

Product Innovations for Micro Insurance

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Abstract

Micro insurance is often treated as a scaled-down version of traditional insurance. But this form of insurance is different. Micro insurance is a developmental tool to protect low income populations from risks. This insurance is rapidly gaining traction in emerging markets across the globe. However, the progress on this front has been tardy despite the use of technology to penetrate the market and grow the business. This is due to absence of product innovations and less awareness about benefits of micro insurance. Low income communities need to be treated as customers. These customers also need a value proposition.

Claims payment process is the moment of truth in micro insurance as this is what will build trust among the low income population. Innovations in this area need exploration. Micro insurance covers bundled with saving options are one among the many new product ideas that are suggested in this work. Product innovations must be complemented by creative methods of distributing micro insurance. Lastly, insurers must not limit themselves to offering covers for protection of risks – they must go beyond offering their unstinted support for community development activities.

Keywords: Micro insurance, socially underprivileged, low-income population, self help groups.

Introduction

Micro insurance addresses the dilemma of low income populations. These populations need insurance because they do not have a suitable mechanism to cope with risks and insurance is the only option available to them.

Micro insurance products are characterized by modest premiums and small coverages. The covers are provided for life, accident, disability, property, health and agriculture. The risk in micro insurance products is limited. There have been cases of fraudulent claims that have been reported; yet the processing of claims in micro insurance has to be expedited. Generally, the tendency is to carry out group underwriting for micro insurance.

Well known management scholar Michael Porter has exhorted businesses to relook at the value chain so that shared social and economic value can be created. Porter's theories can be applied in insurance sector so that customers get better value. In developing nations like India and China, micro insurance presents a good business opportunity.

This study has attempted to broadly capture the product innovations in micro insurance. However, product innovations alone are not enough to sustain the micro insurance portfolio. Product innovations need support through innovations in distribution and efforts to build awareness among low income populations.

The trajectory followed in this effort is delineated now. First, we gain some conceptual clarity and insights about micro insurance including operational definitions gleaned from a critical review of secondary sources of information available. Then we look at the challenges and opportunities for micro insurance in India. In addition, the paper also presents successful examples of micro insurance models across the globe. The influence of technology on sustainability and scale of micro insurance is also documented.

Results of the brainstorming session conducted with management students are documented and this gives us an inkling of what the present generation thinks about the role of insurers in improving the lot of the poor. Finally, observations from literature are recorded along with suggestions and recommendations. Conclusion is then drawn based on information collected, collated and reviewed.

Micro Insurance – Concepts & Definitions

The International Association of Insurance Supervisors (IAIS) defines micro insurance as “the protection of low-income people against specific perils in exchange for regular premium payments appropriate to the likelihood and cost of the risk involved.” Low income populations have inadequate informal tools to manage their risks. So they need some kind of insurance cover.

Insurers are often concerned that micro insurance should not lead to business losses for them. At the same time, they also feel obliged to provide protection to underprivileged sections of society. These competing objectives need to be balanced well (Cohen and Sebstad, 2006).

Key Characteristics of Micro Insurance

Micro insurance must be physically accessible. The policy document must be simple and easy to understand. The premiums must be small to accommodate irregular cash flows. Exclusions must be few. Sums insured must be small – often for short terms. Chart 1 provides the characteristic features of micro finance and Chart 2 provides the innovations in micro insurance.

Micro insurance protects people's livelihoods by offering protection for low income people against specific peril. The premium payments are proportionate to the likelihood and cost of the risk involved.

Background of Micro Insurance in India

India's life insurance penetration is 2.72%. The penetration of general insurance is 0.77%. The total market size of the insurance sector in India is projected to touch US \$ 350-400 billion by 2020. From Table 1, it is clear that the ratio of premium to GDP was 3.49% during the period 2016-17. Insurance continues to be underpenetrated in India. This is further supported by data in Table 2.

The micro insurance sector in India has also not grown as much it was expected to grow. IRDA drafted micro insurance guidelines in 2010; lower threshold limit for agents' commissions was fixed. Regional rural banks and NGOs in rural areas were designated to distribute micro insurance products.

