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Project	IGP and HMF programmes
Topic	Impact study

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1 Executive summary

This impact study has tried to answer the following questions:

- Do Health mutual fund services improve the standard living level of the family when it is given additionally to a micro loan (through the Income generation programme)?
- What difference these additional services brings to a family? The study has been conducted in the NGO partner of Inter Aide Parvati Swayamrojgar over a sample of 285 persons with the methodology of one experimental group (IGP + HMF group) and one control group (IGP group).

We have randomly selected 2 comparable groups on 3 main criteria. We have not found socio economic difference between the 2 groups (and controlling for other factors such as the loan cycle or the HMF year), because there may not be any, or because the study still has some limitations (no real temporal dimension for instance).

We have found out that our two groups have:

- **similar accumulated saving amount** throughout the year,
- **Equivalent socio economic conditions** (we can't say that one group is richer or poorer that the other), related monthly per capita expenditure as well as food habits.

Furthermore, we have observed that there is **no disparity as regards as the health status between the 2 groups** given by the health score. At last, we have also noticed that our sample is particularly vulnerable since a substantial proportion of members declared suffering from diseases and/or being affected by accidents, and almost half of the sample has a tobacco addiction.

Beside those similarities among the groups, we found significant differences between the two groups on different dimensions. Those aspects indicate certain impact on a long run which shows that HMF programme may improve the economic stability and hence the long term socio economic conditions of the insured families. **But this trend still needs to be confirmed with a deeper longitudinal study over the time on several years.**

Being an insured member in addition of being a borrower made a difference in terms of:

- **Access to health care and health coverage:** The noteworthy findings relates to the fact that HMF reaches, in Parvati, population who actually needs insurance and health coverage. Indeed, it appears from the data that there are more members in IGP + HMF group who faced more incidences of illness and accident than the IGP group. This factual observation means that when a family has a lot of health problems, members opt for a health insurance and confirm the general truth that the insured have propensity to consume more health services. Furthermore, it also indicates some moral hazard in the selection of members but as 85% of total on going borrowers in Parvati takes HMF, there would still be some significant pooling of the risk. Hence, without deliberate strategy on selecting members, HMF reaches population who actually needs insurance and health coverage which is a positive achievement for the programme.
- **Economic stability in the family for insured members:** the members from IGP + HMF show less tendency in missing loan installment.
- **Higher awareness on the importance of health**: It seems that the consistent and regular awareness on importance of health for a family through dedicated field staff,

health camp, health talk, referral services, easier access to OPD doctors motivate the member to pay attention to their health by availing apropriate medical services

- **Impact on saving behaviour:** With equal saving capacity, the number of savers almost doubled in IGP + HMF group and the saving capacity of insured members increased by 60 %..The families can save a lot of money due to concessional treatment at network Health care provider which can spare with them a sufficient amount of money to be kept aside as saving. However, HMF programme is of course not the direct cause of a better management of family budget but awareness of health may create an indirect positive consequence on prioritization of expenses and saving discipline

- **Improvement of the health status of the family**: If the health score is similar for both groups, the number of HMF years has a positive and significant influence on the health status of the population which mean that HMF improves the health status of its population on a long term. Nevertheless, we know that there is always other biases and to be able to control them all, we should go even further in the statistical models. Furthermore, this positive impact should be put into the perspective of the limitation of the health indicator whose calculation still reflects limitations.

The second part of the study was dedicated to the qualitative analysis of the service through a satisfaction survey. This qualitative analysis may suffer from certain limitations: the interviewed partners may have given “expected” and “politically correct” answers, since they are all on-going borrowers or beneficiaries of the projects. Regarding IGP services, a majority of members expressed a degree of satisfaction. As long as HMF non financial services are concerned, on average 18 % of the members who declared falling sick have used the network service. From the data, OPD network doctor is the most used service. The referral service to network hospitals could be improved..

At last, we have taken the opportunity of this study to test the standard of living level tool currently used. We have built and tested a new tool on purpose for this study based on objectives factors such as fixed asset own by the family and the global housing conditions.

For 4 parameters out of 7 from the Standard of living level tool of Inter Aide, namely education, financial link (saving), food, health, we observed that the result are not precise enough. For those dimensions, the tool allocates in a very different way the population across the 7 poverty levels compared to the quintile allocation from the socio economic indicator built for the study. **This research is then an opportunity to revise the Inter Aide tool and simplify it to provide more accurate result in the future based on objective and measurable variables.**

2 Acknowledgment

We would like to thank all the persons who have contributed to this study :

- Parvati's partners for sharing information about them and their family and allowing us to proceed with questionaire.
- Parvati 's staff and director for their involvement during during field survey
- Josselin Thuillez for his consistent and professional technical guidance on methodology.
- Swabhimaan and Uplift health team staff for their additional input on field and technical knowledge on micro insurance and health mutual fund.

2.1 Summary table of the different numbers used

Number	Meaning
3636	Total on going members of PSW as of 29th february considered as the initial total population in the survey
2901	From total population of 3636, 2901 have access to IGP + HMF
650	From total population of 3636, 650 have access to IGP only
75	From total population of 3636, 75 have access to other health services
3551	Total population excluding the 75 persons who have access to other health services. The 3551 has been considered as the population to build the stratified random selection of the group.
451	Out of 3551, the total sample is 451 distributed into 2 groups of 232 (IGP + HMF) and (IGP only)
232	Out of the 2901, we have selected with a stratified random selection 232 persons to build the sample group of IGP + HMF to conduct the field investigation.
219	Out of 650, 219 persons have been selected with a stratified random selection to match the 232 of IGP + HMF
331	Out of the 451, 331 persons have been interviewed
285	Final number of sample partners interviewed and considered for the analysis (ID branch excluded).
123	Final sample number of partners for IGP group
162	Final sample number of partners for IGP + HMF group

2.2 Terminology

The followings terms/abbreviations will be used:

- CM - Collector Motivator, designing the loan officers of PSW
- DB- Dandekar Bridge branch of Parvati Swayamrojgar
- FLT - Financial Literacy Training
- Govt- Government
- HCP- Health Care Provider
- HMF- Health Mutual Fund (Micro insurance activities)
- IA- InterAide
- ID- Indira Nagar branch of Parvati Swayamrojgar
- IGP- Income Generation Programme (Microfinance activities)
- Impact Manager: Staff of Swabhimaan who looks after the Poverty Assessment Tool and research part of the project
- INR- Indian New Rupee
- JW- Janata Wasahat branch of Parvati Swayamrojgar
- KW- Kasewadi branch of Parvati Swayamrojgar
- LG- Lohiya Nagar branch of Parvati Swayamrojgar
- LPF- Loan Performer- Software used to manage loan data
- Max.- Maximum
- MFI - Micro Finance Institution
- Min.- Minimum
- MOU- Memorandom of Understanding
- NGO- Non Governmental Organization
- No.- Numbers
- OPD- Out Patient Department
- PAN Card- Permanent Account Number given by Income Tax Department in India
- Partners- to design PSW beneficiaries
- PCA- Principle Component Analysis
- PCE- Per Capita Expenditure
- PCI- Per Capita Income
- PSW - Parvati Swayamrojgar
- Rehab- Rehabilitation
- Rs- Rupees
- RT- RamTekadi branch of Parvati Swayamrojgar
- SHG- Self Help Groups

- SLL - Standard of Living Level (Derived from Poverty Assessment Tool)
- Std.Dev.- Standard Deviation
- Std.Err.- Standard Error
- UIA- Uplift India Association
- UID- Upper Indira Nagar branch of Parvati Swayamrojgar

About terminology used about Middle class and Upper middle class :

Throughout the report, we are using the words Middle class and upper middle class. This terminology can be confusing as we are not taking into account the middle class in the general use of the term, which refers to well off families.
Hence, it is worth recalling the context : we are considering here population living in slums, we are considering middle class and upper middle class population leaving in slum community.

The word **community** is also frequently used in this report. It refers to the population leaving in a slum.

3 Introduction and methodology

3.1 Context of intervention of Inter Aide in Pune

Inter Aide has started its intervention in Pune since 2000 through the technical support team call Swabhimaan. In 2008, Swabhimaan provides technical support to 3 NGOs in microfinance programme in Pune.

In december 2004, Uplift India Association (UIA) was created and gather 9 NGOs. Uplift India Association hosts the HMF programe. UIA provides technical support to implement HMF programme to a total of 4 NGO, 2 being in Pune.

3.2 Context of the 2 programmes launched in the NGO Parvati

Parvati Swayamrojgar (referred as to PSW in the rest of the document) was established and registered under the company's Act 1956 in September 2002 with the vision to improve the standard of living of urban slum dwellers in Pune city.

"Swayamrojgar" means self- employment. The NGO aims to provide access to financial services to the poor to make them self-reliant so that they can meet their basic consumption needs, build assets and engage in activities leading to income generation. When poor people have access to financial services, like micro credit and micro savings (together termed as microfinance) they can earn more, build their assets, and cushion themselves against external shocks. It is expected that, poor households can use microfinance to move from everyday survival to planning for the future: they can invest in better nutrition, housing, health, and education.

A micro-insurance program started in November 2002, soon after the micro-finance activities had been launched.

3.3 The Income Generation Programme (IGP)

Income Generation Programme (IGP) is an alternative term used for microfinance programme. It aims at providing financial leverage for the partner through micro credit for the creation or expansion of small informal businesses.

Many of the urban and rural poor do not have access to regular, reliable and friendly financial services. Often, they have to rely on the informal financial sector or on charity. Neither of these enables building capacity to cross the poverty line.

- **Micro credit**: Parvati provides micro credit to facilitate easy access to credit. The loan size varies from 2, 000 to 40, 000 Indian roopies[1] The loan is given for 5 main purposes:
  1. To start or expand a business
  2. For children's education
  3. Home repairs
  4. Home appliances

[1] The loan policy since january 2009 has changed. The highest loan to be disbursed is now 25 000 Rs.

5. Repayment of old debt (in minority, not disbursed any more in 2008)

The organization does not work for any specific community or any political party. There is no discrimination on the grounds of caste or gender. Few documents are required to avail the loan.

- **Micro Savings:** The NGO also includes in its financial services micro-savings to encourage people to save money for planned expenditures such as festivals, marriage, etc. The habit of saving is not so evident in poor urban communities. Therefore Parvati Swayamrojgar introduced a compulsory saving product as a mandatory component before taking any loan, in order to build up the financial capacity of the family. It also plays an important role in terms of collateral for the loan guarantee.

  A voluntary saving product is also possible for those who want to continue to make savings after completion of their loan period.

  However, Income is not the only mean of attaining the better livelihoods. Therefore NGO provides non-financial services to build the capacity and sustainability of the poor.

- **Business Development Services:** An important feature of this programme is Business development services, which includes difference modules of financial literacy training (FLT) and job placement.

  FLT –I: Although opportunities are made available to generate income, household income is sometimes not properly managed due to cultural practices, traditions, superstitions, lack of knowledge, etc. In order to increase the family awareness about the family budget management, Financial Literacy Training modules (FLT-I) have been designed. Attendance to this training is made compulsory before the disbursement of the loan. During the training, guidance is given regarding monthly income expenditure, priority list of expenses, planning for necessary and unnecessary expenditures.

  After the successful implementation of this first module, the organization has implemented the second module in 2008 on financial planning (FLT II).

  FLT – II: People rarely do the short term and long term planning of their goals. They live in present time and future is never thought of. As they are poor they feel that saving is not possible with their meagre earnings.

  Therefore the Financial planning training is a tool to prepare them for planning their goals and helping to constructively save money to achieve those goals.

3.4 The concept of Health Mutual Fund (HMF)

According to the World Health Organisation (WHO), annually 25 % of the Indian families facing a hospitalization slip below the poverty line because of high medical expenses.

Hence, health problems may be one of the major explanations for micro businesses bankruptcy and destabilized economic situation of poor families. Some of the major problems faced by poor households during a health crisis are as follow:

- High Cost treatment
- Inadequate savings
- No available guidance
- Borrowing with High interest rates
- Huge financial loss if an earning member of the family is (temporarily or not) disabled
- Sale of assets for paying hospital bills

With "Health in Our Hands" as an underlying principle, the Community Based Health Mutual Fund (CBHMF) is a health care financing tool that uses the principle of Solidarity to bring people together to collectively achieve financial access to quality health care using the option of mutual funds. The idea being that such a financing arrangement is created through mutual contribution that people can avoid or reduce their expenditures on health services at their time of use.

Mutual fund and particularly a **community-based** mutual fund provides slum dwellers with such a health micro insurance option whereby it's possible for people to come together and become responsible for their health and health care.

Parvati Swayamrojgar offers following services to help the poor to manage their unplanned health expenditures.

- **Referral Service** – With the support from Uplift India Association, Parvati has access to 146 health care providers. It includes primary ,secondary and tertiary level reputed hospitals, specialist doctors, OPDs, medical stores, investigation centres, laboratories etc. Every member of the Health Mutual Fund gets an identity card on which the member gets a concessional rate / price on the treatment in network hospitals.
- **Guidance**: providing health consciousness and health education. It includes organizing regular health camps and health talks for members. Also a 24X7 helpline is available in case of emergencies.
- **Mutual fund** – Hospitalization expenses are refunded as per the norms set by the members through Health Mutual fund.

Thus the organization has integrated financial services with non financial services. The services are optional for the partners, meaning they can opt for the services which they like.

3.5 Objective of study and methodology

3.5.1 Main objective

The main objective of this study is to analyse the « Impact of HMF on standard of living level: Do HMF services improve the standard living level of a family when the services are given additionally to a micro loan ? ».

3.5.2 Secondary objective

A secondary objective of the study is to analyse the general satisfaction of loanees (i.e. beneficiaries of loans) regarding Parvati and HMF members' satisfaction regarding HMF non financial services.

3.5.3 Type of study – Methodology

This study is an impact study.With all due precautions, it is important to note that any statistical study of this type cannot provide exact and categorical answers of 'yes/ no' type. However, we will be able to provide results per group with certain level of certainty for the results we will get. Moreover, to go further in the analysis and the treatment of biases, we should either use experimental procedures (randomizations) or use complex econometrical techniques which are not the objective of this survey.

The complementary satisfaction survey does not aim at measuring the impact of the projects. It is only a simple satisfaction questionnaire which allows us to have only the opinion of the members on the services provided by Parvati in microfinance and health mutual fund.

Similarly to a public opinion poll, it is an assessment report at a given point in time. Furthermore, the satisfaction questionnaire always includes a certain number of biases, particularly in this case. Even if the investigators were 'outsiders' (they had no link with any project or activity, and were recruited for the sole purpose of the study) , and the question have been defined taking into consideration those aspects, a tendency towards positive opinion is expected. Indeed, the partners who have been consulted / interviewed for the study are on-going members or beneficiaries of the projects.

3.5.4 Methodology to answer the main objective

The methodology used here is a cross study "experimental group / control group" based on the comparison on different individuals. The analysis of the average difference between the 2 groups allows us to draw conclusions in terms of impact of an intervention on the variable of interest. However, the conclusions and interpretations depends on the quality of selection of the group and the integrity of the tool used or variable of interest (in this case, the evaluation of the "standard of living level").

The intervention is here defined as the addition of micro insurance health services to financial services of microfinance to the members of the NGO Parvati. Some members have benefited from this intervention or "treatment" and other have not, therefore, a study such as experimental group / control group is hence possible and suitable.

Because of time constraints, it was not possible to conduct a longitudinal study (i.e. follow up of individuals over the time and track evolutions). The priority was therefore given to a transversal approach. Nevertheless, we do believe that this study can be helpful as a benchmark study for a deeper longitudinal study in the future (such as the study conducted in Madagascar with Inter Aide partner NGO CEFOR, in 2005 and 2006) where the same group has been studied and followed up. We do recommend deepening this survey in a longer period.

The difficulties of implementation and analysis of this type of study are mainly linked with the possible initial difference between the 2 compared population "experimental group / control group" in terms of level of risks. We mean to say by level of risk all the factors identified or not, others than the access to micro insurance and other than our main variable of interest (explaining the standard of living by the standard of living would make no sense) which would have an impact on the socio economic conditions of the household. Those factors must be globally similar in the 2 defined groups.

The different possibilities to overcome those difficulties are the common methods used in the evaluation of public policy: matching, stratification, adjustment done on confusion factor at the time of analysis…. The control group must be as similar as possible from the experimental group for the risk factors.

In addition to those theoretical difficulties, will add up contextual difficulties peculiar to our field situation and our objective, i.e.:

1- Availability of reliable data (particularly a complete poll database)

2- The allotment of beneficiaries among 2 defined group (beyond our control and non homogenous) which will condition the size of our sample group and the method of selection

3- the meaning given by Inter Aide / Uplift to the "socio economic" or " standard of living level" which includes very different topics such as health or education.

4- The initial assumption. It is obviously very difficult to control all the factors which can interfere in the relation we are studying due to the relation itself studied as well as the lack of historical data.

3.5.5 Methodology to answer the secondary objective: satisfaction study

In order to test the partner's satisfaction on the services provided by Parvati, a focus was put on qualitative aspects through a satisfaction study on the 2 groups randomly selected.

3.5.6 Nature of study

This study is both a quantitative and qualitative study. It is based on the administration of one questionnaire given in annexure, and which includes 2 parts: quantitative sections with mainly close-ended questions and a qualitative section with open-ended questions.

3.5.7 Data collection

3.5.7.1 Straw poll database

The straw poll database which has been used to select the sample group has been created by Anuprita Dixit (impact and research coordinator within the technical support team Swabhimaan) and Delphine Chouvet (Inter Aide programme manager for Microfinance programme). After identifying which data would be necessary to conduct this study, data have been collected from 2 main sources: the micro insurance software Syslift developped by the indian IT Company Tieto Enator and the loan software LPF (Loan Performer) of the NGO Parvati.

Considering the importance of having at least one control group, the NGO Parvati has been selected to conduct this study. Indeed, it is possible to find beneficiaries who have only accessed microfinance services in Parvati whereas it was not possible for other network NGO because the micro insurance service is compulsory (i.e. automatically linked to the disbursement of a micro-loan).

The straw poll database used for the selection of the group includes all the on going members as of 29th February 2008 in Loan performer, who got at least one loan since January 2006, date from which we have reliable data. Indeed, old cases before 1st january 2006 in loan perfomer were pending from migration from the previous software which we prefer not to include.

We have cross checked this list of beneficiaries with Syslift software in order to get our 2 main lists: clients who got only access to a micro loan (called 'IGP group', for 'Income generation programme'), clients who got one or more loan as well as an insurance policy for the family (called in the study 'IGP +HMF group', for 'Health Mutual Fund').

We have looked for on going insured clients who have renewed their insurance policy on 1st April 2007. 1st of april has been taken as an arbitrary date. In order to avoid probable errors, we have also searched out those names in the list of non active members of the previous year, i.e. from 1st April 2006. However, HMF members, whose HMF policy got over before 2007 and was not renewed have not been considered in IGP + HMF group as we consider that the period from which they could have received benefits is too far in time.

In order to exclude from the sample groups the clients being insured by other means (susbcription to other insurance policies for example), we have also cross checked this list with the field staff, who knows the families well. A third list has then been established from the data collected from the branches: all the beneficiaries having an insurance policy other than the Uplift health one.

A descriptive analysis of thisdata base has been done according to the available variables. It is presented in part 3.8 of this report. We have kept all the loanee in the data base irrespective of the loan cycle.

3.5.7.2 Data collected from field

The majority of data, in addition to the data from LPF software database, is coming from the questionnaire filled by a team of investigators hired externally for a period of one month (June 2008).

The team of investigators has been trained and supervised by Anuprita Dixit and the microfinance programme manager.

The questionnaire has been built using different sources:

- Other existing models (Demographic and Health Surveys, CEFOR, Uplift Manila, Micro Insurance Capitalisation Report, Spandana study)

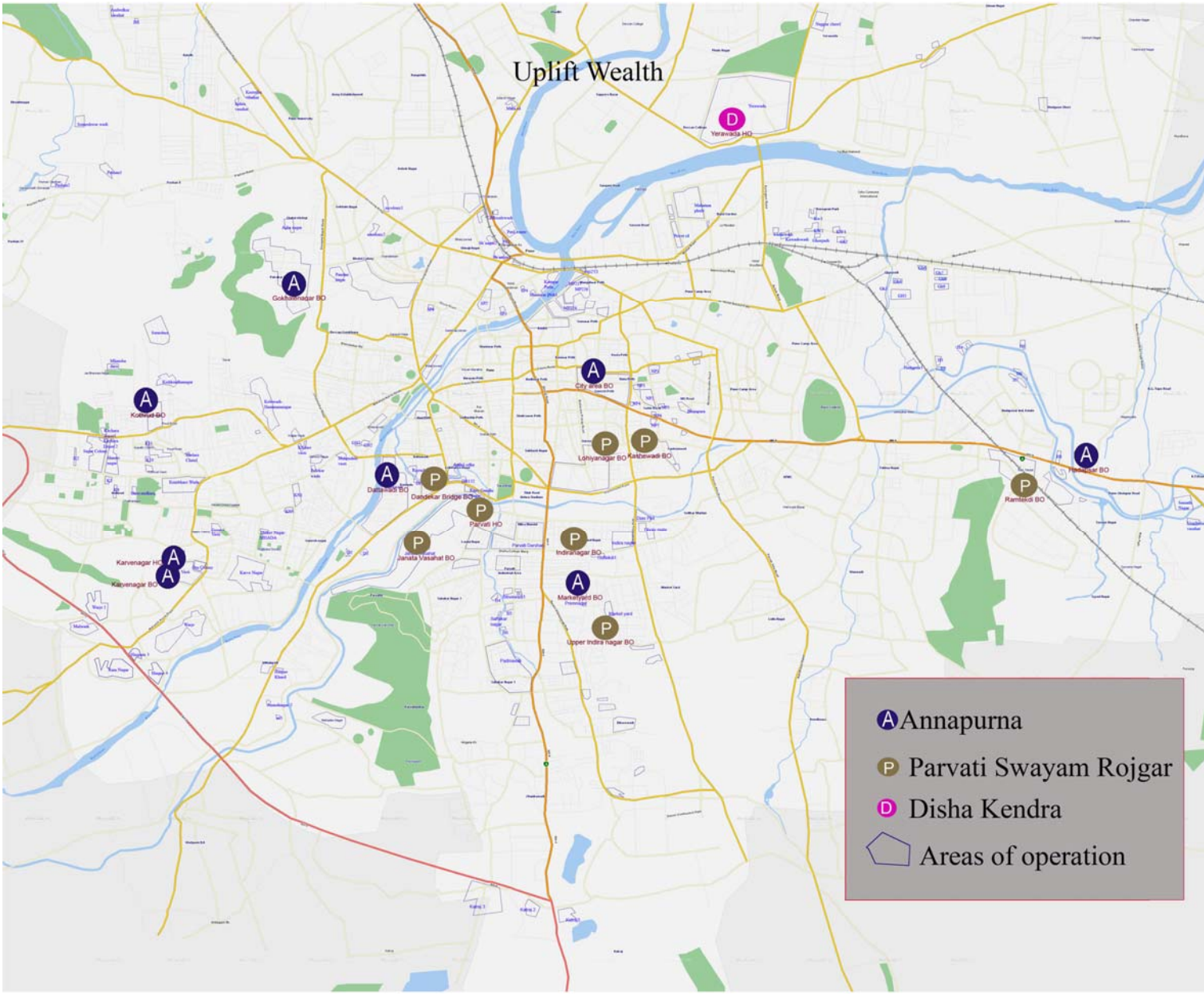
- Different levels of cross checking (external advices and feedback from field testing mainly)

3.6 Study setting

The data has been collected from the 7 branches of the NGO, across the city of Pune:

1. Janata Wasahat
2. Dandekar bridge
3. Indiranagar
4. Kasewadi
5. Lohiyanagar
6. Ramtekdi
7. Upper Indiranagar

Picture 1: Parvati's branches across the city of Pune


Uplift Wealth
Annapurna
Parvati Swayam Rojgar
Disha Kendra
Areas of operation

3.6.1 Definition and group selection

3.6.1.1 Group selection

Two groups have been defined to conduct the study. Ideally, it would have been better to take a third group who would have been a second control group and external to all type of activities run by Parvati. This option has been rejected mainly due to time and organisational constraints. It was also very difficult to find available information on such a population to build a reliable straw poll and match it with the other 2 groups.

The total population is 3636 persons. Those 3636 includes the total numbers of partners recorded in LPF in PSW as of 29th february 2008, having a loan since 1st january 2006 (excluding the very old cases of 2005).

2901 persons (80%) have access to IGP + HMF, 75 (2%) have access to micro health insurance other than Uplift health on top of financial services IGP, 650 (18%) have access only to IGP. The 75 persons who have access to other health services have been excluded at the time of group selection in order to avoid bias results, which give a total population of 3551.

Table 1 : Distribution of total population group and branch wise

Branch	Total Population			HMF + IGP Group			IGP Only Group		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.	Freq.	Percent	Cum.
DB Dandekar Bridge	601	16.92	16.92	424	14.62	14.62	177	27.23	27.23
ID Indira Nagar	496	13.97	30.89	420	14.48	29.09	76	11.69	38.92
JW Janata Vasahat	560	15.77	46.66	505	17.41	46.50	55	8.46	47.38
KW Kashewadi	443	12.48	59.14	333	11.48	57.98	110	16.92	64.31
LG Lohia Nagar	580	16.33	75.47	420	14.48	72.46	160	24.62	88.92
RT Ramtekdi	457	12.87	88.34	411	14.17	86.63	46	7.08	96.00
UP Upper Indira Nagar	414	11.66	100.00	388	13.37	100.00	26	4.00	100.00
Total	3,551	100.00		2,901	100.00		650	100.00	

Table 2 Distribution of total population group and gender wise

Sex	Total Population			HMF + IGP Group			IGP Only Group		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.	Freq.	Percent	Cum.
Female	2,600	73.22	73.22	2,155	74.28	74.28	445	68.46	68.46
Male	951	26.78	100.00	746	25.72	100.00	205	31.54	100.00
Total	3,551	100.00		2,901	100.00		650	100.00	

Table 3 Distribution of total population group and cycle wise

Loan Cycle	Total Population			HMF + IGP Group			IGP Only Group		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.	Freq.	Percent	Cum.
1	1,326	37.34	37.34	1,021	35.19	35.19	305	46.92	46.92
2	1,011	28.47	65.81	844	29.09	64.29	167	25.69	72.62
3	629	17.71	83.53	537	18.51	82.80	92	14.15	86.77
4	312	8.79	92.31	260	8.96	91.76	52	8.00	94.77
5	199	5.60	97.92	173	5.96	97.72	26	4.00	98.77
6	64	1.80	99.72	58	2.00	99.72	6	0.92	99.69
7	7	0.20	99.92	6	0.21	99.93	1	0.15	99.85
8	3	0.08	100.00	2	0.07	100.00	1	0.15	100.00
Total	3,551	100.00		2,901	100.00		650	100.00	

In total, the group selection represents 451 persons distributed among the 2 groups :

3.6.1.2 IGP + HMF group

1. Size and definition of the group population : 2901 persons have access to IGP + HMF services
2. Selection method: Stratified random selection of 232 persons according to several criteria (branch, loan cycle and gender) to respect the structure of the population, so be 51.4.%. Those criteria have been considered as strata since they allow us to group in an homogeneous manner the population.
3. The geographical criteria correspond to a social reality which allows us to select similar control group for the risk factor mentioned above. The precise answer rate was not known from the partners in advance. Nevertheless, we have voluntarily chosen a larger group in case members would refuse to answer.
4. The selected sample is then representative of the population who got at least one insurance policy complementary to an access to credit

3.6.1.3 IGP group

1. Size and definition of the group population : 650 persons who never had access to any health insurance service
2. Selection method: Random selection of 219 persons matching the 232 persons of IGP + HMF group, so be 48.6%. It was not possible to find 232 persons with exactly the same criteria or similar profile, due to the population distribution, hence this small gap (13 persons less than in the IGP group).
3. The sample structure built is then comparable to IGP + HMF for the different criteria selected as the chi2 test is showing below, which allow us to carry on and answer our main question

Table 4 : Distribution of straw poll population group and branch wise

Branch	Random HMF + IGP Group			Random IGP Only Group		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.
DB Dandekar Bridge	33	14.22	14.22	33	15.07	15.07
ID Indira Nagar	35	15.09	29.31	33	15.07	30.14
JW Janata Vasahat	40	17.24	46.55	39	17.81	47.95
KW Kashewadi	27	11.64	58.19	27	12.33	60.27
LG Lohia Nagar	33	14.22	72.41	33	15.07	75.34
RT Ramtekdi	32	13.79	86.21	28	12.79	88.13
Upper Indira Nagar	32	13.79	100.00	26	11.87	100.00
Total	232	100.00		219	100.00	

Chi2 Test 0.5846 *p.value* *0.997*

Table 5 : Distribution of straw poll population group and gender wise

Sex	Random HMF + IGP Group			Random IGP Only Group		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.
Female	174	75.00	75.00	165	75.34	75.34
Male	58	25.00	100.00	54	24.66	100.00
Total	232	100.00		219	100.00	

Chi2 Test 0.0071 *p.value 0.933*

Table 6 : Distribution of straw poll population group and loan cycle wise

Loan Cycle	Random HMF + IGP Group			Random IGP Only Group		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.
1	83	35.78	35.78	80	36.53	36.53
2	68	29.31	65.09	65	29.68	66.21
3	44	18.97	84.05	42	19.18	85.39
4	21	9.05	93.10	19	8.68	94.06
5	14	6.03	99.14	12	5.48	99.54
6	2	0.86	100.00	1	0.46	100.00
Total	232	100.00		219	100.00	

Chi2 Test 0.3822 *p.value 0.996*

3.6.1.4 Questionnaire

The full questionnaire is presented in annexe 7.2

Here are the main different areas of enquiry of the survey:

1. Age, sex, education, occupation
2. Per capita income
3. Loan details (Loan amount, disbursement date, loan cycle no., missed loan instalments, reasons for the same)
4. HMF history- HMF enrolment dates, period, renewals, claim history
5. Health, hygiene, food and addictions data
6. Housing and Assets
7. Education and Documentation
8. Expenditure pattern
9. Financial Links
10. Utilization and Satisfaction about HMF services
11. Assessment of Standard of Living Level

3.6.2 Cross checking / validation of data after field survey

Each questionnaire has been reread a first time on the field by the investigator every day after the survey and validated by the coordinator of the study the latest the day after. The data have then been encoded by 2 external encoders on Sphinx (data analysis software).

After the encoding, the data have been controlled, validated and if needed corrected by the coordinator (Anuprita Dixit). The validation mainly consisted in:

- Analysis of atypical data (outlier, aberrant value linked or isolated)
- Catching non answer
- Calculation of socio economic indicator (presented later in the study)
- Identity of respondents has been deleted before the analysis for ethical reasons and data confidentiality.

3.6.3 Comparability of the group after field survey

In total, 331 persons have been interviewed. Two main difficulties have occurred resulting into not ending exactly with the pre defined groups:

- The answer rate has not reached 100%
- Some members considered has IGP only in our straw poll database in fact belonged to IGP + HMF. This is due to a low quality of information available to create the straw poll which is prejudicial to the group selection. Moreover, 5 months passed between the setting up of the data base and the field survey.

In total, out of 331 surveyed partners, 16.3% had to be switched to a different group, the initial assumption about their IGP or HMF status being mistaken. Out of this, 30 partners were moved from IGP to IGP+HMF group and 24 partners were changed from IGP+HMF to IGP group.

Due to very low response in ID branch for IGP group and for the group to remain comparable according to our 3 criteria, we had to exclude from the analysis ID branch which reduce the final sample to 285 persons.

Therefore finally the survey covers 39.8% partners from only IGP (123 families) and 60.1% partners from IGP + HMF group (162 families).

Nevertheless, a complementary analysis on the initial 331 interviewed persons has been done, including ID branch to compare the result. Main results are not modified once the ID branch is excluded. The analysis without ID Indira Nagar branch remains the most reliable one in the comparison between the 2 groups and it is the one presented in this report.

Table 7 : Distribution of sample population group and branch wise

Branch	Random HMF + IGP Group			Random IGP Only Group		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.
DB Dandekar Bridge	33	20.37	20.37	21	17.07	17.07
JW Janata Vasahat	35	21.60	41.98	19	15.45	32.52
KW Kashewadi	15	9.26	51.23	24	19.51	52.03
LG Lohia Nagar	25	15.43	66.67	21	17.07	69.11
RT Ramtekdi	29	17.90	84.57	24	19.51	88.62
Upper Indira Nagar	25	15.43	100.00	14	11.38	100.00
Total	162	100.00		123	100.00	

Chi2 Test 8.2236 *p.value 0.144*

[0]

Table 8 : Distribution of sample population group and gender wise

Sex	Random HMF + IGP Group			Random IGP Only Group		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.
Female	120	74.07	74.07	97	78.86	78.86
Male	42	25.93	100.00	26	21.14	100.00
Total	162	100.00		123	100.00	

Chi2 Test 0.8822 *p.value 0.348*

Table 9 : Distribution of sample population group and loan cycle wise

Loan Cycle	Random HMF + IGP Group			Random IGP Only Group		
	Freq.	Percent	Cum.	Freq.	Percent	Cum.
1	45	27.78	27.78	41	33.33	33.33
2	53	32.72	60.49	39	31.71	65.04
3	40	24.69	85.19	21	17.07	82.11
4	13	8.02	93.21	15	12.20	94.31
5	8	4.94	98.15	7	5.69	100.00
6	3	1.85	100.00			
Total	162	100.00		123	100.00	

Chi2 Test 6.2237 *p.value 0.285*

3.6.4 Data analysis

The quantitative data have been analysed according to different criteria on the software Stata and Sphynx by the survey coordinator and the technical advisor thanks to cross sorting, correlation analysis, tables of average, common statistical test and variance and covariance analysis (ANOVA).

3.6.5 Summary of the main limitations and difficulties faced

We have listed below the main difficulties faced during the data collection and administration of the questionnaire.

- Delay in setting up the straw poll due to practical difficulties
- Quality in straw poll database: the bad quality of data available to implement the straw poll resulted into errors in the final database (persons from IGP group were in fact from IGP + HMF group and vice versa).
- The precise answer ratio was not known in advance
- The information available prevents us from going back in the time on historical data mainly due to the impossibility to exploit data from Uimpact software (Software developed to measure impact of services on the families who received Uplift service). The data already encoded in this software were either incomplete or not available.
- The problem of measuring the standard of living level. This notion is very wide and brings in several aspects which should be analysed separately to obtain more precise result and better efficiency in the sampling. Inter Aide should be more precise in the definition of its objectives for the impact study, in the setting up of such indicator (particularly in a socio economic indicator more reliable and tested on the field, as the indicator is controversial).
- Impossibility to select a control group external to all activity of Parvati.

3.7 Definition of tools used

3.7.1 Utilization of the Standard of Living Level of Inter Aide

It has always been a key point of Inter Aide strategy to measure the poverty level of the families being served. The poverty assessment form build and used by the NGO partners of Inter Aide is presented in annexe 7.2

Each family who joins the program is interviewed by the loan officer at the same time of the loan disbursement in order to measure and know their poverty level before intervention. Thereafter, the assessment is repeated at each renewal of the loan cycle (i.e. every year), with the purpose of recording and studying potential changes in the family standard of living.

The poverty assessment form and its derivate Standard of Living Level (SLL) has been the main measurable tool of the Impact study. It has been used in the field since 1st April 2006 and encoded since July 2006 for all network of NGO in Pune and Mumbai running IGP programme. It is derived from seven indicators, which have been identified as the major components of living standards in the local Indian context.

3.7.2 Seven main indicators …

The 7 indicators which sets out the poverty assessment form are the followings: Refer to each specific section of this report where the criterion for grading the indicator is explained in details.

