

Preparatory Survey on BOP Business on Development of Micro Life Insurance in Bangladesh

Final Report (Summary)

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Map of Bangladesh



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Abbreviation

BDT : Bangladesh Taka

MFI : Microfinance Institution

IDRA : Insurance Development and Regulatory Authority

MRA : Microcredit Regulatory Authority

NGOAB : NGO Affairs Bureau

CO : Credit Officer

IO : Insurance Officer

PKSF : Palli Karma Sahayak Foundation

Fukoku: Fukoku Mutual Life Insurance Company

RIO: Regional Insurance Officer

1 Study Overview and Background

This project aims to conduct a feasibility study on an inclusive business of micro life insurance services through microfinance institution(s) (MFIs) for low income households in Bangladesh.

The livelihoods of the BOP (Bottom of the Pyramid) population in Bangladesh face high vulnerability with unstable income and therefore little saving/asset. Also, they face high risk of falling into poverty due to various causes (“Life risk”) such as facing natural disasters and sudden traffic accidents. However, the public social security system is yet to be fully developed; thus, the BOP need to prepare for the high “Life risk” by themselves. Nevertheless, the existing insurance services are too expensive and therefore not accessible for the BOP. Thus, though development of micro-insurance services is urged, most of the existing micro-insurance services are credit insurance.

In this context, a meeting between Mr. Yoneyama, the CEO of Fukoku Mutual Life Insurance Company (Fukoku) and Dr. Muhammad Yunus, founder of Grameen Bank, was held in July 2012. This gave Fukoku a chance to decide to conduct a feasibility study on micro-insurance services in Bangladesh.

2 Summary of the project

2.1 Summary of the project

First, it became apparent at the pilot test that the needs for insurance and understanding about insurance of the BOP population exist enough.

Second, as for the risk selection and sales channels, business possibility is high. It became apparent that moral risk, which is most important for insurance business, can be eliminated by utilizing MFI’s customer network and trust relationship with customers. A model of micro-insurance business in developing countries (Micro Bancassurance model) was created partnering with a MFI. Nevertheless, following challenges exist; thus, further research is needed for the actual business. 1) Further needs assessment is required for the multiple years of insurance product that is important for the actual business. 2) Capacity development about efficient customer data collection and analysis of all the UDDIPAN branches. 3) Negotiations regarding partnership with other MFI(s) for expansion of sales channels.

Third is about possibility about partnership with local organization(s). We consider UDDIPAN as an appropriate partner after the pilot test. Nonetheless, system for data collection and analysis must be more organized with UDDIPAN as mentioned above, and knowledge about insurance business is needed to be shared with UDDIPAN.

Fourth, there is enough business possibility. It became clear that the needs for insurance of the BOP population are strong as those people have not accessed insurance services. It also became apparent that there is enough room for the market development. However, we need to overcome the following challenges to decide to start the actual business. 1) Lots of assumed numbers are used for insurance product development due to a lack of statistic data. 2) Further data is needed for analysis of business continuity because risk occurred in large scale disasters such as natural disaster and disease cannot be calculated. 3) Increase in revenue by asset management using duration risk and operational expenses are difficult to be assumed under the fact that inflation rate is still high and economic forecast is uncertain in Bangladesh.

2.2 Decision for the actual business

Fukoku decided not to start the actual business soon after this project. The first reason is that it is difficult to set up a new business form such as micro-insurance company and mutual insurance company without an approval of insurance business. Negotiations with Insurance Development & Regulatory Authority (IDRA) and other governing agencies are too challenging under the circumstances regulations for micro-insurance are still under development. The second reason is that it is also hard to start the actual business with an approval of life insurance business. Getting a new approval for a new insurance company is too difficult, considering country-specific contextual situation. Another way to get an approval is to make partnership with an existing company or M&A; however, the research on existing companies had to be halted after the terrorist attack in Dhaka in June 2016.

Therefore, at the moment, Fukoku decided to conduct further research on the actual business and provide technical assistance to UDDIPAN, the MFI in Bangladesh, which was chosen to be the local partner for this preparatory survey.

3 Market Research

3.1 Life insurance market (Macro level research)

Both the penetration rate and market size of the life insurance market in Bangladesh are very small. There are 31 life insurance companies (foreign:1, governmental:1, domestic:29) as of December 2014 after new 13 companies were approved. However, the market growing rate in terms of total insurance premium and total asset is steadily increasing with 10-20% over last year. Thus, though the market size is small, the market is rapidly growing. (Bangladesh Insurance Association website)

3.2 Insurance regulations and their actual enforcement

There are mainly 2 regulatory authorities for this project, which are Microcredit Regulatory Authority (MRA) and Insurance Development & Regulatory Authority (IDRA). Both authorities have only short history with MRA being established in 2006 and IDRA in 2010. According to the meeting with IDRA, while general insurance law was enacted in 2010, the details of the enforcement would still need to be fixed. Furthermore, according to the meeting with MRA, it is allowed by MRA for MFIs to provide micro-insurance services only to their members though it is just to protect the clients in case of their death.

3.3 Micro-insurance sector

Micro-insurance sector in Bangladesh has been slowly developed by 3 types of organizations such as private insurance companies, Islamic insurance companies, and MFIs. Each type provides its services to a bit different targeted customers with a little different methodology. BRAC, one of the largest MFIs in Bangladesh, established a life insurance company called 'Guardian Life Insurance Limited' in 2013 and started its operation in February 2014.

4 Partnership Development

4.1 Identifying the potential partners and research

Meetings were held with Grameen Kalyan as well as Grameen Fisheries and Livestock Foundation, which were considered to be the most possible partners among the Grameen group organizations. However, the size of both organisations was quite limited with only 10-20 thousand of members and they did not provide its services on a broad scale based on the nation-wide network that Grameen bank had. Therefore, meetings were held with BRAC, but they decided not to make a new partnership after the recent new establishment of 'Guardian Life Insurance Limited'. After then, though other MFIs such as PKSF, Padakhep, Sajida Foundation, ASA, TMSS, etc showed their interest in our project, there was no progress toward making a partnership.