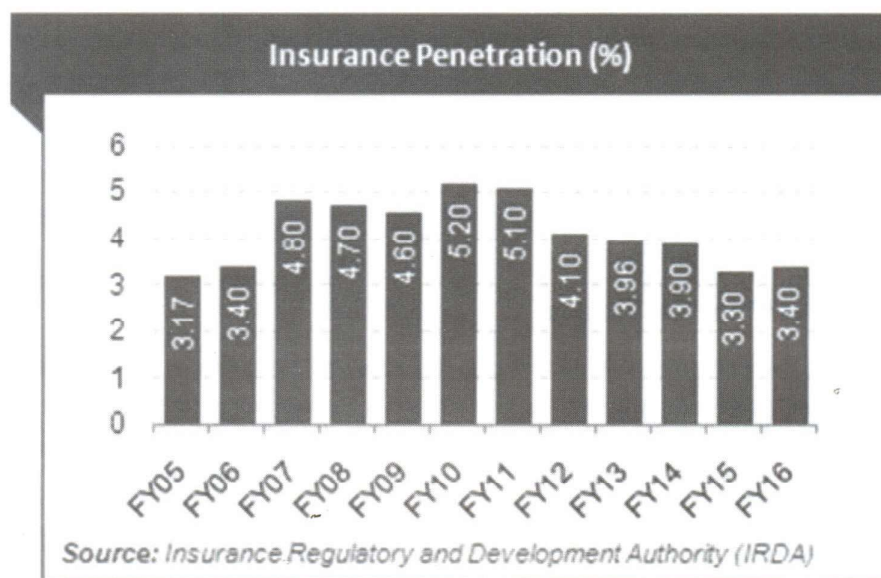
Table 1. Ratio of Premium to GDP

Name of country	Ratio of premium underwritten to Gross Domestic Product (2016-17)
India	3.49%
Thailand	5.42%
China	4.77%
Malaysia	4.77%

Source: Compiled from various sources

NGOs and self help groups act as agents to insurers in marketing the micro insurance products and also allow both life and general insurers to promote combi-micro insurance products (combining different lines of business). IRDA has amended the micro insurance regulations in 2015. Now district co-operative banks and regional rural banks can also act as micro insurance agents for better penetration of micro insurance business as shown in Table 3.

Table 2. Insurance Penetration in Percentage



Sixty micro insurance products are offered by general insurance companies like cattle policy, kisan agriculture pumpset policy, Janata personal accident policy, silkworm sukshmbima policy, sheep and goat micro insurance policy, sampoorna grihasuraksha policy. In the year 2016-17, Pradhan Mantri Fasal Bima Yojana covered 50.9 million farmers. The gross premium was Rs. 1725524 lakhs and the number of claims was 8712396. The claim payout was Rs. 657366 lakhs.

Table 3. Micro Insurance Coverage in India

For the year 2016-17	
Individual new business premium under micro insurance segment	Rs.38.22 crores under 9.56 lakh new policies.
Group business premium	Rs. 460.43 crores covering 3.22 crore lives.
Number of micro insurance agents	35200
Share of agents	NGOs – 21.7%, Self -help groups – 1.1%, Micro
Finance institutions – 1%,	
Insurance agents – 75.9%	Business correspondents – 0.2% , other micro

Source: IRDA Annual Report 2016-17

Table 4. New Business under Micro Insurance Portfolio, 2016-17 (Premium in Rs lakh)

Insurer	Individual Policies	Individual Premium	Group Schemes	Group Premiums	Lives covered
Private Total	475269	2234.37	387	12035.36	9281170
LIC	480892	1587.13	4812	34007.62	22965393
Industry Total	956161	3821.50	5199	46042.98	32246563

Source: IRDA Annual Report 2016-17

Table 4 clearly indicates that LIC has played a dominant role in covering more lives under micro insurance portfolio and that private sector has not focused on group schemes. Table 5 shows that the private sector has enrolled more number of micro insurance agents during 2016-17.