1. **Food:** assessment of regularity, balance and variety in the diet.
2. **Health:** assessment of frequency of illnesses, aptitude to seek treatment and awareness about health services among family members.

3. **Housing:** description of housing structure and availability of housing services (electricity, water and sanitation).
4. **Education of the children:** assessment of school attendance and progress for children of the family aged between 3 to 15 years (period of compulsory education in India)
5. **Documents available with the family:** description of the documentation available in the family among documents usually considered as important as per Indian systems (birth certificate of the children, Ration card, Election card and PAN card[2]).
6. **Economic activity of the family:** description of the number of eligible working members of the family and assessment of the stability and security of occupation and income.
7. **Financial Links of the family.** Assessment of the debt and saving of the family available in case of emergency.

3.7.3 … To calculate 7 levels of standard of living levels (SLL)

As a vast variety of standards of living and income can be found in the slums of Pune, the scoring system intends to categorise the population into 7 major standard of living levels (SLL).

A detailed grading system has been developed to help the surveyor in assessing the living standard of each partner by measuring the 7 indicators above.

Each of these indicators is graded into 4 categories and scored from 1 to 4, 1 being the lowest score and 4 the maximum.

All the families from SLL 3 and below are considered as Below Poverty Line (BPL) families. SLL 4 and 5 is middle class and 6 and 7 can be considered as upper middle class families.

3.7.4 Constraints and limitations of the Inter Aide SLL tool

The indicator used by Inter Aide NGO partner in India is called “SLL score”. This indicator takes into consideration different dimension of the social and econonomic level of the partners. The basic principal of this indicator is rather interesting. However, it presents several drawbacks and that is why we have built another indicator which is presented further in this report:

1. It has been controversial on the field and no reliable study has been able to demonstrate that it really reflects the standard living level of the population.
2. Each sub- category of the SLL score (Food, Health, Housing, Education, Documentation, Economic activity, Financial links) is sometimes built on an arbitrary way. For instance, the score 2 of health parameter stand for: « frequent irregularly treated ailment or treated but frequent illness or chronic ailments irregularly treated » which seems fairly vague. Another example: in the food parameter, score 3 stands for « Assured and balanced meals, but not diversified ». We do not know on which criteria to consider that somebody in a slum in India has a diversified diet or not (and a medical advice, has *a priori* not been taken but it is the coordinator in charge of the indicator who define if the meal is balanced or not). We do not know either to what degree the meal is balanced.

[2] Permanent Account Number (PAN) is a ten-digit alphanumeric number, issued by the Income Tax Department. All Income Tax payers must possess this card

3. The final indicator is a mix of very different dimensions without, at least, standardising the scores.
4. The final indicator is a simple average which is a succinct summary which does not allow us for example to separate the person who would have an average score for all parameters from the person who would have a very good score in some parameters and a very bad score in others dimensions. In other words, all categories are given an equal weight in defining the SLL, whereas to reflect the reality a weightage system shoul be thought of.

3.7.5 Utilization of other indicator to measure poverty

Considering the limitations of SLL Inter Aide tool explained above, and to slim down the analysis, we propose to use other types of indicators.

WHY?

The study which tries to analyse income disparity often use the routine expenses as a measure of the income on the long run. We have collected this type of information in the questionnaire (section IIE2 of the questionnaire).

Nevertheless, the data is often subjective: the person can lie or incorrectly assess their expenses, most of the time; they do not make a regular and strict accounting of their expenses …

The utilization of indicators based on fixed asset (television, radio, sofa, fridge for example) own by the household as well as the basic living conditions (owning of private toilet, access to drinking water) and basic housing conditions (materials used for the roof, for the flooring for example) are more and more considered as reflecting the socio economic level as well as the income in the long run for such type of population. Many studies[3] have shown that in concrete cases that a synthetic indicator based on those variables allow a better allocation of people according their socio economic level.

3.7.5.1 Utilization of socio economic indicator based on asset and living conditions

The principal component analysis method (PCA) on those variables allows to build such an indicator.

Setting up of the indicator:

Without going into the detail, the principal component analysis method looks for an "automatic" research of the best series/suite of the "best synthetic variables" called principal component. The first principal component used here is a synthetic variable (like an average), linear combination of all the other variables we are interested in to build this socio economic indicator (here, variables of owning asset, status of the house). We consider that a variable is a trustworthy summary if it is linked with each of the other variables. We use here standardised variables (in order to avoid problem such as measurement unit), the criteria used here is that the square sum of the correlation of the principal component with all the variables included in the analysis is maximum. The measure of the relationship used in PCA method is then the coefficient of correlation. The sign should not interfere; we hence take the square to simplify the calculations.

[3] See Filmer and Pritchett (2001) or all the Demographic and Health Surveys for instance

Interpretation:

A partner who has a high value for the first principal component can globally be considered as belonging to upper middle class. A person who has a low value can be considered as poor.

Creation of quintiles or socio economic level:

In order to allot the people from poor category to upper middle class category, we have divided the 331 interviewed persons into 5 equal groups of 66 persons or quintile from poorest to upper class according to the socio economic score built for the study. We can either use directly the « Socioeconomic Score » or use this quintile distribution that we will name in the report socioeconomic quintile.

Selection of variables to include for the analysis:

The variables included in the analysis are selected according to their descriptive statistics (average, standard deviation, relation with other variables through coefficient of correlation) and on the fact that they reflect a certain socioeconomic reality.

For example, it is obvious that if everybody has house roof in tale, including this variable into the analysis will not make any difference since it does not help to distinguish the different individuals. We have to choose variables which seem to be the most relevant and allowing dissociating individuals.

The table given below provides a summary of the 24 variables used to build such an indicator as well as the average of those variables for the poorest and richest quintile. The average of the variables taking only the value 0 and 1 can be considered as percentage. For example, 0% of the poorest have a fridge whereas 62 % of the richest have one. The quintiles are those built from the « Socioeconomic score ».

We can see that the indicator allow to allot properly the population according to those variables.

Table 10 : Variables used to create socio economic indicator and socio economic quintile

	All Households				Means	
	Means	*SD*	*min*	*max*	*Poorest Quintile*	*Richest Quintile*
Variables used for Socioeconomic score:						
House characteristics:						
House is own house with legal title	0.8640483	0.3432561	0	1	0.7727273	0.9104478
Roof is slab	0.1329305	0.3400136	0	1	0	0.358209
Floor is made of cement or tile	0.8308157	0.3754822	0	1	0.530303	0.9701493
Wall is made of cement or bricks	0.9456193	0.2271106	0	1	0.7727273	0.9850746
Number of rooms	1.679758	0.8911252	1	6	1.121212	2.597015
Number of Houses	.9577039	0.3869377	0	3	0.8484848	1.029851
Electricity - Household own a meter	.7160121	0.4516137	0	1	0.3787879	0.9253731
Basic life conditions						
Household use Private Toilet	0.1903323	0.3931576	0	1	0	0.5522388
Source of Water is Private Tap	0.7643505	0.4250466	0	1	0.4545455	0.9552239
Drinking Water is kept separately	0.939577	0.2386296	0	1	0.8484848	0.9850746
Drinking Water is kept on height	0.8187311	0.3858241	0	1	0.6666667	0.9552239
Drinking Water is purify before use	0.5528701	0.4979497	0	1	0.3787879	0.6865672
Assets owned by the household:						
Bed	0.8096677	0.536569	0	3	0.530303	1.074627
Table/Chair	1.07855	1.97711	0	15	0.0606061	2.507463
Gas/Strove	1.625378	0.7737097	0	4	1.075758	2.059701
Cupboard	0.7854985	0.5973943	0	4	0.2727273	1.298507
Sofa	0.081571	0.2954072	0	2	0	0.3134328
TV	0.8912387	0.3213824	0	2	0.5454545	1.014925
Fridge	0.1873112	0.3907518	0	1	0	0.6268657
LPG cylinder	0.8731118	0.6388216	0	4	0.3030303	1.462687
Bicycle	0.4410876	0.5710204	0	3	0.3939394	0.5373134
Bike	0.2990937	0.5542938	0	4	0.0151515	0.8059701
Car/Rickshaw/Tempo	0.1510574	0.4487259	0	4	0.030303	0.3731343
Land	0.163142	0.3700546	0	1	0.1060606	0.2835821
Socio-economic Score	0	2.039323	-5.120	7.983	-2.682893	2.936464

3.7.5.2 Utilization of other socio economic indicator: SLL standardised

In order to slim down the analysis, we will use the average of the standardised score of the different parameter of the SLL Inter Aide tool. We will call this average **SLL-Standardised.**

3.7.5.3 Utilization of other socio economic indicator: SLL PCA and SLL PCA quintile

Secondly, we can narrow down even more the analysis by making a principal component of the different score. We will call this new indicator **SLL-PCA.** We have also built quintile as done previously and called **SLL PCA quintile** and then SLL_ poor to SLL_ Upper middle class. Building those new indicators will not rub out the problems described in section 3.7.4 of the report which are inherent to Inter Aide SLL tool and the arbitrary questions of the poverty assessment form. We have to be careful in the interpretation of those variables and in their comparison as the scale of each indicator is different (refer to table below).

Table 11 : Descriptive statistics of the 4 socio economic indicators

	Mean	SD	Min	Max
Final SLL	4.613293	0.9285073	2	7
SLL standardized	0	0.5271669	-1.369	1.558
SLL PCA	0	1.406188	-3.631	4.074
Socio-economic Score	0	2.039323	-5.120	7.983

Table 12 : Correlation coefficients Matrix between indicators

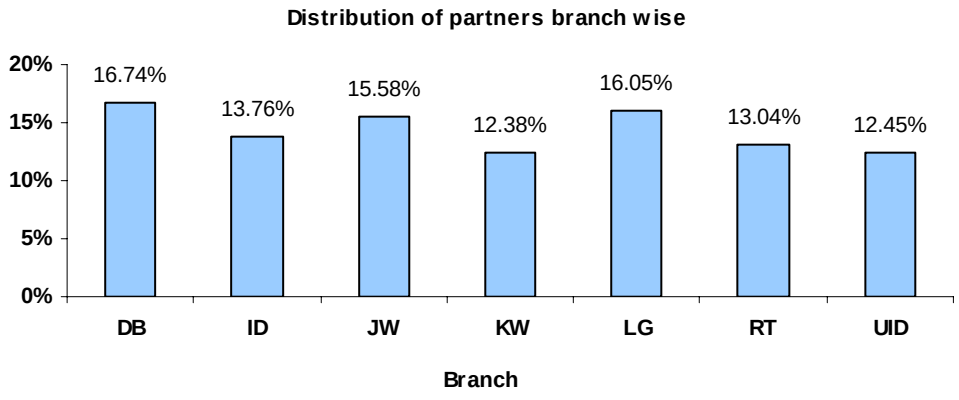
	Socio-economic Score	Final SLL	SLL standardized	SLL PCA
Socio-economic Score	1.0000			
Final SLL	0.4316	1.0000		
SLL standardized	0.4676	0.9459	1.0000	
SLL PCA	0.4780	0.9320	0.9924	1.0000

We will then be able to compare other variables according to the original "SLL Inter Aide", the « SLL-Standardised », the « SLL-PCA », then with the « Socioeconomic indicator » built only from variables of fixed asset, living conditions (supposed to categorise properly the population) and routine expenses. We will then have a global picture of the different methods available.

3.8 Description of total population (3626)

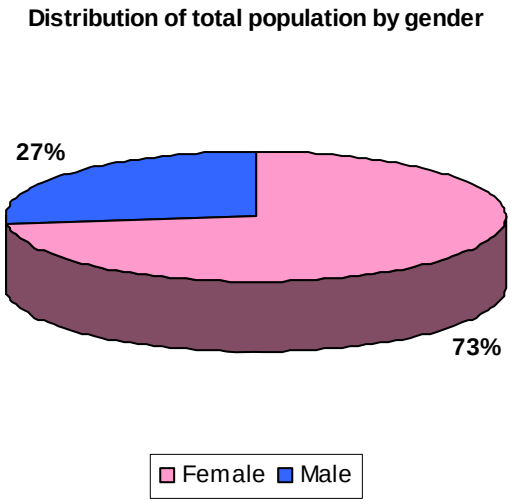
3.8.1 Distribution of total population branch wise

Graph 1 : Distribution of total population branch wise



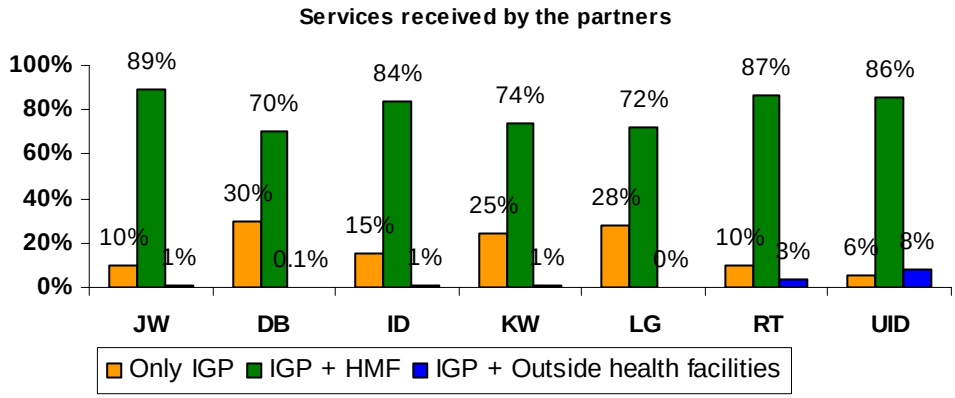
The number of partners from all the branches range from 12% to 16%. Out of the total population, Dandekar Bridge and Loyianagar branch gather the highest number of partners with proportions above 16% whereas Kashewadi and Upper Indiranagar have the lowest number of partners with 12%.

Graph 2 : Distribution of total population gender wise



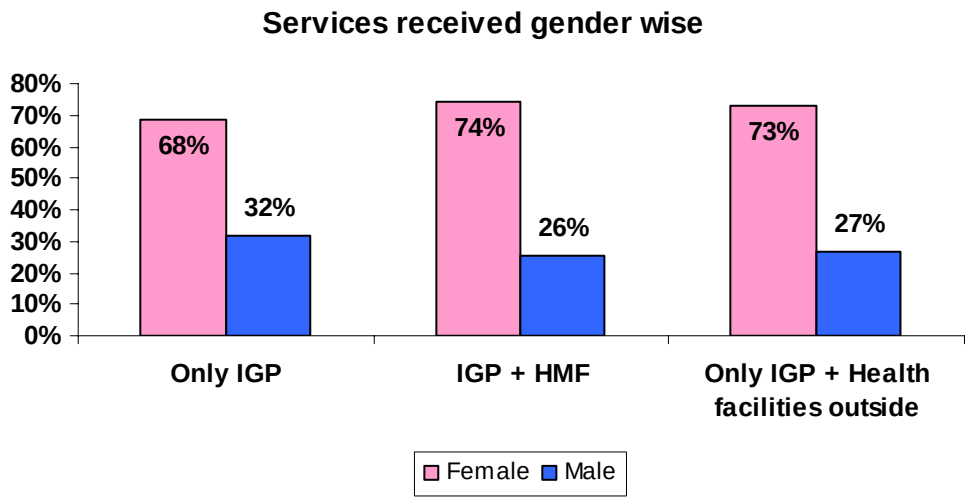
3.8.2 Distribution of services received (branch wise / sex wise)

Graph 3 : Distribution of total population with services received



Though the member tapped is high in RT and UID, we can see that it is in those 2 branches that the population have access to other health insurance services.

Graph 4 : Distribution of total population with services received and gender



Sex wise, there are more women than men in each group. Among all the women, most of them (74 %) are in IGP + HMF group.

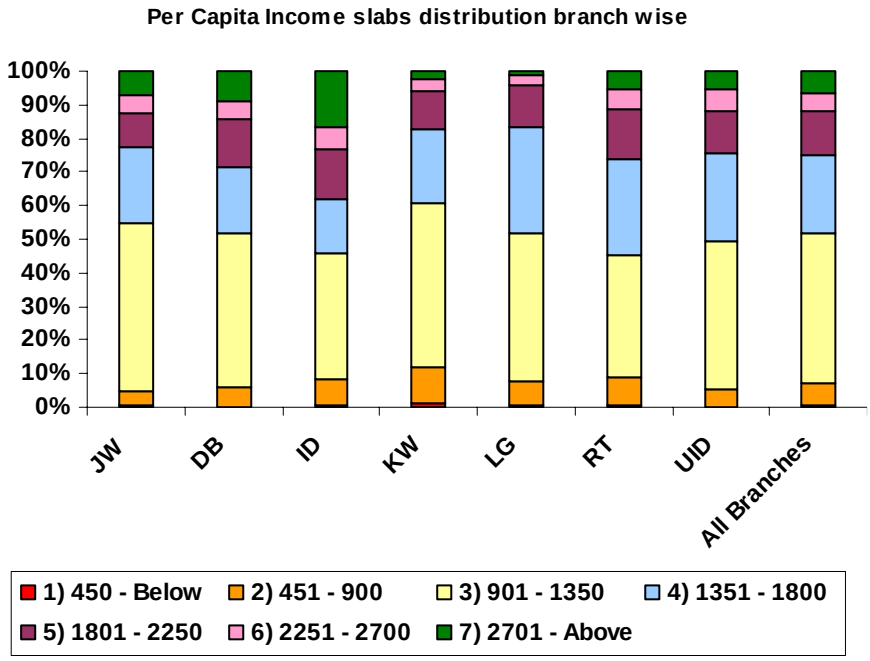
3.8.3 Per Capita Income vs. branch / sex / services received

The per capita income has been divided into 7 slabs as below-

1. Below Rs. 450/-
2. Rs. 451 – 900/-
3. Rs. 901 – 1350/-
4. Rs. 1351 - 1800
5. Rs. 1801 – 2250/-
6. Rs. 2251 – 2700/-
7. Rs. 2701 & Above

Per capita income slabs are independent from the SLL calculation and the PCI is not at all considered in standard of Living Level of the partners.

Graph 5 : Distribution of total population with per capita income slabs and branch

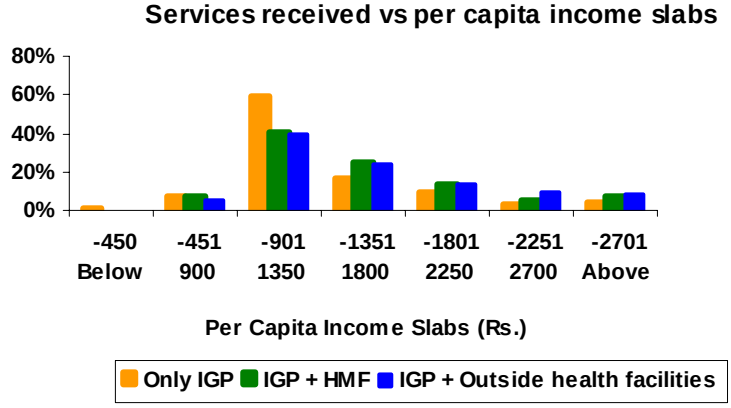


The Graph 5 illustrates that, altogether, 51.5% of the partners have their per capita income below Rs.1350/-. 44.1% of the partners belong to the PCI group of Rs.901/- to Rs. 1350/-. Followed by 23.6% partners represent PCI group of Rs. 1351/- to Rs. 1800/-. Only 12% partners come from two higher income groups (Rs.2251/- to 2700/- and Above Rs. 2701/-).

When we compare branches, Kasewadi shows higher number of partners from first two slabs (Rs. 450/- to 900/-).

3.8.4 Services received versus per capita income

Graph 6 : Distribution of total population with per capita income slabs and services received



Partners who have received only IGP services and do not have any health facilities outside, represent 67.6%. They are more IGP members in lower income group (<Rs. 1350/-) than from IGP+HMF group (48.1%).

Globally, from total population, the proportion of IGP only decreases as PCI slabs increase. It is in a way logical as PSW intend to reach to the poorest, therefore richest quintiles are not the target population.

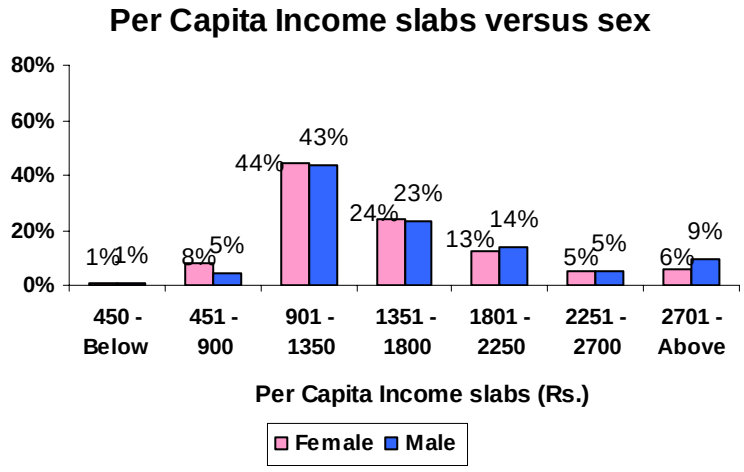
For income groups higher than Rs. 1350/-, IGP group partners are 33% only, where as IGP + HMF and IGP + external facilities are 52% and 54% respectively.

3.8.5 Sex wise distribution of PCI slabs

Following graphs shows how male and female are distributed among all the PCI slabs. 52.6% women are from lower income groups i.e. from first 3 slabs- <Rs. 1350, whereas among males this proportion is 48.4%. The highest proportion of members, whether they are male of female, fall into the 3rd slab category (PCI between Rs. 901 to 1350/-).

As the PCI amount increases the proportion of partners from both sex decreases which is quite obvious as we have seen that we have less and less number of partners from highest PCI slabs. Hence, it is logical that both male and female proportions are decrasing. There is not a very significant difference between the male and the female as the PCI slabs increases.

Graph 7 : Per capita income slabs versus gender



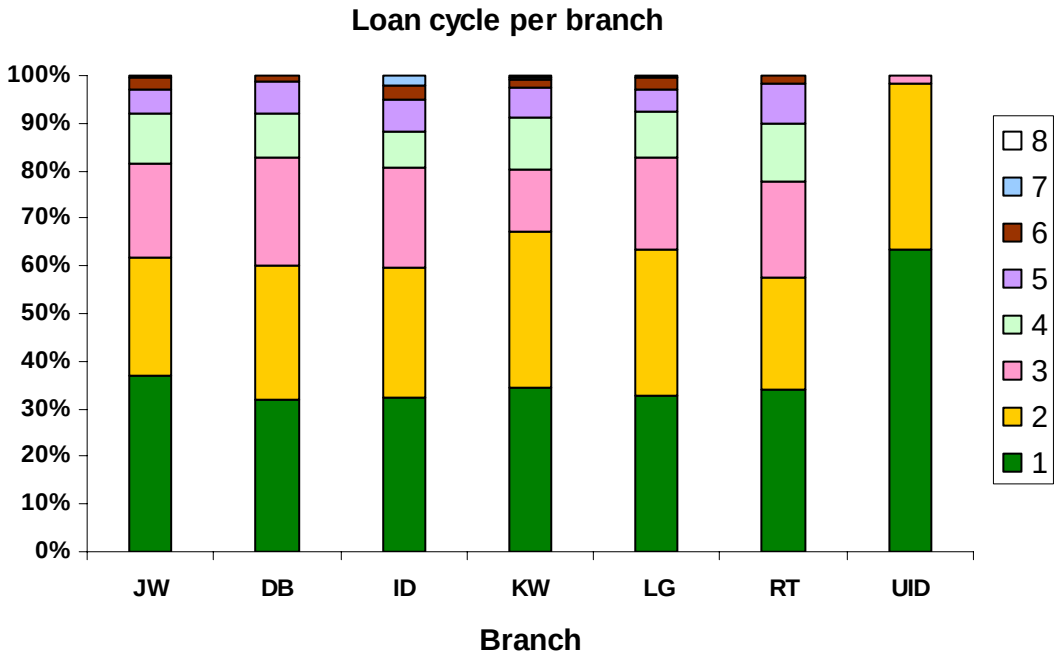
3.8.6 Loan cycle versus branch / sex / services received

Partners in the database have taken up to 8 loans. Those members who have taken maximum of 7 and 8 loans are from Kasewadi and Lohiyanagar branches. They have been opened in 2002 and are one of the oldest branches where PSW is providing micro-finance and micro-insurance services.

As it appears from the data, the first loan cycle partners are the highest. (37.5%), especially in UID because it is the newest branch (services have started in 2006).

Frequency of partners has inverse relation with loan cycle number. As the loan cycle increases, frequency of partners per loan cycle decreases due to maturity of the programme. DB and LG branch has maximum numbers in loan cycle 2, and DB has maximum partners from those who have loan cycle 3. Only 16.3% partners have loan cycle 4 and above.

Graph 8 : Loan cycle per branch

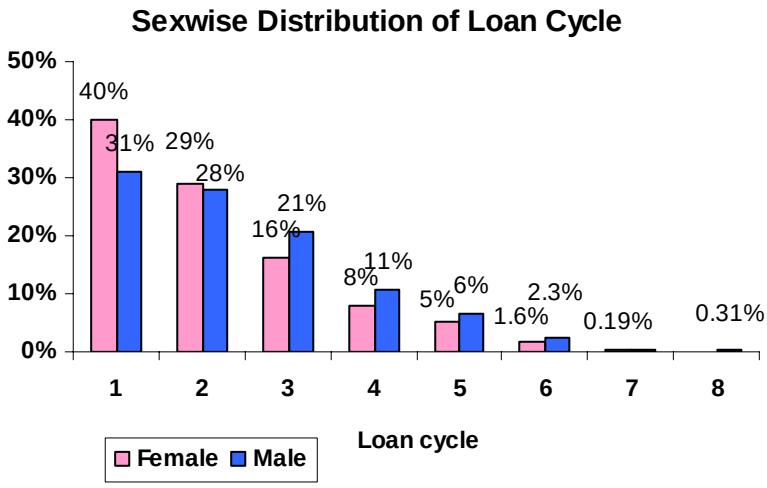


Sex wise comparison of loan cycles shows that in the group of loan cycle 1 and 2 together, there are more female beneficiaries (69%) than male beneficiaries (59%). However, as the loan cycle number increases, i.e. more than 2 loans onwards, there are more men (41%) than women (31%) altogether.

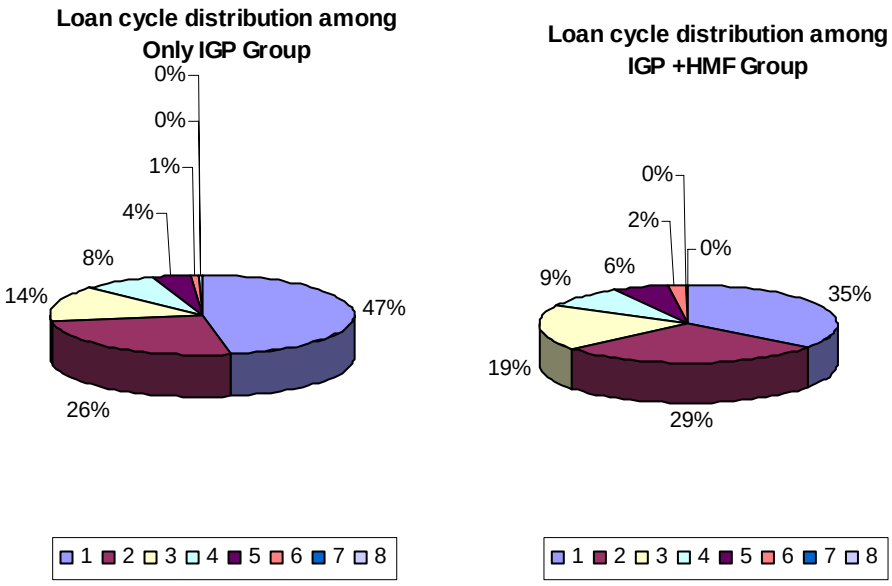
In microfinance, the initial loan is often disbursed to the wife, though it can be used for the husband's activity. At least, the loan is encoded in the software under the women's name. Women have the reputation to be more reliable, to care for the borrowing given to them and with better creditworthiness than the men.

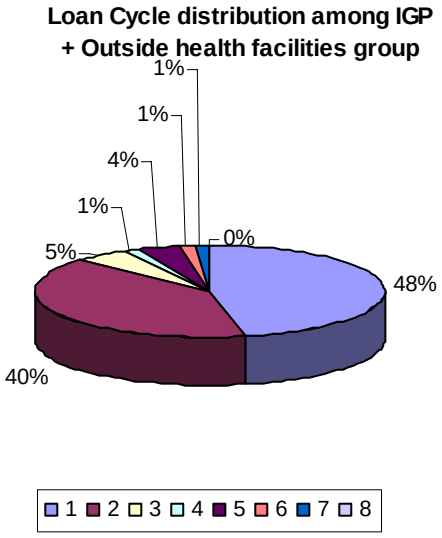
Once the trust is established between the borrower and the loan officer, it may happen that the successive loan is given to the right user, to the husband who is the bread earner of the family.

Graph 9 : Loan cycle per sex



Graph 10 : Loan cycle per service received





Three comparative pie graphs above illustrate that irrespective of the services, the major proportion (37.5 %) in all the three groups belong to the first two loan cycles.

3.8.6.1 Loan amount / Branch / sex / Services Received

Loan amount follows the same trend as the loan cycle. Partners have a wide range of loan amounts, from Rs. 1,000/- as minimum to Rs. 40,000/- as maximum.

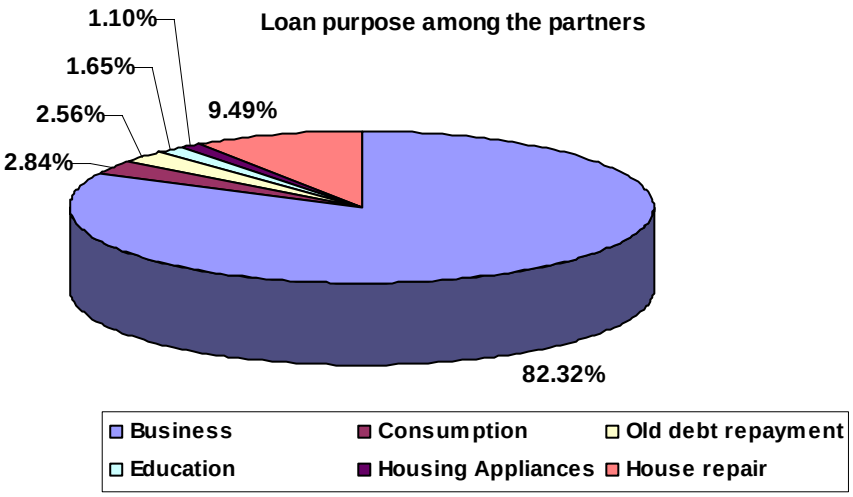
- The majority of partners (56.6%) have taken a loan of a maximum of Rs. 5,000/-.
- This is followed by 31.0% partners who have taken a loan of 5,000 to 10,000 Rs
- Out of the remaining, 11% partners have loans between Rs. 10000/- to Rs. 20,000/-.
- Very few loans have been disburse for amounts exceeding Rs. 20,000/-

3.8.6.2 Loan purpose vs. branch / sex / services received

There are 6 purposes for loan disbursement: business, repayment of old debts, Education, House repairs, Housing appliances and consumption. Repayment of old debt and consumption are not yet disbursed in 2008 but some cases are still on going in the database.

82.3% loans in PSW are business loans which is strongly appearing from Graph 11.

Graph 11 : Distribution of total population and loan purpose



Among others, housing loans are most common which is indicated by 9.5%. Ramtekadi has highest number of housing loans (15.9%) and old debt repayment (5.9%) as compared to other branches.

If we compare the loan purpose with the services, 79.5% partners from IGP group have taken loan for business, which is 83.2% for IGP + HMF group.

4 Socio economic impact of HMF service

4.1 Description of sample population

4.1.1 Coverage of the Sample

As the table indicates, altogether 331 interviews were conducted by the investigators in all the branches (73.4% of the sample).

Table 13: Sample field coverage among branches

Branch	# of partners selected	Coverage IGP	Coverage IGP+HMF	Total coverage	Coverage in %
JW	79	20	34	54	**68,4**
DB	66	21	33	54	**81,8**
ID	68	9	37	46	**67,6**
KW	54	24	15	39	**72,2**
LG	66	21	25	46	**69,7**
RT	60	24	29	53	**88,3**
UID	58	13	26	39	**67,2**
Total	**451**	**132 (39.8%)**	**199 (60.1%)**	**331**	**73,4**

The highest coverage is in Ramtekadi (RT) branch, followed by Dandekar Bridge (DB). In Indiranagar (ID), the number of partners covered in IGP + HMF group is 4 times higher than the partners who have only IGP. Due to low response in this branch in IGP group, the 2 groups became unbalanced and not statistically comparable. As said earlier in the methodology, it was more reasonable to exclude ID branch from the analysis. The total sample is then 285 persons.

Following table gives an idea about the reasons for non coverage of the remaining partners.

Table 14: Reason for non coverage

Reason for Non Coverage						
Branch	**Permanent Migration**	**Difficult to approach / Refused**	**Defaulters**	**Temporary migrated**	**Total – Not covered**	**Done but rejected due to invalidity**
JW	13	5	6		24	1
DB	5	5	1	2	13	0
ID	9	4	9		22	1
KW	7	4		3	14	1
LG	7	3	5	1	16	4
RT	4	1	2		7	0
UID	4	8		6	18	1
Total out of non	**49 (42.9%)**	**30 (26.3%)**	**23 (20.1%)**	**12 (10.5%)**	**114**	**8**

coverage						
% out of total sample	10.8 %	6.65 %	5%	2.66%	25.11 %	1.77 %

Permanent migration from the community has been the major reason for not approaching the partner for interview. 42.9% partners from the sample have migrated from their community. However, they are still on going loanee members of the organization. Field staff especially from Janata wasahat explained that even if the partners are migrated, they pay their installment sometimes by visiting branches personally or they keep the installment due with their neighbours. However, investigators could not approach them for the survey.

26.3% partners were difficult to approach. This has 2 categories-

- Investigators could not meet them physically as they leave their houses early in the morning and come back late in the evening and
- Partners refused directly or indirectly to spend time for the interview. Whenever investigators went to them they always asked them to come afterwards and never allotted time to them. 2-3 cases said “no” to the investigators. Those were chronic defaulters and had conflicts with PSW staff.

20.1 % of the partners are defaulters and do not entertain CMs when visits are paid, hence CMs were not very cooperative to show their houses to the investigators. However, some partners even being defaulters were covered by the investigators.

Temporary migration category covers partners who were out of town when investigators tried to visit them. Such persons were approached repeatedly by the investigators. However, still 12 partners could not be met.

4.1.2 Encoding errors ratio

The data has been encoded in `Sphinx’ software by two encoders. Encoded forms were checked on a random basis and error percentage has been calculated to assure the reliability and validity of the data.

An error percentage is calculated by using the following formula:

$$\frac{\text{Actual errors in the variables encoded} \quad * \quad \text{total number of forms checked}}{\text{Total number of variables encoded}}$$

Altogether 67 forms were cross checked and 94 errors were found in. Total variables encoded are 408.

Therefore the error percentage comes to 0.34% (94/408*67). All the errors found in this process have been corrected.

4.1.3 HMF + IGP group status after interview

Out of 162 partners of IGP+HMF, 141 (87%) have an ongoing HMF policy at the time of interview. The remaining 21 (13%) partners were enrolled in HMF in the previous year but in fact they did not renew their policy. Nevertheless, we have still considered those members in the IGP + HMF group.

The reasons for not renewing their policy have been collected as secondary data from the field staff

In most cases (14 out of 21), the reasons for discontinuing the HMF policy is unkown to staff and investigators. For the other 7 partners, the reasons vary from not receiving any benefit from HMF to not enough money to pay the premium upfront, or defaulter from IGP, etc….