Meanwhile, UDDIPAN (United Development Initiatives for Programmed Actions), a middle sized MFI, was introduced to us by INAFI Bangladesh, which was a network NGO. INAFI conducted a micro-insurance pilot test called MIME (Micro-insurance for Mutual Enabling) Project with 13 NGOs/MFIs under the support of Rabobank Foundation, etc in May 2007, and UDDIPAN was one of the 13 NGOs/MFIs. Even after the end of the project, UDDIPAN has individually carried out a micro-insurance project named UDDIPAN Micro-insurance (UMI) since January 2014.

Table 4.1 Overview of UMI by UDDIPAN

Items	Contents	Note
Starting date	January, 2014	
Number of branches for UMI	23/244	
Number of staff	Insurance Officer: 18 Staffs supporting indirectly: 168	IO is staffed besides Credit Officer who is responsible for microcredit.
Product	Endowment insurance: Term of insurance: 5,7,10,12 years Monthly premium:200,300,400,500,600,700,1000 BDT	
Accomplishments	Number of policyholder: 28,987 Premium income: 79.04 million BDT Death claims: 1.37 million BDT Maturity claims: 7.63 million BDT	As of September, 2014. All is the total of UMI and MIME Project. * Number of policyholder of MIME Project :13,598

4.2 Capacity assessment of potential partner

Interviews with UDDIPAN were conducted in November 2014. UDDIPAN is a National NGO registered in Department of Social Service, Bureau of NGO Affairs, Joint Stock Company under the Societies Registration Act, and Micro Credit Regulatory Authority, and it is considered as an middle sized MFI in Bangladesh following a few large MFIs such as BRAC, Grameen, and ASA. Other information is indicated below.

Table 4.2 Overview of UDDIPAN

Items	Contents	Note
Date of founding	1984	
CEO	Mr. Md. Emranul Huq Chowdhury	
Business descriptions	1. Economic development programs 2. Human rights and social development programs 3. Knowledge and capacity building programs	1. microcredit, enterprise support, micro-insurance, etc 2. agriculture education, solar energy generation support, health program, etc 3. vocational training, ICT advocacy program, etc
Number of members	408,371	As of June, 2014. *BRAC: approximately 5.84 million (As of 2012)
Total asset	76.72 million USD (6,082 million JPY)	As of June, 2014. *BRAC: 1,253 million USD (As of 2012)
Loans	60 million USD (Loan to Clients)	As of June, 2014. *BRAC: 729 million USD (As of 2012)
Numbr of staff	2,344 (only staff for microcredit)	Grameen Bank: 22,555 (As of 2012) BRAC: 106,507 (As of 2012)
Number of branch	Zonal Office: 2, Regional Office: 11 Branches: 244, Training Centre: 3	District coverage: 37/64 Upazila coverage: 165/493

The requirements for becoming a member of UDDIPAN are; to own land smaller than 1 acre, have monthly income below 5,000BDT (6,000BDT if living in a city), and be 18-55 years old.

Firstly, as for microfinance products, UDDIPAN provides microsaving and microcredit services and responds to the needs from the customers by developing saving products besides compulsory saving.

Furthermore, as mentioned above, UDDIPAN continues to provide endowment insurance products that were sold under MIME Project (UMI). Depending on whether payment of premium is smoothly done or not, the interest of 10%, 12.5%, or 15% of the death insurance amount is added to the death insurance amount. Thus, maturity repayment is the total of the interest and the death insurance amount. The operation is efficient as 1 Insurance Officer (IO) in each branch supervises Credit Officers (COs) who are actually engaged in insurance sales and administration such as premium collection.

Moreover, besides UMI, loan customers must pay 1% of the loan amount as compulsory loan insurance just like other MFIs. Also, UDDIPAN provides health insurance services partnering with PKSf and livestock insurance. Besides, primary health services are also provided by them. Thus, those products can be of some help when we design insurance products that can add more value.

Secondly, UDDIPAN's percentage of debt collection, Operational Self Sufficiency (OSS), and Financial Self Sufficiency (FSS) show good performance. Therefore, it can be said that UDDIPAN is sustainable, managing the double bottom line of both social performance and financial sustainability.

Lastly, we value UDDIPAN's administrative department. UDDIPAN created Human Resource Management Division as a new independent division and is planning to invest more in personnel development. Also, they are planning to invest more in Management Information System (MIS) as well for more efficient administration. Installation of management system software was completed in 25 branches as of the timing of the capacity assessment in November 2014, and it was done in other branches by June 2015.

As mentioned above, we assessed UDDIPAN's existing products, operation, performance, personnel development, and MIS, and we evaluated high capacity of UDDIPAN. Especially, while only few MFIs provide micro-life insurance services apart from credit insurance, UDDIPAN already has more than 5 years experience of providing such insurance. We believe that our pilot test would be operated efficiently by utilizing the existing operational flow and training system of UDDIPAN. Therefore, MOU (Memorandum of Understanding) for the pilot test and future partnership was signed between UDDIPAN and Fukoku on 9th December 2014.

5 Research on the Operational Structure and Process

Research on the business and operational structure/process of UMI Project by UDDIPAN was conducted in November and December 2015. The results are as follows.

- Credit Officer (CO) is responsible for 15-18 Shomiti (division, smallest unit in Bangladesh) and visit all the Shomiti everyweek to lead weekly meeting, work on administrative job such as collection of repayments, and provide financial education. In UMI Project, they are engaged in collection of insurance premium and follow up work for the members when insured events occurred.
- In the UMI Project, as of December 2014, an IO is staffed at each branch of all the 23 branches targeted for the pilot test, and each IO is in charge of insurance education, administration for policy issued and management of insurance policies, and insurance payouts at all the Shomiti within the branch.
- Contract for policy issued is made when IO accompanies with CO. Confirmation of intent, confirmation of understanding about the insurance premium and the term of insurance, creation of applications, and issue of insurance pass book are done in front of IO and CO at Shomiti.
- As for insurance payouts, first, bereaved family report the death of insured person to CO, IO, or the branch, mainly via the mobile phone. Then, CO and IO immediately visit the bereaved family for verification of the death and proceed in the insurance payout. Though the basic rule is that the payment would be made within 15 days, the payment is made within 3-5 days in many cases, which leads to high customer satisfaction.