Table 5. Micro Insurance agents of Life insurers, 2016-17

Insurer	As on 1st April 2016	As on 31st March 2017	% change
Private Total	8990	15899	76.85%
LIC	18574	19301	4%
Industry total	27564	35200	28%

Source: IRDA Annual Report 2016-17

Table 6. Micro Insurance agents of Life insurers, 2016-17

Micro insurance agents	Private Total	LIC	Industry Total
NGOs	142	7504	7646
Self Help Groups	20	369	389
Micro finance institutions	22	337	359
Business Correspondents	6	74	80
Other Micro Insurance agents	15709	11017	26726
Micro insurance agents total	15899	19301	35200

Source: IRDA Annual Report 2016-17

Figures in Table 6 clearly indicate that LIC has joined hands with more number of NGOs, self-help groups, micro finance institutions and business correspondents as compared to the private insurers.

Challenges in Micro Insurance

High operating costs, absence of a compelling value proposition and accessing clients in remote areas are the main ills plaguing micro insurance. Lack of quality data for underwriting is also a challenge. Not offering products and services that are of value to customers is also the main reason.

Customers who need insurance the most – the mass market- are the last to get it. Listening to customers and their needs, re-shaping product terms and processes and partnering with large brands are essential to provide customers with innovative micro insurance covers.

Insurers must understand three points

- a. Identify and understand a problem
- b. Propose ideas to tackle the problem
- c. Execute a solution as skillfully as possible

Absence of an effective grievance redressal mechanism, mobility of targeted population and uncertainty of incomes are other challenges faced by micro insurance sector. Pricing is the not the most important variable for micro insurance. The tendency of insurers to sell covers without knowing what risks the insured is experiencing can be a setback.

Limitations of Micro Insurance

Low benefit caps and low share of premiums paid as claims are key limitations. In India, micro insurance is still not popular due to following reasons:

1. Small ticket size
2. Poor agent and distributor commissions
3. Unviable proposition
4. Customer unfriendly

Need for Product Innovations in Micro Insurance

Innovations to address constraints of developing economies have led to extension of micro insurance schemes to mature economies as well. Innovations in the form of new products, distribution channels and segments characterize micro insurance.

Micro insurance helps insurers to increase insurance adoption and drive growth. Innovations across the value chain can lead to social and economic impact. Innovations are needed to tackle tough development challenges and arrive at inclusive solutions that enhance service delivery to the poor.

Sustainability is important for an insurer. The market at the bottom of the pyramid (a marketing philosophy that was made popular by C K Prahalad and Gary Hamel) is immense; the economies of scale can drive profits from huge volumes despite low margins.

Success in micro insurance will lead to a win-win proposition – the poor will benefit due to the protection and insurers will make profits that can drive further growth.

Low-income households may not understand what risk protection is all about. They may feel that unless the insured event happens, the money that they spend for premium may be a waste. Therefore, a term life product is attractive as it gives cash benefit on survival.

In rural areas, there is a myth that insurance is something that will benefit you only after your death. This highlights the need for consumer engagement and education to drive awareness among the low income households.

Methods for Delivering Product Innovations in Micro Insurance

There are three main dilemmas in micro insurance model

1. What product type is relevant? – health, life, agriculture or property
2. What product features will meet needs of client?
3. How to market the product?

Innovative, simple, flexible products taking into account the lifestyle and needs of the low income group are a must. Proposal approval must be quick and premium payment must be flexible; Product design must be simple. Policy wording must be in simple language with few exclusions. Premium collection must match frequent and irregular payments. Maturity/ death claim settlement must be a simple affair.

Product innovation must address issues concerning flexibility and adaptability of the insurance cover to meet individual needs and preferences. Customers can be given cash back bonus as part of “No claims” so that they are incentivized to take proper care of their assets.

Cultural factors must be considered while designing micro insurance products. The products have to be simple and communication must be in local language.

Index-based insurance is an innovation by which an external indicator triggers payments to claims rather than a claims process initiated by the insured. Insurers have to work hand-in-hand with clients, meteorologists, financial experts and brokers to build indexes that most accurately reflect the clients' risk.

Issues in Index Based Crop Insurance

Index based products cover losses when there are observable variations from standard local rainfall levels or crop yields. In index insurance, basis risk results when index measurements do not match an individual insured's actual losses. This can be due to poor product design.

Geographical risk is a factor of the distance between the location where the index is measured and the production field. The greater is this distance, the greater is the basis risk. This often leads to a strange situation wherein those who do not suffer losses receive compensation and those who suffer losses do not receive the compensation. So, to address this risk, the index has to cover an area that is homogeneous both in terms of weather and in terms of farming techniques.