4.1.3.1 Policy members

Family members enrolled in the policies are minimum 1 to maximum up to 8 members per family. Altogether, among the 141 ongoing policies holders, there are total 451 members enrolled from our sample population. This makes an average of 3.2 members enrolled per policy, in the considered sample population of IGP+HMF group.

4.1.3.2 Policy renewals

Following Graph 12 shows the renewal frequency among IGP+HMF group. 0 renewal means that the policy is ongoing and not yet renewed. Since the real "kick start" of the programme was given on 3rd December 2003, the number of members who have reached more than 4 policy renewals is still low.

It has also emerged from the regular renewal ratio analysis of HMF programme (this analysis is being done as part of the monitoring of the project) that there is a tendency generally noticed (which is true elsewhere) that if the family did not suffer from any health incidence and therefore did not get a "return on their investment" (i.e. direct financial benefits exceeding the premium paid through the claim reimbursement), they do not wish to renew the policy further.

Graph 12 : Percentage of on going policy and renewals from sample population

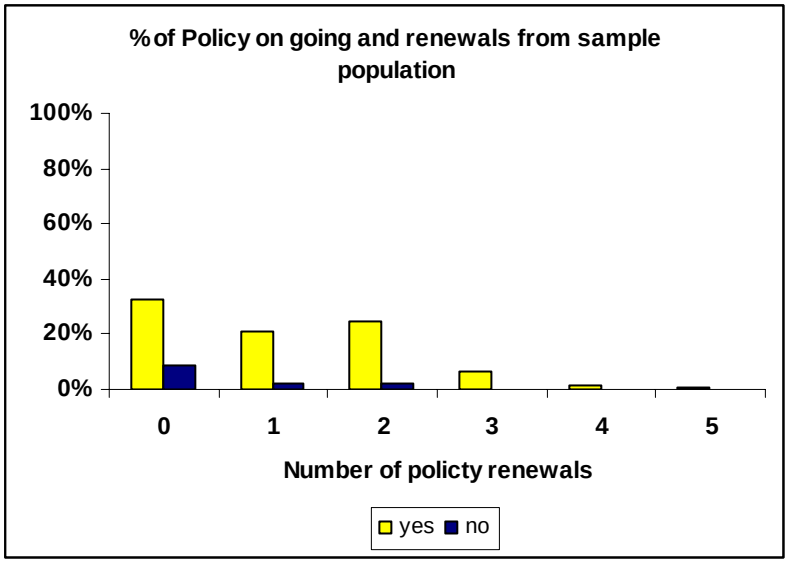


Table 15: Table on policy renewals for IGP + HMF group

No of policy renewals		no	yes	Grand Total
0	Frequency	14	53	67
	Total %	8.64%	32.72%	41.36%
1	Frequency	4	34	38
	Total %	2.47%	20.99%	23.46%
2	Frequency	3	40	43
	Total %	1.85%	24.69%	26.54%
3	Frequency		11	11
	Total %	0.00%	6.79%	6.79%
4	Frequency		2	2
	Total %	0.00%	1.23%	1.23%
5	Frequency		1	1
	Total %	0.00%	0.62%	0.62%
Total Frequency		21	141	162
Total %		12.96%	87.04%	100.00%

21 (13%) partners do not have ongoing HMF policy. In this group, 14 partners (8.64 %) have never renewed their policy.

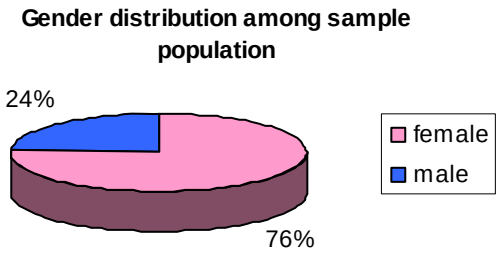
Out of 141 partners who have ongoing HMF policy, 32.72% have their first policy year ongoing. 20.99% have completed 1 year and renewed the policy. 33.33% partners have continued policy for 2 and more renewals, indicating their trust in the programme.

The renewal ratio of Parvati throughout 2008 given by the technical report of HMF is 56%.

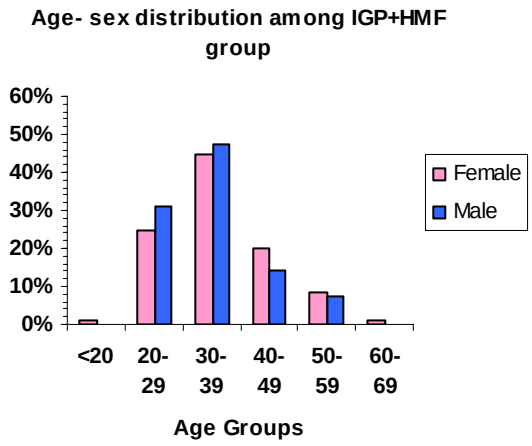
4.1.4 Socio-demographic profile of the partners interviewed

4.1.5 Age and sex wise distribution

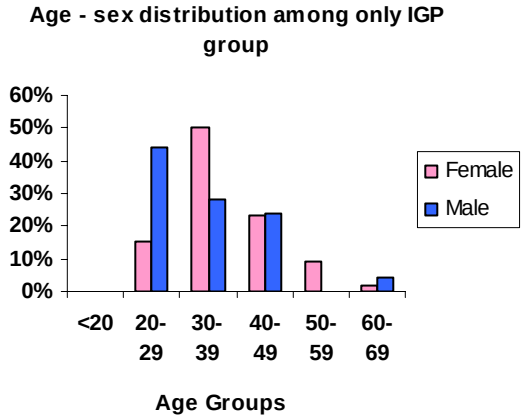
Graph 13 : Gender distribution among sample population



Graph 14 : Age and sex distribution among IGP + HMF group



Graph 15 : Age and sex distribution among IGP group



There is a ratio of 1:3 of males to females (76.5% females, 23.5% males) in the sample. Age wise, IGP and IGP+HMF groups differ in the age group of 20 to 40 years. IGP group gathers more males in the lower age group (up to 30 years). This pattern can be due to the responsibility of the men to be the bread earner of the family whereas the women look after child rearing till 30 years. Once the children grow up, women can start thinking about earning. Therefore, the number of women in the age group of more than 30 years shoots up as compare to men.

4.1.6 Educational background of the partners

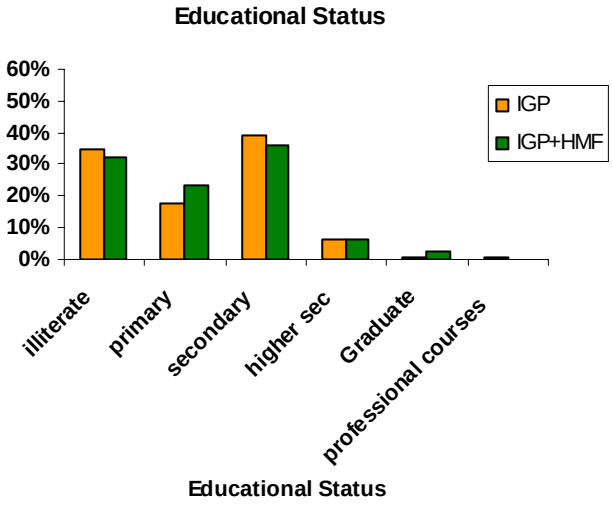
Table 16: Educational background of the partner

Educational Background of the Partners				
Educational Categories	**Data**	**Female**	**Male**	**Grand Total**
Illiterate	Frequency	84	11	95
	Column %	38,53%	16,42%	33,33%
Primary (1st to 4th)	Frequency	45	15	60
	Column %	20,64%	22,39%	21,05%
Secondary (5th to 10th)	Frequency	78	28	106
	Column %	35,78%	41,79%	37,19%
Higher sec. (11th - 12th)	Frequency	7	11	18
	Column %	3,21%	16,42%	6,32%
Graduate	Frequency	3	2	5
	Column %	1,38%	2,99%	1,75%
Professional courses	Frequency	1	0	1
	Column %	0,46%	0,00%	0,35%
	Total Frequency	218	67	285
	Total column %	100,00%	100,00%	100,00%

In the total sample of 285, 33.3% partners have never gone to school. Among the illiterates, women are 2.3 times more than men. Regarding the proportion of partners who have undergone primary education, the sex wise difference is not significant. However, for higher standards of schooling (above 5th) the proportion of males (61.2%) is much higher than females (40.8%). Overall, 37.2% partners have studied up to 10th, i.e. Secondary level of education.

IGP group count slightly more illiterates (35%) than IGP+HMF group (32.1%). For other educational categories there isn't any significant difference found among our 2 groups.

Graph 16 : Educational status of partner for both groups



Pearson chi2 (5) = 5.2503 Pr = 0.386

4.1.6.1 Education score analysis

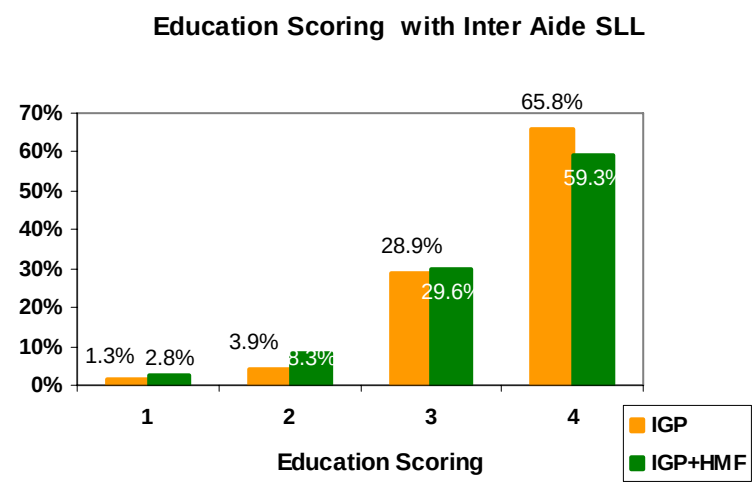
The fourth indicator of Inter Aide Standard of Living Level is the Education of the children in the family. The criteria for eligibility of the child/family member for education is either >3 years & <15 years old or enrolment in an educational institution for higher education. This score can sometimes turn out to be Non Applicable (NA) if the children age is outside those limits. Like other indicators of the tool, if it is applicable the minimum score would be 1 and maximum would be 4. In case of NA, the family gets average score as `2' for education. The scores are described as follows:

1. **No eligible children are in school:** Not a single child between 3 to 15 years goes to school.
2. **Only few eligible children go to school:** Some of the children go to school. Some have left the school halfway or not yet admitted to school.
3. **All eligible children are in school but performance is not satisfactory**: All children are in school but the schooling is not according to age i.e. class does not correspond with age. This can be assessed by asking whether all the children going to school are passing every year or not. If all of them are not passing they will be included in this category.
4. **All children are in school and performance is satisfactory**: All the children are passing every year to next standard.

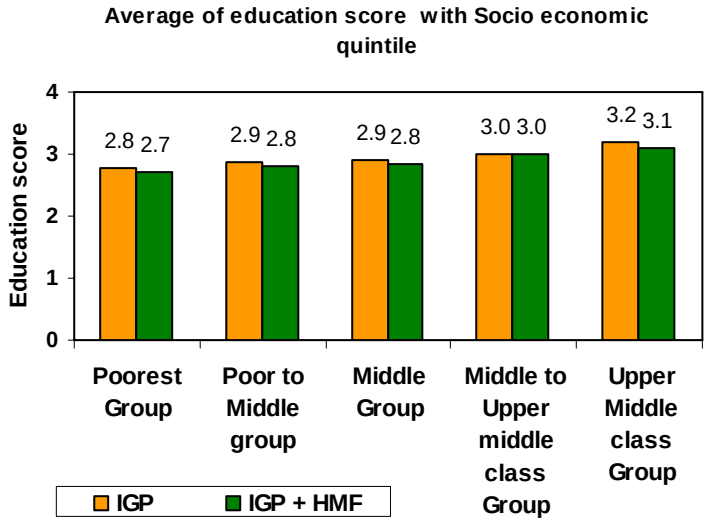
In the questionnaire, survey data for education was collected during demographic profile of the family and the indicator has been analysed directly from the data. Out of our sample, for 35.4% of families (101 households), the indicator of education is `Not Applicable", in other word, there are no children between three to fifteen age group.

The analysis of the remaining 184 families (64.6%) is presented herewith with 2 different indicators:

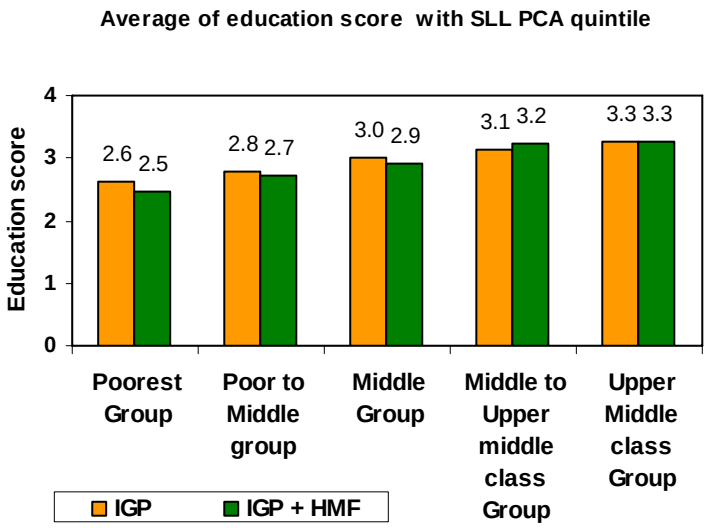
Graph 17 : Educational score from SLL Inter Aide tool



Graph 18 : Average education score among socio economic quintile



Graph 19 : Average education score among PCA quintile



Globally, 91.30% of the 184 families got an education score above 3 which indicates that majority of the family do care for the education of their children.

This proportion represents 52% for IGP + HMF families and 40% for IGP ones. Though we found in chapter 4.1.6 no global difference in terms of educational level of the family between the 2 groups, it seems that people opting for an insurance policy have more awareness about the importance of sending their children to school.

Partners who got score 1 and 2 were asked about not sending their children at school. Most of them have children at the border age i.e. 3 to 4 years and mentioned that next year they are going to take admission for their children. This indicates their lack of awareness towards education for their child (importance of pre-school education). Very few partners have school drop outs.

Regarding the allocation of sample population across the quintile, there is no significant difference among the 4 quintile for both group, even with socio economic quintile whose calculation is independent from the SLL Inter Aide.

We can conclude 2 possibilities:

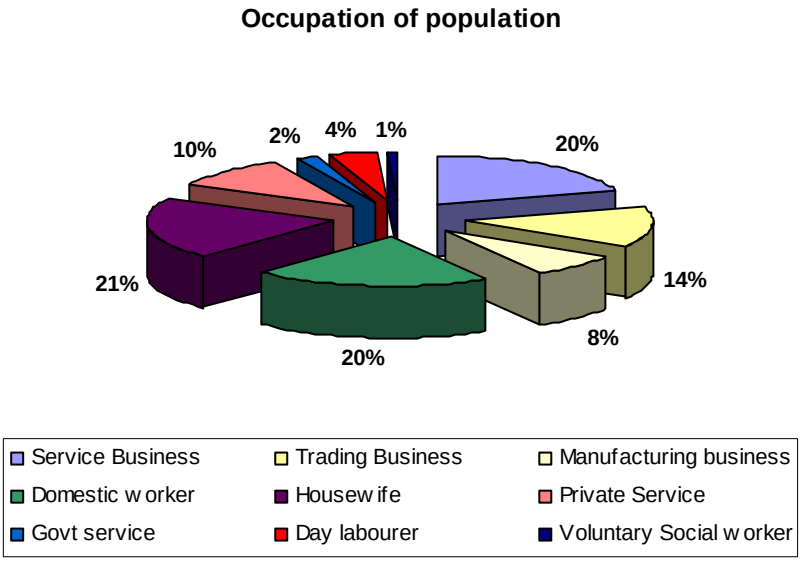
1/either even if partners belong to lowest quintile, they give importance to education of their children.

2/ There is a limitation in the education parameter of the SLL Inter Aide due possibility of subjective answer and the non applicable option which gives automatically a score of 2 to the family.

4.1.7 Occupational background of the partners

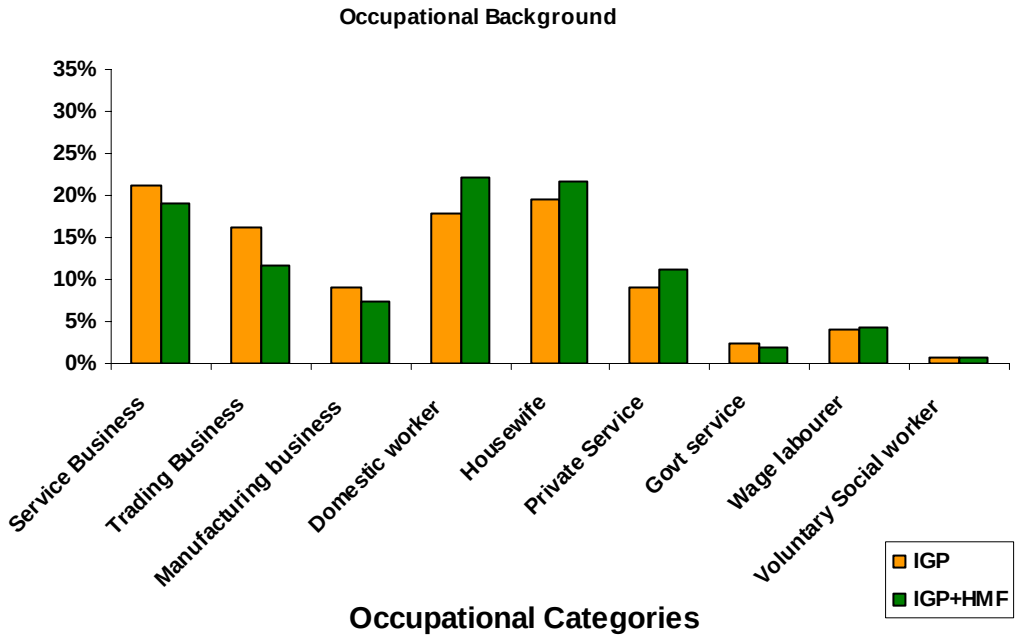
First of all, regarding marital status, out of the total number of partners interviewed, 88.4% are married. 11.0% of the women are widow, therefore falling into category of vulnerable households. Among the IGP group, 91.1% partners are married against 86.4% married partners for IGP + HMF group. The proportion of widows and unmarried persons is higher in IGP+HMF group (9.9% and 3.7% respectively) than in IGP group (7.3% and 1.6% respectively).

Graph 20 : Distribution of sample population by occupation



Overall, 41.7% of the partners interviewed are directly involved in a business activity. There seems to be more entrepreneurs in IGP group for the 3 types of business (service, trading, and manufacturing). Proportionately, there is a higher number of men (62.7%) involved in small business than women (35.3%) whereas women are more commonly working in the domestic sector (maid servant, 20%). 27.6% women are housewives. The proportion of partners employed in government service is 2.1%. This pie illustrates a general knowledge about slums : most of the partners are employed in the informal sector. Regarding unemployment, data coming from the field survey has not brought any proportion of unemployment among the sampled partner. A sub question in the questionnaire should have been added to reach this level of information. Usually, a women not working would answer that she is housewife and a men would comment that he is a day labourer (4.21% in our sample).

Graph 21 : Distribution of sample population by occupation group wise



4.1.8 Per capita income calculation

Average family size of the partners is 4.5 instead of 3.8 observed in Syslift software (HMF software). It does not differ significantly between the 2 sample groups ; IGP (4.6) and IGP+ HMF group (4.5). This difference between 3.8 and 4.5 members per family probably means that the family is not being covered and there might be possibilities of adverse selection in enrolment since it is voluntary.

Productivity of family members is illustrated in Table 17.

Table 17 : Per capita income calculation

	Total			IGP Only			IGP + HMF		
	Min. / family	Max / family	Mean	Min. / family	Max / family	Mean	Min. / family	Max / family	Mean
Family Size	1	9	4.5	2	8	4.6	1	8	4.5
Eligible members for earning	1	7	3.1	1	6	3.2	1	7	3.0
Actual earning members	0	4	1.9	0	4	1.9	0	4	1.8
Number of days worked per month	15	30	27.08	15	30	26.8	15	30	27.3
Per Capita Income per family in Rs.	167.7	6750	1799.8	167.7	6375	1690	257.1	6750	1789.2

On an average, out of 4.5 members per family, 3.1 persons per family are eligible for earning[4]. But, in fact, only 1.9 persons are involved in an earning activity and have stable and secure income. This proportion is 59.8% of total eligible members. The number of days worked per month ranges from 15 to 30. Average of it is 27.1 days. IGP+HMF group has a slightly higher average number of worked days.

The Per Capita Income (PCI) of the family is widespread between a minimum of Rs. 167.7/- (IGP member) to maximum Rs. 6750/- (IGP + HMF member).

The average PCI is Rs. 1799.8/- , which equals to 29 euros per month per person, (less than 1 euro per day), so below international poverty line.

Partners having PCI < Rs.500/- are little more in IGP+ HMF group (3.09%) than IGP group (1.63%), however, for next two slots i.e. up to Rs. 1500/-, there are more IGP members (56.1%) than IGP+HMF group (40.7%). More number of IGP members are also observed in the category of Rs. 3000 to 4000/-.

So there is no fixed pattern observed as it was in the PCI distribution of total population.

Graph 22 : Per capita income versus services received

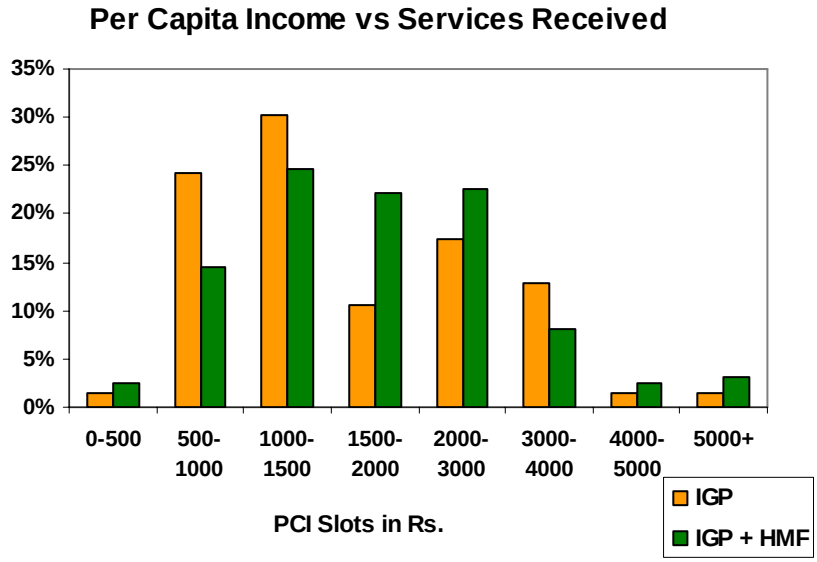


Table 18 : descriptive statistics of the Per capita income versus services received

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
IGP	123	1690.016	96.90287	1074.705	1498.187	1881.845
IGP+HMF	162	1789.191	85.1597	1083.906	1621.017	1957.365

t stat= -0.7679 p value= 0.4432

[4] We have considered eligibility for earning, members from 15 years old not studying to 60 years old.

There is no statistical significant difference found between the 2 groups on the per capita income variables.

4.1.9 Loan history and services received

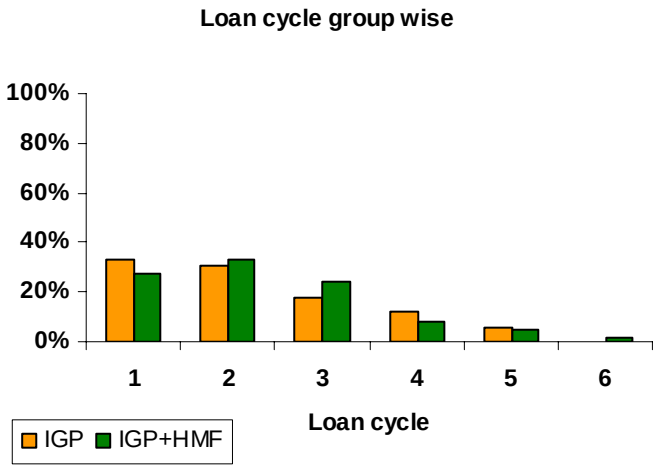
4.1.9.1 Loan Cycle

Table 19 : Loan cycle group wise

No of Total Loans	Data	IGP	IGP+HMF	Grand Total
1	Frequency	41	45	86
	Column %	33,33%	27,78%	30,18%
2	Frequency	38	54	92
	Column %	30,89%	33,33%	32,28%
3	Frequency	22	39	61
	Column %	17,89%	24,07%	21,40%
4	Frequency	15	13	28
	Column %	12,20%	8,02%	9,82%
5	Frequency	7	8	15
	Column %	5,69%	4,94%	5,26%
6	Frequency		3	3
	Column %	0,00%	1,85%	1,05%
Total Frequency		**123**	**162**	**285**
Total Column %		**100,00%**	**100,00%**	**100,00%**

Pearson chi2 (5) = 6.2237 Pr = 0.285

Graph 23 : Loan cycle group wise



Parvati started its activity in 2002, and has in its portfolio members who have reached 6 loans cycles. (Average loan length is 13.6 months in 2008). 30.2% of the partners are new loanees, i.e. they have their first loan ongoing.

One of the hardest field objectives in microfinance is to reach a high level of customer loyalty right from the first loan. The drop out rate is often highest between the 1st and 2nd cycle and decrease with the number of loan. Beneficiaries get convinced about the usefulness of the programme after several years during which they have been empowered.

Furthermore, HMF premium may be considered as an additional financial burden that the family may not want to support.

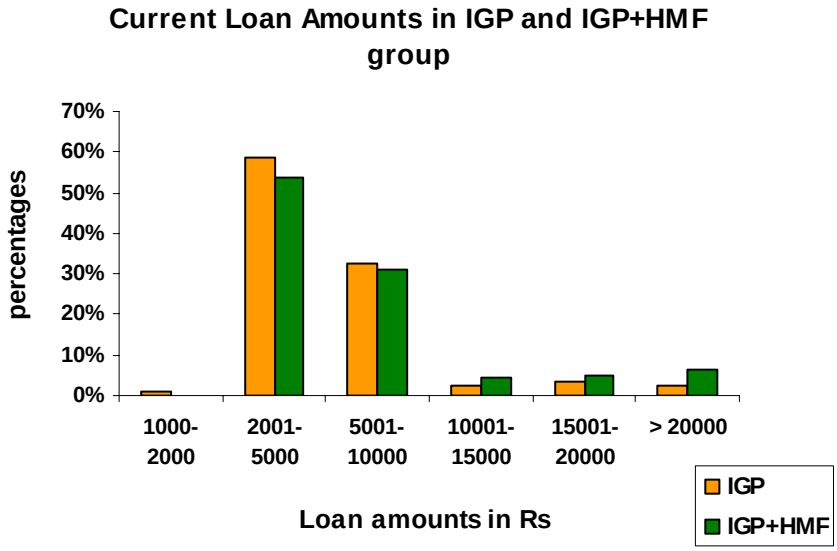
In terms of operation, and as per HMF team, HMF is currently riding on the back of IGP programme for 85 % of its activity. The HMF programme can sometimes be described as a "burden" to micro finance activity in terms of process and operation due to the fact, for example, that premium is paid in majority of the cases (70%) in Parvati from the compulsory saving that the partner has to pay upfront to avail the loan.

Nevertheless, looking at the table above, the loan cycle for IGP + HMF between 1st and 2nd cycle is higher for IGP + HMF than IGP group. This trend decrease slightly at the 4th cycle. So it does not seem that HMF programme, in terms of operational process, affect the retention ratio of IGP, at least till the 3rd cycle (loan).

4.1.9.2 Loan amounts for Current / ongoing loan

For the analysis, only the on going loan amount has been considered. As in description of total population, minimum loan amount in the sample is Rs. 1,500/- and maximum is Rs. 40,000/-. 56.1% partners have a loan amount up to Rs. 5,000/-. This is because there the majority of partners are still found in the first 3 loan cycles (loan cycles and loan amounts are related to each other and have fixed slots).

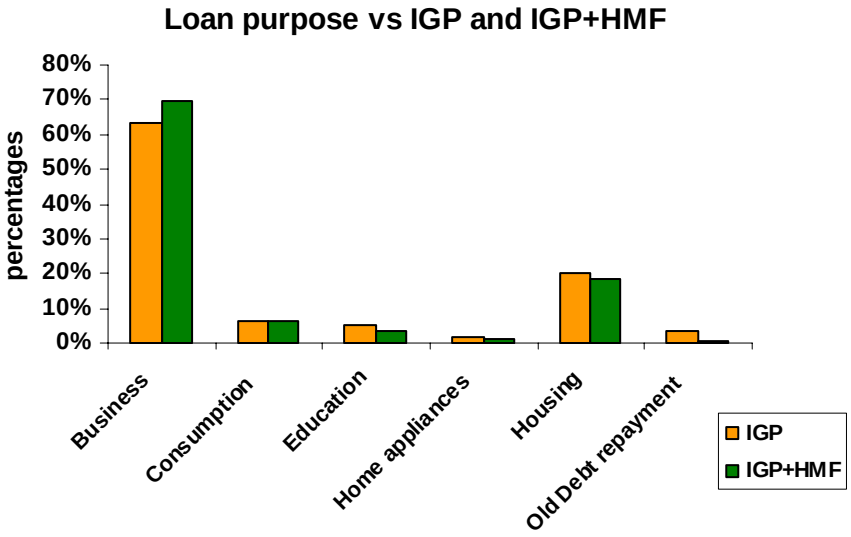
Graph 24 : Loan amount group wise



4.1.9.3 Loan Purpose for current / ongoing loan

Partners receiving IGP+HMF services show a higher proportion of business loans (69.8%) than partners receiving only IGP services (63.4%). Loans for purpose of consumption, education and old debt repayment, together show a higher proportion (14.6%) in IGP group than in IGP+HMF group (10.5%).

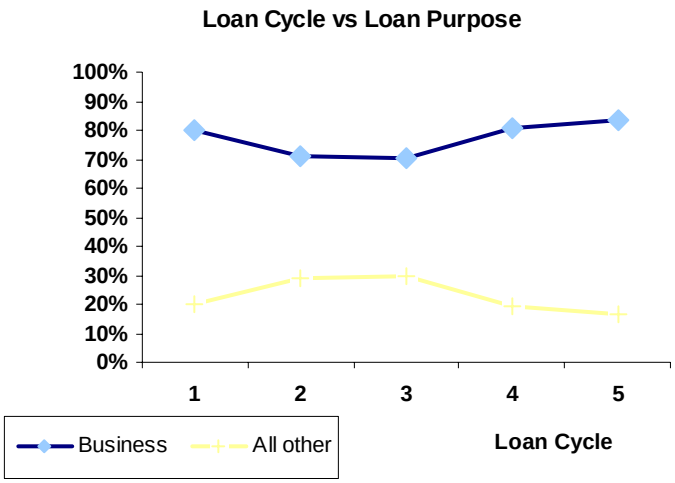
Graph 25 : Loan purpose group wise



Following Graph 26 shows the purpose for which the loan is taken at various loan cycles. Only the first five loan cycles are considered here as there are only 3 partners for 6th cycle and this scant number cannot be compared with other loan cycles. It appears

from the graph that, although 80% of the first loans are business loans, this proportion reduces at 2nd and 3rd loan cycles. This proportion of business loans increases at the fifth loan cycle again. After covering its basic need with the first 3 loans, the partner may be willing to invest his/her time and money in his/ her growing business which require higher capital.

Graph 26 : Loan cycle group wise



4.1.9.4 Loan instalments missed

Out of 285 partners, 32.3% partners have missed their loan instalments at least once, of their ongoing loan. Partners from only IGP group (53%) show more tendency of missing loan instalments than IGP+HMF group (47 %).

Graph 27 : Loan instalment missed group wise

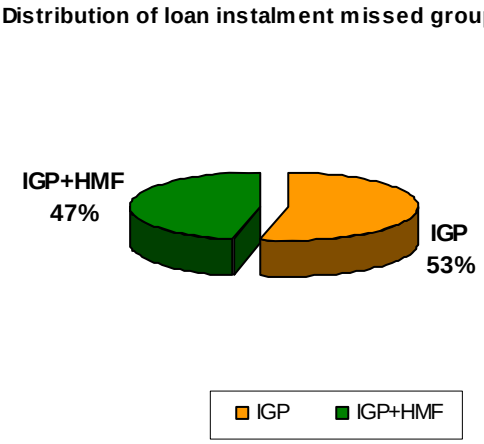


Table 20 : Loan instalment missed group wise

Missed loan Installments	IGP	IGP+HMF	Total
no	74 38.34%	119 61.66%	193 100.00%
yes	49 53.26%	43 46.74%	92 100.00%
Total	123 43.16 100.00	162 56.84 100.00	285 100.00 100.00

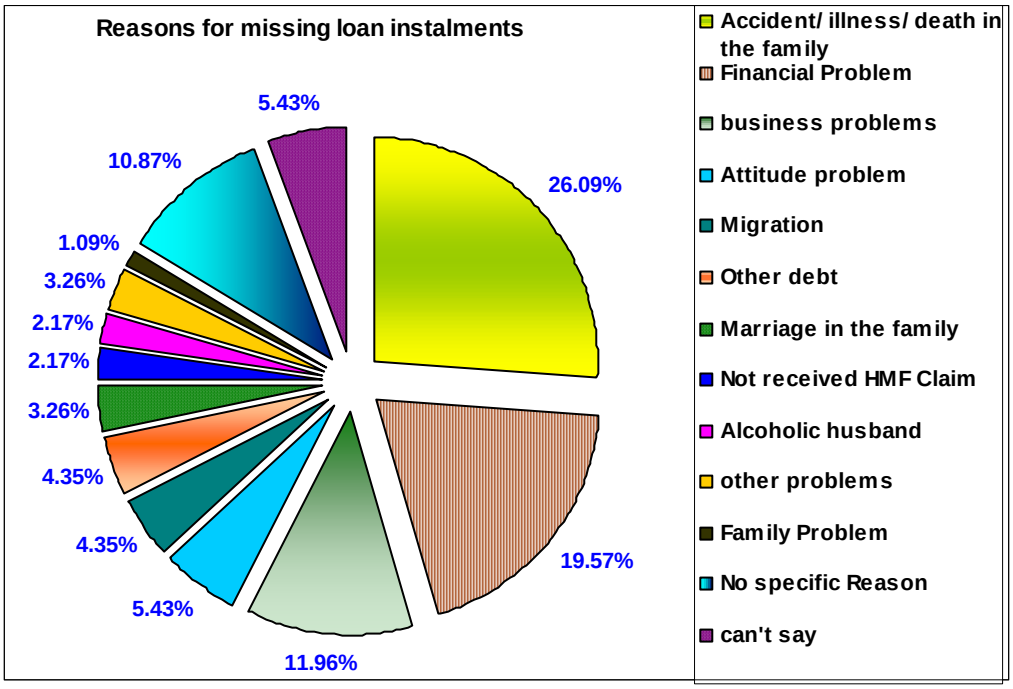
Pearson chi2 (1) = 5.6525 Pr = 0.017

There is a significant difference between the 2 groups. Though there are no fixed patterns among the 2 groups as far as the per capita income is concerned, this result shows that HMF brings to the family a better economic stability since we can see that partner having a health insurance have missed less number of instalments.

However, this result can be linked with other reasons that we have not controlled such as selection bais. Indeed. it is also possible that members who are more disciplined and aware of their responsibilities opt for HMF policy. Nevertheless but notice a significant link.