6 Product Development

6.1 Actuary

Statistic data related to death rate, asset management yield, and operating expenses are mainly required for designing insurance products and operational plans.

1) Statistic data related to death rate

We could only get 0.367% of the rough death rate based on the hearing from PKSF and Professor Syed A. Hamid (Institute of Health Economics, Dhaka University). Moreover, we noticed that UDDIPAN also drew the product design for UMI Project starting in January 2014, using 0.367% of the rough death rate. Therefore, we decided to use 0.367% for death rate for the product design of the pilot test.

2) Data related to asset management yield

UMI Project is managed with the separate accounting with other projects such as microcredit in UDDIPAN, but most of incoming money from premiums is used as 'Loan to Clients' as the asset management. As for UDDIPAN's microcredit programs, the annual interest of main loans keeps over 20%. Thus, incoming money in the pilot test would be invested in the loan to UDDIPAN for the 'Loan to Clients' in order to gain high yield. However, considering fundraising costs by UDDIPAN, the annual rate of the loan to UDDIPAN is considered to 9-11%.

3) Data related to operating expenses

We made an assumption of 5 million BDT for the expenses for the one year pilot test.

Table 6.1 Pilot test operation plan

Profit / Loss Sheet													
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Fund from Fukoku	2,000,000			2,000,000				500,000			500,000		5,000,000
Premium income	0	206,000	411,454	616,365	820,732	1,024,558	1,227,845	1,021,845	816,390	611,480	407,113	203,286	7,367,068
Investment income	7,064	5,917	6,380	24,402	28,214	33,635	40,670	40,279	34,277	26,620	21,296	10,363	279,119
Operating expenses	-1,114,086	-353,286	-353,286	-353,286	-353,286	-353,286	-353,286	-353,286	-353,286	-353,286	-353,286	-353,286	-5,000,237
Death claims	0	-142	-284	-425	-566	-707	-848	-705	-584	-422	-281	-141	-5,086
Surrender claims	0	-183	-547	-1,093	-1,818	-2,722	-2,722	-2,540	-2,175	-1,630	-904	0	-16,334
Maturity	0	0	0	0	0	0	-1,234,824	-1,234,824	-1,234,824	-1,234,824	-1,234,824	-1,234,824	-7,408,944
Provision for policy reserve	0	-205,454	-410,845	-616,168	-821,420	-1,026,596	0	205,454	410,845	616,168	821,420	1,026,596	0
Net surplus for each month	892,978	-347,149	-347,128	1,669,795	-328,145	-325,118	-323,165	176,223	-329,337	-335,894	160,533	-348,006	215,587
Total surplus		545,829	198,701	1,868,495	1,540,351	1,215,232	892,067	1,068,290	738,953	403,060	563,592	215,587	

4) Product development for additional features products (health insurance, educational insurance, insurance related to maternal and child health, etc.)

It has appeared that lack of statistic data in Bangladesh is a significant challenge. Thus, it is important that we would collect necessary information and statistic data through a trial and error process during the business operation and develop possible products, after deciding product types based on the needs assessments, understanding the challenges around the products, and making assumptions.

6.2 Needs assessment of the poor/MFI clients

Needs assessment was conducted as supplement of a pre needs assessment in 2012, whose results indicated endowment insurance as the most interest of the BOP population.

According to the hearing to Assistant Director of UDDIPAN, 200BDT of monthly insurance premium is most common among 6 kinds of insurance premiums in the UMI Project, and most of the clients in any of rural, suburban, and city areas are able to pay the 200BDT of premium and continue it. On the other hand, with increase in understanding of insurance and income increase by economic growth, some clients purchase a second policy. As examples, a second policy with 500BDT of premium and 5 years of term of insurance or 500BDT of premium and 10 years of term of insurance were purchased. 5 years of term of insurance is most common, but policies with 7 years and 10 years are popular in some Shomiti.

6.3 Needs assessment of additional product features

The first baseline survey (pre-pilot test survey) indicated that the clients are most interested in 'Educational related services' with 47.4% of the responses followed by 'Medical related services' with 32.7% (multiple answers allowed).

7 Development Impact of Pilot Program

7.1 Development issues to be solved through BOP business

First, we aim to contribute to poverty reduction through life security by self-help efforts. Second aim is to make a contribution to industrial development by managing assets accumulated through micro-insurance business. Third is collaboration with other development projects utilizing insurance function.

7.2 Status survey on the targeted BOP

Baseline surveys were conducted for the pilot test target areas.

Pilot test target areas: Comilla District, Chittagong Division, Bangladesh

Pilot test target : Each Shomiti randomly chosen from all the 5 pilot test target branches.

Table 7.1: No. of interviewees

	Branch name	Category	Shomiti Name	Total members
1	Barura 1	Rural	Orjuntola	36
2	Comilla 1	Suburban	Muradpur	27
3	Comilla 2	Suburban	Kochitoly	21
4	Madhaiya	Rural	Jamira Para	50
5	Tujarbhangha	Rural	Natuan Bashurdhar	22
Total				156

Status of the surveyed: According to the 1st survey (August-September 2015), most were married and the average age was 35.3 years old. As for the financial status, only 3.8% answered having no saving while most having some saving. However, the saving amounts depend on the areas; for example, the average amount was 6,000BDT in Barura 1 while 15,000BDT in Tujarbhangha. Furthermore, the 2nd survey (February 2016) indicated the annual income of the member and the one of the household.

