agricultural and Rural Development for Reducing Poverty and Hunger in Asia: In pursuit of Inclusive and Sustainable Growth*" in Manila during Aug 9 to 10, 2007. The paper is written on the basis of BASIX experiences on insurance services, inputs from earlier studies conducted particularly the pre investment feasibility study on Micro Insurance for UNDP and personal reflections based on exposure to rural sector. The paper deals with Indian context.
Indian economy primarily depends on agriculture where over 72.4% (as on Jan – June 2004; answer to question in Lokhsabha Q No 3258) population engaged in agriculture, allied and support services. The rest 27.6% engaged in non agriculture activities. As per 2001 census Indian population was 1026 million of which 740 million (72.3%) is living in rural areas and the rest 285 million (27.7%) in urban areas. There are a total of 401 million worker of whom 309 (77%) million located in rural areas.

The following table indicates workers distribution in to cultivator, agriculture labourers, household enterprises and other workers.

| | *Occupation* | *Total* | *Main workers* | *Marginal workers* | *Rural* | *Urban* |
|---|---|---|---|---|---|---|
| | Total workers | 401.1 (100%) | 312.2 (78% ) | 89.0 (22%) | 308.9 (77% ) | 92.5 (23%) |
| 1 | Cultivators | 126.7 (32%) | 103.2 (27%) | 23.5 (6%) | 124.1 (31%) | 2.5 (1%) |
| 2 | Agri Labourers | 106.4 (27%) | 63.3 (16%) | 43.1 (11%) | 102.2 (26%) | 4.2 (1%) |
| 3 | Household Industries | 16.8 (4%) | 12.1 (3%) | 4.7 (1%) | 12.1 (3%) | 4.7 (1%) |
| 4 | * Other workers | 150.7 (38%) | 133.3 (33%) | 17.7 (5%) | 70.4 (18%) | 80.3 (20%) |

Other workers include people engaged traditional occupations like

1. Weavers,
2. Cobblers
3. Blacksmith, carpentry primary support services for agriculture
4. brass smith, gold smith, sculpture,
5. Tailors, potters, barbers, masonry
6. Shepherds,
7. Toddy tapers, fisherman etc

As per economic survey 2004-05, Ministry of Finance over 363 million (92%) of workers are engaged in unorganized sector and rest 32 million (8%) in organized sector. With-in the organized sector 70% employment is catered to by the Public sectors and the rest in the private sector. Since most of the public sectors are again located in towns and urban places, the rural employment in organized sector can be presumed to be around 1% of rural workforce. That indicates 99% of the rural workforce is employed in un-organized sector. The following table indicates the population poverty level in India based on uniform recall period consumption conducted in 2004-05.

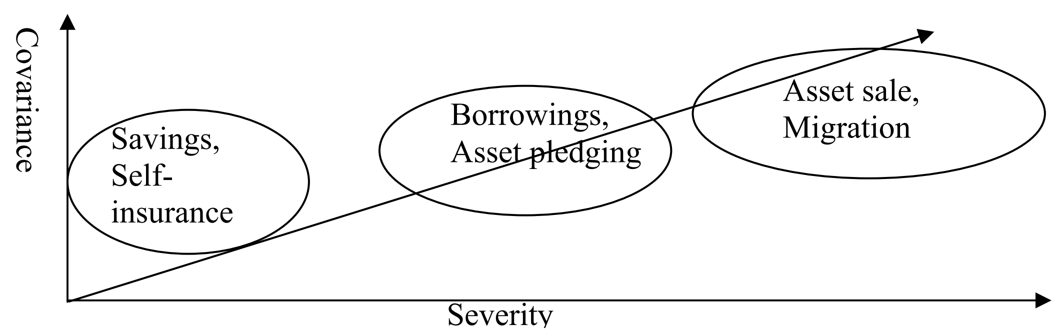
| | Rural | Urban | Overall |
|---|---|---|---|
| Number of People below poverty line | 220.9 | 80.7 | 301.7 |
| % people below poverty line | 28.3% | 25.7% | 27.5% |

The combination of high concentration of manpower in agriculture and rural sector, mostly in un-organized sector with poverty around 27% poses a major concern for development and necessitates for a sustainable market mechanism for addressing the risks involved for the people. The content in the following box (drawn from “Pre-Investment Feasibility on Micro Insurance in India” a study conducted by BASIX for UNDP) illustrates the impact of risks with the poor families.