4.1.9.5 Reasons for missing loan instalments

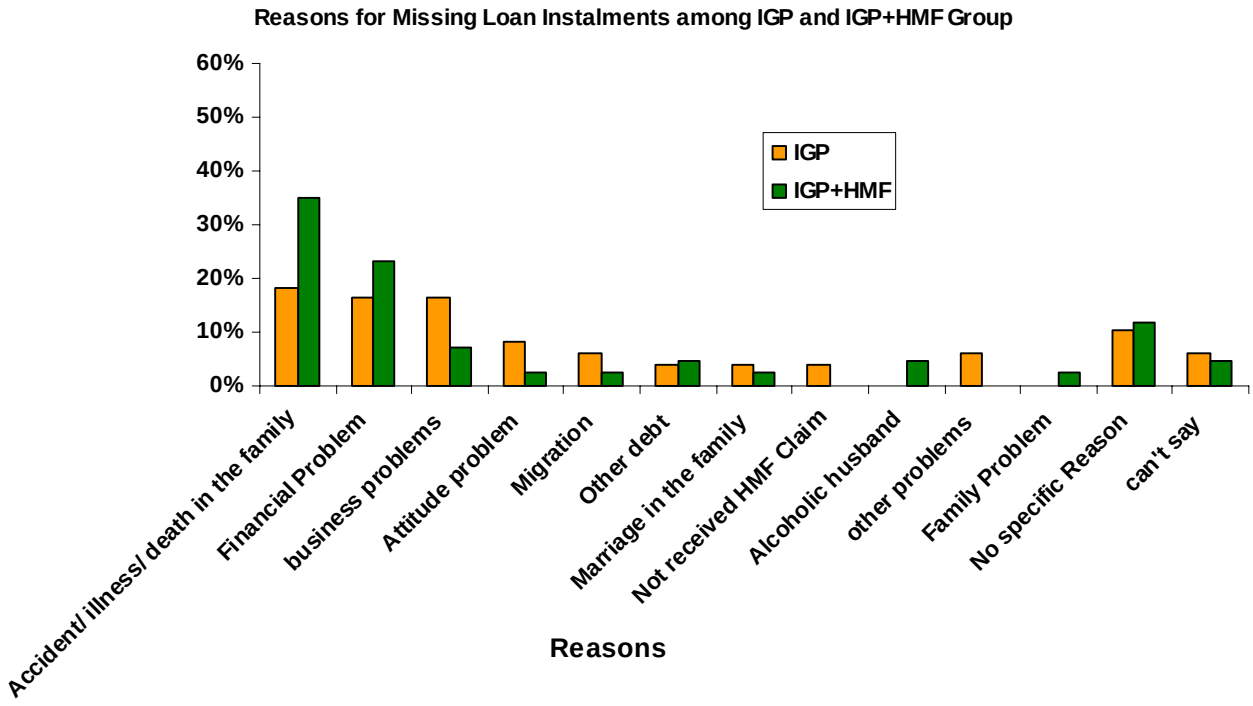
Graph 28 : Reason for missing loan instalment



Those who miss only one instalment are due to circumstances such as accident/ death or illness (26 %) in the family and financial or business related problems (19%).

There is difference between IGP and IGP+HMF group for reasons, which are illustrated in the following graph.

Graph 29 : Reasons for missing loan instalment group wise



From this graph, we can see that there are more people from IGP + HMF group who missed their instalment due to accident and illness. It is would be an incorrect assumption to state that from this graph, belonging to HMF programme does not provide support to repay the loan. Moreover, we can't conclude of any impact as such as there is no evolution in the time.

Furthermore, the section 4.7.2 and 4.7.3 show that there are more members in IGP + HMF who got an accident and declared falling sick. This is probably the reason why we find here that the major reason for missing instalment from IGP + HMF is accident and illness.

4.1.9.6 Main conclusive points of the description of sample population

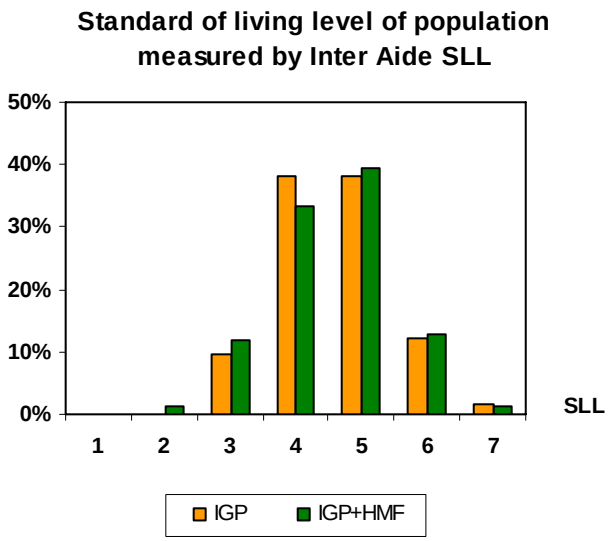
- With equal education level of the parents for both groups, we have noticed that IGP + HMF group tend to send more their children to school.
- As far as per capita income is concerned, there is no fixed pattern observed in the sample population between IGP and IGP + HMF group. The average PCI is 1799 Rs (29 euros per person per month, less than 1 euros per day)
- As per the percentage from cycle 1 till cycle 3, it does not seem, in terms of operation, that HFM programme affect the retention ratio of IGP
- Partners from IGP group (39.8%) show more tendency of missing loan instalments than IGP+HMF group (26.5%). There is a significant difference between the 2 groups which indicates more economic stability for beneficiaries who have an insurance policy.

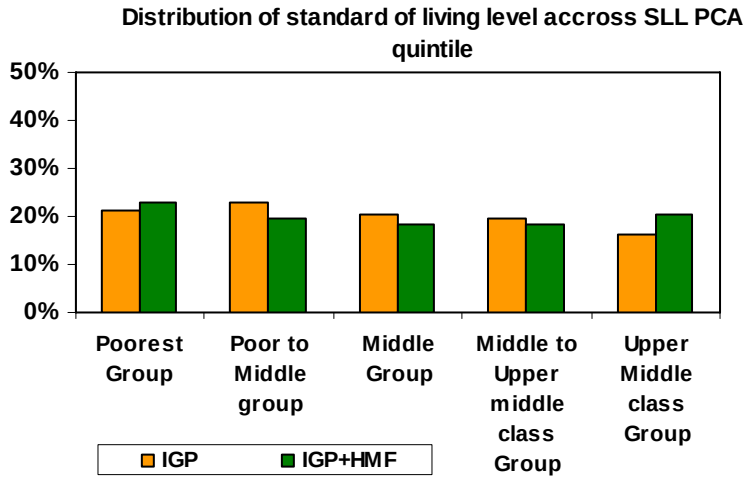
4.2 Does HMF service improve standard of living level of the sampled partners in comparison to IGP service only?

This section analyse the impact of HMF on the standard of living of the members. Each result is presented with the 4 tools / indicators described in the methodology in order to get a picture as true as possible beside the limitation of Inter Aide SLL.

Graph 30 : Standard of living level of population measured with Inter Aide SLL

Graph 31 : Standard of living level of population across SLL PCA quintile

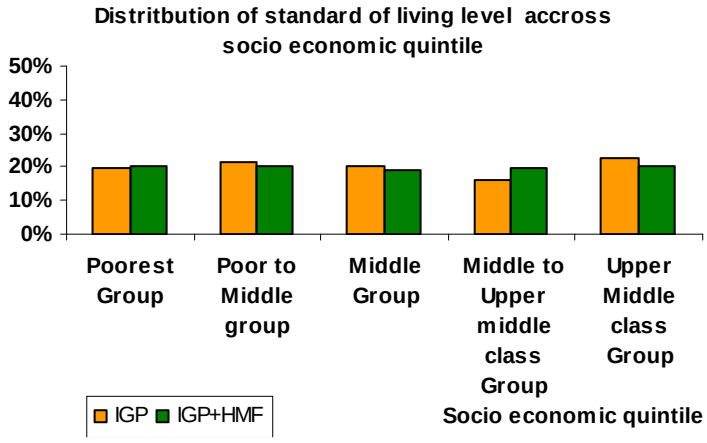




Pearson chi2 (5) = 1.7063 Pr = 0.888.

Pearson chi2 (4) = 2.0937 Pr = 0.719.

Graph 32 : Standard of living level of population across socio economic quintile



Pearson chi2 (4) = 2.7156 Pr = 0.606

Taking into account that our groups are comparable On three criterions: sex, branch and loan cycle (i.e. we have the same proportion of male, female, branches and cycles

in each group), here are the main interpretations of the results:

- On average there is no significance in the distribution in both groups, irrespective of the methods used (Inter Aide SLL, SLL PCA quintile, Socio economic quintile). There is also no difference in the mean average of Socio economic score between both groups despite the fact that HMF+IGP group have a higher Socio economic score on average. As the Table 21 tend to show. In other word, we can't say that one group is poorer or richer that the other one.

Table 21 : Mean average of socio economic score

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
IGP	123	-.1332749	.189612	2.102898	-.5086307	.2420809
IGP+HMF	162	.0786739	.1579744	2.010686	-.2332952	.390643

t test stat = -0.8641 p value: 0.3883

- We can see that the socio economic score built for the study tends distribute in better way the population by category whereas the Inter Aide SLL method gathers majority of population in levels 4 and 5.

- Though IGP has a deliberate strategy to reach the poorest at the time of first disbursement, it is almost imperceptible. 2 histograms sticks are slightly higher than the other (poorest of the group and poor to middle group). Furthermore, the Graph 147 in annexe shows that the proportion of poor people is not particularly high in first loan cycle.

- SLL PCA distribution for IGP+HMF is fairly similar for all the quintile which is not intentional as far as the strategy of HMF programme is concerned. Nevertheless, the strategy of any insurance system tends to pool enough people from all range of population to reduce the risk and get on balance an affordable system for a larger population.

4.3 Evolution of standard of living with loan service

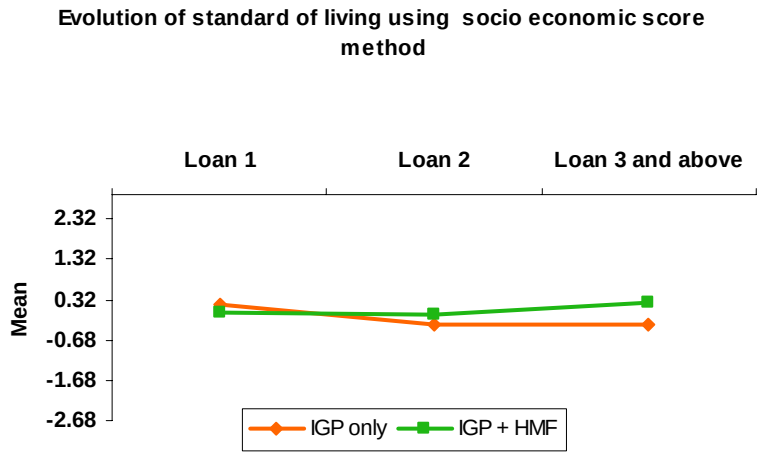
As our two groups are statistically comparable for the loan variable, we have compared the standard of living level for the person having a loan.

The scales used respect the minimum and maximum of each indicator (refer to Table 11 of methodology) to illustrate the real variation over the period.

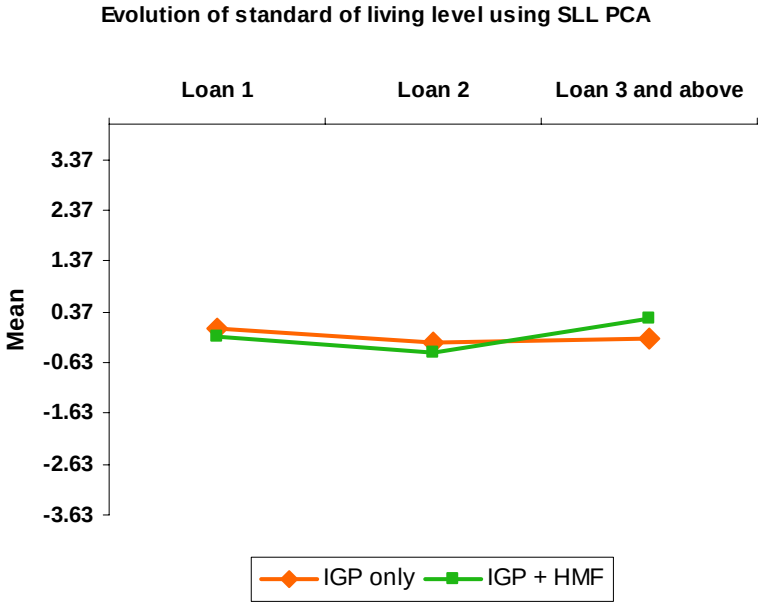
Other tables in annexe 7.4.1 and 7.5 shows those same graphs with bigger scale to show the trend but those variations are in fact infinitesimal as regards as the maximum and minimum of those indicators.

The absis of the graph indicates the loan cycle

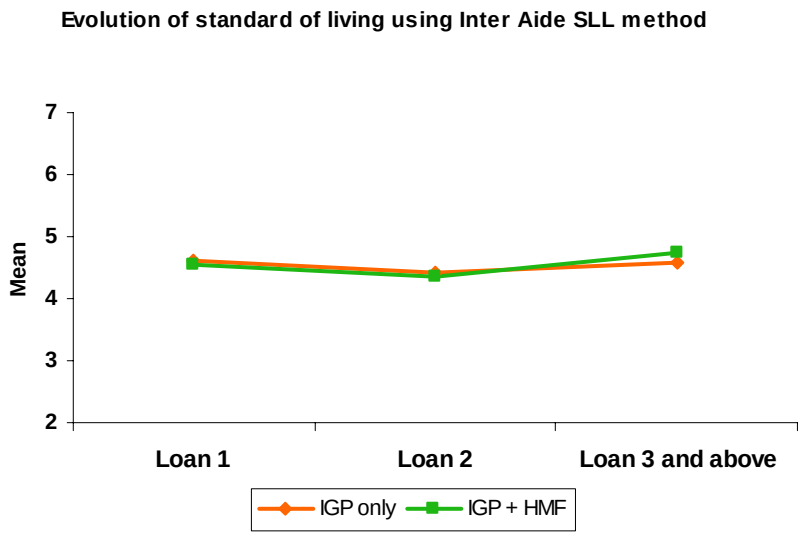
Graph 33 : Evolution of standard of living level with socio economic score and loan variable



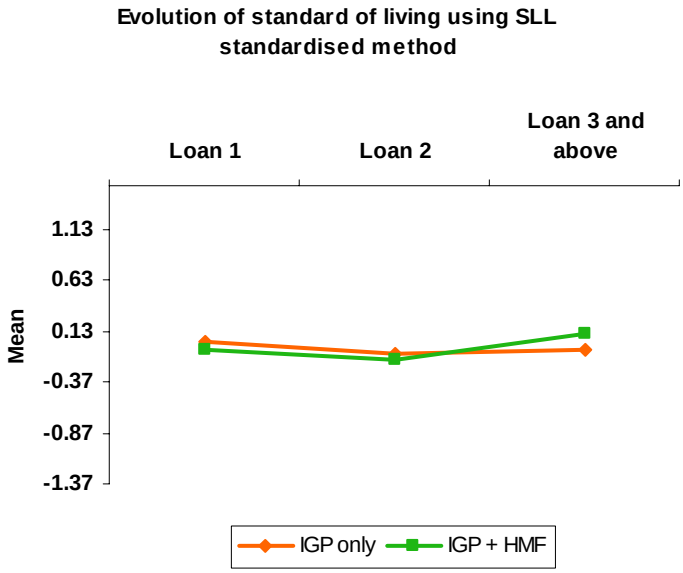
Graph 34 : Evolution of standard of living level with SLL PCA and loan variable



Graph 35 : Evolution of standard of living level with SLL Inter Aide and loan variable



Graph 36 : Evolution of standard of living level with SLL standardised and loan variable



These graphs indicate that with the 4 indicators used, neither the number of loan nor the service received seem to increase the standard of living level of the partner at least for the first 3 years (see annexe 7.5.1 for ANOVA, analysis of variance and covariance of socioeconomic - Socioeconomic Quintiles and SLL PCA Quintiles - difference by loan cycle, HMF years and service received. The results show no significant difference among groups).

It is also interesting to notice that for both groups, their standard of living decrease slightly in the 2nd year to rise in the 3rd year.

The explanations could be the following:

- People tend to repay their current debt with the loan they receive
- In the first year, people may not be acquainted to manage their borrowing, because of lack of skills to manage their money

- People may spend first into non productive purpose such as the improvement of their house to increase their security. Income generation may come in the second priority.
- First loan amount is usually inferior to the real business need. Indeed, microfinance institution working with poor tend not to disburse high loan amount in the first year because it takes time to know the credit worthiness of the member and the member himself takes time to use properly the fund borrowed.
- Socio economic indicator decreases at year 2 for both groups. As both groups are affected in a similar way, there is therefore no unique effect on one group as opposed to the other.

4.4 Evolution of standard of living with loan and insurance service

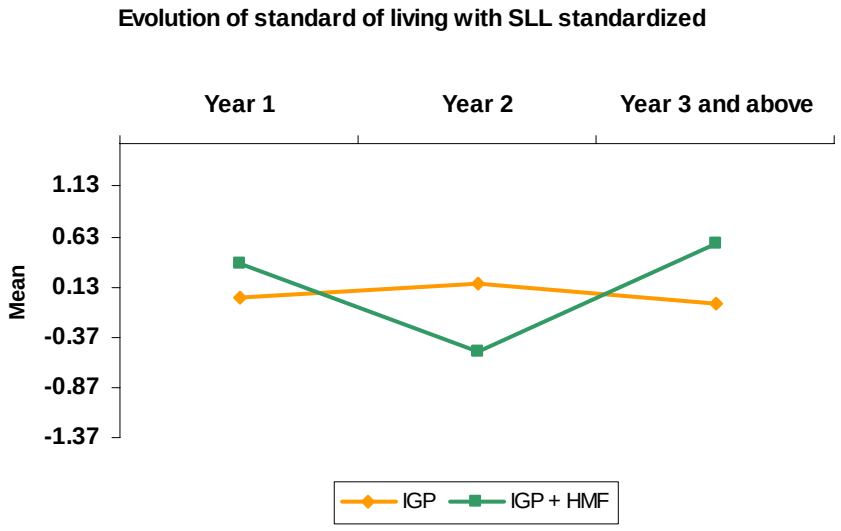
We have tried to compare with the loan variable the difference and the evolution of standard of living when the partner has received both services over a period of time.

It is important to recall here that this study is not a longitudinal survey. We are comparing similar groups at a certain period in time but it is not the same family followed over the 3 years.

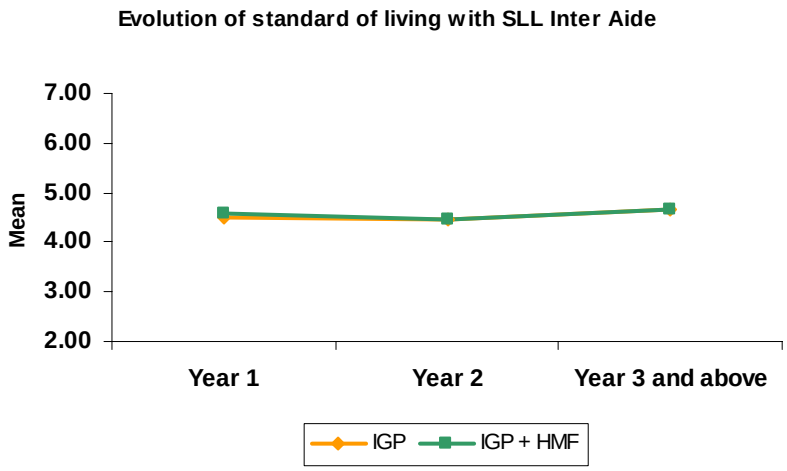
We have compared partners who are having

- 1 loan cycle (40 persons) with 1 year of health insurance policy (41 persons), year 1
- two loans (38 persons) with 2 years of health insurance policy (25 persons)- year 2
- three loans and more (44 persons) and 3 years and more of health insurance policy (44 persons)- year 3 and above

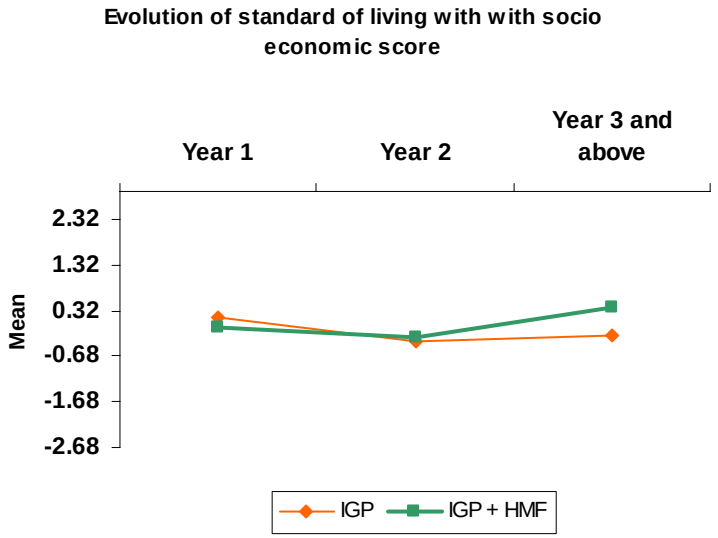
Graph 37 : Evolution of standard of living level with SLL standardised, loan and policy renewals variables



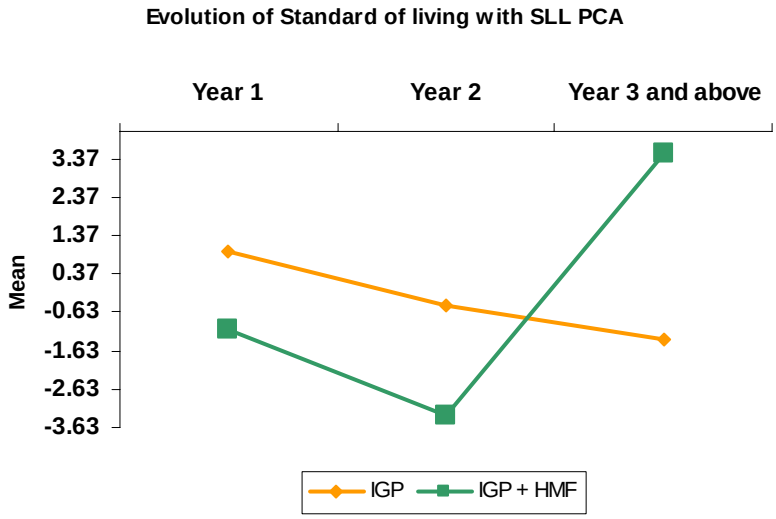
Graph 38 : Evolution of standard of living level with SLL Inter Aide, loan and policy renewals variables



Graph 39 : Evolution of standard of living level with socio economic score, loan and policy renewals variables



Graph 40 : Evolution of standard of living level with SLL PCA, loan and policy renewals variables



Interpretation

- All the methods used show different results for the IGP group
- All the methods show a V shape curve for the group IGP + HMF.
- At the 3rd year of service, the difference between the 2 groups increases except for the SLL Inter Aide method. We can see here the limit of this tool and its lack of accuracy. Average is always higher for IGP + HMF group. Globally, the more HMF years, the higher the SLL, with similar loan cycle and HMF years.
- But the difference between the 2 groups are low and non significant (see annexe 5.4.2 for ANOVA, analysis of variance and covariance of socioeconomic - Socioeconomic Quintiles and SLL PCA Quintiles - difference by loan cycle, HMF years and service received. The results show no significant difference among groups). For the socio economic indicator which minimum is -5.12 to the maximum (7.98), the improvement of 0.00 to 0.30 corresponds only to an increase of 2% of the score. (0.30/ (7.98+5.12)).

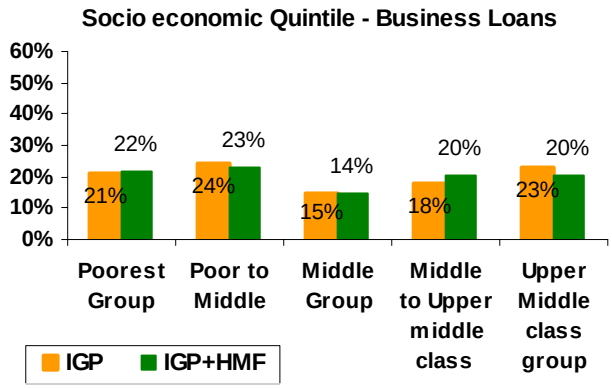
Conclusion: we notice that the evolution of the standard of living level (defined by the 4 indicators) **is non significant and infinitesimal for both group.**

4.4.1 Loan purpose and SLL

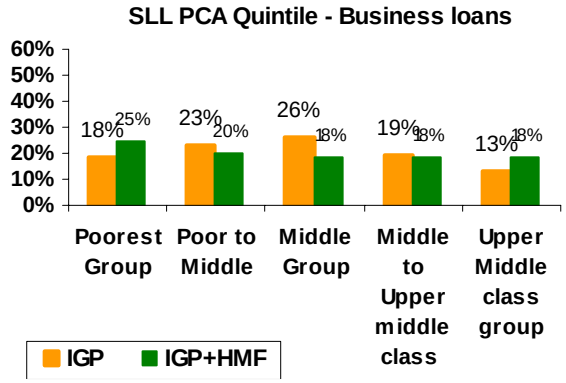
It is interesting to observe the socio economic score distributed by quintile and loan purpose. Current loan purpose has been considered to create those graphs.

The histogram representing other loan clubs the old debt repayment loan, home appliance loan, consumption as well as educational loan.

Graph 41 : Business loan among socio economic quintile

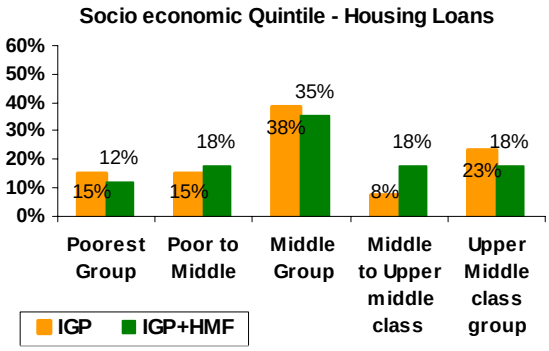


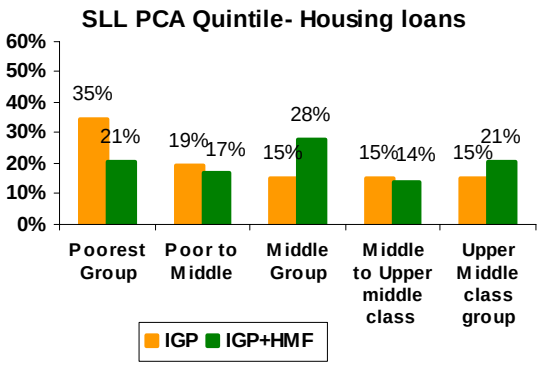
Graph 42 : Business loan among SLL PCA quintile



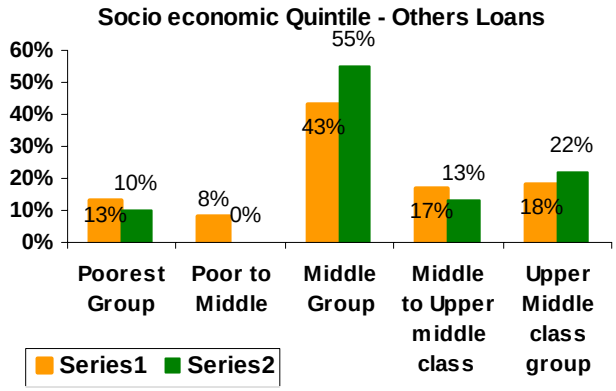
Graph 43 : Housing loan among Socio economic quintile

Graph 44 : Housing loan among SLL PCA quintile

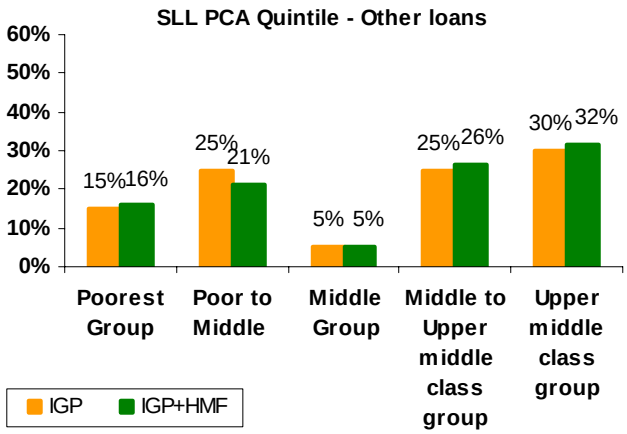




Graph 45 : Others loans among Socio economic quintile



Graph 46 : Others loans among SLL PCA quintile



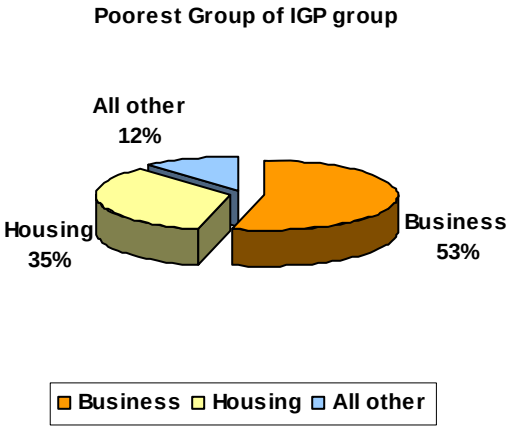
The common strategy of Inter Aide and Parvati in microfinance sector has always been to promote loan disbursement for income generating purpose also called business loan or productive loan. This strategy is clearly noticeable in all the pies of next pages which shows that all quintile received more loans for business.

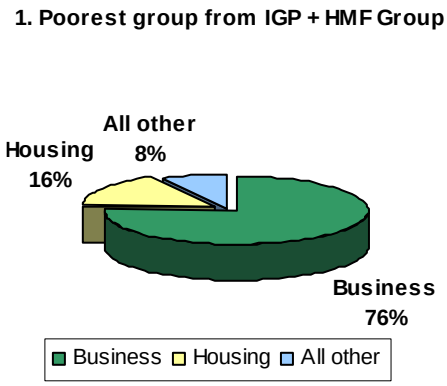
Beside this strategy, it is not so surprising to notice that the proportion of housing loan

in the poorest group of IGP is greater than other category. The very poor usually give priority to repair their house. Indeed, the poorest have very bad living conditions (no waterproof house, up to only 1m2 per person in the house only, etc). Housing conditions is often their priority to secure the family.

Graph 47 : Loan purpose among poorest quintile for IGP group

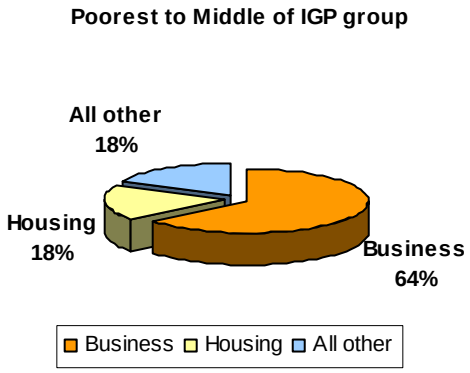
Graph 48 : Loan purpose among poorest quintile for IGP + HMF group

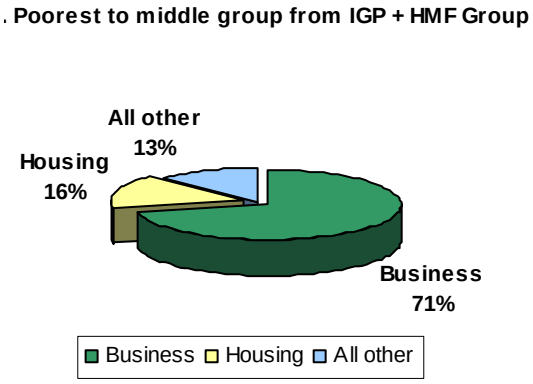




Graph 49 : Loan purpose among poor to middle group quintile for IGP group

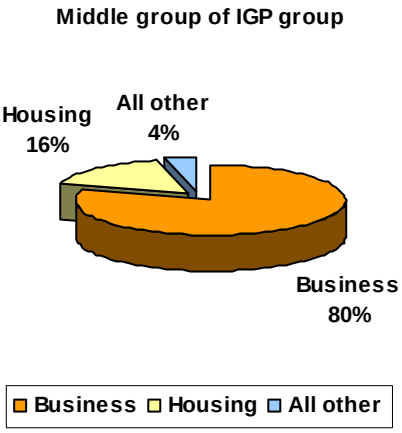
Graph 50 : Loan purpose poor to middle group quintile for IGP + HMF group

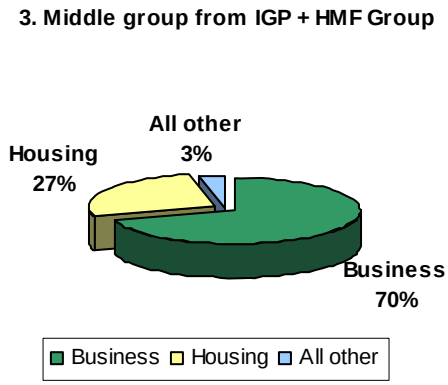




Graph 51 : Loan purpose among middle group quintile for IGP group

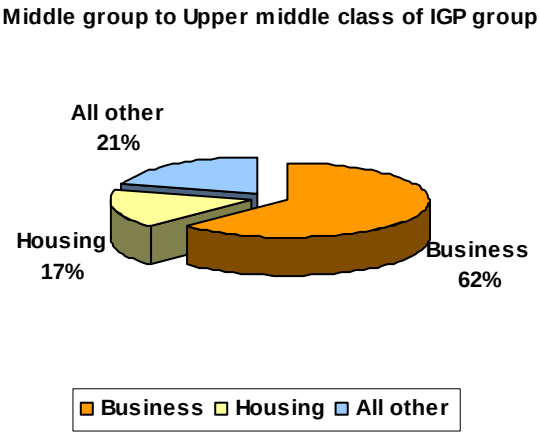
Graph 52 : Loan purpose middle group quintile for IGP + HMF group

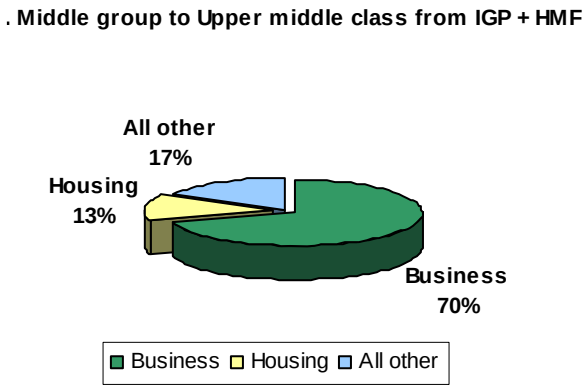




Graph 53 : Loan purpose among middle group to Upper middle class quintile for IGP group

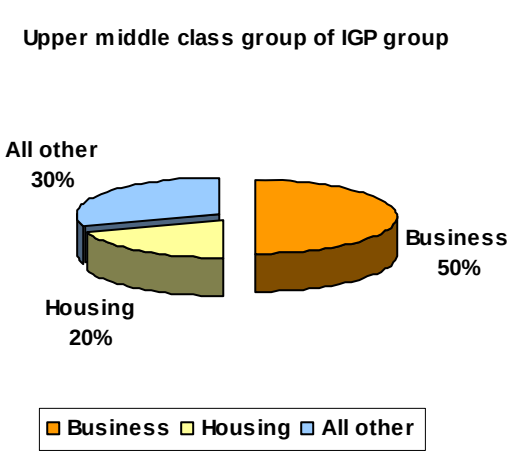
Graph 54 : Loan purpose among middle group to Upper middle class quintile for IGP + HMF group

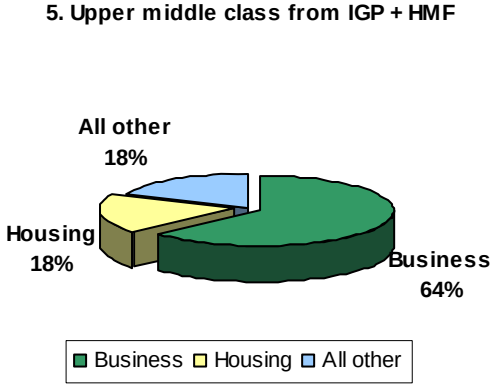




Graph 55 : Loan purpose among Upper middle class quintile for IGP group

Graph 56 : Loan purpose among Upper middle class quintile for IGP + HMF group





Main conclusive points:

- Both groups are equals as regards to their SLL. We can't say that there is one group poorer or richer than the other
- Loan does not seem to improve the SLL of the partner over the time, at least for the 1st three years
- There is no statistically significant improvement in SLL for bot group over the years.
- In terms of methodology, the socio economic indicator built for the study on fixed asset of family seems to have a better allocation of the population among the quintile than the SLL Inter Aide tool.