Table 7.2: Annual income of member

Member		Barura 1		Comilla 1		Comilla 2		Madhaiya		Tujarbhangha		Total		1st	2nd
Annual income	Branch Source	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd		
0		19	0	12	0	14	0	14	0	13	0	72	0	72	0
0-5,000		0	0	0	0	0	0	27	0	0	0	27	0	55.0%	
5,000-10,000		0	1	2	0	1	0	1	0	0	0	4	1		
10,000-20,000		2	0	0	0	0	0	0	0	0	0	2	0		
20,000-30,000		2	1	0	0	1	0	0	0	0	0	3	1		
30,000-40,000		2	0	0	0	0	0	1	0	2	0	5	0		
40,000-50,000		1	0	0	0	0	0	1	0	2	0	4	0	117	2
50,000-60,000		2	0	1	0	0	0	0	0	2	0	5	0	89.3%	
60,000-70,000		1	0	0	0	0	0	0	0	0	0	1	0		
70,000-80,000		0	0	0	0	0	0	0	0	0	0	0	0		
80,000-90,000		0	0	1	0	0	0	0	0	0	0	1	0		
90,000-100,000		0	0	1	0	0	0	0	0	1	0	2	0	9	0
100,000-110,000		0	0	0	0	0	0	0	0	0	0	0	0	6.9%	
110,000-120,000		0	0	4	0	0	0	0	0	0	0	4	0		
120,000-130,000		0	0	0	0	0	0	0	0	0	0	0	0		
130,000-140,000		0	0	0	0	0	0	0	0	0	0	0	0		
140,000-150,000		0	0	0	0	0	0	0	0	0	0	0	0	4	0
150,000-		0	0	1	0	0	0	0	0	0	0	1	0	3.1%	
Total		29	2	22	0	16	0	44	0	20	0	131	2		
Median		0-		0-		0-		1,500-		0-		0-			
Average		13,241-		40,727-		2,500-		3,339-		19,400-		14,160-			

Table 7.3: Annual income of household

Households		Barura 1	Comilla 1	Comilla 2	Madhaiya	Tujarbhangha	Total	Share
0		0	0	0	0	0	0	0.0%
0-50,000		1	0	0	0	0	1	0.8%
50,000-100,000		3	1	1	3	1	9	6.9%
100,000-150,000		4	2	5	13	1	25	19.1%
150,000-200,000		6	6	5	4	0	21	16.0%
200,000-250,000		4	4	0	8	3	19	14.5%
250,000-300,000		1	2	0	4	3	10	7.6%
300,000-350,000		0	2	1	3	1	7	5.3%
350,000-400,000		1	1	1	2	3	8	6.1%
400,000-450,000		0	0	3	2	1	6	4.6%
450,000-500,000		1	0	0	1	1	3	2.3%
500,000-550,000		0	1	0	0	0	1	0.8%
550,000-600,000		1	0	0	2	1	4	3.1%
600,000-650,000		2	1	0	0	0	3	2.3%
650,000-700,000		0	0	0	0	2	2	1.5%
700,000-750,000		0	0	0	1	1	2	1.5%
750,000-800,000		1	0	0	0	0	1	0.8%
800,000-850,000		0	0	0	0	0	0	0.0%
850,000-900,000		1	1	0	0	0	2	1.5%
900,000-950,000		2	0	0	0	0	2	1.5%
950,000-1,000,000		0	1	0	1	0	2	1.5%
1,000,000-		1	0	0	0	2	3	2.3%
Total		29	22	16	44	20	131	
Median		204,000	218,000	180,000	222,250	360,000	234,000	
Average		357,655	312,441	222,219	260,711	444,200	314,172	

Furthermore, experience of holding insurance policy is indicated in below.

Table 7.4: Experience of holding insurance policy

Current policy Past experience	Barura 1	Comilla 1	Comilla 2	Madhaiya	Tujarbhanga	Total	Share
Yes	6	0	2	1	5	14	9.0%
Yes	0	0	0	0	2	2	1.3%
No	3	0	2	1	3	9	5.8%
n.a.	3	0	0	0	0	3	1.9%
No	28	27	16	48	16	135	86.5%
Yes	0	1	0	0	1	2	1.3%
No	28	26	16	48	15	133	85.3%
n.a.	2	0	3	1	1	7	4.5%
n.a.	2	0	3	1	1	7	4.5%
Total	36	27	21	50	22	156	

7.3 Setup indexes for solving development issues through BOP business

Indexes that were set-up are as follows.

<ul style="list-style-type: none"> ➤ How much do you know about insurance? (Please circle) <ul style="list-style-type: none"> a) Very poor b) Poor c) Fair d) Good e) Excellent ➤ Do you think that insurance is important for your life? <ul style="list-style-type: none"> a) Do not know b) It's not important c) Yes, I think so d) Yes very much
<ul style="list-style-type: none"> ➤ Do you want to buy insurance? <ul style="list-style-type: none"> a) Yes b) No <ul style="list-style-type: none"> ● If yes, what is the reason for buying insurance? <ul style="list-style-type: none"> a) to protect family b) to get lump sum money at specific period c) others (Please specify _____) ● If not, what is the reason for not buying insurance? <ul style="list-style-type: none"> a) Lack of trust b) Inability to pay c) Do not know benefit of insurance d) Others (Please specify _____)

7.4 Collection and analysis of baseline data for development indexes

【Subjective recognition for insurance knowledge】

1) Both the policyholders of the pilot test product (Nirapod Jibon (NPJ)) and the non-policyholders among the baseline surveyed members:

The number of members answering 'Excellent' or 'Good' significantly increased to 108 members (78.2%) at the post pilot test survey from 68 members (49.2%) at the pre pilot test survey.

2) Only the policyholders of NPJ among the baseline surveyed members:

The number of members answering 'Excellent' or 'Good' significantly increased to 74 members (78.7%) at the post pilot test survey from 43 members (45.7%) at the pre pilot test survey as well.

【Recognition for the importance of insurance】

1) Both the policyholders of NPJ and the non-policyholders among the baseline surveyed members:

The number of members answering 'Yes very much' decreased to 61 members (44.2%) at the post pilot test survey from 106 members (76.8%) at the pre pilot test survey. However, the total of the number of members answering 'Yes very much' and 'Yes, I think so' did not change much with 135 members (97.8%) at the pre pilot test survey and 137 members (99.2%) at the post pilot test survey. The reason of the decrease in 'Yes very much' and the increase in 'Yes, I think so' is not apparent due to the subjectivity. Nevertheless, considering the increase in the number of members answering 'Both' for the insurance/saving preference, it can be said that

although the members continue to recognize the importance of insurance, the importance of saving and insurance are relativized.