**Nature of Risks faced by the Rural Households/Poor**

The rural/poor households are vulnerable to a number of risks. Some of these are frequent, such as minor illnesses but have relatively little impact, while others can be infrequent, such as a cyclone, with great impact. While the former are best handles by dipping into one's savings, or occasional borrowing, the latter require outside support, either in the form of insurance payouts or disaster relief. One can also distinguish between idiosyncratic and covariant shocks. Covariant shocks, such as drought, can affect all households in a locality while an idiosyncratic shock, such a theft, may be restricted to only a given household.

The poor adopt a mix of strategies depending on the severity and co-variability of the shocks. Self-insurance strategies include a) reduced consumption of food grains b) taking children out of school c) temporary migration d) diversification of income sources. It may be noted that some of the above strategies reduce the ability to withstand future shocks and thus if there are successive droughts or bouts of illness, then the family becomes more and more prone to risk as shown in the Figure 1 below.




A Price Waterhouse study (1997) identified the need for micro insurance based on major adverse events that a rural household has experienced in the previous ten years. It was found that 44% of households reported losses due to flood/heavy trains, 39% due to drought and 27% due to pest attack. Further, the survey revealed that only 15% of the respondents already possessed an insurance policy and 64% of the respondents wanted some form of insurance.

## 2 INDIAN INSURANCE SECTOR

Indian insurance sector is opened for private insurers during 1999-2000 and the private insurers started operations in 2000. The Insurance Regulatory and Development Authority (IRDA) is the supervising authority over insurance companies operations. The following provides the number of insurers operating in public sector and private sector.

| *Sector* | *Life Insurers* | *Non Life Insurers* |
|---|---|---|
| Public sector | 1 | * 6 |
| Private sector | 15 | 9 |
| | 16 | 15 |

- Includes Export Credit Guarantee Corporation of India exclusively for export related transactions insurance and Agriculture Insurance Company exclusively for agriculture insurance.

There is only one reinsurance company General Insurance Corporation of India which is again a public sector company. IRDA has mandated the insurance companies with the following targets to cater to the rural and social sector. The social sector is defined as lower income work groups mentioned a list issued by IRDA.

| *Year of Operations* | *Life (Rural) % total policies written* | *Life(Social) No of Lives to be covered* | *General (rural) % of total Gross premium* | *General Social- No. of lives covered* |
|---|---|---|---|---|
| 1 | 7% | 5,000 | 2% | 5,000 |
| 2 | 9% | 7,000 | 3% | 7,000 |
| 3 | 12% | 10,000 | 5% | 10,000 |
| 4 | 14% | 15,000 | 5% | 15,000 |
| 5 | 16% | 20,000 | 5% | 20,000 |
| 6 | 18% | 25,000 | 5% | 25,000 |

The above targets are conservatively mentioned given the need for innovations to reach these low premium clients. However, there is need to do much bigger job in order to provide benefits of insurance rural masses. The regulator is likely to come up with the target numbers for 7th and onwards soon.

<u>Insurance penetration in India</u>:

Current insurance services penetration is abysmally low at less than 3% of insurable population, as a study "Micro-Insurance demand and market prospects, conducted by GTZ in August 2006. This limited is despite completion of over 7 years of opening up the sector for private insurers and over 31 insurance companies operating currently operating. India ranks 54th positions in terms of market penetration and 19th position in premium collection in the world. This anomaly persists due to the legacy of life insurance being positioned as a savings and tax-minimization tool rather than as a risk protection tool
The low penetration is perhaps due to orientation of earlier state insurance company, Life Insurance Corporation of India (LIC India), to sell insurance products with substantial savings component involving higher premium levels and had rarely term insurance products which involve lesser premium. As a result the insurance was not accessible to rural poor. However, LIC has administered couple of life insurance products like Jan Shree Bhima Yojana (JSBY) meant for groups of poor people where the product risk is passed on to Social Security Fund with Government of India. Under this product, 50% of the premium is collected from the group members covered and the rest premium is collected from the Social Security Fund.