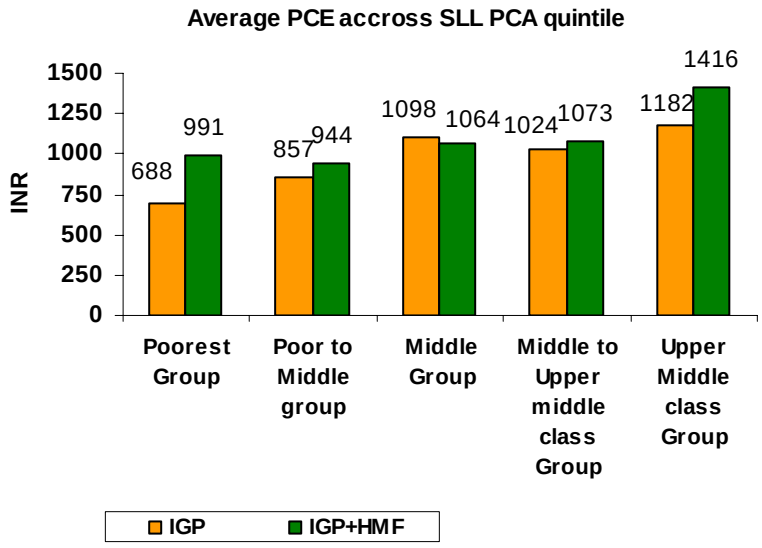
4.5 Family expenses analysis

This section of the report will try to analyse the impact of HMF programme on the management of the routine expenses. It would have been ideal but very lengthy to analyse all the type of expenses of the family. Therefore, we have focused particularly on health expenses and the correlation with the saving capacity.

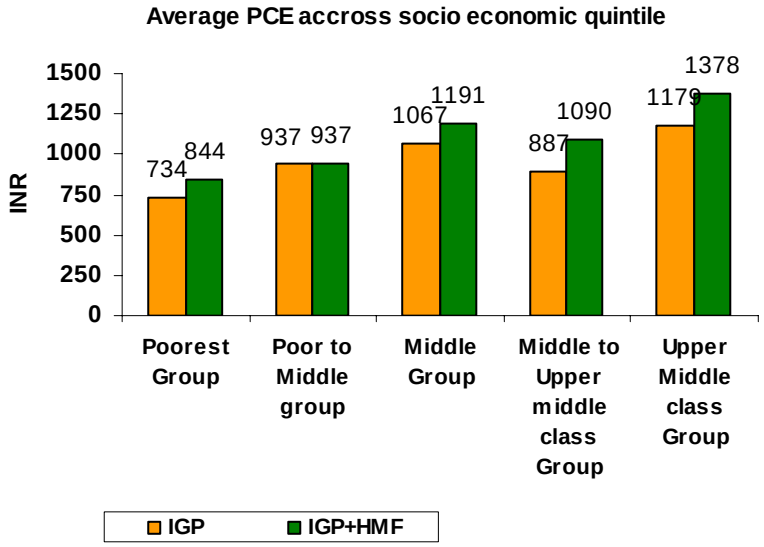
4.5.1 Per capita expenses (PCE) analysis

During the interview, we have asked the partners about their monthly routine expenses of their family. This includes expenses on food, health, education, housing, travelling, clothing, electricity, phone, and other minor expenses. For the purpose of analysis, we have added all those expenses together. In order to get comparable data, we have calculated and considered for the analysis the Per Capita Expenditure (total expenses divided by number of family members).

Graph 57 : Average per capita expenditure across SLL PCA quintile



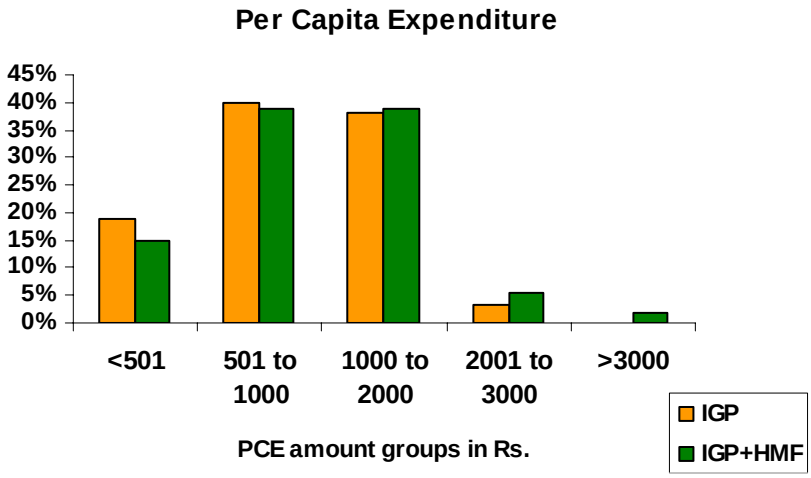
Graph 58 : Average per capita expenditure across socio economic quintile



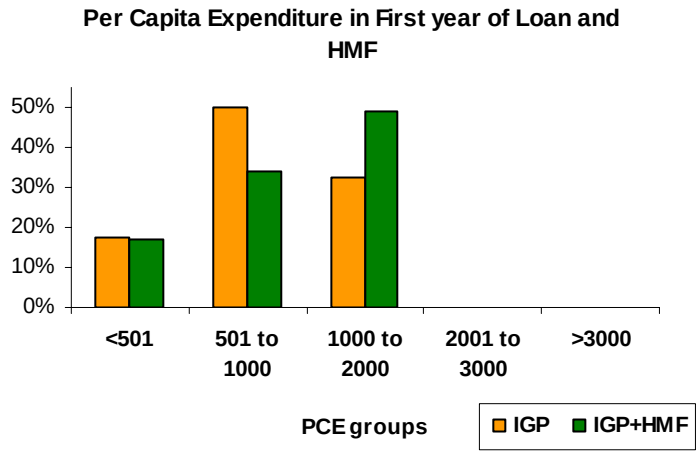
Graph 57 and

Graph 58 with both tool illustrates that the richer the higher the expenses per head in the family.

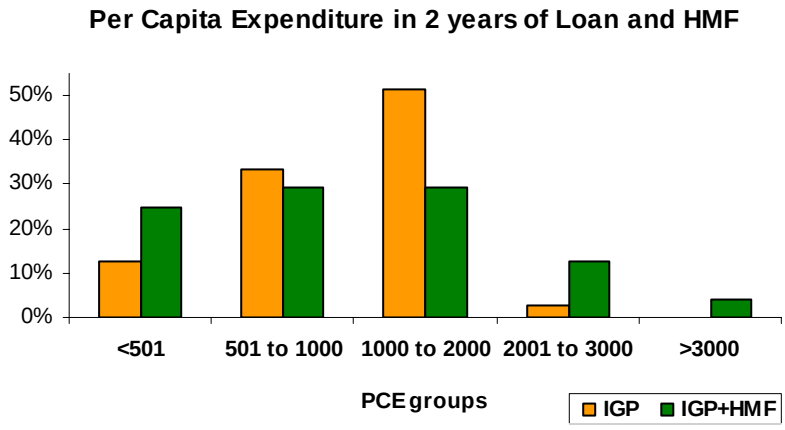
Graph 59 : Per capita expenditure slabs among the 2 groups



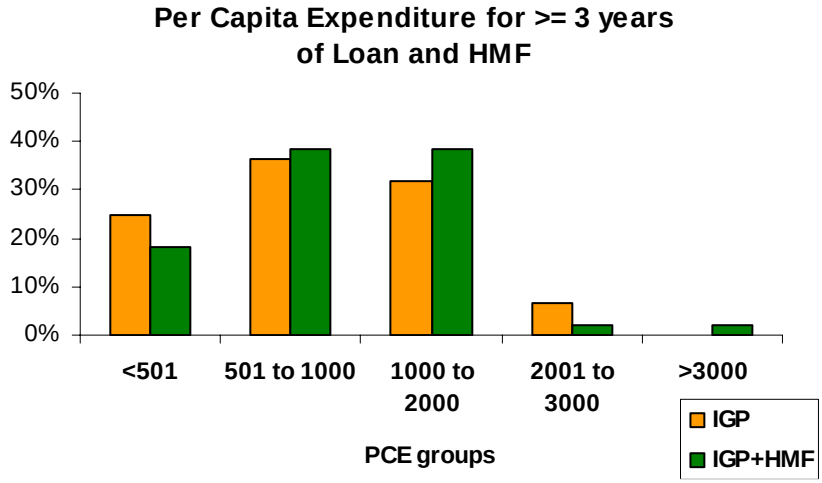
Graph 60: Per capita expenditure in first year of loan and HMF



Graph 61: Per capita expenditure in second year of loan and HMF



Graph 62 : Per capita expenditure for 3 and more years of loan and HMF

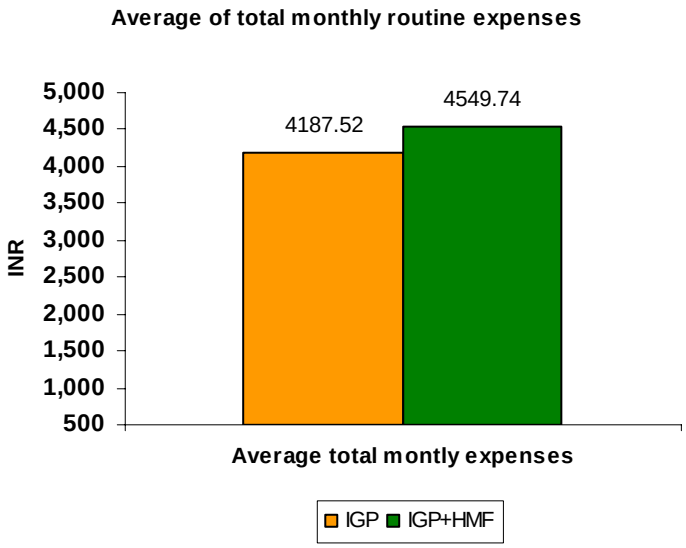


We have to take those results with a grain of salt since slum dwellers do not have always a real knowledge of their monthly expenses: expenses are done on irregular basis

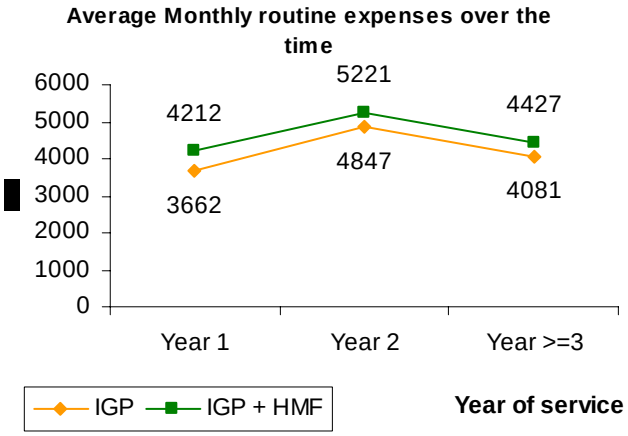
(many daily but also weekly…), one third of the sample is illiterate therefore not able to be sharp in answering these questions about expenses and family budget, many people are working on daily wages which mean irregular expenses pattern from month to month.

From the Graph 63, it seems that partners having HMF along with IGP have slightly more spending capacity than IGP partners.

Graph 63 : Average total monthly routine expenses



Graph 64 : Average monthly routine expenses

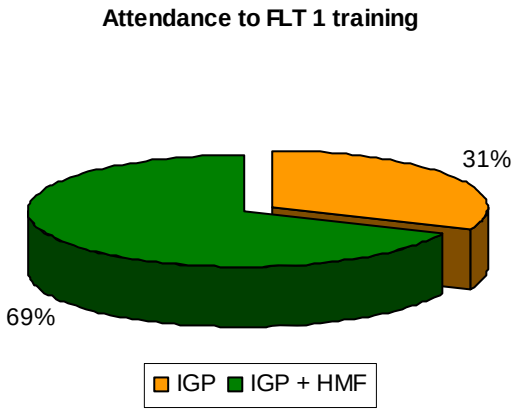


The total average monthly routine expenses illustrated in Graph 64 increase over the time, 5% and 11 % respectively for IGP+ HMF and IGP group. We can also see that the expenses decrease after the 3rd year of service for both groups.

One possible explanation to interpret this trend could be to connect it with the training on financial literacy the partners have received. Indeed, since May 2007 till end of February 2008, in PSW, 2500 partners have attended FLT 1 training, both from IGP and HMF programme. 67.3 % of our sample population have attended this training (192 members), out of which respectively 69% from IGP + HMF and 31% from IGP group.

In December 2007, we have conducted a survey whose main objective was to measure the impact of financial literacy training on the expenditure pattern of the family. Though this FLT study is based on declarative answer and is not a statistical impact survey, out of the 87 persons interviewed, 83.9% of them mentioned that they have started cutting their unnecessary/ avoidable expenses after attending the training, in either one or more than one heads of expenses.

Graph 65 : FLT 1 attendance



FLT 1 training objective is met if indeed partners tend to manage better their expenses. They may not necessarily decrease their expenditures but spend their income more efficiently.

Other possible explanations of this trend are detailed in the next section. Indeed, this trend is particularly true for HMF members who increase their health expenditure after several years of services. Furthermore the proportion of people who can save in IGP + HMF group increases with the number of years of service. Refer to the next Graph 83 and

Graph 73 in section 4.5.2 till 4.6 for further details.

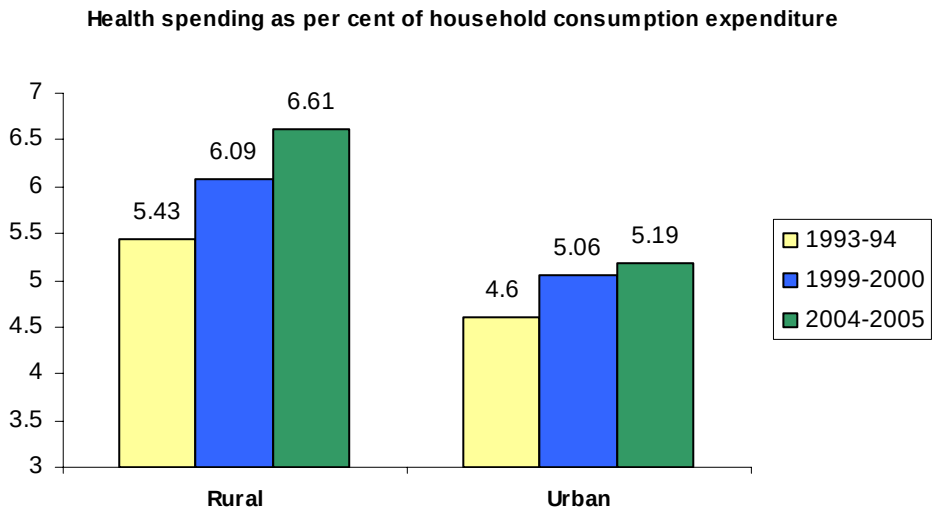
4.5.2 Monthly Health Expenses

Health expenses correspond respectively to 5 % and 6 % of total household expenditures for IGP group and IGP + HMF group. (Refer to pie chart in annexe 7.7.2). This proportion is following the general trend of urban context of India. Indeed, as per the study from Government Health expenditure in India[5], the proportion of health expenses

[5] Source : p 10 from the Government Health expenditure in India : A benchmark study. Undertaken by the Mac Arthur Foundation, India, by Economic Research Foundation, New Delhi, August 2006.

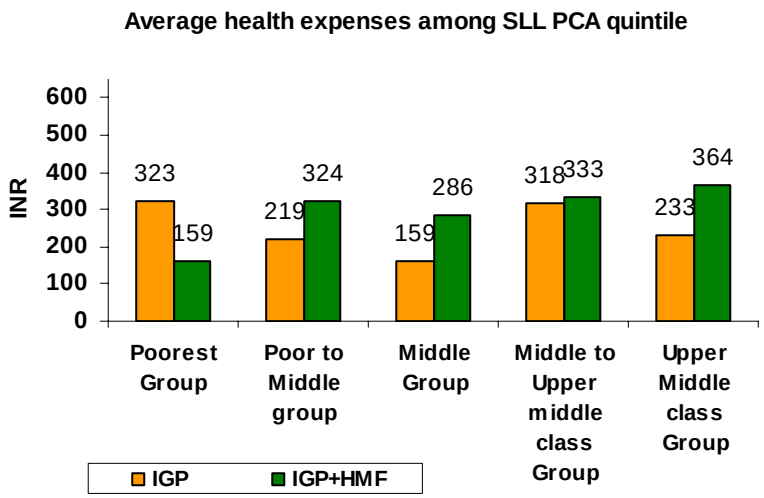
per household expenditure was in urban india 5.19 % in 2005. According to HMF database, medical cost have increased by 30 % between 2005 and 2008, pulling this percentage of health expenditure per household to 6.7%.

Graph 66 : Health spending as per cent of household consumption expenditure

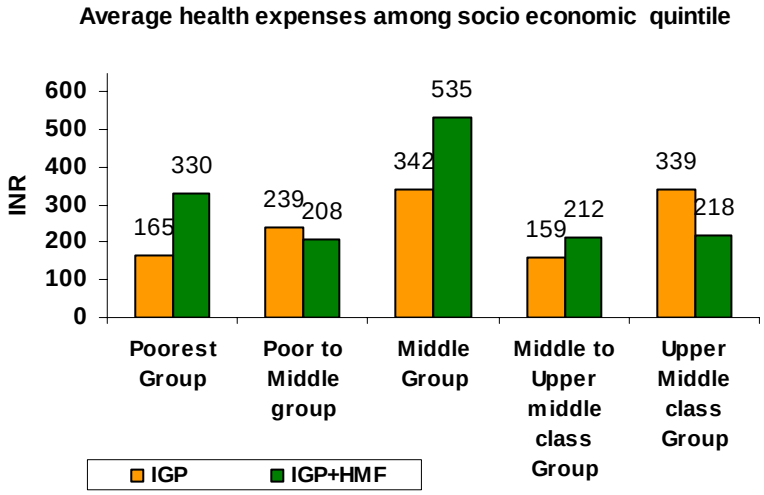


Source: NSSO Surveys of consumption expenditure, 50th, 55th and 61st rounds

Graph 67 : Average health expenses among SLL PCA quintile

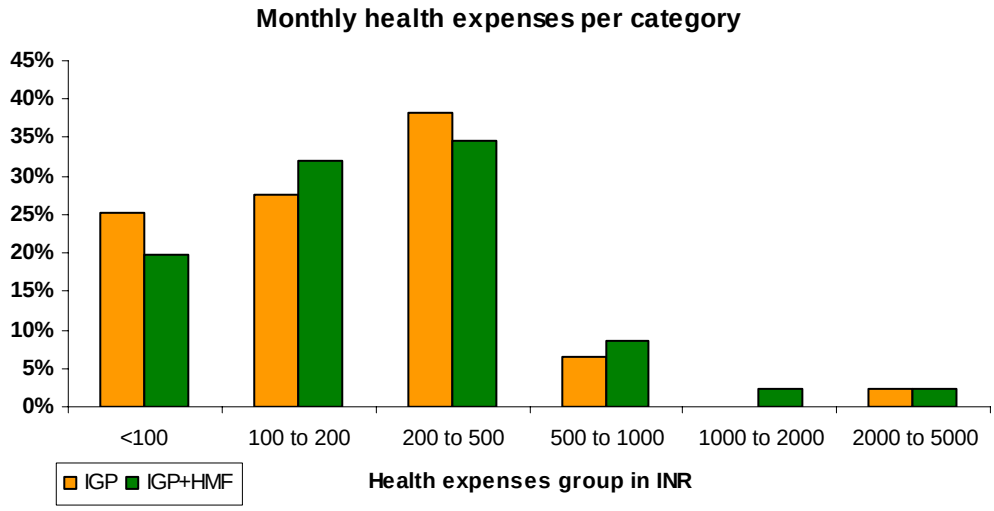


Graph 68 : Average health expenses among socio economic quintile



There isn't a clear pattern of health expenses per quintile for both groups. We can't say that with higher income, the population is spending more on health which was quite clear for global expenses.

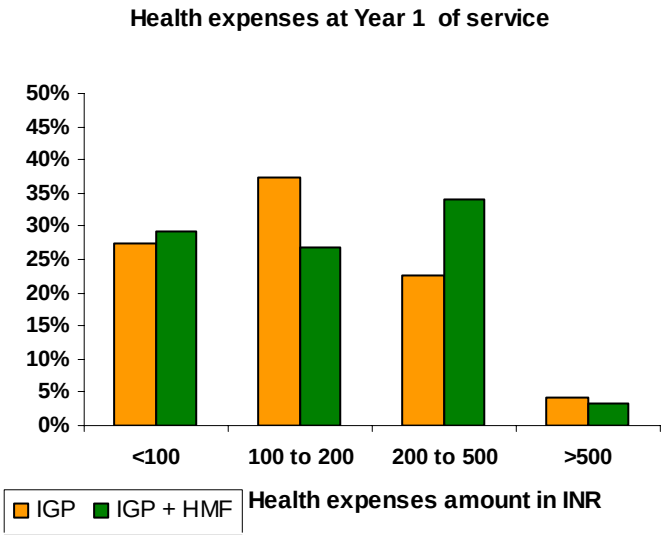
Graph 69 : Monthly health expenses per category

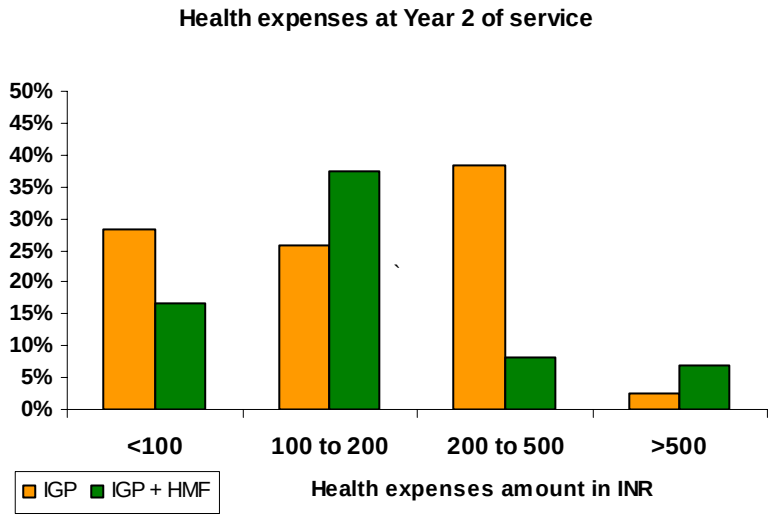


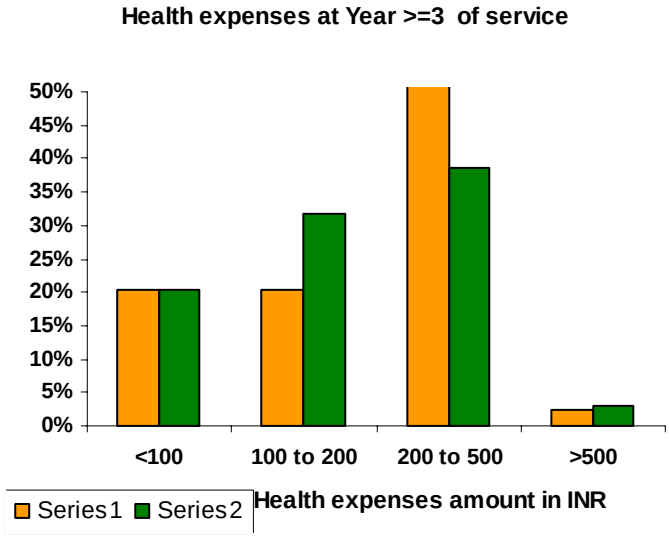
The next three

Graph 70, Graph 71 and Graph 72 show the monthly health expenses according to year of service.

Graph 70 : Health expenses at year 1 of service
Graph 71 : Health expenses at year 2 of service
Graph 72 : Health expenses at year 3 and above of service







In the

Graph 73, the absis has the following meaning:

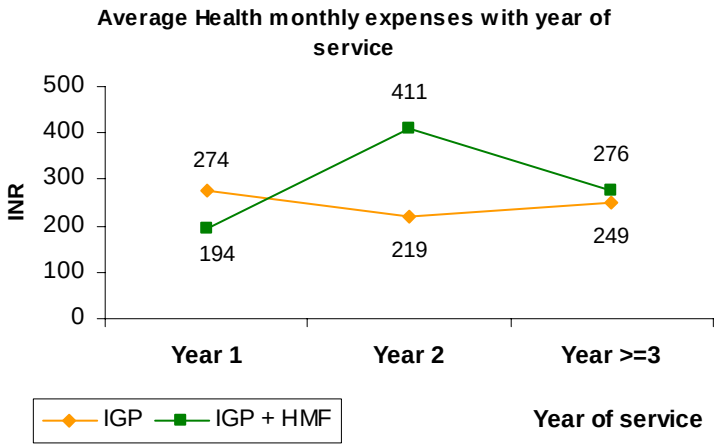
Year 1 means one loan and enrolment for one year of insurance policy

Year 2 means 2 loans cycle and enrolment for 2 years of insurance policy

Year 3 and above means 3 to 6 loans cycle and enrolment for more that 3 years of insurance policy

This classification, year1, year 2, year >= 3, will be used throughout the report.

Graph 73 : Average health monthly expenses with year of service



The

Graph 70, Graph 71 and Graph 72 illustrates that as the year of service increases, beneficiaries tend to spend higher amount, from below 100 INR to more than 500 Rs. Inflation can be one of the explanatory factor as it has reached 11 % in 2008[6]. However, this study is not a longitudinal study, all data have been collected in may-june 2008, so inflation is neutralised.

The

Graph 73 shows the average health monthly expenses for respective 2 groups. The IGP curve indicates clearly that partners who do not benefit from health insurance coverage have stable health expenditures. They would not consider their health as a priority and may even tend to save money from this expenses head.

The curve is reverse for insured members who spend 42 % more between the first year and the 3rd year and above. The increase of health expenses is particularly important between the first 2 years (112% of increase).

Possible explanation for the increase of expenses : Accessibility and affordability of health care services increase for those who have HMF. Indeed, they have a strong guidance facility available and the monetary reimbursement component of HMf can take

[6] Source : http://www.economywatch.com/indianeconomy/india-inflation.html

care of the majority of their out of pocket expenditures which may not be the case for the only IGP group.

From those 2 reasons, health expenses increase. It would be also interesting to show maybe in the forthcoming studies that while expenses may be more how much these members saved or got reimbursements to indicate real expenses. Differentiation should also be made between those health expenditures that were made after referral and guidance and those which the family did on their own.

Regarding the decrease of 33 % between year 2 and 3, there may be two gerenal explanations for this decrease: 1/ disease or accidents frequency may be less (or more stable) in one year than in the other. 2/ It is also true that for a brief period in Parvati there was a high incidence of claims (mostly accidents) which was discussed with communities and measures were taken to control that.

4.5.3 Health expenses disparities: concentration curves

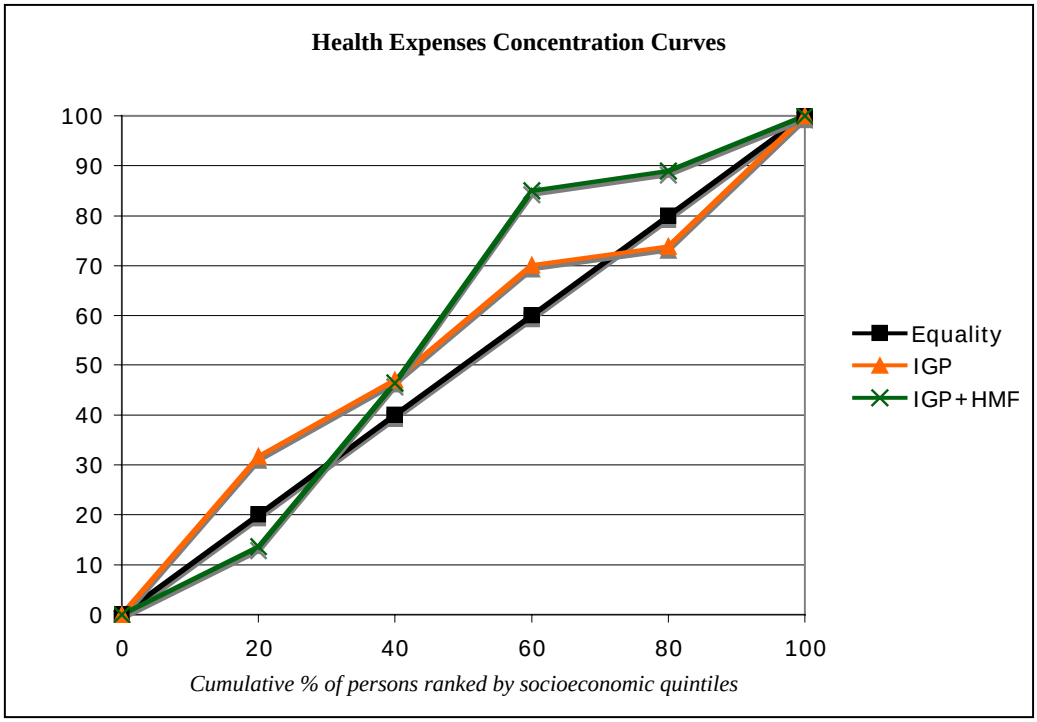
Before going for interpretation, a short point of methodology on the concentration curve is presented below[7] :

"The concentration index and related concentration curve provide a means of quantifying the degree of income-related inequality in a specific health variable. For example, it could be used to quantify the degree to which health subsidies are better targeted towards the poor in some countries than others, or the degree to which child mortality is more unequally distributed to the disadvantage of poor children in one country than another, or the extent to which inequalities in adult health are more pronounced in some countries than in others. Many other applications are possible.

The concentration index is defined with reference to the concentration curve (q.v.), which graphs on the x-axis the cumulative percentage of the sample, ranked by living standards, beginning with the poorest, and on the y-axis the cumulative percentage of the health variable corresponding to each cumulative percentage of the distribution of the living standard variable. (…).The line of equality is defined by the 45 degree line running from the bottom-left corner to the top-right. The convention is that the index takes a negative value when the curve lies above the line of equality, indicating disproportionate concentration of the health variable among the poor, and a positive value when it lies below the line of equality".

Graph 74 : Health expenses concentration curves

[7] Source : *The concentration Index : Quantitative Techniques for Health Equity Analysis—Technical Note #7, p1.*



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Graph 74) for IGP group lies (dominates) the line of equality, indicating that health expenses are concentrated among the poor. In IGP+HMF group curve, this tendency is not observed: first the concentration curve is under the line of equality, indicating that health expenses are not concentrated among the poorest. Next, when we reach the middle class, we observed that 60% of the people ranked by socioeconomic quintiles spend 85% of the total health expenses which indicates that health expenses are more concentrated in the middle class within the IGP+HMF group.

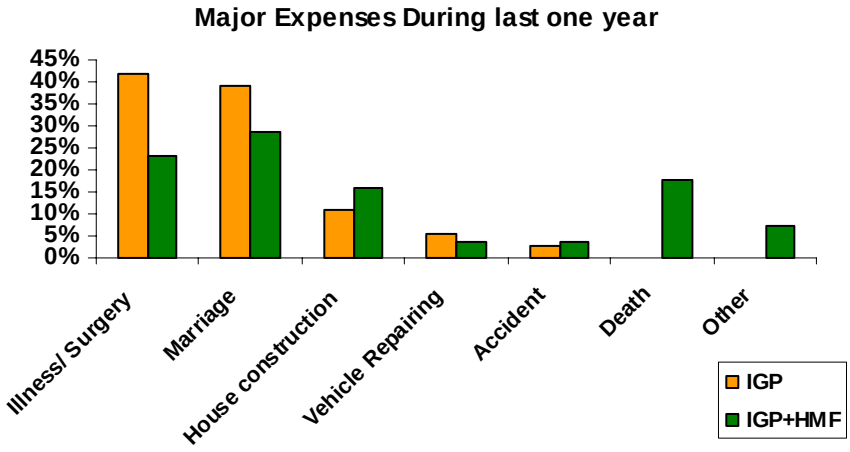
Can HMF team bring some light here in terms of analysis? According to HMF team, how do you interpret the fact that health expenses are more concentrated in the middle class within the IGP+HMF group?

One possible explanation would be that the very poor avoid hospitalization till they are in extreme health condition (like an accident) while the community middle class may not have expenses due to better living conditions. The general awareness among the clients as well as personal preferences in terms of care also may also be a definit factor.

4.5.4 Major household expenses in the previous year

Out of 285 families, 92 (32.3%) families reported that they had major expenses during last one year, respectively 34.6 % for IGP+HMF and 29.3% for IGP families. The main reasons for major expenses include illnesses, deaths, marriages, accidents, house repairing or building, vehicle repairing …

Graph 75 : Major expenses during last one year



Apart from death and illness, the major expenses mentioned by the interviewees are planned expenses.

It is interesting to notice that they are more members of IGP group who considered illness as major expenses than from HMF group. Being HMF member, they also receive timely diagnosis and treatment of a disease at an early stage, which prevents emergencies and seriousness of illness. Also the expenses of the HMF members will be less as the costs are negotiated thanks to the network created which means an IGP person will spend more money on the same illness than the HMF member.

Wedding is also an important expenses head in an Indian family for both groups.

Surprisingly, deaths are mentioned only by HMF members and not by IGP members as major expense though majority of them are covered by LIC policy[8].

4.6 Saving behaviour and members's saving analysis

4.6.1.1 Financial link indicator of the SLL Inter Aide

The seventh indicator of the standard of living level tool is the financial links. This indicator provides information regarding access to financial source as well as indebtedness and saving of the partners. Scoring from 1 to 4 is made as per following criteria:

- **1. Money lender debts/no economic transaction**: The family is unaware of any form of financial services or has no access to them. They just earn for the day and spend the complete amount. There are no savings, no debts. They have no credibility so that anybody would give them credit. Or else, the family has taken loans from a money lender.