Different Types of Innovative Products in Micro Insurance

1. Pure term assurance product

2. Term assurance with return of premium
3. Group insurance covers
4. Endowment insurance
5. Family health insurance
6. Individual health insurance contracts

How can Micro Insurance Product Design be Made More Innovative?

This needs a rethink of traditional insurance principles – not to dilute them but with a strategic intent to look at how these can be made more relevant for the underprivileged. Bundling of covers with savings plans is significant. The insurance cover must go beyond 'protection against risks' to 'offering solutions for problems'.

Awareness of innovative products must be driven through community efforts like street plays, posters, videos, songs and animations. Design must consider requirements of marginalized sections of society.

Steps to Engineer Innovations in Micro Insurance Products

1. Redesign the micro insurance product to make it more relevant
2. Adapt product to market
3. Look at options for combining savings and risk cover at the same time
4. Innovative products need innovative and trustworthy distribution channels
5. Communicate about what is covered in insurance and what is not
6. Use buzz marketing to attract communities to subscribe to micro insurance.

Use of Technology to Drive Growth of Micro Insurance

Technology plays an important role in innovative distribution – for example – customers access micro insurance through mobile network operators. Advances like satellite data, global positioning systems and point of sale terminals can improve micro insurance in a variety of ways.

Point-of-sale devices allow customers to enroll and make premium payments remotely. Tele-medicine is another innovation that has been providing support for rural health insurance efforts.

In Africa, mobile Network Operators (MNOs) have been playing an increasingly important role as a distribution channel for micro insurance products.

Customers using a certain amount of airtime minutes per month receive free life insurance.

Mobile apps, fin tech systems and digital innovations are transforming the way micro insurance is administered. On demand coverage is slowly gaining popularity.

On-demand insurance is here to stay. It is best to remember who micro insurance aims to serve.

Case Let

A farmer goes to an approved dealer to buy a bag of fertilizer. He pays 5% extra to get climate coverage. The dealer scans a special bar code. The policy is now registered with the insurer. A text message is sent to the farmer's mobile

phone. When data transmitted from a particular weather station indicates drought, the farmer registered with that station automatically receives payouts via a mobile money transfer service.

Achieving Scale & Sustainability in Micro Insurance

Minimization of operational costs is vital to ensure sustainability of micro insurance. In case of micro insurance, maintaining a good ratio of operating costs to premium payments becomes a challenge. The ability of insurers to achieve scale and proper communication of value to underprivileged population can drive success of micro insurance efforts.

Creation of self-help groups, raising community awareness about the benefits of micro insurance, use of posters and music/dance to propagate the message are time-tested ways of engaging the low income population about micro insurance. Unless insurers are able to scale up their efforts, they won't be able to make profits.

Distribution Channels to Support Product Innovations

Micro insurance can be distributed through unconventional methods like micro franchising through women's groups, mobile technology and sales and payment processing at rural kiosks. Partnerships with local NGOs and micro finance institutions can help expand the reach of micro insurance. Channels like local retail stores present an attractive proposition.

Agro dealers selling seeds, fertilizers and chemicals can offer insurance on the spot for an incremental amount. The bar code on the bill can be scanned and the policy gets registered with the insurer; customer gets a text message that indicates policy details. Innovation is a key to success that knows no geographical boundaries.

Successful Examples of Micro Insurance Innovations across the Globe

In Peru, farmers buy micro insurance from water boards. In South Africa, micro insurance products are sold by retailers off-the-shelf. Philippines sells micro insurance through churches and schools in remote areas. Chinese insurers have delayed premium collection till the end of the insured period while underwriting pig insurance. In Thailand, micro insurance is sold at convenience stores.

In Colombia, low cost health insurance is tagged along with delivery of gas for cooking. In Kenya, farmers can buy crop insurance cover by using a mobile phone. The bar code on a bag of fertilizer or seed is scanned as an image and sent to the insurer. This provides insurance cover wherein premiums can be paid using the M-pesa mobile banking system.