# 3 RISK PROFILES OF HOUSEHOLDS

## 3.1 COMMON RISKS FACED BY ALL HOUSEHOLDS

Common risks faced by rural households, particularly those around poverty line, irrespective of economic activity are engaged.

1. Risk of incurring un-desirable expenditure or loss of income due
    a. Ill health out of occupational causes
    b. Damage or loss of household assets
    c. Disability – partial or full

d. Accidental deaths due to incidents like snakebites, electrocution, collapse of houses, walls, etc.

## 3.2 RISK COMING OUT OF ECONOMIC ACTIVITY ENGAGED

1. Loss or damage of income generating assets
2. Loss of recovery of expenses in economic activity and expected surplus
3. Accidents arising out of economic activity
4. Credibility Risk due to cash flow crisis – particularly delay in collection of
5. Market risks – inability to meet the market conditions in order to sell products and services
6. Occupational hazards – resulting in to destabilization of the activity

Profiling risks of rural households with respective to the activity engaged in and insurance solutions: The following provides the profile of each group of households, economic risks faced by them, possible insurance interventions and current insurance products available.

### 3.2.1 Cultivators (Farmers)

Over 32% of the workers are in cultivation of which 26% main workers and 6% marginal cultivators.

| | | *Remarks on the risk* | *What insurance products are possible* | *Offered by Public insurers* | *Offered by Private insurers* | *Potential* |
|---|---|---|---|---|---|---|
| 1 | Loss / damage of income generating assets | Agri implements like electrical motor, livestock, produce etc | Motor insurance Produce stock insurance | Offered. But reach is limited | Offered by very few companies | Good potential |
| 2 | Loss of livestock | Farmers depend on livestock for cultivation and other purposes including milk production. | Livestock insurance covering death of animals like cattle, buffaloes | Offered but mostly linked to government schemes and credit. | Offered by few companies | There is a great scope for this product if channeled properly. |
| 3 | Loss of recovery of expenses and profit | Input cost and surplus expected | Crop insurance Weather insurance | Offered but limited success | Offered by few companies but little reach | |
| 4 | Creditabilit y risk for miss-match in cash flows | Delay in marketing produce, realizing cash | -Nil- | Offered by AIC | No | Crop insurance has not been performing satisfactorily. |
| 5 | Market risks | Price Risk | - Nil - | Offered by AIC | Offered by 2 to 3 companies | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | Occupational hazards | Snake bites, electrocution<br><br>Poisoning with pesticides | Accident insurance | No specific product for farmers is offered. However, offered Janata Accidence Insurance a policy with 100 Sum Insurance Limit. | No specific product for farmers is offered. However, offered as a part of general accident insurance product. | Some of the risks like snake bite is excluded in general accident insurance policies. |

### 3.2.2 Labourers

27% of total work force in the country is engaged in agriculture labour. Of which about 60% are primarily engaged in agriculture as main workers and the rest on marginal workers who does engage in non agriculture labour also. Agriculture labour employment is a seasonal phenomenon. Places with good rainfall and irrigation facilities offer labour employment round the year. Where as drought areas only rain fed cultivation is possible, the labourers try to find employment in non agriculture activities like well digging, construction, road laying etc.
Further labour engaged in other sectors also depends on performance of regional agriculture seasonal productivity which determines the demand for their labour. Hence, there is a possibility of making the weather derivatives a useful mechanism to hedge the labour employment scarcity risk. The following table indicates the risk faced by labourers and insurance products available

| | *Remarks on the risk* | *What insurance products are possible* | *Public insurers products* | *Private insurers* | *Potential* |
|---|---|---|---|---|---|
| Loss of recovery of expenses and profit | Wage loss due to draught and floods | -Weather insurance has the potential to address this risk | AIC is offering | 2 companies are offering this product | This product has tremendous potential |
| Creditability risk for miss-match in cash flows | In ability to pay debts and consumption needs | -Nil- | Not applicable | Not applicable | Savings , Credit is an alternate services |
| Market risks | Decrease labour opportunities due to recession in economy | Nil | Not applicable | Not applicable | Not applicable |

| | | | | | |
|---|---|---|---|---|---|
| Occupational hazards | Snake bites, electrocution Poisoning with pesticides, Falling from heights, road accidents, sustaining injuries | Accident insurance | No tailor made products are available | No tailor made products are available | A special product can be designed looking at the risk profile of this work group. |

There is no insurance coverage extended either by the public sector, private sector insurers into labourers against the risk of loss of wage employment. However, there is Union Government programme "National Employment Guarantee Scheme" NEGS a programme to provide 100 days of assured wage employment to rural labourers, youth during the scarcity of employment in rural areas. This employment is generated in constructing and maintenance of rural infrastructure at the cost of the government resources. The insurers are not allowed to extend the weather derivatives under the present regulations.