2) Only the policyholders of NPJ among the baseline surveyed members:

The number of members answering 'Yes very much' or 'Yes, I think so' increased to 94 members (100%) at the post pilot test survey from 91 members (96.8%) at the pre pilot test survey, which showed the high standing even from the pre pilot test survey. Moreover, while the decrease number of 'Yes very much' among the non-policyholders of NPJ was 21 (47.7%), the one among the NPJ policyholders was 24 (25.5%). It means that there was difference about the ratio of the numbers decreasing the importance of insurance between the NPJ policyholders and the non NPJ policyholders.

7.5 Scenario for making a development impact through BOP business

Based on the section 6.3 above and other results of the baseline survey related to development impact, scenario for making a development impact through BOP business was created as below.

- To be able to provide security to the BOP by savings insurance that the BOP has needs and that has function of asset building.
- To work on development of products for strengthening development impact by adding possible educational/health services.
- As for promotion of insurance sales, a system that the members indirectly provide insurance education to their family especially husband will be developed, and so it would lead to increase in new policy rate.
- To aim at increasing in accuracy of effect validation by setting up not only subjective indexes but also objective indexes for measuring development impact. At this point, 'lapse rate', 'voluntary surrender rate', and 'renewal rate of policy' are considered as objective indexes.

7.6 Setup target numbers for development indexes

Target numbers for development indexes are set-up as follows. (Those are only reference due to the customer's subjectivity.)

- Level of understanding of insurance at the entry, lapse/ surrender, and maturity.
- Saving/Insurance preference at the entry, lapse/ surrender, and maturity.
- Recognition of importance of insurance at the entry, lapse/ surrender, and maturity.
- Plan of use of maturity repayment at the entry, lapse/ surrender, and maturity.

As objective indexes, the followings are also set-up.

- Payment due of death insurance
(Target : within 5 days after getting all the necessary complete documents)
- Payment due of maturity repayment
(Target : within 5 days after getting all the necessary complete documents)
- Lapse rate (within 13th month, within 25th month)
(Target : 13th month : 0%、 25th month : 2%)
- Voluntary surrender rate (within 13th month, within 25th month)
(Target : 13th month : 0%、 25th month : 2%)
- Renewal rate of policy (Target : 99.0% of target policies for renewal)

8 Preparation and Implementation on Pilot Program

8.1 Pilot site

Comilla District was selected as the pilot site based on the results of discussions with UDDIPAN. Comilla is located about 100km southeastward from Dhaka, the capital city, and the second largest city in Chittagong. It is a linking city connecting the two large cities and has one of the 7 Export Processing Zones (EPZ) in the nation. Also, regarding the geography, it is not affected much by natural disasters.

8.2 Development of pilot test framework and preparation

Pilot test was conducted with the purposes below.

- To thrash out all the challenges from the perspective of sales management and administrative management.
- To check UDDIPAN's actual operational ability.
- To research on change in customers' recognition/attitude to insurance through baseline surveys.

On the other hand, collection of statistic data was not a purpose since the target number of new policy was not enough to analyze data.

Furthermore, the following points were put much value for the pilot test.

- To lower the operation risk by reducing impact on insurance underwriting risk.
- To prioritize the protection of policyholders.
- To complete the pilot test during the feasibility study period, and not to burden responsibility after the pilot test.

For the above points, the followings were emphasized.

- To design products that reduce insurance underwriting risk.
 - Select endowment insurance that works as saving as well rather than term insurance.
 - Set a short term of 6 months for the term of insurance
 - Set small amount of insurance of 6,075BDT as a maximum (Maximum monthly premium is 1,000BDT.)
- To design products that meet customers' expectation about nominal yield without considering profitability at this point.
- To set the target number of new policy small (2,000) in order to avoid too many insurance underwriting.
- Renewal is impossible not to leave operational risk after the pilot test. (All policies cease to exist at the maturity.)

8.3 Execution of pilot testing

Operating structure was same as existing UDDIPAN's UMI with 1 IO for each of the 5 target branches and 1 Regional Insurance Officer (RIO) for supervision of the 5 IOs.

a) Insurance education for members

IO provided insurance education to the members, and was engaged in insurance sales and policy administration, along with CO at Shomiti. As for the insurance education material, flip chart and posters used for UMI Project were utilized.

b) Insurance education for loan officers

The training was provided for 4 days in late August, 2015. 1 RIO and 5 IOs hired in August 2015 participated in the training. Criterion for hiring are 1)to have HSC (Higher School Certificate)(almost the same level as high school graduate to two-year college graduate) but 2) not to need to have professional experience at insurance company. Total of 16 including 5 Branch Managers and 5 First Credit Officers attended the training.

c) Sales of insurance

Insurance product for the pilot test was designed as below.

Table 8.1: Product design for pilot test

Items	Explanations
Product type	Nonparticipating endowment insurance
Monthly premium	200BDT, 400 BDT, 600BDT, 800BDT, 1,000BDT average premium system (Premium amount does not depend on the age of policyholder.)
Maturity repayment	1,215BDT, 2,430BDT, 3,645BDT, 4,860BDT, 6,075BDT Nominal repayment rate: 107.00% (Maturity repayment / Total premium)

	Annualized repayment rate : 102.28%, Actual yield : 4.592% (compound)
Term of insurance	6 months
Sales target	Only members in 5 branches (not to the family)
Age at issue	18-50 years old
Payment frequency	monthly
Additional condition	Not applicable
Declaration	Simplified declaration (Those who answer 'yes' to even one question among all cannot be policyholders.)
Grace period	Until the end of the month when clients fail to pay.
Compulsory cancellation, optional cancellation	35% of paid premium amount as surrender value.
Renewal	Not applicable

Profitability of the insurance was not considered for the pilot test since UDDIPAN requested the amount of maturity repayment higher than that of principal even for the very short term of insurance. Therefore, validation of the profitability could not be a purpose of the pilot test.

8.4 Project evaluation

1) Achievement of the pilot test

As an accomplishment of the pilot test, first, the number of new policy exceeded the assumption. Our target number of new policy was 2,000; thus, in order not to be too much insurance underwriting for the assumed operating expenses, we stopped the sales in the fifth month (January 2016) when the number of new policy exceeded 3,000.

More information including total premium, average monthly premium are indicated below.