Where There Is a Wheel – The “Pudukottai” Experience

Pudukottai is a district in Tamil Nadu that has many of its residents living below poverty line – some of them working as laborers in stone quarries. Mobility was an issue for the women. They had to rely on their men folk or depend on public transport to travel. The then collector Smt. Sheela Rani Chunkath decided to involve the community in the literacy program; she combined this with a training drive to make rural women learn cycling; thus women who took part in the literacy program also learnt how to ride a cycle and then a two-wheeler. These women later on became volunteers for the literacy cum mobility drive inspiring other women to join the movement. Lessons from this success story can be used to popularize growth of micro insurance.

Is it a Crime to be Poor? Poor also have a Right to Live a Life with Dignity!

The Western media is full of stories about technological interventions and use of big data in insurance; there are also reams and reams of literature on the need to serve the poor; India may be a poor country but India is rich in its cultural heritage; our values make us stand out from the crowd; India continues to be an excellent example of unity in diversity.

It is not a crime to be poor. Poor people are also entitled to a life of dignity. For a man who earns Rs.100 per day, Rs. 20 may be a big amount. So why should he contribute that amount to buying a micro insurance cover unless the value proposition is immense? The focus of micro insurance must be to address what the marginalized communities' value more; design of new products must follow this tenet. Innovations must enlist the needs of consumers.

As C K Prahlad mentioned in his research effort, the poor people also deserve respect as "customers". Inclusiveness is all about appreciating dignity of the marginalized and underprivileged section of society.

Results of Brainstorming Session

To understand what Gen Y thinks about insurance for the low-income segments, a brainstorming session was conducted. 100 students pursuing MBA took part in the session that was carried out in two tranches. Students were asked to come up with suggestions to answer the question -

What can insurers do to help grow micro insurance business in India?

The responses received were collated and are presented below:

1. Appraise farmers about scientific farming techniques and drip irrigation
2. Use of solar panels for electricity generation
3. Provide loan for purchasing seeds and fertilizers bundled with insurance cover; the premium can be drawn from the revenue earned.
4. Educate farmers about biodiversity – cultivating a variety of crops
5. Provide counselling to farmer based on soil testing and type of crops that can be cultivated based on water availability.
6. Promote collaborative working among farmers
7. Encourage the cash-rich IT industry to support farmers as a corporate social responsibility effort
8. Train farmers to grow crops all-round the year – example – sandalwood cultivation can be encouraged.
9. Enhance efforts to improve rural transportation infrastructure
10. Affordable health care and setting up of primary health care centres across the rural landscape
11. Use of telemedicine in remote areas
12. Conduct weekly/ monthly camps in rural areas to create awareness about micro insurance
13. Provide farmers with cheap mobile phone handsets at subsidized prices
14. Support farmers in efforts to promote rain water harvesting
15. Farmers can sell crops to approved business establishments and in the process they also pay a nominal amount as micro insurance premium
16. Provide milch cattle to farmers at subsidized prices so that in addition to farming they can also supply milk; bundle this with an insurance cover.
17. Insurers can set up intermediaries who can help sell produce of farmers; a part of the revenue earned can be used for buying micro insurance cover.

18. Use of fintech to popularize organic farm products; the website can sell such products online and a portion of the revenue can be used for buying micro insurance covers.
19. Strategic alliances between fintech start-ups and insurance companies in designing innovative micro insurance products
20. The micro insurance policies can be in the form of a digital card just like Aadhar
21. Creation of a toll free number where villagers can contact to get clarifications about micro insurance cover
22. Associate buying of insurance cover with festive celebrations
23. Creation of an app in local language to educate low-income households about micro insurance
24. Regular feedback sessions with insured
25. Promote radio advertising
26. Regular health camps in villages where awareness about health insurance cover is provided.
27. Organize community of farmers who can produce different varieties of crops and ensure the right price for their produce; micro insurance to be provided based on revenues generated and premiums drawn from it.
28. Provision of subsidized cold storage facilities in rural areas
29. Provide livelihood bundling – farmers' wives can be taught to set up cottage industries with a credit facility along with a micro insurance cover; premium for two months can be waived off; this can encourage savings mindset among the rural poor.
30. Corporate sponsors for low income households to part-finance insurance premiums.

Observations

Micro insurance is a social safety net for low income households. It offers value proposition in two forms – a product that is not only responsible but also profitable. There is a need for paradigm shift – thinking has to change from “how to distribute micro insurance to the poor” to “how to help low income communities manage their own risks”.