### 3.2.3 Artisans:

Artisans, in Indian context, are all those various communities possessing specialized skills supporting the agriculture and serving the needs of people indirectly. These skills are gained and nurtured through generations and inheriting the artisan profession is an assured employment earlier. The market risk due to heavy mechanization and availability of ready made products have literally displaced all these artisans resulting them either opting to unskilled labour or go for alternative option where they ought to take risk due to lack of necessarily skills required in the newer activity. The following table provides the risks, which are beyond scope of insurance mechanism, faced by important rural artisans.

| | Category of household | Risks resulting in financial loss |
|---|---|---|
| 1 | Weavers | No demand for products |
| 2 | Blacksmith | No demand for products |
| 3 | Carpenters | No demand for agriculture support service. Obstructution from authorities |
| 4 | Brass smith | Market risk |
| 5 | Goldsmith | Scarce demand as the surplus in agriculture is coming down making the rural household not investing in gold. Exploitation from corruptive police officials on the pretext of buying gold from thieves |
| 6 | Sculpture | No demand for the products. |
| 7 | Tailors | Lowered demand due to preference changed to ready made garments. |
| 8 | Washer man | The profession is abandoned due to lack of reliable water source and inadequate remuneration. |

The following table provides some of the risk within in the scope of insurance subject and can be covered by insurance companies.

| Community | Risk faced | Likely insurance product | *Products offered by public insurers* | *Products offered by private insurers* | *Potential* |
|---|---|---|---|---|---|
| Fisher man | The community resources like ponds, open tanks are leased out to contractors for a fixed value. This results in them opting for a different occupation and earning bare minimum from this activity. The contractors use mechanized boats and carry out fishing in relatively a short span and export to bigger markets in bulk. | An insurance product to protect the loss of fish due to draught, excess rainfall, temperature and malicious poisoning can be designed for the rural communities which will help them increase their income and also generate more employment. | Offered but the reach in not significant | Offered by few companies | Good potential |
| Sheph erd | The scope for grazing sheep has come down due to no grazing lands available in the villages where the irrigation is available. Similarly the draught prone areas offer little scope for the activity. | -Nil- | Offered but mostly linked to government schemes and credit. | Offered by couple of companies only | There is a great scope for this product if appropriate channels are explored. |
| | Death of sheep and goats due to epidemics | Sheep and Goat insurance | | | |
| Toddy tapers | Death or disability from the occupational hazard of falling down from the top of the tree | An accident insurance designed for this community would serve the purpose. | Offered Janata Accident Insurance and Road accident policy. | Offered as part of accident insurance | |

### 3.2.4 Non-form enterprises:

Non form enterprises are broadly categorized in to trading, service and manufacturing. The following table provides the risks faced by such enterprises and risk management tools available in the market.

| Category of household | Risks resulting in financial loss | Possible Insurance tools | *Products offered by public insurers* | *Products offered by private insurers* | *Potential* |
|---|---|---|---|---|---|
| Trading: Provisional stores, bangle store, clothe stores, clothe hawkers, vegetable vending, fruit vending, Used clothe vendors, medical stores | Loss or damage of assets and stocks due to external factors like fire, flood etc | Fire insurance polices are suitable for these needs | Offered polices like shop keepers policy. However, these products are aimed for enterprises with an asset value of about 100, 000 and comes with an excess of Rs 10,000. as a result could not catered to the large number of enterprises worth assets less than Rs 100,000 | One company is offering with reduction of excess from Rs 10,000 to Rs 500 | There is lot of potential |
| Services: Hotels, tailors, fabrication works, Flour mills, repairs -motor, electrical, radio, television etc, cycle rentals, primary schools, medical practitioners, transporters, | Loss or damage of furniture due to fire and related incidents | Fire Insurance polices are suitable | Do | Do | do |
| | Road Accident particularly for road transportation workers | Accident insurance | Offered | Offered | |
| Manufacturing Shoe makers, bread makers, sweat makers, papad makers, | Loss or damage of machines and stocks due to external factors like fire, flood etc | Fire insurance policies are suitable | No suitable product is offered by the shop keepers policy is available | One company is offering with reduction of excess from Rs 10,000 to Rs 500 | |