[8] Life insurance company policy for death and accident (in case of partially handicapped)

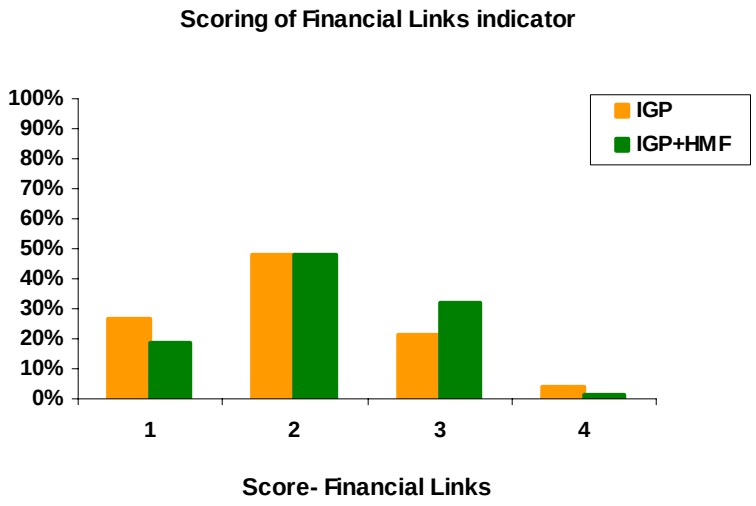
- **2. No savings, no debts, member of Bhishi**: Family has not borrowed loans from anybody, Family has any special saving but one family member belongs to a Bhishi or self help groups (SHG).
- **3. Savings <15000 / and access to Cooperative / MFI.** Score 3 in financial links is given when the family has saving less than Rs. 15000/- and they have links with bank. Or else, they have links with (savings/ investments/ loans) cooperatives, MFIs, post office, insurance companies etc. The situation should be assessed by the investigator. However, when a partner has reloan, the family will be directly considered for score 3 or more as they already have link with PSW (MFI) for 1 or more years.
- **4. Savings > 15000 and access to banks Loan**: Total savings are higher than Rs.15000/- and the family has a bank account and can access the services of a bank.

In the questionaire, indicator of financial links is scored on the basis of indebtedness and savings data.

It is important to recall here the limitation of Inter Aide, particularly for this parameter. It is very difficult to get the right information on saving and indebtedness of a family in an interview of 30 minutes. To obtain a realistic picture of the indebtedness of the family, a deep qualitative interview of about 2 hours with the family is required.

Therefore, we will analyse in the core part of the report information related to saving and we will present in annexe 7.6 those related to indebtedness.

Graph 76 : Financial link score

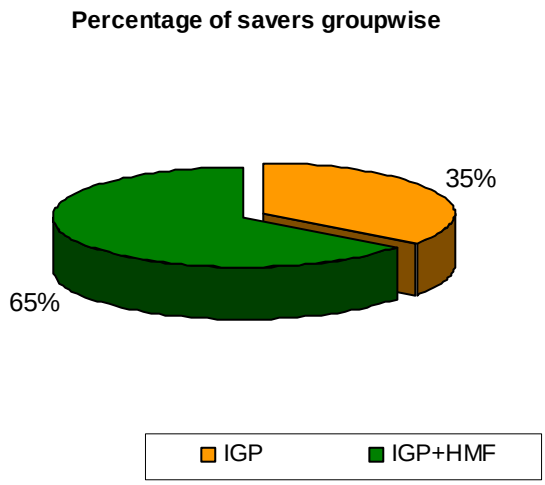


Out of 285 partners, 162 (56.8%) reported that they save money periodically. 43.2% partners reported not to save at all.

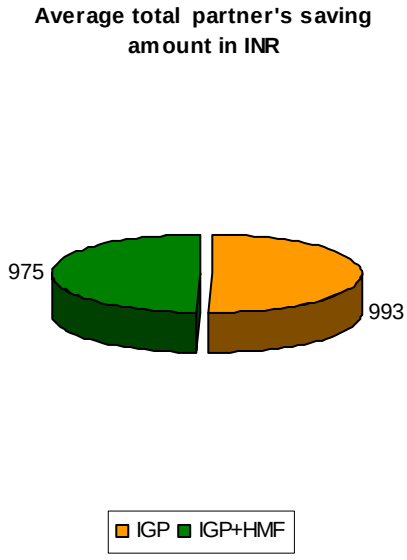
Monthly saving of the family is calculated by converting all the family saving into monthly figures.

We have assumed that members who have accumulated amount throughout the year have saving capacity. However, saving capacity (income minus expenditure and debt) has not been calculated.

Graph 77 : Percentage of savers group wise



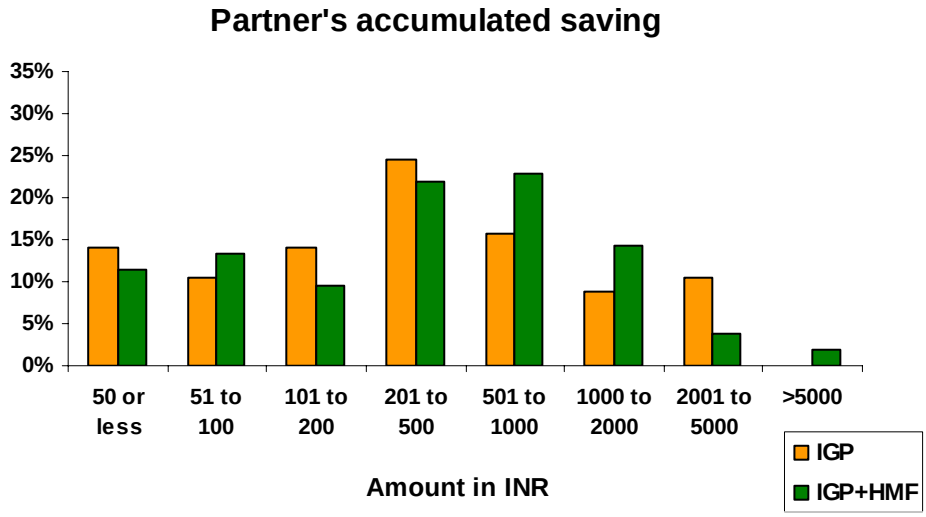
Graph 78 : Average total saving amount of members in INR



Though the saving accumulated between the 2 groups is very similar, they are more savers among IGP + HMF group.

Total saving is similar but monthly saving amount differ between the 2 groups (see next table)

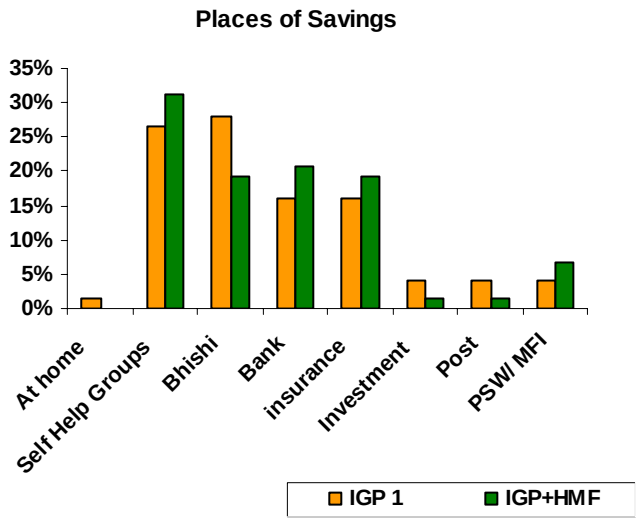
Graph 79 : Monthly saving per slabs amount in INR



The

Graph 80 is a cumulative data of all number of savings.

Graph 80 : Place of saving

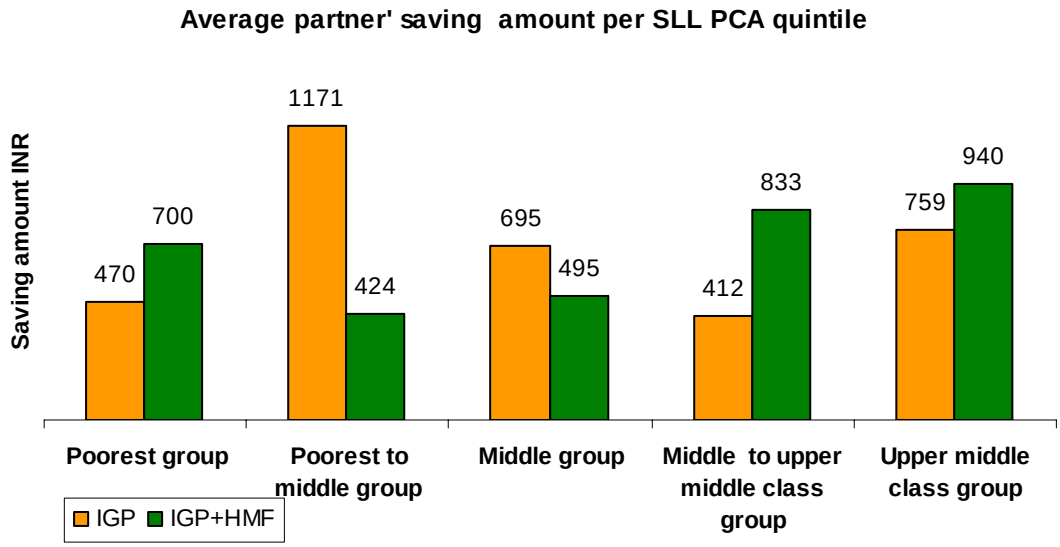


It is interesting to notice that though partners are enrolled into a microfinance programme, they are still saving with very informal schemes such as Bhishi (unformal group). Whereas IGP+HMF members opt for organized and formal places of savings/ investments like Self help groups, banks, insurance or microfinance institutions.

Selecting place for saving depend upon saving capacity as well as awareness regarding financial literacy. Parvati does not promote in a large scale the saving opportunity within the NGO as it is not yet fully legalised. The Indian government has not yet given the authorisation to any MFI to collect savings from their members in India.

The accumulated saving amount directly throws a light on the economic conditions of the families. Hence, it is important to study the distribution of saving per quintile.

Graph 81 : Average partner' saving per SLL PCA quintile



The Graph 82 with the socioeconomic quintile illustrates a direct trend of saving behav-

iour for both groups: the higher the quintile, the higher the number of savers and their accumulated saving.

However, this trend is not obvious with the graph above built with the SLL PCA quintile method. Again here, the difference between those 2 graphs question the Inter Aide SLL tool.

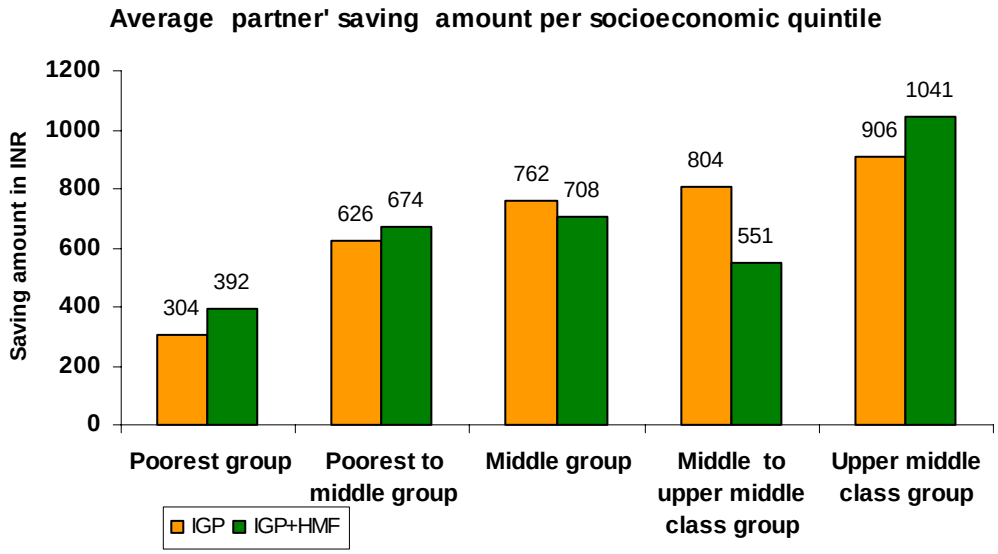
The quintile PCA depends upon the SLL inter Aide calculation which is subjective (refer to those subjective reasons mentioned in the constraints and limitations section 3.7.4)

It is worth reminding that the socio economic quintile has not been built according to the saving amount of the partner but on objective criteria of family fixed asset and housing conditions.

Hence, we can say here that the SLL PCA does not provide an accurate allocation across the quintile according to certain criteria, here the saving.

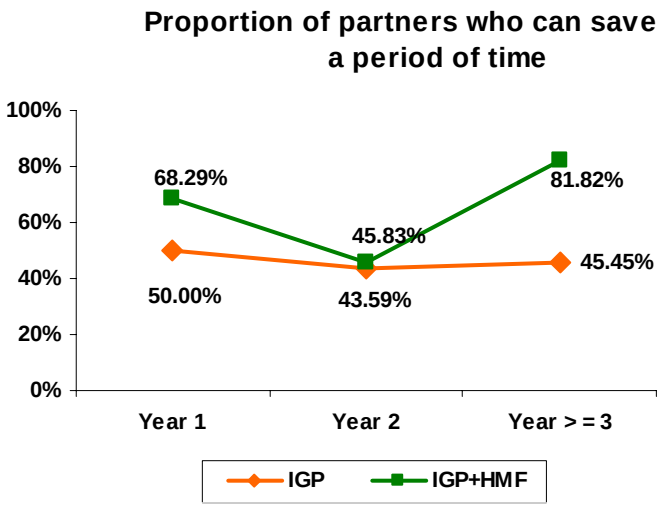
We can then question the methodology of Inter Aide SLL indicator (poverty assessment form and means of calculation).

Graph 82 : Average accumulated saving of members per socio economic quintile



It is also worthy of note that insured members tends to have a growing saving capacity with the time which is very encouraging. After 3 years and more of service, the number of HMF savers almost doubled when it remains stable for IGP group.

Graph 83 : Proportion of partners who can save with years of service



Illustrated in graph 83, the evolution of accumulated saving amount is showing a positive curve for IGP + HMF, with an increase of 36 % from year 1 to year 3 and a decrease of 23 .7% for IGP group.

Graph 84 : Evolution of accumulated saving with years of service

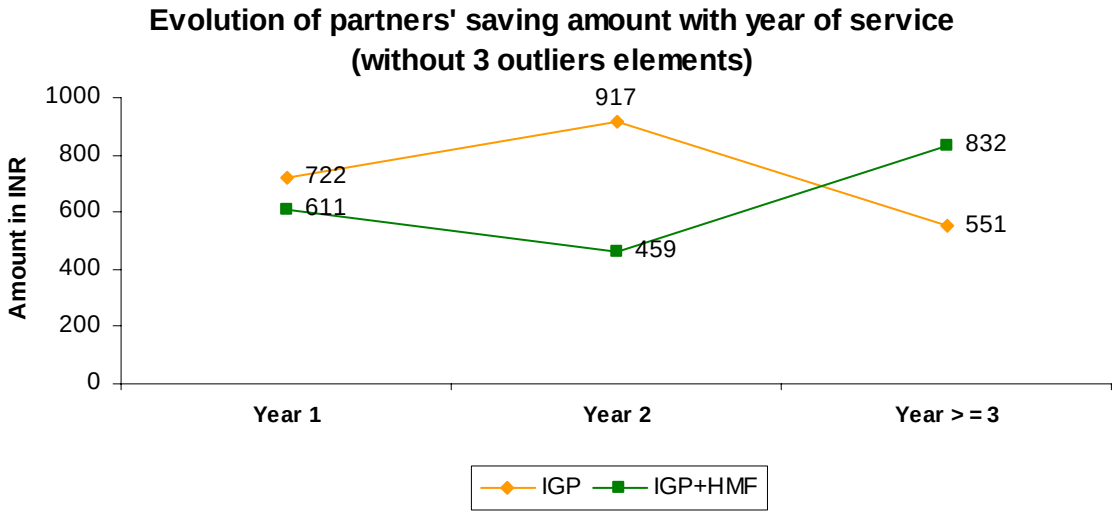


Table 22 Number of savers year and group wise

Frequency	Year 1	Year 2	Year > = 3	Total
IGP	20	17	20	**57**
IGP+HMF	28	11	36	**75**
Total	**48**	**28**	**56**	**132**

Even if we have isolated the 3 outliers elements, the accumulated saving amount over the years increase for IGP + HMF group and decrease for IGP group.

Conclusion of the economic chapter

1. Monthly average routine expenses increase slightly for both group. It seems that members who have health coverage tend to spend more for priority expenses head such as health expenses. They are also more people from IGP + HMF who have attended FLT 1 training.
2. IGP+HMF members show more awareness while selecting saving places.
3. There is a higher percentage of savers in IGP + HMF group though the accumulated saving is pretty much similar for the 2 groups. Moreover, it seems that there is a substantial difference between the 2 groups in the capacity of partners who can save over a period of time. It seems that enrolment in HMF programme increases the understanding of prioritizing the expenses, resulting in a more discipline saving behaviour.

4.7 Health hygiene and food analysis

4.7.1 Introduction

As part of the assessment of standard of living, the health status (including illness and accident history of the family), hygiene practices and food habits of the families are important criteria. We have assessed them with the following criteria:

Illness and accident history: history of illnesses occurred in the family during the previous 3 months; treatment-seeking behaviour in the family (capacity to avail health services); accidents occurred in the family since 2007

Hygiene practices: hygienic conditions; hygienic individual habits (washing hands before meals, daily bath, usage of sanitation facilities, for example)

Food habits: number of meals per day, frequency of balance and adequate diet

The description of assessment criteria is made as precise as possible, in order to generate objective and unbiased data.

4.7.2 Illness pattern and treatment seeking behaviour

Out of our 285 surveyed families, 92 (32.3%) reported that they had at least one family member who fall sick during the last three months. The family member includes all the permanent family members including children and dependents. This proportion is higher in the IGP+HMF (35 %) than in the IGP-Only group (28%). It might be because belonging to HMF programme increase the awareness about health problems resulting into reporting of illnesses.

Out of these 92 families who reported at least 1 member who fell sick in the previous 3 months:

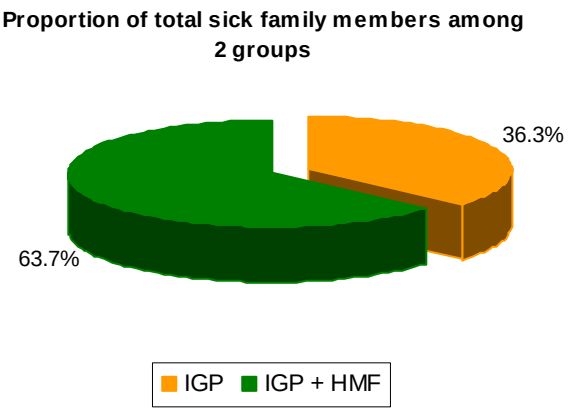
- 76.1% of families had only one member who was not well
- 19.6% of families reported sickness of two family members

Only 4 % of families (4 families) reported that they had three family members who were sick.

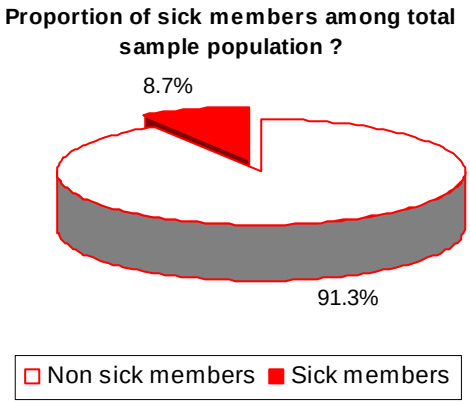
Altogether, out of 1300 persons from all the 285 families, illness of 113 persons was reported during the last 3 months.

There are twice as many members who fall sick in IGP + HMF group than IGP group. It seems that HMF programme tends to capture population who have health problems and needs more health care. It confirms the general truth that it is likely that members who are more aware of health system & services increase their access and expenses on health due to having insurance. Furthermore, it also indicates some moral hazard in the selection of members but as 85% of total on going borrowers in Parvati takes HMF, there would still be some significant pooling of the risk.

Graph 85 : Proportion of sick members among the 2 groups



Graph 86 : Proportion of sick members among total sample population



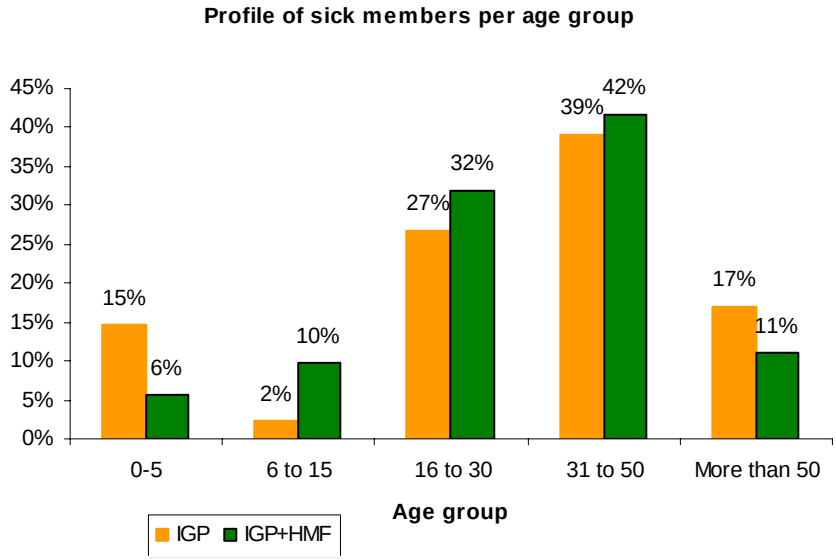
Generally speaking, the Indian national average of probability to be hospitalized range between 2% to 3 % per year[9].The 12 months claim frequency is still below this level for Parvati: 1.8% in 2008.

We have to be careful when comparing this result with national or uplift benchmark since we have considered in our calculation of sick members hospitalization as well as OPD. The proportion in our sample would obviously be higher than the general trend.

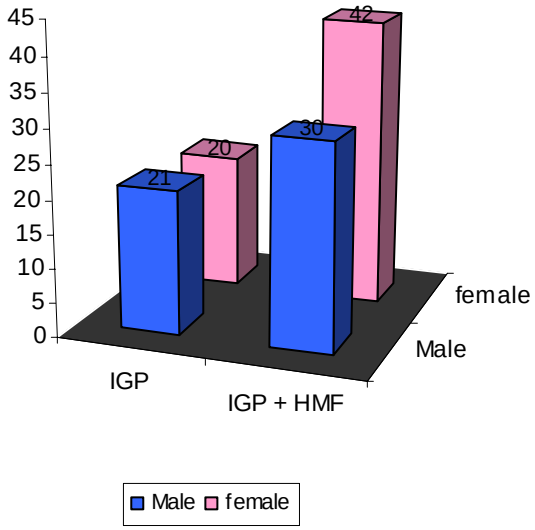
As it is presented in the Graph 87, individuals who have faced illness during last three months are from middle age group (31 to 50 years), i.e. active members of the family, followed by young adults (16 to 30 yrs). In IGP+HMF group, the family members who had faced illnesses are female in majority (58.3%, as compared to 48.7% in IGP-only group).

[9] Source : www.mohfw.nic.in/NRHM.htm

Graph 87 : Proportion of sick members per age group



Graph 88 : Distribution of sick member gender and group wise

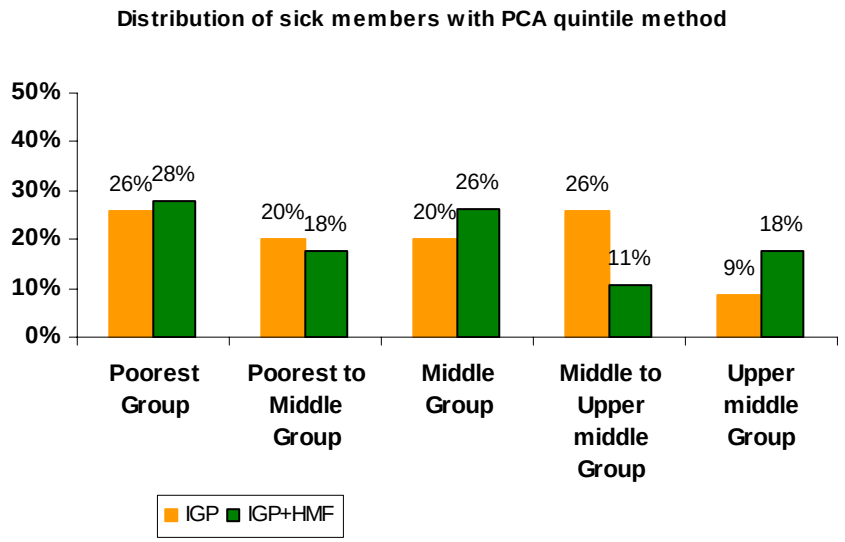


4.7.2.1 Type of illness

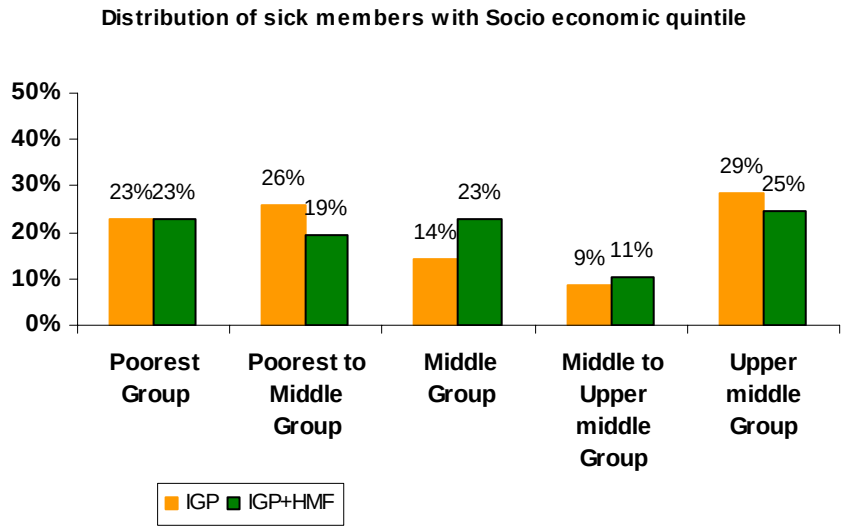
Illnesses faced by these members range from simple minor ailments like fever and chills to serious like cardiovascular diseases. However, it is important to note that declarations of illness are very subjective and also depends on the poverty level of the patient.

Usually, the richer, the more the propention to declare an illness whereas poorest level group may not declare it. However, this is not true in our case. The distribution of sick members across the quintile below does not show a significant difference of reporting illness between the poorest and the upper middle class family.

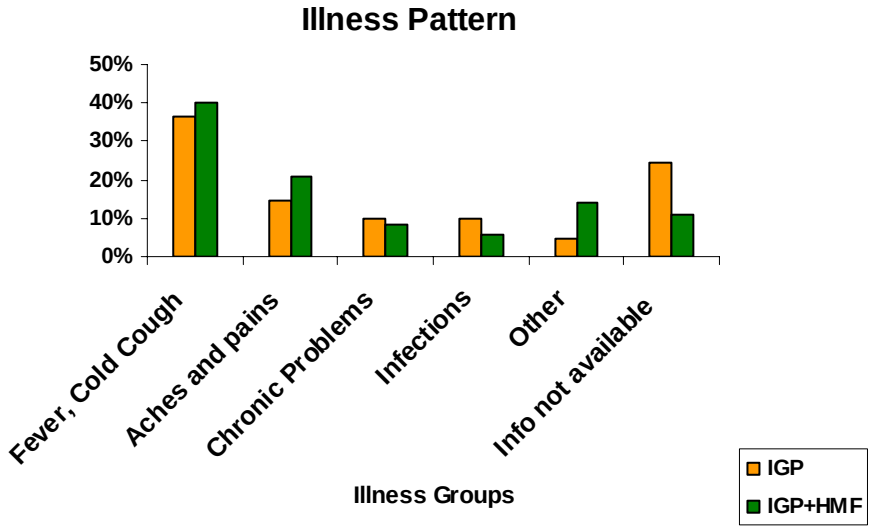
Graph 89 : Distribution of sick members with PCA quintile



Graph 90 : Distribution of sick members with socio economic quintile



Graph 91 : Illness pattern



As it is illustrated from the Graph 91, maximum partners reported minor ailments like fever, cold and cough followed by aches and pains. These are more reported by IGP+HMF group. The data was collected in the month of June and illness history was asked from the last 3 months (March, April, may). Those three months were summer season where the frequency of illness is less compare to monsoon season and winter. Below are the reported diseases till October 2008 for Parvati among the month as well as the type of debases for the same period.

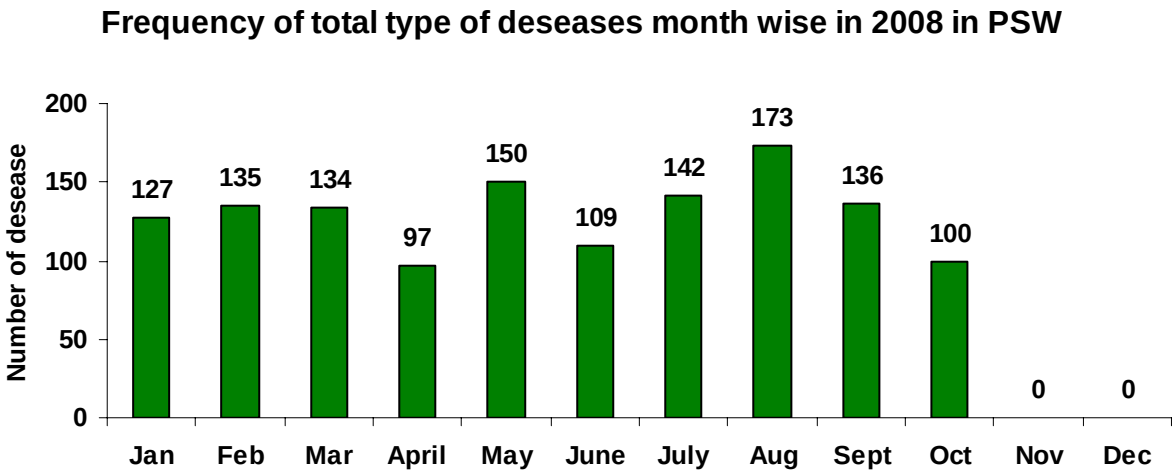
Problems like aches and pains are also appeared common. There are more middle age persons reporting illnesses, aches and pains might be occupation related.

Around 10% partners reported chronic lifestyle related problems such as diabetes, hypertension, asthma and cardiovascular diseases. IGP group has little more proportion in this category.

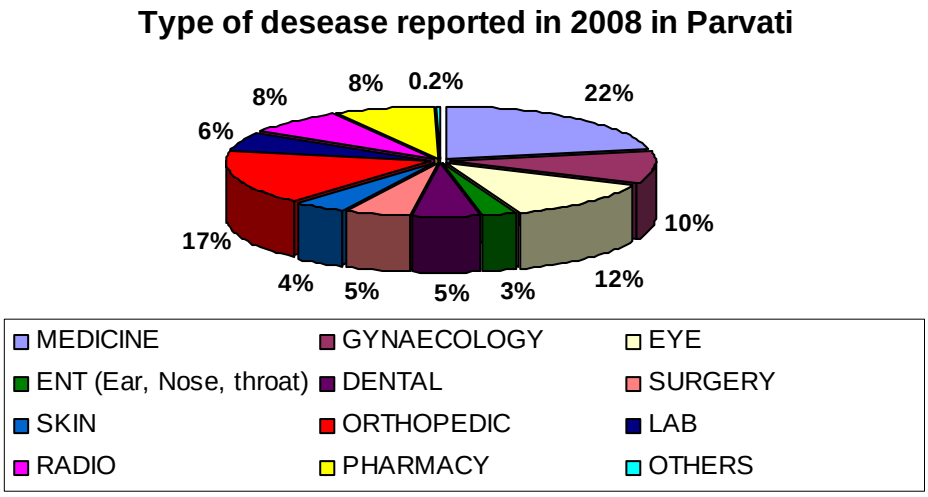
Infections include gastrointestinal infections like diarrhoea and vomiting, jaundice, detected malaria and Tuberculosis. These are problems more related to awareness and life style which includes hygienic practices.

`Other' category includes problems like arthritis, giddiness, weakness, skin problems, alcoholism etc. More than 25% of IGP partners did not reported the information regarding illness.

Graph 92 : Frequency of total type of disease month wise in 2008 in PSW

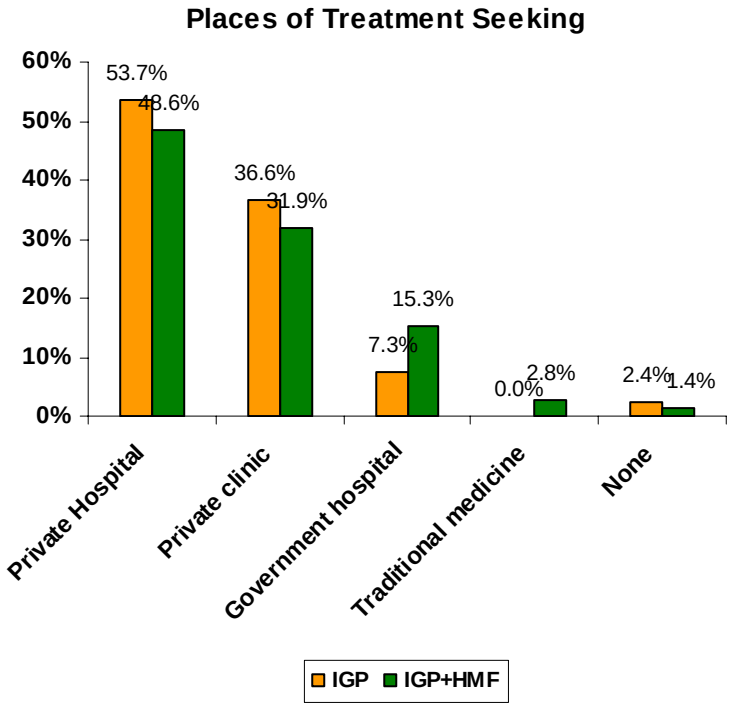


Graph 93 : Type of disease report in 2008 in PSW



4.7.2.2 Place of treatment

Graph 94 : Place of treatment



The

Graph 94 clearly indicates that partners prefer private health care services for all kind of illnesses. About 15.3% IGP+HMF partners have sought treatment from Government centres; however this proportion is less than 10% for IGP partners. This might be due to HMF project, where Government services are in network and partners are referred to them by the Network doctor. Respectively 2.4 % and 1.4 % for IGP and IGP + HMF group did not seek for treatment outside their house. They may have taken home remedies or stayed at home.

Out of those who declared falling sick in IGP + HMF group (57), 18% of them went to a network hospital..

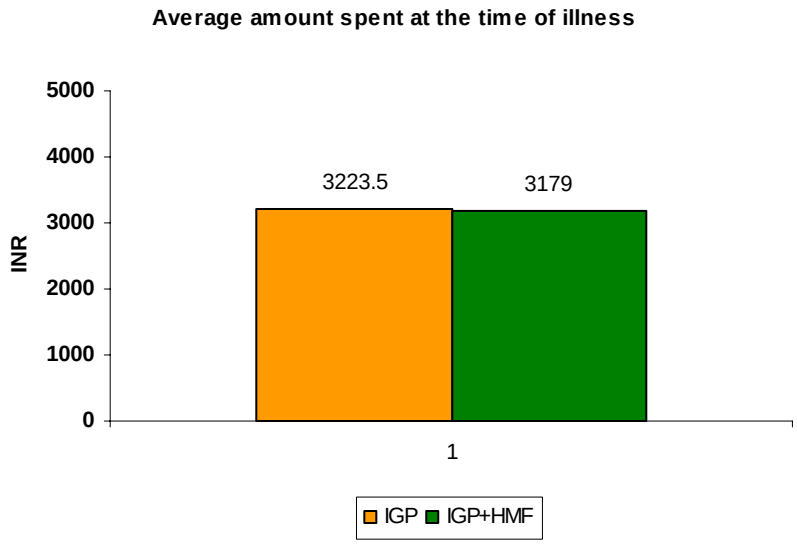
4.7.2.3 Amount spent for treatment

The data of amount spent is sourced from the declaration of the partner at the time of interview.