Consumer education cannot always guarantee increased demand for micro insurance products like health cover. Demand is driven by personal characteristics of community, understanding of insurance, trust, ability to pay, availability of alternative risk coping mechanisms.

Avoiding lengthy paper work processes and preliminary health checks are important for health insurance. If claims are paid quickly (say, within three business days) this can help low income families. In rural areas, micro insurance cover can include payment of school fees as an incentive to buying the policy.

Locally recruited and trained young graduates can work well as agents to enable customers to understand micro insurance products well.

Suggestions

1. Micro insurance must be viewed from a different lens compared to conventional insurance methods. Providing annual life insurance covers at nominal premium can be considered.

2. The conventional agency model needs replacement with an innovative mechanism where the agent (mostly from the community itself) is trained and manages customer relationships, premium collection and claims payment.
3. Product innovation in micro insurance cannot be seen in isolation from innovations in distribution; an innovative product that is not accessible to customers makes little sense. All the 7Ps of services marketing are relevant for micro insurance – Product, Price, Promotions, Place, Physical Evidence, People and Processes.
4. Promotions must be evangelistic – with the intention of turning customers into advocates for products sold. Trust and credibility play a vital role in micro insurance and only community involvement can drive this.
5. Micro insurance products must be well-integrated with other savings products. Claim rejections must be minimized; benefits of volumes and scaling up of the model must be adequately leveraged.
6. The cover should be designed in such a way that part of premium can be given as cash back offer if there is no claim for 6 months.
7. Developing appropriate institutional arrangements that are viable and encourage a savings mindset is essential.
8. Innovative distribution channels like retailers, mom and pop shops, schools, temples and churches must be used to distribute micro insurance.
9. Premium amounts for micro insurance need to be arrived at after understanding the income patterns of the insured.
10. Innovation must aim to deliver micro insurance products that are affordable as well as relevant. Information transmission must be made easy and simple.
11. Micro insurance can be provided on wheels.
12. Use of digital marketing methods via app and localization of content can aid penetration of the market.
13. Strategic tie up between insurers, mobile phone manufacturers and telecom services can be explored.
14. Exclude laborious form filling exercises
15. E-certificate confirming cover
16. Increase micro insurance density
17. New product variants
18. Partnership with local communities
19. New channels/ platforms
20. More payment gateways
21. Micro insurance can also be projected as a disaster risk management tool.

Conclusion

Micro insurance products are hyper targeted offerings that meet precise needs of the customer taking into account the realities staring at poor people and the latter's limited purchasing power. Innovation has to be considered across the total product cycle – product development, sales and collection of premiums, servicing and processing of claims.

Micro insurance products must have the right design and right price so that they can meet the needs of the low income population. Innovation in micro insurance is not about meeting customer demand –it is also an operational necessity to ensure inclusion of underprivileged communities that are often geographically distanced from the mainstream. The Indian micro insurance market is driven by regulation than with a sense of purpose to serve the marginalized. Innovative products need innovative methods of delivery too.

Policies need to be issued in 24 hours; claims must be easy to process and administer. Digital pens can be used by agents to convert handwritten notes to formal policy application; pen data can be transferred to company website through blue tooth or send to insurance officers through WhatsApp.

Smart cards can be given to insured to avail of subsidies in primary health care centers. Small retailers can sell scratch cards; customers buy scratch cards by paying premium; the concealed code can then be texted or sent as an image to the insurance company. The marketing of micro insurance must understand social and cultural needs of target population.

Digitalization of insurance offers, block chain systems and peer-to-peer approaches can lead to massive reduction in costs and these innovations can also be extended to micro insurance. Peer-to-peer approaches are based on mutual trust and co-operation. The innovative covers must be so designed that behavior of insured to protect against the risk due to voluntary efforts must be rewarded suitably.

The whole micro insurance space is characterized by diversity. So, a unilateral approach may not always work. The Indian Government can facilitate setting up of mobile clinics in rural areas. On a pilot basis, a model village can be created so that other rural areas can emulate the same.