Table 8.2: Number of new policy, total premium, average monthly premium

	Number of new policy						Aggregate	Average	Assumption
	Sep	Oct	Nov	Dec	Jan				
Comilla-01	112	138	119	237	34	640	128.00	102	
Comilla-02	138	130	77	254	10	609	121.80	102	
Barura	177	151	149	157	34	668	133.60	102	
Madhiya	152	136	141	175	46	650	130.00	102	
Tujarbhanga	212	80	93	216	29	630	126.00	102	
Total	791	635	579	1,039	153	3,197	639.40	510	
Premium									
Comilla-01	43,600	48,200	32,200	78,000	5,800	207,800	41,560		
Comilla-02	44,600	47,000	26,600	68,600	800	187,600	37,520		
Barura	70,600	67,600	70,800	64,200	10,200	283,400	56,680		
Madhiya	43,800	48,200	53,200	58,800	17,600	221,600	44,320		
Tujarbhanga	62,600	32,200	32,400	69,400	7,600	204,200	40,840		
Monthly	265,200	243,200	215,200	339,000	42,000	1,104,600	220,920		
Aggregate	265,200	508,400	723,600	1,062,600	1,104,600				
Premium income (Plan)	206,000	411,454	616,365	820,732	1,024,558	7,367,068			
Comparison	128.74%	123.56%	117.40%	129.47%	107.81%				
Ave. Premium									
Comilla-01	389.29	349.28	270.59	329.11	-	334.57			
Comilla-02	323.19	361.54	345.45	270.08	-	325.07			
Barura	398.87	447.68	475.17	408.92	-	432.66			
Madhiya	288.16	354.41	377.30	336.00	-	338.97			
Tujarbhanga	295.28	402.50	348.39	321.30	-	341.87			
Total	335.27	382.99	371.68	326.28	-	354.05		400	

Second, other achievements were '0 number of lapse' and '0 number of surrender'. This could show high level of UDDIPAN's insurance administration structure, strong will of insurance continuity of policyholders, and enough management skill of household income of members for choosing premium level.

Third, the fact that the death insurance payment was practically possible as rapid as within 5 days after getting all the necessary complete documents can be emphasized. Though this level of rapidity of the payment cannot be done by local insurance companies, it directly connects with customer satisfaction.

2) Payment

During the 1 year pilot test, 3 insured events (death case) occurred. In all the cases, UDDIPAN paid 2,000BDT of condolence money to the bereaved family within 3-5 days after the report of the death, based on the UDDIPAN's rule. Also, the death insurance payment was possible within 5 days after getting all the necessary complete documents. However, UDDIPAN paid it within 11-16 days because they needed to spend some time to coordinate for the date of the payment ceremony.

9 Finalization of the Research and Development of Business Plan

9.1 Summarise research and pilot outcomes

1) Insurance needs and product design

First, it appeared that the target population much prefer saving insurance such as endowment insurance to term insurance which offers no refund payment. Also, the results of the pilot test show strong needs for endowment insurance.

Second, it appeared that services for children would be most appealing to female members as the survey results regarding both additional services and use of maturity repayment referred to 'Education' the most. As for saving insurance, not only simple endowment insurance but also endowment insurance whose term is adjusted with school age of children and educational endowment insurance that works as saving for school expenses and covers same amount of school expenses at the death of policyholder would be very appealing to customers.

2) Business management and policy administration structure

It became apparent that utilizing a MFI as sales channel has the following advantages.

- It can reduce operating expenses since marketing network and business management structure are not in need to be set up from the zero point by utilizing MFI's existing business structure including careful customer management and credit management system through weekly meetings.
- Also, it does not take much time to make trust relationship between customers and an insurance company as we sell insurance products under the trust relationship between MFI and customers.
- Insurance policy can be sold to the customers who already passed the 1st screening for health problems and financial problems at the credit examination by MFI. Also, we are able to eliminate moral risk in insurance sales by being shared information on change in financial status of customers with MFI.

On the other hand, the following are challenges to be raised.

- The sales target customers are limited to only the partner MFI's members, so expansion of the number of customers is limited unless we develop more sales channels by partnering with other MFI(s), etc.
- In case we partner with more than one MFIs, we need to work on insurance sales strategy, customer management strategy, and capacity building of partner MFI, based on each MFI's strategy.
- We need to make a decision with partner MFI(s) when we change insurance products, or need to end the sales, etc.

9.2 Strategy for full-scale business model

a) Operation plan

First, basic product design in the beginning phase of the business is as below (partly non-disclosure).

Table 9.1: Basic product design in the beginning phase of the business

Items	Explantions
Product type	Nonparticipating endowment insurance
Monthly premium	200BDT, 400 BDT, 600BDT, 800BDT, 1,000BDT
Maturity repayment	7,704BDT, 15,407BDT, 23,111BDT, 30,815BDT, 38,519BDT

Sales target	Policyholder must be members of partner MFI and her husband. The insured must be members of partner MFI, her husband, and her first degree relatives (18-50 years old).
Term of insurance	3 years
Payment frequency	monthly
Additional condition	Not applicable
Declaration	Simplified declaration (Those who answer 'yes' to even one question among all cannot be policyholders.)
Grace period	Until the end of the month when clients fail to pay.
Renewal	Provide vested rights. Renewal for the same guarantee is possible even if there is some declaration issue at renewal.

Second, sales assumptions are as follows.

- Operations will be expand to 40 branches in the first year and then 60 branches from the following years in UDDIPAN.
- Operations will be also expanded to other MFI(s) from the second year with an assumption of 10 branches every year.
- IO's sales power would increase 3% every year, and average premium would increase 7% every year.

b) Personnel plan

The personnel plan for the 10 years period is indicated below (Table 8.2).