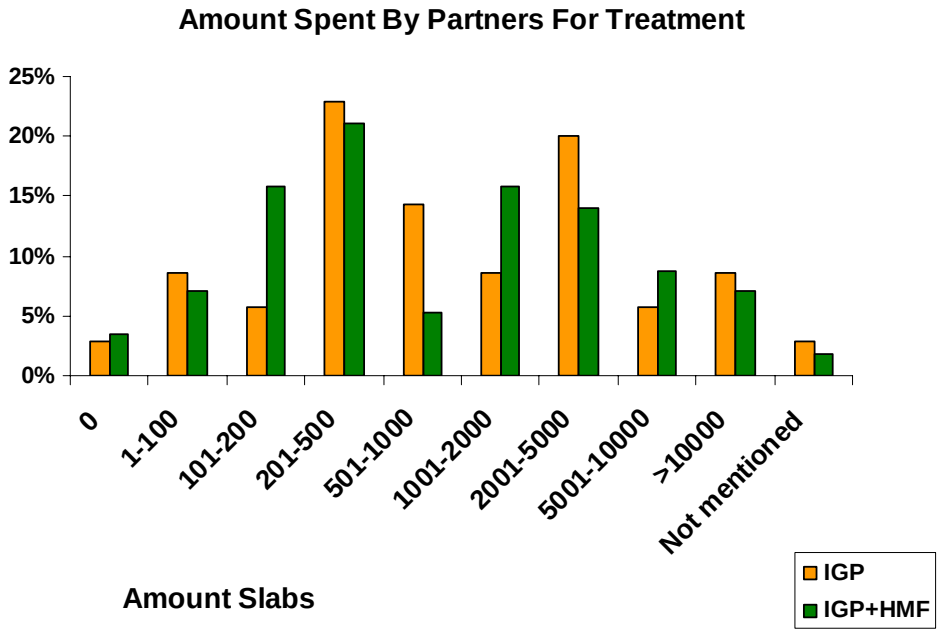
The difference of average amount spent for illness between the 2 groups is very insignificant. However, it differs slabs wise, then treatment wise.

Globally, on an average, sick members have spent around 3200 Rs, which represents for the very poor 1.77 times their average monthly income (1799 INR for this study).

Graph 95 : Average amount spent at the time of illness

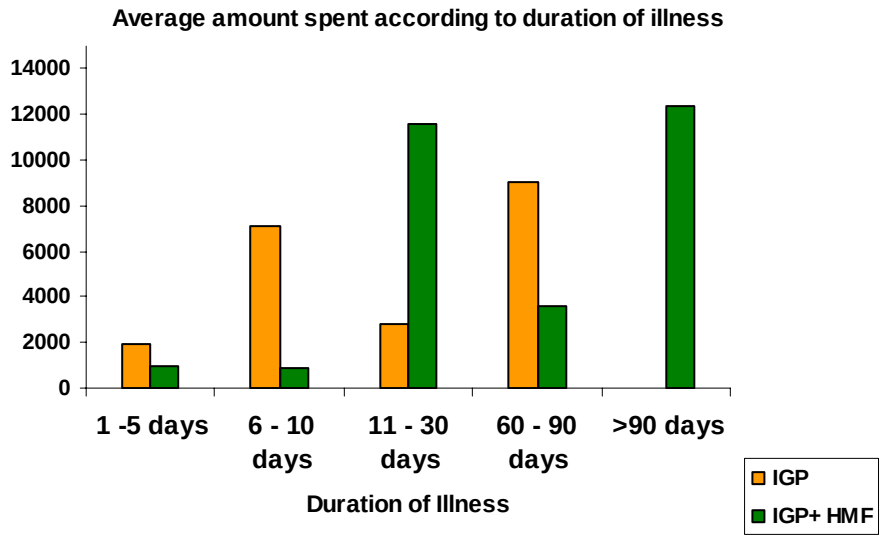


Graph 96 : Amount slabs spent at the time of sickness



Furthermore, the duration of illness varies from 1 day to 6 months. Average duration is 18.1 days. 40% of the people have spent on an average 1430 Rs for an average duration of illness of 5 days, respectively 1952 Rs for IGP group and 1000 Rs for IGP + HMF group. The illness has been a burden on the family for both groups. Nevertheless, we cannot conclude that HMF programme has been a “financial reliever” for the family since we have not compared for the amount spent for the same type of illness.

Graph 97 : Average Amount spent according to duration of illness



As used in previous chapter, the absis in the

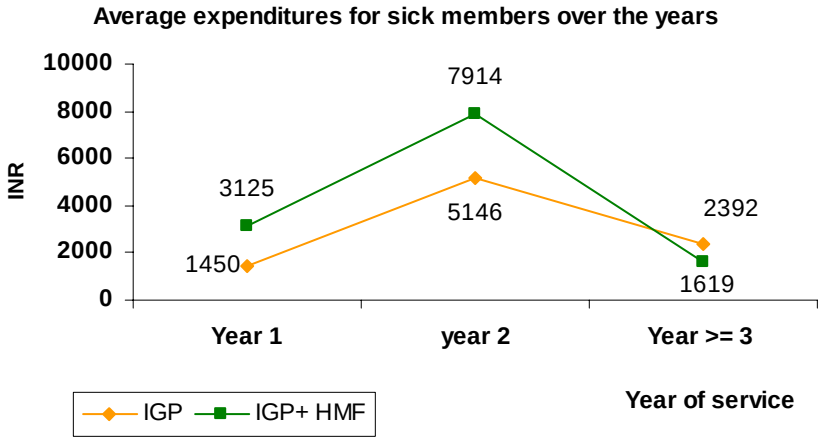
Graph 98 indicates the different year of services

Year 1 means one loan and enrolment for one year of insurance policy

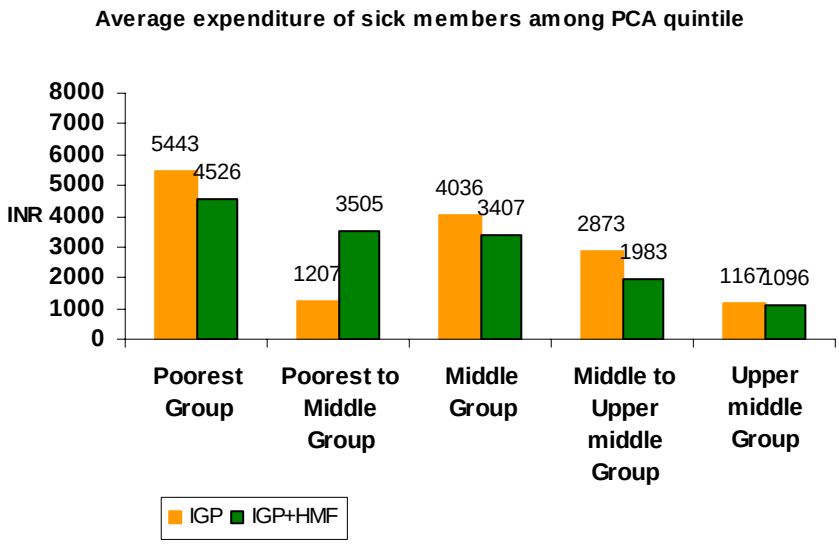
Year 2 means 2 loans cycle and enrolment for 2 years of insurance policy

Year 3 and above means 3 to 6 loans cycle and enrolment for more that 3 years of insurance policy

Graph 98 : Average expenditure of sick members over the year

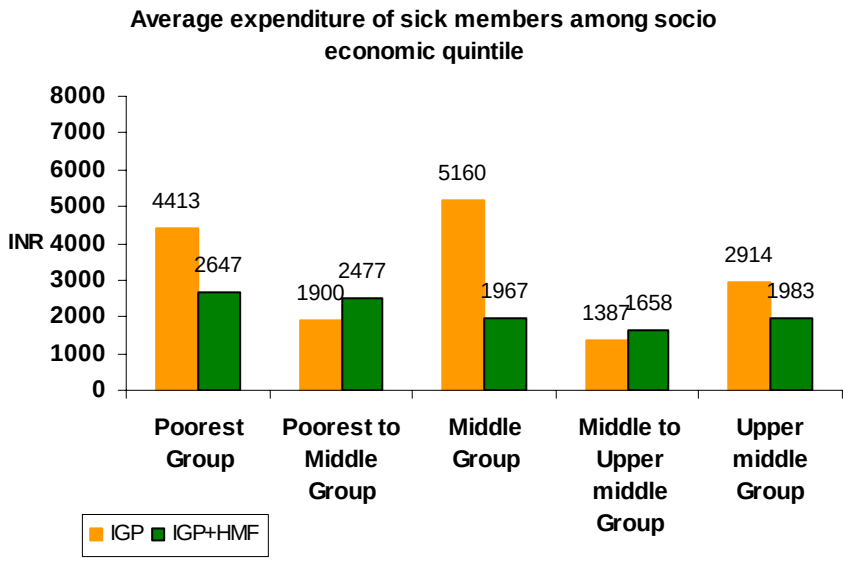


Graph 99 : Average expenditure of sick members among PCA quintile



The Graph 99 and Graph 100 show the same information but with different quintile method. With the only PCA quintile, we could have said that the poorer the higher the expenses at the time of illness, which is not so obvious with socio economic quintile method. We can observe that poorest quintile of IGP group only has spent 66 % more of health expenses for curing disease than the IGP + HMF group.

Graph 100 : Average expenditure of sick members among socio economic quintile



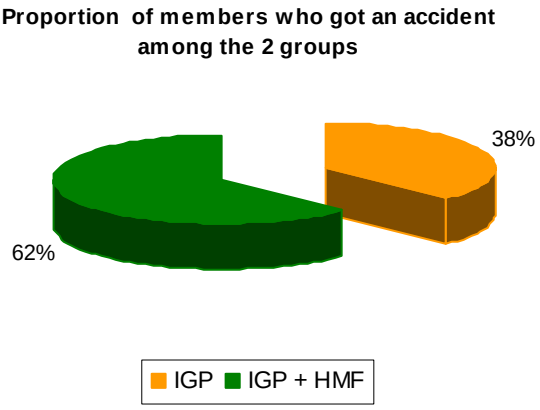
4.7.3 Accidents

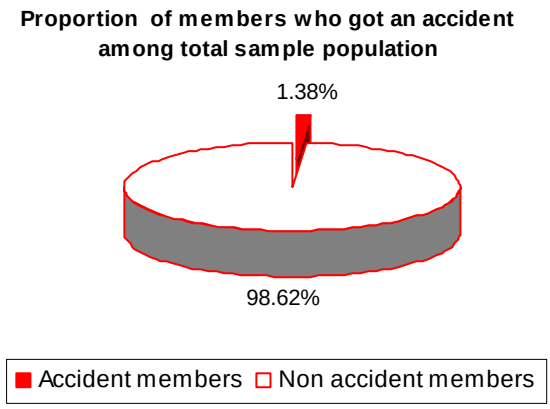
Out of 285 families, only 16 families reported an accident of any of the family member during the past one year. Two families had 2 members who had an accident. Therefore among 285 families of 1300 family members, 18 persons had accident (1.38%). All the accidents reported are road and vehicle accidents except one, reported to be road fighting in which the member had an injury.

Out of 16 families, 10 are from IGP+HMF group, whereas IGP group has only 6 families. Sex wise there are 14 males and 4 females.

Graph 101 : Proportion of members who got an accident among the 2 groups

Graph 102 : Proportion of members who got an accident among sample population

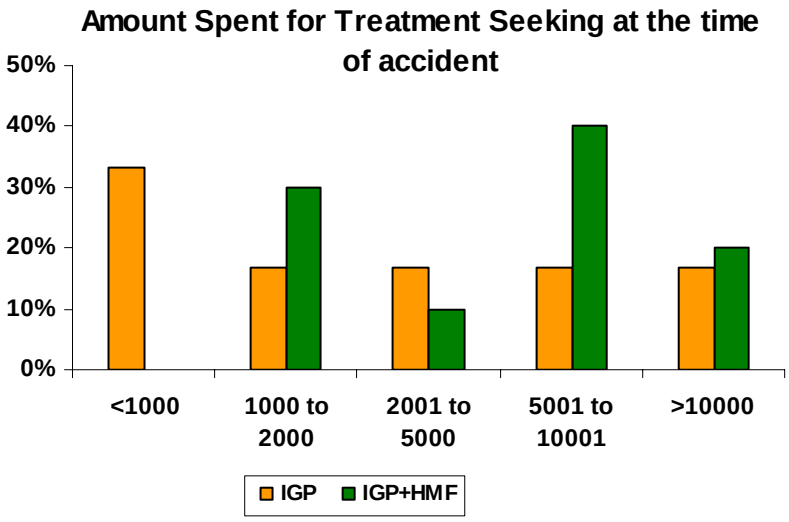




This percentage seems low but it is in fact a high percentage when we compare it with the probabilities of accident from a population. As per assumption from actuaries, there is 0.43 % of probabilities that a person from a population has all type of accident (see annexe 7.7.5). Our percentage is then 3 times higher than average probability of accident in a non exceptional context (we would expect even higher percentage during monsoon).

The expenses of treatment ranges from Rs. 400/- to Rs. 20000/-. Following graph shows the expenses for treatment by two groups.

Graph 103 : Amount spent for treatment at the time of accident



4.7.4 Addictions

To complete the assessment on the health status of our sample population, we have questioned the partners about the addiction in the family. Addictions to mishri[10], tobacco, alcohol and gambling were investigated. This addiction status has also been considered for scoring the health indicator.

Regarding gambling, this ruinous practice does not have effect on health status but has still been considered here as it usually go along with alcohol habit.

There is a high level of addiction among population living in slums: almost one person out of 2 is addicted to tobacco.

Graph 104 : Distribution of members per addiction and group

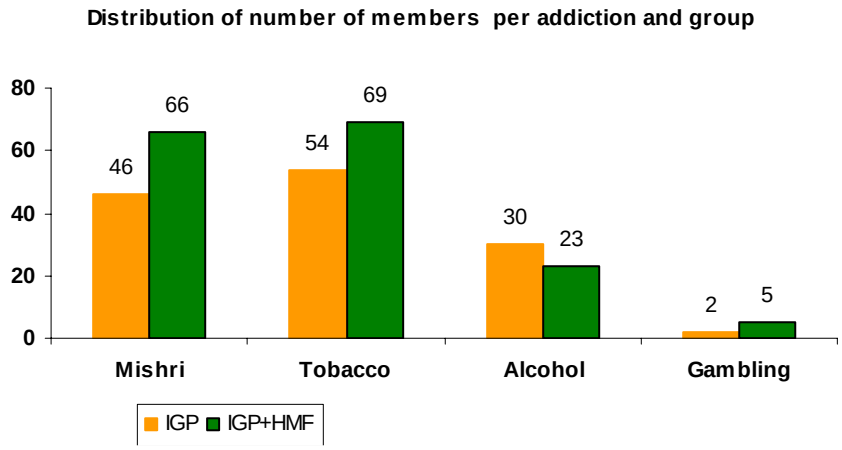


Table 23: Table on addictions

[10] Smokless tobacco preparation

	IGP	IGP+HMF	Total
Mishri	46	66	**112**
% of total	37,40%	40,74%	**39,30%**
Tobacco	54	69	**123**
% of total	43,90%	42,59%	**43,16%**
Alcohol	30	23	**53**
% of total	24,39%	14,20%	**18,60%**
Gambling	2	5	**7**
% of total	1,63%	3,09%	**2,46%**

4.7.5 Health score

From the poverty assessment form, the health status of the family is defined by 4 main situation described and scored below :

1. Frequent non-treated ailment: The members in the family frequently fall ill and even if they have knowledge about the practitioners, they do not seek treatment; may be due to financial constraints or misconceptions. People giving preference to spiritual and religious kind of treatment will come into this category. So here even if any one member of the family is frequently ill, then also the investigator has to code this option. However, chronic ailments or disabilities for which families are taking treatment will not come into this score.

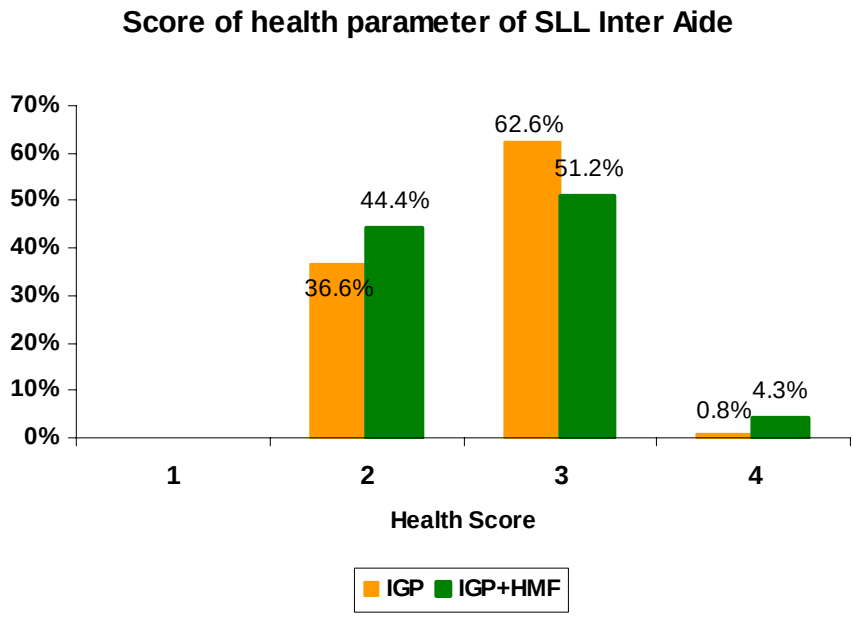
2. Frequent irregularly treated ailment: Members of the family frequently fall ill/are prone to ailments but just sometimes visit a local practitioner whose authenticity is not always known. The treatment seeking often depends upon financial availability or which person in the family is ill. They often wait for 2-3 days or if the illness is in minor stage and then visit the doctor, normally do not pay the follow up visits to the doctor. Chronic ailments like diabetes, blood pressure, asthma, arthritis will come here.

3. No frequent ailment and adequate knowledge of medical services: members of the family do not usually fall ill and have complete knowledge of the medical services available in the vicinity or the city at large. Immediate treatment seeking with low episodes of illness.

4. No.3 along with medical Insurance: Like in the third case there is good health in the family and complete knowledge of medical facilities and the family members are also insured with a medical insurance. However, if the member has opted for the Uplift HMF policy for the first time, then this case will not be considered this is baseline information before starting the policy. However, if any other medi-claim has been taken, this case would fall into 4th score. Also if the family members frequently fall sick and do not take benefit of health insurance, then they will get score 2.

Although, scoring of the indicator depends upon frequency of illnesses, treatment and awareness about medical services, hygienic practices and addictions in the family were also considered at the time of scoring this indicator as this would affect health ultimately. Even if family has medical/ health insurance, score 4 is not ranked if the family does not have good health conditions or high addictions. Therefore, very few proportion of IGP+HMF received score 4.

Graph 105 : Health score with SLL Inter Aide

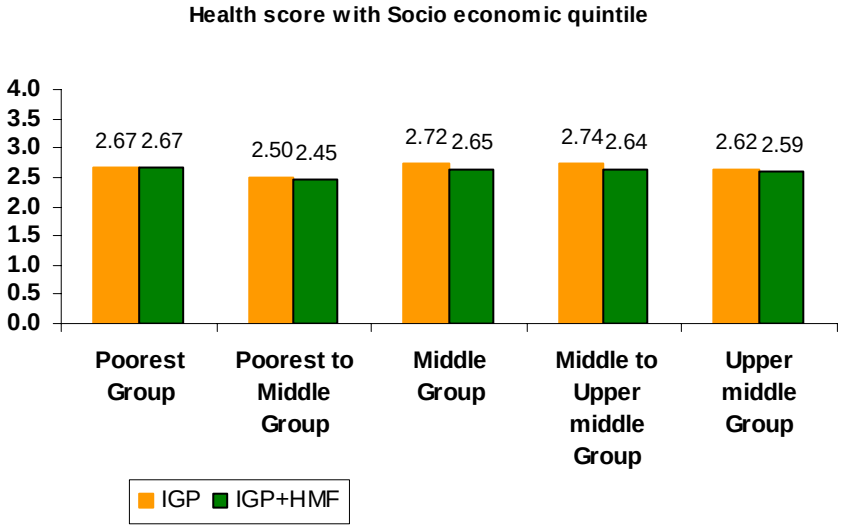


As per the Graph 105, nobody has score 1, as families go for treatment. The average health score distribution by quintile shows a minor difference of health score according to poverty level of the partner. It is surprising to see that the upper middle group has same health score than the poorest group, irrespective of the method used.

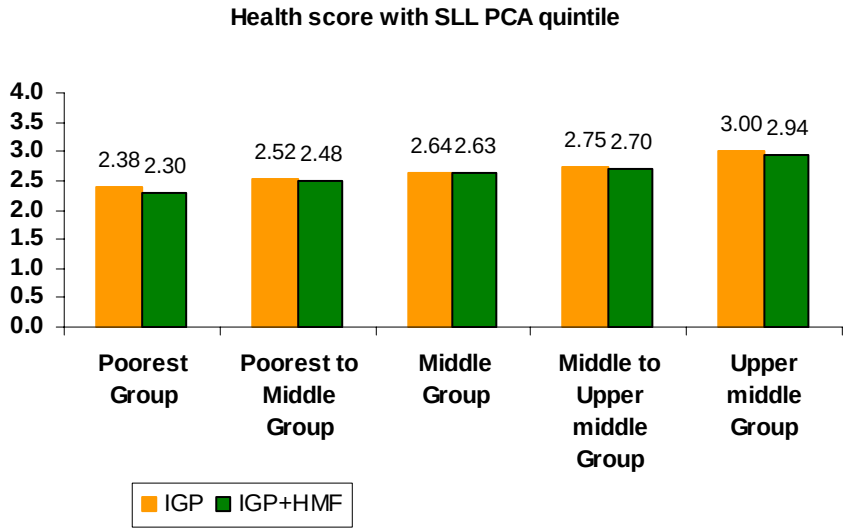
We have seen that there are higher numbers of members who fall sick in the IGP + HMF group. This status is emerging also here from the health score with greater percentage of IGP + HMF with chronic and frequent health problem (score 2).

The allocation of health score among the 2 quintiles is also here uniformly distributed among the quintile. This uniformity indicates that the health score is not a very good indicator. It is then better to rely on the percentage of sick members than the global health indicator where the 4 scoring possibilities are too general.

Graph 106 : Health score with socio economic quintile

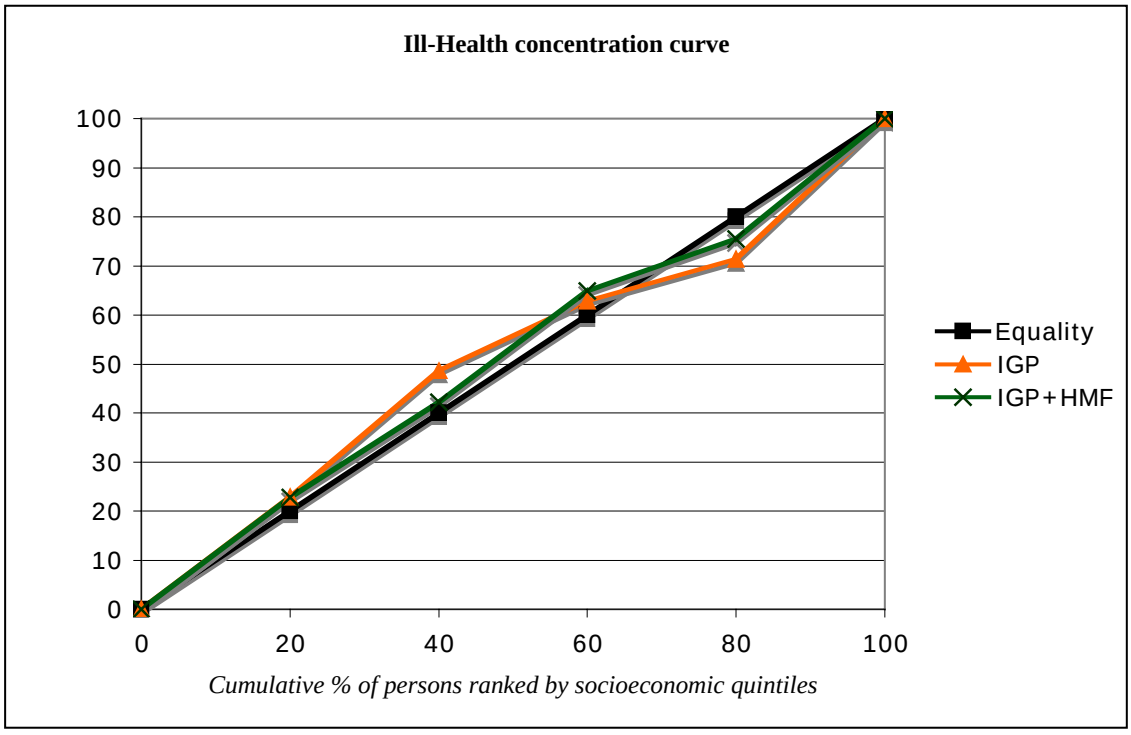


Graph 107 : Health score with SLL PCA quintile



4.7.6 Health disparities: Ill-Health concentration curve

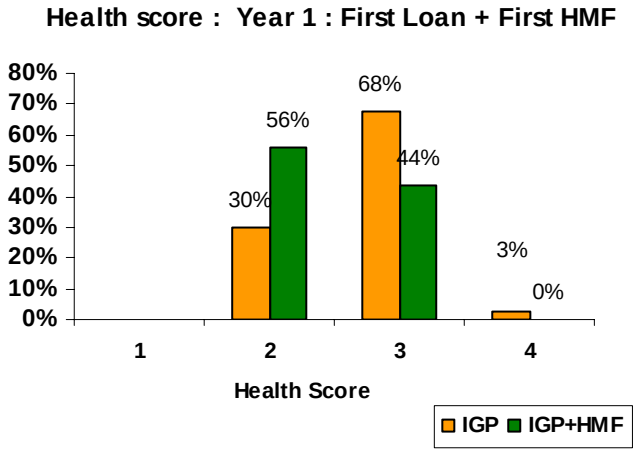
Graph 108 : Health concentration curve



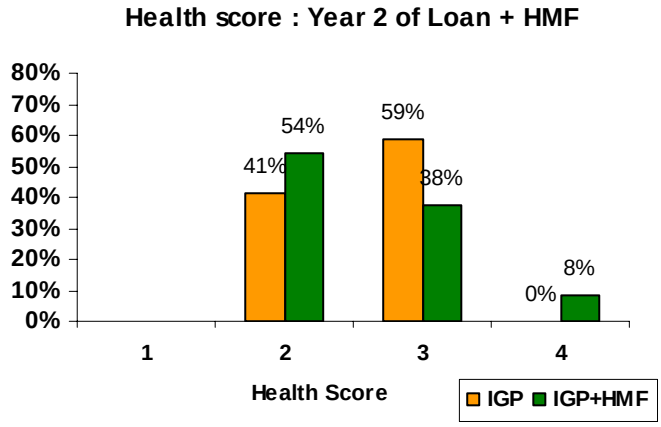
The concentration curves show that there are no major inequalities in health among groups. The two lines follow the same tendency along the line of equality. There are more inequalities in the IGP group however as the curve shows more variations with respect to the equality line.

4.7.7 Evolution of health score over the years

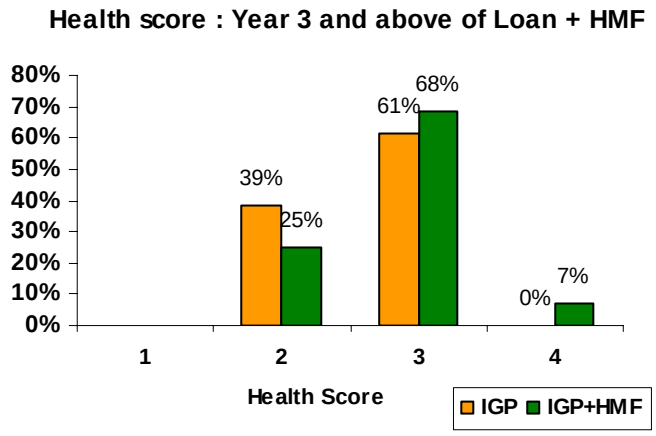
Graph 109 : Health score at year 1 or service



Graph 110 : Health score at year 2 or service

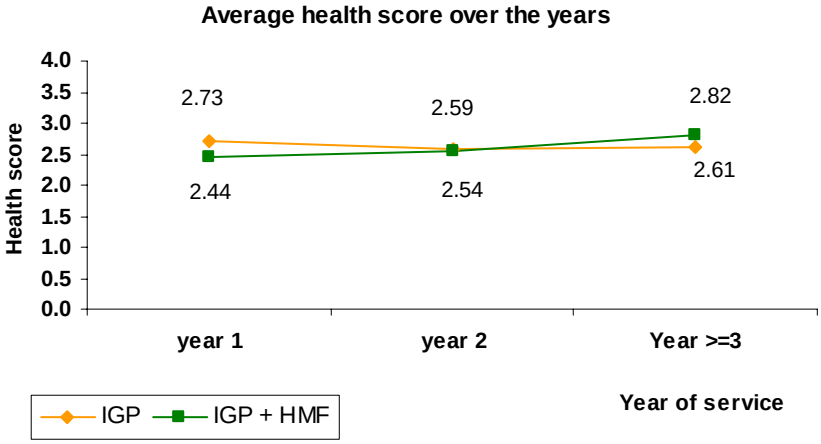


Graph 111 : Health score at year 3 and above or service



The Graph 112 illustrates the evolution of health score with years of service.

Graph 112 : Average Health score with years of service



The Graph 112 indicates that there is a flimsy rising proportion of healthier population with the increase of years of services. This budding growth is seen for both group but there is no significant difference for the health score between the 2 groups as per the statistical test done and presented in annexe 7.5.2.

However, among the IGP + HMF group, the number of HMF year has a positive and significant influence on the health status of the population which means that HMF improves the health status of its population on a long term. Refer to the result of the statistical test in annexe 7.5.2. Nevertheless, we know that there is always other bias and to be able to control them all, we should go even further in the statistical models.

Those statistical tests are positive impact but we should put them into perspective of the health indicators whose calculation remains “relatively crude”.

4.7.8 Food habits

As it is mentioned at the beginning, sections and questions in the questionnaire were designed in such a way so that the food indicator would become easier for scoring. Food

and dietary habits are one of the sections which have been purely included for scoring purpose. Four scores of the indicator are:

1. **Irregular meals**:
    - Meals are taken only when there is absolute hunger. Barely a single meal in a day. The constituents of this meal are a simple staple diet.
    - No regular time for food, take food at any time; mostly have food once or twice: Following conditions can come into this:
    - Cannot afford to have regular meals. Cook only when they work and get wages and purchase required grocery.
    - Mostly do not cook at home, consume whatever other people give them. E.g. Aanganwadi food (food provided by government nurseries through national programme), employers give something.

2. **Regular Imbalanced meals**: Meals are either twice or thrice but the constituents are a basic staple diet with salt, green chillies, onion etc. Do not contain all basic five food groups (Cereals, dals, milk, Green leafy vegetables, Vegetable, fruits) in the diet, missing one group totally. Following conditions can come into this:
    - Do not consume dals and pulses or sprouts.
    - Vegetables are not consumed daily.
    - Lentils is prepared but it is very thin, watery.
    - Do not have milk in the diet.
    - Non vegeterian is consumed but very small amount is shared with many people in the family so that each one has just one piece.
    - Only one cereal is cooked.
    - Daily bhakari with onion (sort of bread)
    - Vada-pav daily (sandwich with potato)
    - Only pithale-bhakari daily (horse gram flour powder cooked in water with bread).
3. **Balanced meals but not diversified:** Meal is usually taken thrice a day constituting pulses, rice, breads (chapatis) and often a green vegetable. Following conditions can come into this:
    - They take meals regularly and all the five food groups are present in the diet, however, they do not have variety in their diet. E.g. Green leafy veg- only methi or spinach is commonly consumed or vegetables- potato is consumed commonly, only 2-3 vegetables are prepared usually.
    - Fruits are not consumed commonly. Lentils and pulses- only moth beans (Matki) is common.
    - Here the investigator has to go into detail for asking questions like which leafy vegetables do you consume? Which fruits are bought? What kind of vegetable are prepared daily? Do you consume salads or raitas (yogourt mixed with vegetable) ? What kinds of snacks are prepared in the home?
4. **Assured balanced and diversified meals:** Three meals in a day are assured and the constituents in addition to being balanced in the diet itself also include a wide variety of diversified vegetables etc and are well supplemented with fruits.

Balanced diet contains all basic five food groups with recommended quantity and fre-

quency (Carbohydrates, proteins, fats, vitamins and minerals). Surveyors were trained to assess these criteria. Questions were asked whether partners' family consume all the food items during their meals, its frequency and quantity. Regularity was assessed by asking the number of meals consumed by the families daily.

Graph 113 : Distribution of sample population as per number of meal per day

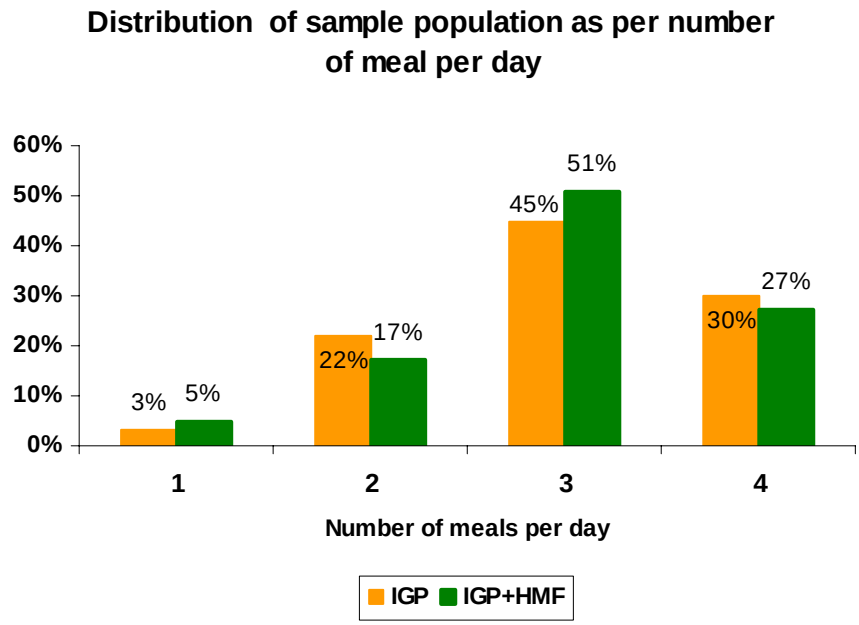


Table 24 Number of meal per day group day

No. of meals	Data	IGP	IGP+HMF	Grand Total
1	Frequency	4	8	**12**
	Column %	3,25%	4,94%	**4,21%**
2	Frequency	27	28	**55**
	Column %	21,95%	17,28%	**19,30%**
3	Frequency	55	82	**137**
	Column %	44,72%	50,62%	**48,07%**
4	Frequency	37	44	**81**
	Column %	30,08%	27,16%	**28,42%**
Total Frequency		**123**	**162**	**285**
Total Column %		**100,00%**	**100,00%**	**100,00%**

The majority of families in our sample population affords to have 3 meals per day. Only 4.2% partners have one meal only. Among those 12 families, 9 families belong obviously to the very poor quintile. From the field visit, it is observed that the unique meal is mostly dinner cooked at home and left over is consumed during the next day.