# 4 BASIX EXPERIENCES AND INNOVATIONS:

BASIX Mission and Strategy

BASIX is a Livelihood Promotion Institute working with a strategy of providing financial and technical assistance services in an integrated manner. It started it micro credit operations in 1996 and provided technical assistance to some of its clients through inter borrower expertise exchange programme. SHG quality improvement programme, agriculture experts suggestion to villagers at the cost of company. An impact study conducted by Indian Market Research Bureau (IMRB) in 2001 on BASIX services revealed that about 52% of clients expressed a positive impact, 23% no change and about 25% reported decline in the income. Further probing revealed the presence of unmanaged risk caused the decline in the income. Subsequently, BASIX revised the strategy to provide Livelihood Financial Services (LFS), Agriculture and Business Development Services (AgBDS) and Institutional Development Services (IDS) – called **Triad Strategy.**

BASIX initiated dialogue with private insurers soon after opening of insurance sector for private insurers in 2000. Subsequently it developed functional relationship with 4 insurance companies. To day BASIX works on product and process development and distributions, with AVIVA Life Insurance Company (for life insurance products), Royal Sundram Alliance General Insurance Company (health insurance, livestock insurance, micro enterprise insurance) and ICICI Lombard General Insurance Company (for weather insurance products). The following reach is achieved by BASIX as on March 31, 2007

BASIX had been trying various thoughts for providing risk management tools for agriculture trying to develop an alternate to crop insurance tool. BASIX partnered with World Bank and ICICI Lombard in developing first weather insurance product for the farmers and piloted in 2003.

## 4.1 LIFE INSURANCE PORTFOLIO:

Product: Credit Plus -Life Insurance Group Product
Sum Assured – 1.5 times of the loan sanctioned.
The following table provides the cumulative experience of life insurance

| | FY 2006-06 | Cumulative since 2002 |
|---|---|---|
| Person years covered | 280,357 | 499,497 |
| Claims settled | 920 | 1,487 |
| Mortality rate per 1000 lives per annum | 3.28 | 2.98 |
| Premium outgo for claims | | 68% |

Innovations:
1) Premium is collected on monthly basis along with loan installments
2) Non exclusion of suicide death – decreasing the operating cost
3) BASIX to do all the front end support to customer

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Results
1) Premium is reduced from 8.61 to 3.98
2) Average Claims settlement period 72 days from the date of death. It takes 11 days from date of submission of claim papers
3) Demonstration effect is seen in abundant and staff and customers are convinced on the product.

### 4.2 HEALTH INSURANCE PORTFOLIO:

The following table provides the cumulative experience of life insurance
Product: Credit Plus –Arogya Raksha – Limited Health Insurance Product
Benefits: Rs 1,500 hospital cash; Rs 10,000 critical illness and Rs 25,000 permanent total disability.

| | FY 2006-06 | Cumulative since 2006 |
|---|---|---|
| Person years covered | 271,454 | 499,497 |
| Claims settled | 3,600 | 1,487 |
| Morbidity rate per 1000 lives per annum | 1.33% | 1.2% |
| Premium outgo for claims | | 24% |

Innovations:
1) Premium is collected on monthly basis along with loan installments
2) BASIX to do all the front end support to customer
3) BASIX is deploying claim facilitators who are different from those who enroll customers

Results
1) Premium is reduced from Rs 137to 67 per annum
2) Average Claim takes 44 days form the time of illness and 15 days from submission of papers
3) Demonstration effect is seen in abundant and staff and customers are convinced on the product.