Table 9.2 :10 Years Personnel Plan

No. of staffs	1	2	3	4	5	6	7	8	9	10
Branch	40	110	180	250	320	390	460	530	600	670
B Insurance Officer	40	110	180	250	320	390	460	530	600	670
Regional office										
RO covers 30 branches.										
B Regional Manager (RM)	2	4	6	9	11	13	16	18	20	23
C Regional Monitoring Officer (RMO)	2	4	6	9	11	13	16	18	20	23
C Regional Insurance Officer (RIO)	2	4	6	9	11	13	16	18	20	23
D Regional Accounts Officer (RAO)	2	4	6	9	11	13	16	18	20	23
C Service Staff	1	2	3	4	5	6	7	8	8	10
Head office										
SS serves 10 Managers/Officers.										
C Executive Director	1	1	1	1	1	1	1	1	1	1
D Deputy Director (Finance)	1	1	1	1	1	1	1	1	1	1
C Deputy Director (HR)	1	1	1	1	1	1	1	1	1	1
C Assistant Director (Administration)	1	1	2	2	2	3	3	4	4	4
C Assistant Director (ICRMD)	1	1	2	2	2	3	3	4	4	4
C Assistant Director (Asset management)	1	1	1	1	1	2	2	2	2	2
B Assistant Director (Marketing)	1	1	2	2	2	3	3	4	4	4
C Manager (IT)	1	1	1	1	1	2	2	2	2	2
C Service Staff	1	1	2	2	2	2	2	2	2	2
Total staff	58	137	220	303	382	466	549	631	709	793

c) Personnel training plan

Training for IO is the most important in terms of sales and marketing. Thus, the TOT program using training material created with UDDIPAN would be provided with occasional update.

d) Operation costs

Operation costs include the expense items below.

1. Salary & Allowances,
2. Monthly Branch Office Rent,
3. Monthly Regional Office Rent,
4. Printing Cost,
5. Stationeries & Supplies,
6. Travelling & Transportation,
7. Fuel & Maintenance cost for motorcycle,
8. By-cycle Maintenance cost,
9. Internet Bill,
10. Utilities,
11. Postage & Telegram,
12. Office Maintenance Exp,
13. Training & Development Expenses,
14. Recruitment Expense,
15. Auditors' Fees,
16. Refreshment Cost/Entertainment,
17. Staff Material,
18. Staff Meeting Exp,
19. ToT for Staff,
20. Promotional Expenses.

e) Financial analysis (PL, Cash flow, IRR, etc)

The estimated P&L, Cash flow, IRR for the 10 years period, together with the personnel and development plan above, is as follows.

Table 9.3: Estimated P&L, Cash flow, IRR for 10 years

PL		(Thousand BDT)				
		1	2	3	4	5
Ordinary revenues:		222,105	1,013,214	2,635,918	5,303,790	8,753,818
Premium income		172,800	875,097	2,354,779	4,750,643	7,821,245
Investment income		49,305	138,116	281,139	553,146	932,573
Other ordinary revenues		0	0	0	0	0
Ordinary expenditures:		711,589	1,670,938	3,370,531	5,306,543	7,193,278
Claims and other payments		2,080	12,887	36,113	1,041,517	2,805,846
Death claims		2,080	9,844	24,577	46,678	71,821
Maturity claims		0	0	0	969,985	2,693,324
Surrenders		0	3,042	11,357	24,855	40,701
Provision for policy reserve		320,881	1,257,336	2,911,565	3,814,007	3,903,278
Investment expenses		0	0	0	0	0
Operating expenses		387,263	395,993	412,399	431,874	453,251
Staffing		24,687	45,117	72,711	102,271	133,700
Operating expense		2,576	5,326	8,916	13,940	19,335
Interest on debts		360,000	345,549	330,773	315,664	300,215
Other ordinary expenses		1,365	4,722	10,453	19,144	30,903
Depreciation		1,365	4,722	10,453	19,144	30,903
Other ordinary expense		0	0	0	0	0
Ordinary profits:		-489,484	-657,724	-734,613	-2,753	1,560,540
Taxes (40%)		0	0	0	0	-624,216
Net surplus for the year		-489,484	-657,724	-734,613	-2,753	936,324
(Aggregate surplus/deficit)		-489,484	-1,147,208	-1,881,821	-1,884,574	-948,250
BS						
Cash and deposits		41,225	256,979	1,291,013	2,990,409	5,025,354
Securities		1,034,560	1,175,019	1,470,956	1,950,129	2,564,249
Government bonds		1,034,560	1,175,019	1,470,956	1,950,129	2,564,249
Other securities		0	0	0	0	0
Loans		120,960	612,568	1,648,345	3,325,450	5,474,872
Tangible fixed assets		6,824	16,788	28,653	43,454	58,794
Intangible fixed assets		0	0	0	0	0
Other assets		2,035,555	1,120,658	248,497	-497,334	-814,450
Goodwill		1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Allowance for possible loan losses		0	0	0	0	0
Assets:		3,239,124	3,182,012	4,687,464	7,812,109	12,308,818
Policy reserves		320,881	1,578,217	4,489,783	8,303,790	12,207,068
Policy reserve		320,881	1,578,217	4,489,783	8,303,790	12,207,068
Bonds		2,357,727	1,701,003	1,029,502	342,893	0
Other liabilities		0	0	0	0	0
Liabilities:		2,678,608	3,279,220	5,519,285	8,646,683	12,207,068
Capital		50,000	50,000	50,000	50,000	50,000
Capital surplus		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Unappropriated surplus		-489,484	-1,147,208	-1,881,821	-1,884,574	-948,250
Net assets:		560,516	-97,208	-831,821	-834,574	101,750
		0	0	0	0	0
KPI / Main indexes		(As of the end of F.Y)				
		1	2	3	4	5
Sales	No. of New policies	72,000	199,920	331,200	465,120	601,841
	No. of branches (at the end of FY)	40	110	180	250	320
	Monthly new policy target per one IO	150	154	158	162	166
	Average monthly premium (tk)	400	428	458	490	524
	Renewal rate at maturity	-	-	-	99.0%	99.0%
Maintenance	Mandatory Surrender rate	3.0%	3.0%	3.0%	3.0%	3.0%
	Voluntary Surrender rate	1.0%	1.0%	1.0%	1.0%	1.0%
	Mortality rate	0.375%	0.375%	0.375%	0.375%	0.375%
	No. of Policy holdings	70,425	262,891	575,344	942,161	1,314,805
Investment	No. of Policy holdings per one branch	1,761	2,390	3,196	3,769	4,109
	Investment yield	2.75%	4.30%	7.15%	8.85%	9.27%
	Target liquidity rate	10.00%	10.00%	10.00%	10.00%	10.00%
	Actual liquidity rate	1.27%	8.08%	27.54%	38.28%	40.83%
Operation	No. of Insurance Officers (IO s)	40	110	180	250	320
	No. of staffs (Branch level)	9	18	27	40	49
	No. of staffs (Head office)	9	9	13	13	13
	Total staff	58	137	220	303	382
	Assumed inflation rate on increase of operating expenses	8.00%	8.00%	8.00%	8.00%	8.00%