Financial wellness facilitators can mobilize communities to actively take part in financial literacy program. Product innovations in micro insurance when complemented with innovative delivery mechanisms can make micro insurance schemes sustainable. Scaling up innovations will boost profits. **The future of insurance in emerging markets is closely linked to the future of micro insurance. Product innovations in micro insurance will act as a catalyst to expedite this development.**

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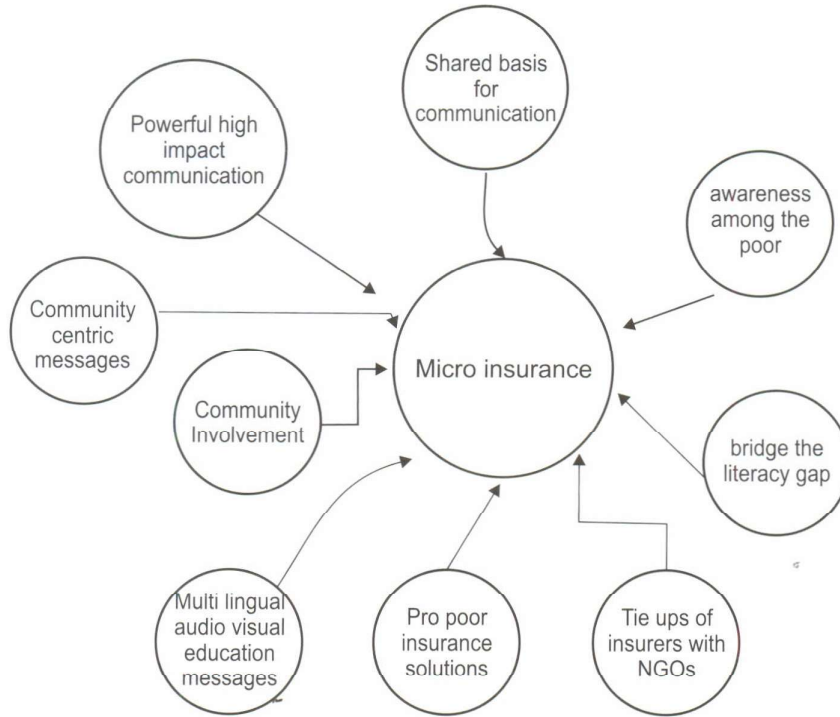
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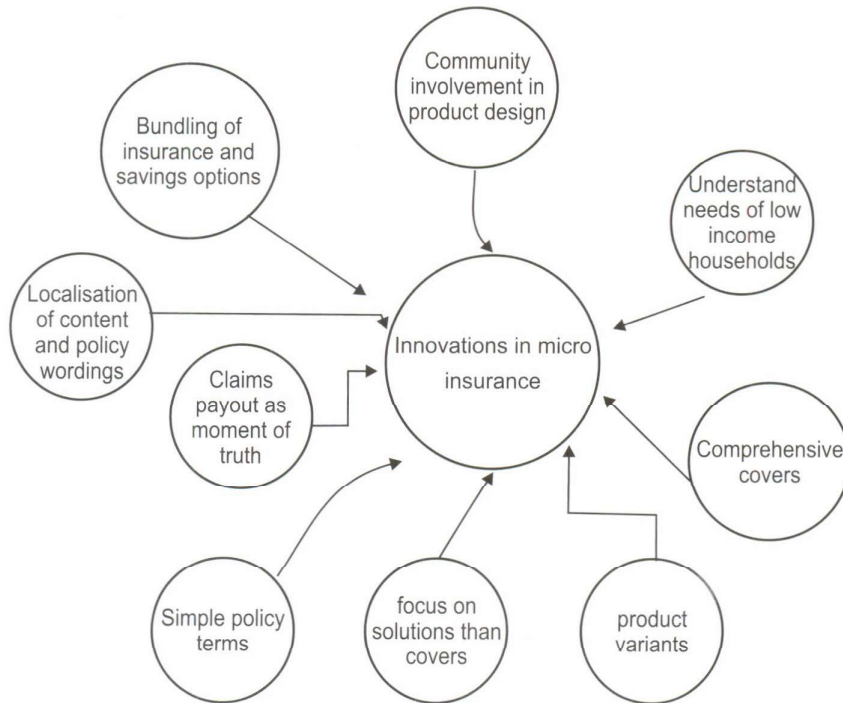
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Chart 1. Characteristic Features of Micro Finance



Source: Author

Chart 2. Innovations in Micro Insurance



Source: Author