### 4.3 LIVESTOCK INSURANCE PORTFOLIO:

The following table provides the cumulative experience of life insurance
Product: Livestock covering Dairy animals and cattle against death
Benefits– Sum Insured up to 20,000 and 100% of insured value is paid on death

| | FY 2006-06 | Cumulative since 2002 |
|---|---|---|
| No. of Livestock Insured | 11,250 | 33,808 |
| Claims settled | 230 | 1005 |
| Mortality rate per 100 animals per annum | Around 3.03 | Around 3.8% |
| Premium outgo for claims | Around 92% | Around 92% |

Innovations:
1) Premium is collected upfront
2) Insurability certification done by BASIX staff and Animal death certification done by claim surveyor
3) BASIX staff does all the front end support

Results:
1) Premium charged between 3.50 to 4.00%
2) Average Claims takes 50 days from the date of death and 20 days from the time of papers submission
3) Insurance company is proactive to further sell the product

## 4.4 WEATHER INSURANCE PORTFOLIO:

The following table provides the cumulative experience of life insurance
Product: Weather insurance package tailor made to the crop, and the rainfall locations
Benefits– Sum Insured up based on shortfall /excess levels

| | FY 2006-06 | Cumulative since 2002 |
|---|---|---|
| No. of polices sold | 11,244 | 18,565 |
| Claims settled | 2,379 | 3,716 |
| No. of farmers received claims | 21% | 20% |
| Premium outgo for claims | 144% | 87% |

Innovations:
1) Products are made to local crops, weather conditions and customer preferences
2) Collaborated for setting up rainfall measurement stations in BASIX operational locations.
3) Claims settled within 30 days after the closure of the window period.

Results:
1) Premium range from 7% to 114% of Sum Insured
2) Claims settled in less than 30 days from the date of risk ending wherever data is available

Constraints faced: Timely availability of reliable data particularly from the IMD stations

Overall BASIX has been experiencing good product performance, about 55% of out go from overall premium. It is expected that the premium outgo on health product will go up as the customer awareness increases on utility. Overall the insurance business performance is continuing with improvement of products and process every year.

# 5 CONCLUSION

## 5.1 STRATEGIC ISSUES ON ENABLING MICRO INSURANCE

The Pre-investment study on Micro Insurance in India for UNDP, submitted in 2006 indicated the following as strategic issues for enabling micro insurance

1. Use of technology for process and product innovation to reduce operating cost and increase customer services
2. Investment in data collection and management to enable the market players
3. Put Thrust on Concept development and testing of Micro-insurance Products to create demonstration effect

## 5.2 CHALLENGES IN MEETING RURAL INSURANCE NEEDS:

1. Education of rural poor on insurance utility
   People are familiar with LIC (Life Insurance Corporation of India) with the virtue of its presence. And Livestock insurance because of IRDP schemes where the animals are insured subsequent to grant of loans under IRDP schemes. It is observed that life insurance is largely seen as only savings instrument and people expect the money back. As a result selling term insurance products become a challenging task.

2. Design and develop appropriate products and services suiting the client profiles.
   Wide range of products available in the market but catering mostly to urban clients. Customization of the products often do not happen which makes the product unattractive to the poor in terms of product features and price. Processes are extremely cumbersome

3. Develop appropriate process for sales and service of insurance products taking the realities in to consideration.

   *As per the Pre investment feasibility study on micro insurance in India conducted BASIX for UNDP Risks faced by the poor is location specific and hence universal products as seen in insurance may not be an attractive proposition for the insured in the rural areas*

4. Penetration – reaching masses: Micro insurance offers a huge challenge. Serving the market becomes operations feasible only through penetration due to small premiums involved.

5. Meet the cost of action research and failures: There is some thing to learn from micro credit and banker's response. Micro Finance Institutions started operations around 1996 in India and had limited access to grants and equity and bankers were hardly willing to lend to MFIs. BASIX was given recognized as the institutions to lend highest amount to SHGs in 1998 to the tune of Rs 20 millions ($ 50000) which stood higher than that of any nationalized bank's lending to SHGs. Today literally every bank is proactively lending to MFIs and it is estimated the lending to MFI is well above $ 500 millions (excluding. All this indicates that there is a need to invest in the insurance market before it becomes attractive for the insurers and the investment should ideally come from the industry it self.

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