PL

(Thousand BDT)

	6	7	8	9	10
Ordinary revenues:	12,751,809	17,370,307	22,702,997	28,855,714	35,943,016
Premium income	11,348,882	15,388,190	20,007,750	25,284,801	31,301,832
Investment income	1,402,927	1,982,117	2,695,247	3,570,913	4,641,184
Other ordinary revenues	0	0	0	0	0
Ordinary expenditures:	9,209,231	11,201,323	13,256,978	15,373,219	17,551,234
Claims and other payments	4,616,126	6,462,676	8,347,790	10,278,683	12,261,901
Death claims	97,396	123,422	149,975	177,132	204,939
Maturity claims	4,461,930	6,266,102	8,108,006	9,994,723	11,932,721
Surrenders	56,800	73,152	89,809	106,827	124,242
Provision for policy reserve	3,985,372	4,077,090	4,183,064	4,299,845	4,422,131
Investment expenses	0	0	0	0	0
Operating expenses	562,786	600,173	646,000	693,603	753,765
Staffing	177,170	221,253	273,567	326,844	390,924
Operating expense	25,615	33,371	41,661	51,096	62,625
Interest on debts	360,000	345,549	330,773	315,664	300,215
Other ordinary expenses	44,948	61,384	80,123	101,088	113,437
Depreciation	44,948	61,384	80,123	101,088	113,437
Other ordinary expense	0	0	0	0	0
Ordinary profits:	3,542,578	6,168,984	9,446,019	13,482,496	18,391,782
Taxes (40%)	-1,417,031	-2,467,593	-3,778,408	-5,392,998	-7,356,713
Net surplus for the year	2,125,547	3,701,390	5,667,611	8,089,497	11,035,069
(Aggregate surplus/deficit)	1,177,297	4,878,687	10,546,299	18,635,796	29,670,866

BS

Cash and deposits	7,851,388	11,736,629	16,970,001	23,890,060	32,866,870
Securities	3,269,776	4,077,638	5,001,550	6,056,960	7,260,366
Government bonds	3,269,776	4,077,638	5,001,550	6,056,960	7,260,366
Other securities	0	0	0	0	0
Loans	7,944,218	10,771,733	14,005,425	17,699,361	21,911,282
Tangible fixed assets	77,049	98,970	122,349	148,277	179,989
Intangible fixed assets	0	0	0	0	0
Other assets	1,635,033	1,214,249	979,070	986,469	1,676,927
Goodwill	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Allowance for possible loan losses	0	0	0	0	0
Assets:	20,777,464	27,899,220	37,078,395	48,781,127	63,895,436
Policy reserves	16,192,440	20,269,530	24,452,594	28,752,438	33,174,570
Policy reserve	16,192,440	20,269,530	24,452,594	28,752,438	33,174,570
Bonds	2,357,727	1,701,003	1,029,502	342,893	0
Other liabilities	0	0	0	0	0
Liabilities:	18,550,167	21,970,532	25,482,096	29,095,331	33,174,570
Capital	50,000	50,000	50,000	50,000	50,000
Capital surplus	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Unappropriated surplus	1,177,297	4,878,687	10,546,299	18,635,796	29,670,866
Net assets:	2,227,297	5,928,687	11,596,299	19,685,796	30,720,866
	0	0	0	0	0

KPI / Main indexes

(As of the end of F.Y)

		6	7	8	9	10
Sales	No. of New policies	741,888	885,742	1,033,762	1,185,948	1,342,296
	No. of branches (at the end of FY)	390	460	530	600	670
	Monthly new policy target per one IO	170	175	180	185	190
	Average monthly premium (tk)	561	600	642	687	735
	Renewal rate at maturity	99.0%	99.0%	99.0%	99.0%	99.0%
Maintenance	Mandatory Surrender rate	3.0%	3.0%	3.0%	3.0%	3.0%
	Voluntary Surrender rate	1.0%	1.0%	1.0%	1.0%	1.0%
	Mortality rate	0.375%	0.375%	0.375%	0.375%	0.375%
	No. of Policy holdings	1,693,338	2,078,915	2,472,856	2,875,961	3,288,571
	No. of Policy holdings per one branch	4,342	4,519	4,666	4,793	4,908
Investment	Investment yield	8.48%	8.14%	8.30%	8.32%	8.24%
	Target liquidity rate	10.00%	10.00%	10.00%	10.00%	10.00%
	Actual liquidity rate	37.79%	42.07%	45.77%	48.97%	51.44%
Operation	No. of Insurance Officers (IO s)	390	460	530	600	670
	No. of staffs (Branch level)	58	71	80	88	102
	No. of staffs (Head office)	18	18	21	21	21
	Total staff	466	549	631	709	793
	Assumed inflation rate on increase of operating expenses	8.00%	8.00%	8.00%	8.00%	8.00%

f) Fundraising plan

Acquisition of an existing life insurance company is planned in order to get approval of life insurance business. Thus, UDDIPAN is currently leading to look for investor(s) while Fukoku would not be a project implementing body as well as taking a stake.

g) Schedule for the future project

First, discussions with possible investors, finalization of the business plan, due diligence of the acquired company, negotiation on terms and conditions with investors, etc would be carried out. Then, with prospects for business fund, acquisition of the company would be proceeded, and the business will commence.

10 Potential Collaboration with JICA

We are still in the stage of requiring further discussions to fulfill the requirements of micro-insurance business. That is, we are in the process of collection/analysis of quantitative data, recognition of current resources, and consideration of the strategy for the starting point. In this context, we still need further time for considering the business scale and business development/validation; thus, funding cooperation (e.g. maintenance of cooperative agricultural infrastructure for capacity building of coop) and technical cooperation can be considered as current potential collaboration with JICA.