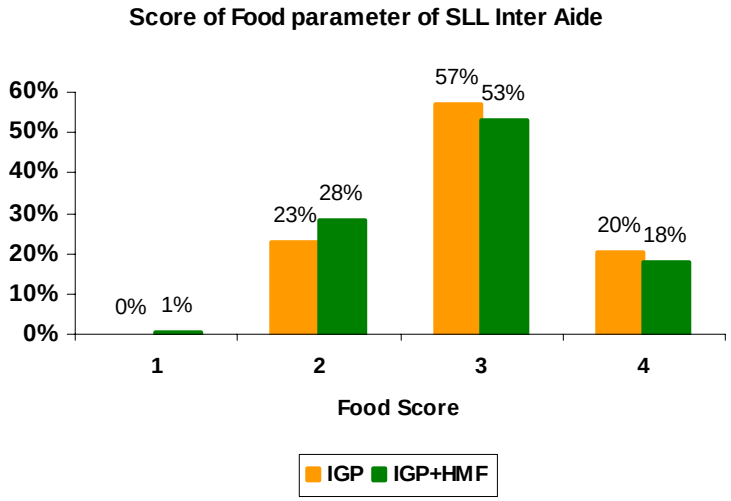
Analysis of details of diet pattern is not done in detail as it was purely for scoring purpose.

4.7.9 Food score

Food scores is linked with the data mentioned above. The majority of partners got

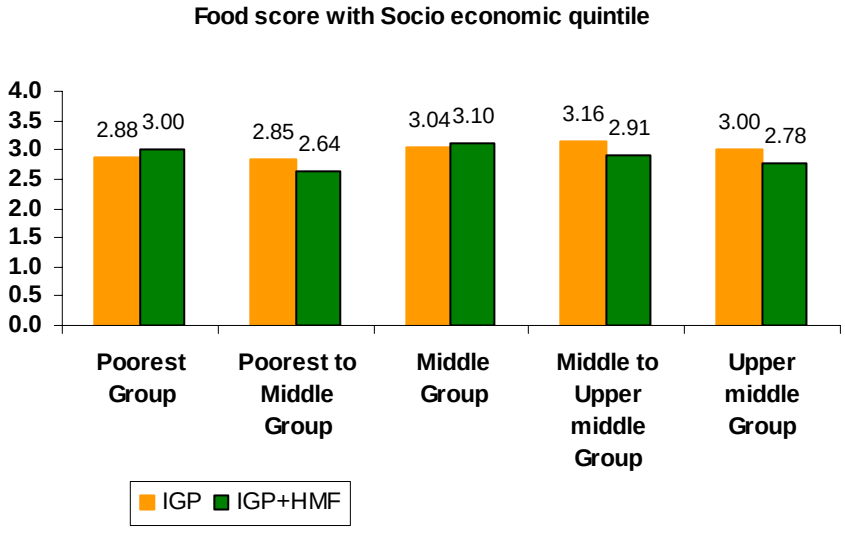
'score 3' which stands for regular and balanced meals but no variety. Partners who got score 1 are from IGP+HMF group only. IGP+HMF group shows little higher proportion than IGP group in first two scores, indicating little more poor families from this group. Such result had also emerged from the SLL analysis (part 4.2).

Graph 114 : Score of food parameter of SLL Inter Aide

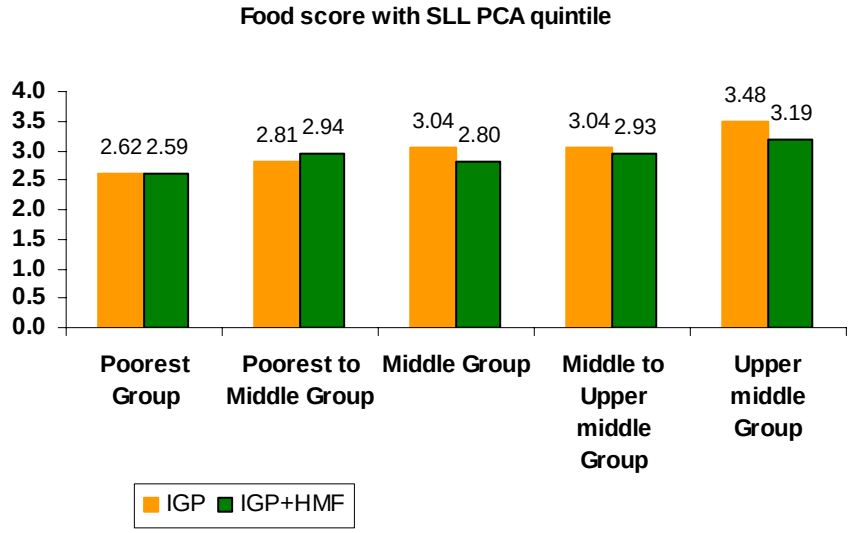


Again here, from the distribution per quintile, the results are a lot more evenly ventilated.

Graph 115 : Score of food parameter with socio economic quintile



Graph 116 : Score of food parameter with SLL PCA quintile

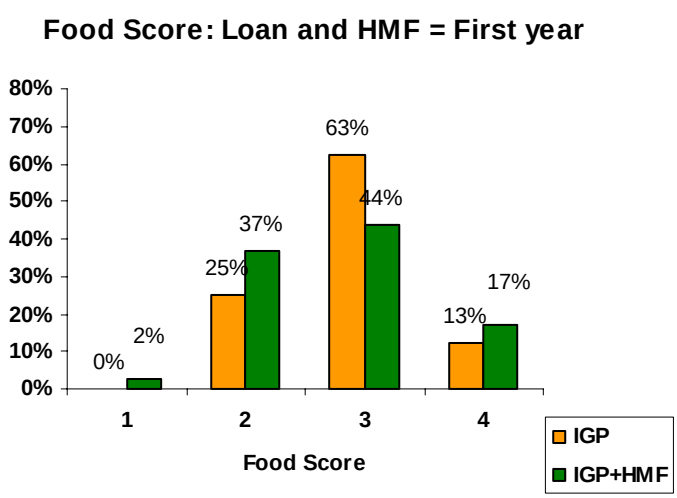


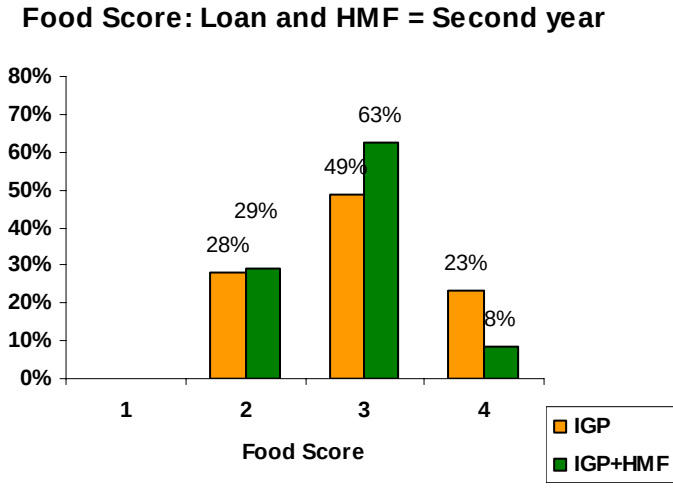
4.7.10 Evolution of food score over the years

Food is an independent indicator of standard of living but play a major role in the health status of a population. Therefore assessing the improvement in the standard of living will be correlated with the improvement in the food/ diet pattern of the partners.

Graph 117 : Score of food parameter at year 1 of service

Graph 118 : Score of food parameter at year 2 of service





Graph 119 : Score of food parameter at year 3 and above of service

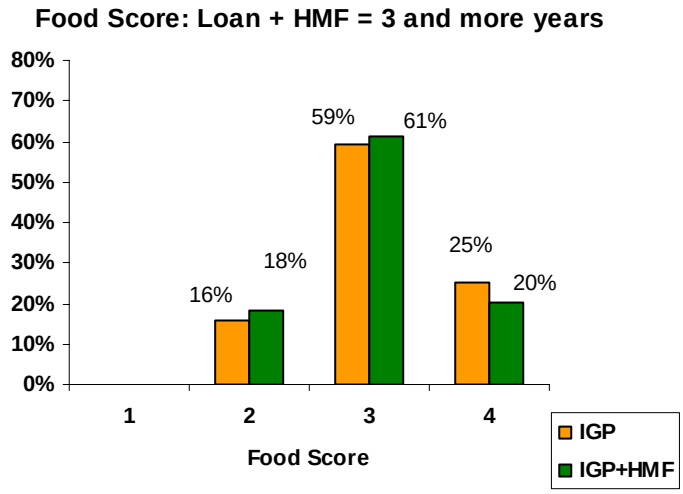
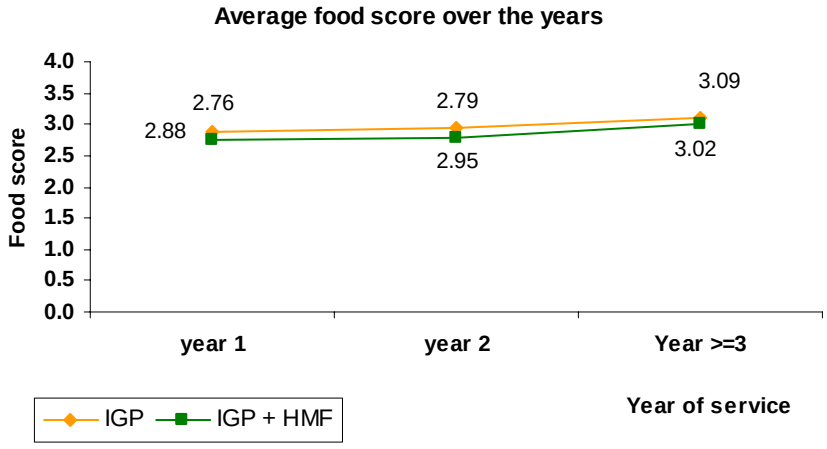


Table 25 : Food score table

	Loan + HMF = 1		Loan + HMF = 2		Loan + HMF> = 3 years	
Food Score	IGP	IGP+HMF	IGP	IGP+HMF	IGP	IGP+HMF
1	0.00%	2.44%				
2	25.00%	36.59%	28.21%	29.17%	15.91%	18.18%
3	62.50%	43.90%	48.72%	62.50%	59.09%	61.36%
4	12.50%	17.07%	23.08%	8.33%	25.00%	20.45%

Similar to health score, the evolution of food score over the years for both groups is non substantial. An evolution may have happened in the food habit of the population but our tool is not precise enough to measure it. We can again witness here the limitation of the SLL Inter Aide tool.

Graph 120 : Average food score over the years



We have made deeper statistical test on the food score but none of the result are significant. (Refer to statistical result in annexe 7.5.3)

4.7.11 Conclusion of the health and food analysis chapter

- It appears from the data that partners with HMF face more incidences of illnesses than IGP only group. Indeed, there is twice as many families who declared falling sick in HMF + IGP group than in the IGP group. Insured members would be more prone to declare their illness due to better awarness. Hence, this factual observation also means that HMF reaches population who actually needs insurance and health coverage which is a positive point for the programme. From insurance point of view, these are possibilities of moral hazard (adverse selection) if HMF enrollement is done on voluntary basis, which is the case in Parvati. Industry standards would recommend an automatic enrollement. However, adverse selection can be good in the long run as a good fund would mean a balance of health and unhealthy people in the fund.

- It is also possible that families in IGP declared themselves less sick just because they are less aware about health risk and the importance of health. They have not received good information on this subject.

- Furthermore, it is known from the HMF programme and is the general trend elsewhere, in terms of renewal ratio analysis that if the family did not have an accident and did not get a monetary benefit from their paid premium, they are dropping the insurance coverage. This can also explain why people without HMF have less health problem or accidents. Those who stay in HMF are those with health problems. To control this type of bias, we should have had the data from Uimpact software. This software gathers a large database which includes for some member the SLL status of members before and after they have taken insurance policy. Unfortunately, it was not possible to retrieve reliable information from the software at the period of the impact study.

- Regarding the amount of health expenses spent at the time of illness, the average amount is pretty much similar for both groups. For minor illness, less than 5 days, HMF members have spent less but have spent more for major illness (more than 10 days duration). We can't take for granted that they have spent less due to utilisation of health care providers when we see the actual utilisation of the referral services. On average, 18.4 % of members who declared illness have used the network services. This average on a 3 months period gives a 6.13 % monthly percentage which is close to the current usage of services utilisation of 5.5 % in Parvati. So this average from impact survey is falling into the current trend of HMF utilisation ratio (66 % of usage in 2008 till date)

- Regarding health and food, it appears that as the duration of loan cycle and HMF years increases, there is an improvement for both group in health and food indicators but this progress is non significant.

- We have seen several times in the section the limitation of the SLL Inter Aide which lacks of precision.

5 Satisfaction analysis

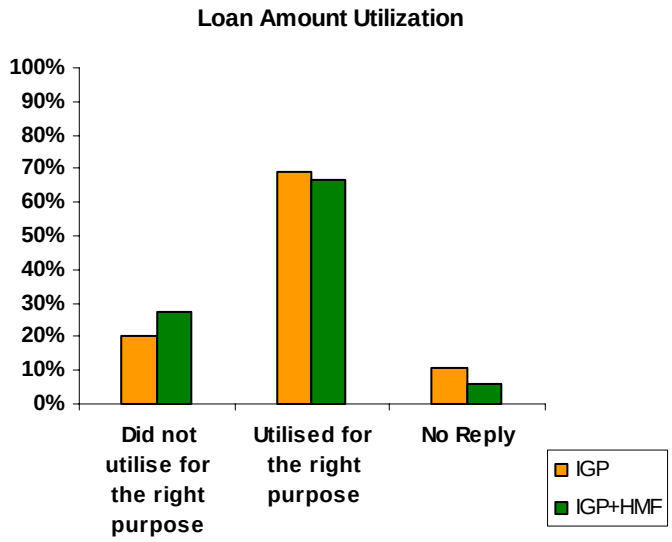
As explained in the methodology, the second part of this report is a qualitative survey based on declaration of satisfaction expressed by interviewed members. The first satisfaction survey is a comparison between the secondary data collected from LPF on loan purpose and the actual use of the loan. For the analysis purpose, we have considered the utilization of the latest loan amount.

5.1 Loan utilisation analysis

Accordingly, out of 285 partners interviewed, 193 (67.7%) partners do not show any

diversion in their purpose of loans from secondary data and utilization of loan amount. However, it appears that 69 partners (24.2%) do not utilize the loan amount for the purpose they have mentioned while applying for the loan. Remaining 8.1% did not reply to the question. There are chances that those partners have not used it for the right purpose and hence tried to avoid the answer.

Graph 121 : Loan amount utilisation

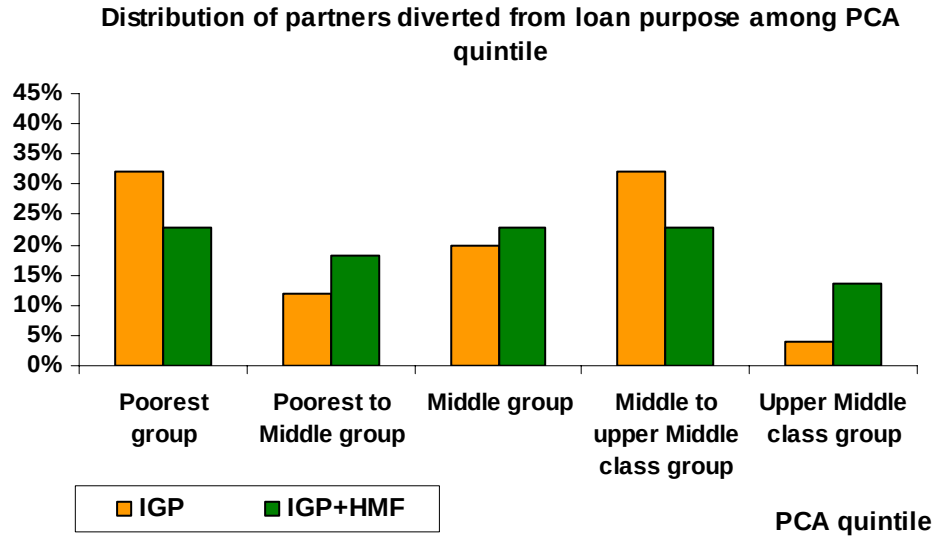


It is quite known in microfinance sector that beneficiaries do not always use the all amount of the loan for the declared purpose. Reaching 100 % is a utopian objective. 67 % is an average result which could be tracked and corrected by the NGO to hit a reasonable 80%.

We have tried to go deeper to see whether there is any relationship between the standard of living level of the beneficiaries and diversion from the said loan purpose, i.e. if poor partners have tendencies to use the loan for other purpose.

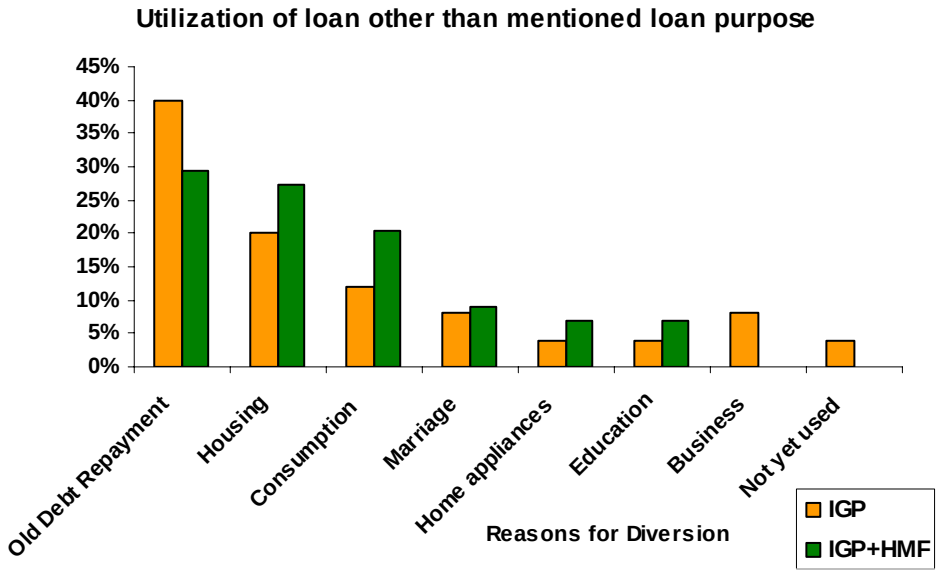
The Graph 122 consists of comparison of 69 diverted partners from IGP and IGP+HMF groups, with PCA quintile methodology.

Graph 122 : Distribution of partners diverted from loan purpose among PCA quintile



We can observe a difference between the 2 extreme quintiles which is not surprising. The poorest are more struggling to run their activity and adjust all types of unplanned expenses with their low and instable income.

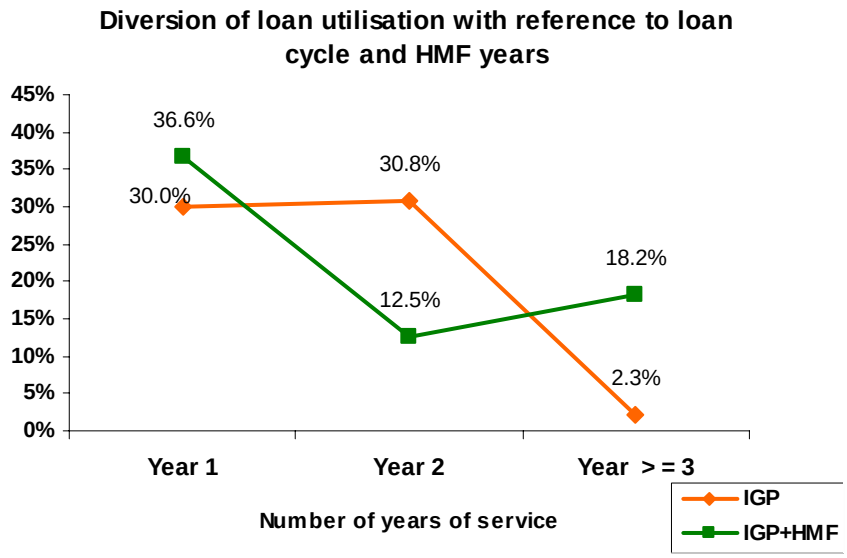
Graph 123 : Utilization of loan other than mentioned purpose



Diversion of purpose of utilizing loan amounts is mostly due to old debts repayments and particularly among IGP group.

However, the Graph 124 indicates that as the number of years of service increases, proportion of partners diverting from the loan purpose decreases. This is particularly true for IGP members with 3 and more loan cycles. This result is another way of showing beneficiary's empowerment, growing maturity thanks to its collaboration with the NGO.

Graph 124 : Diversion of loan utilisation with year of service



5.2 HMF satisfaction analysis

The second satisfaction survey analyzes the use of the financial and non financial services of HMF programme.

5.2.1 Financial services of HMF programme: claim services

5.2.1.1 What is claim service?

The claim is the possibility of a member to get a monetary benefit in terms of reimbursement for the hospitalization expenses he/she may have occurred. To get a benefit, members have to follow the 5 steps procedures below:

Claim process

1. Claimant submits necessary documents within 15 days after discharge from hospitalization

2. HMF Field staff (Service Executive) validates & gives remarks

3. Network Doctors validation & remarks

3. Coordinator prepares the Claim

4. Claim committee (Committee of the community members and their representatives decides

5. Claim is paid by the committee

5.2.1.2 Analysis of claim service from sample population

Out of 162 IGP+HMF partners, 141 members have on going policies. There are 452 members eligible for a claim, Out of 452 policies, 20 partners have raised the claim in

their policy period which give a claim frequency ratio of 4.4 % for our sample population. This ratio is particularly high mainly because the total number of policy is only of 452. The average claim frequency ratio for PSW over 2008 is 0.18 %.

Only one partner had raised two claims, rest raised one claim only. 90% of the claims raised have been accepted by the claim committee.

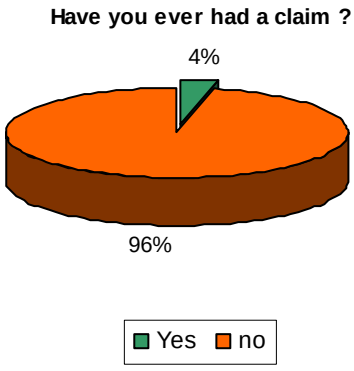
Out of 20 claims in the sample, 8 (42%) claims are from Network hospital and 11 (i.e.58 %) claims are from private hospital.

- 1 claim is rejected out of 19 claims; hence rejection ratio is 5%.
- 3 claims are for emergencies and 15 claims are for illness.
- 3 claims are for one day discharge benefit category, 10 claims are for general and 5 claims are for special category.

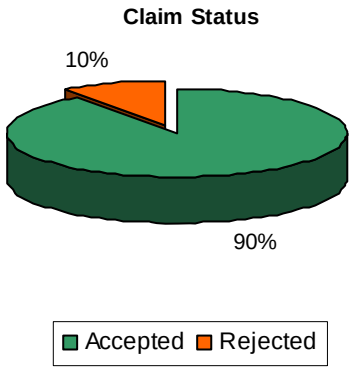
For the calculation of the out of pocket expenditure indicator called OOPE and the actual amount saved by the members thanks to the network hospital, out of the 20 cases, 15 cases only have been considered in the analysis : 1 case is rejected, 3 cases were still pending for settlement at the time of analysis, 1 case is atypical element (total expenditure is more than 35000 Rs).

- The average expected medical cost is 4157 Rs. This expected medical cost includes the amount HMF member have saved thanks to the network services.
- The average amount saved due to network services per person is **659** Rs.
- The average actual medical cost is 3498 Rs (which excludes the amount saved).
- The average amount disbursed to claimant from Health Mutal fund is **1577** Rs.
- The total out of pocket expenditure (OOPE) is **1921 Rs** which represents 46 % of the average expected medical cost. It represents 55 % of the actual medical cost.

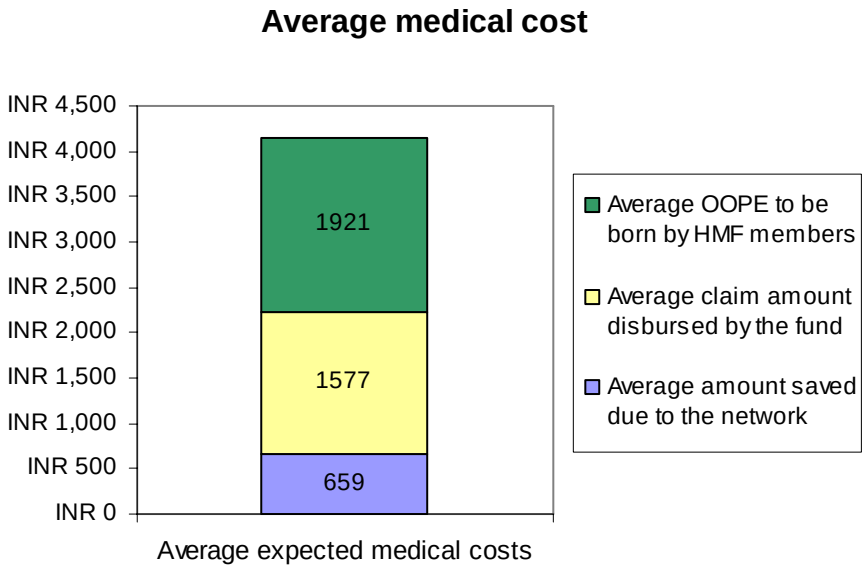
Graph 125 : Claim frequency

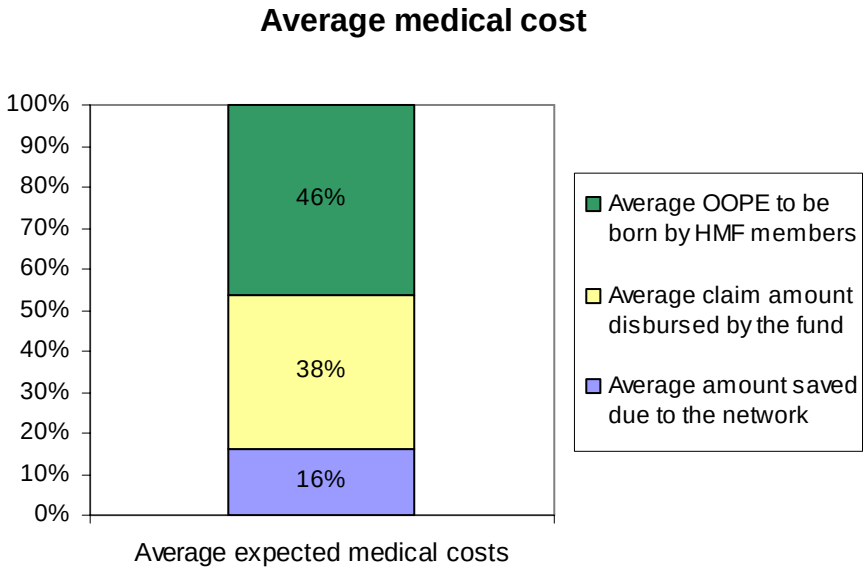


Graph 126 : Claim status

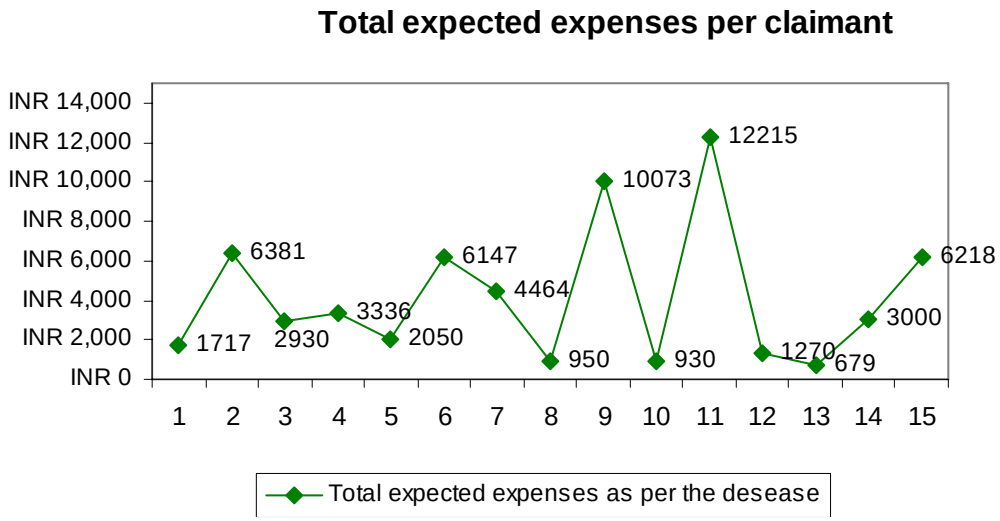


Graph 127 : Average expected medical cost (include saving amount)





Graph 128 : Amount received and out of pocket expenses from sample population



5.2.2 Description of the HMF health care provider network

Along with claim benefit from HMF services, 5 other non financial services are provided by the program. These include branch visits by a network doctor, referral services, 24X7 helpline, health talks, and health camps. We have asked the interviewees their utilization and satisfaction about other HMF services.

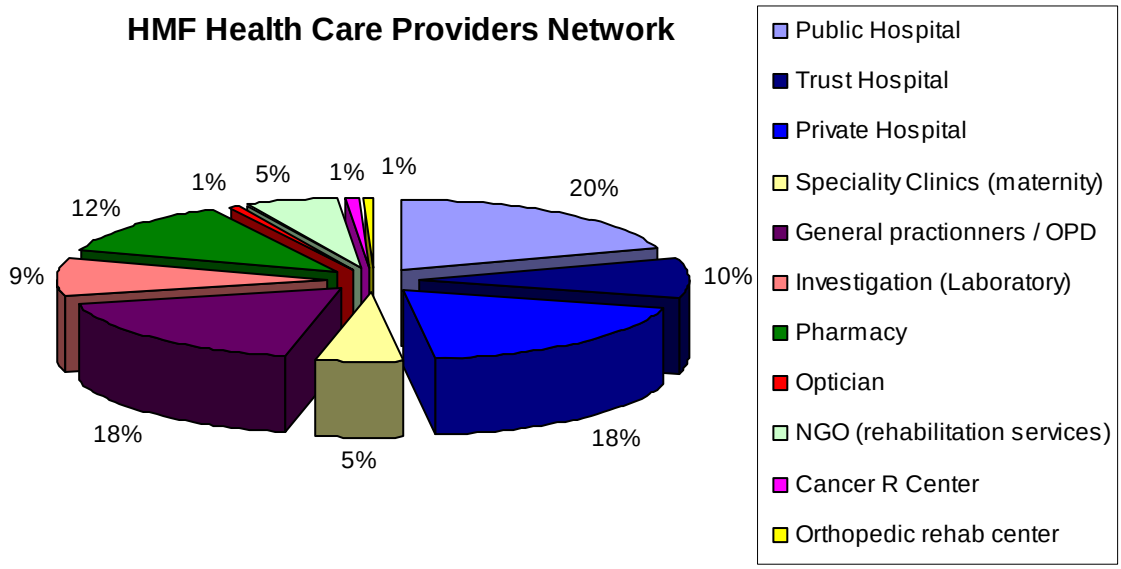
HMF programme has tied up Memorandum of understanding with a large range of health care provider over the city of Pune.

In total 146 health care providers have signed this MOU.

Table 26 : Type of health care provider

Type of health care provider	Numbers
Public Hospital	29
Trust Hospital	14
Private Hospital	27
Speciality Clinics (maternity)	8
General practionners / OPD	26
Investigation (Laboratory)	13
Pharmacy	18
Optician	1
NGO (rehabilitation services)	8
Cancer R Center	1
Orthopedic rehab center	1
TOTAL	146

Graph 129 : HMF health care provider's network

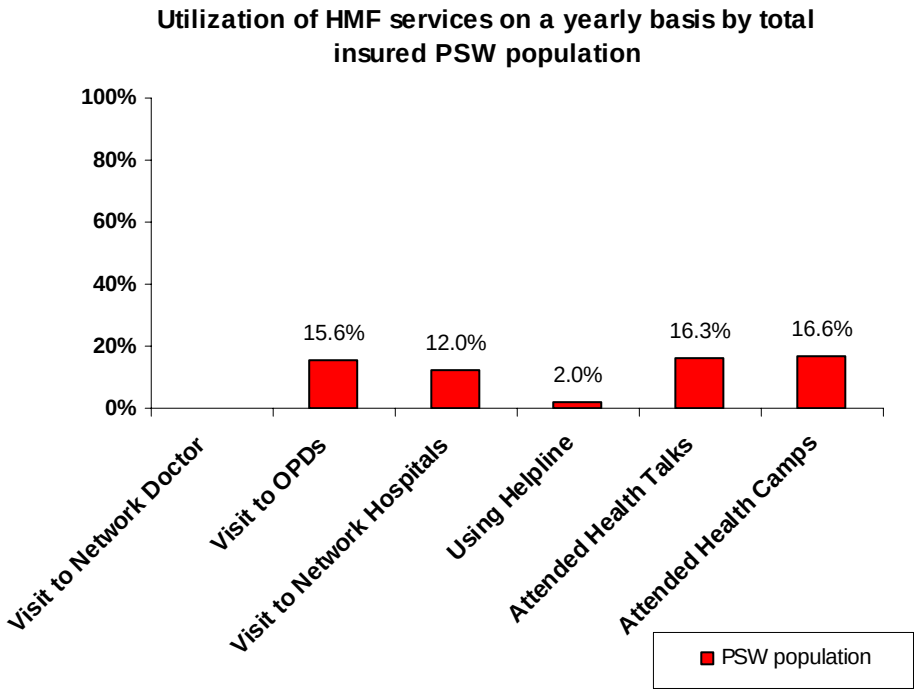


5.2.3 Bird view of utilisation of HMF non financial services

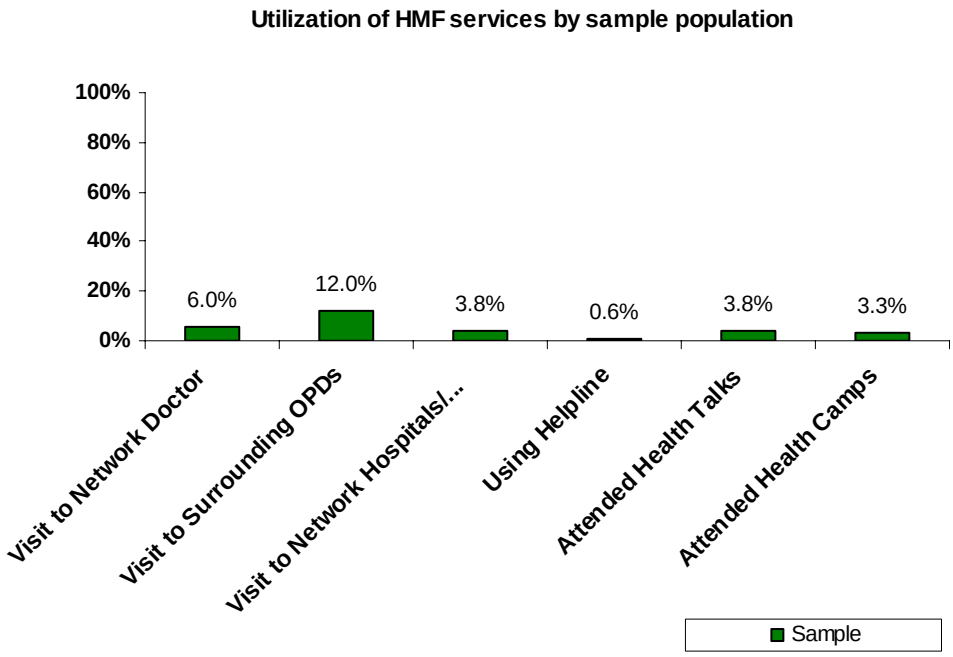
Table 27 Utilisation of HMF non financial services

	Average beneficiaries per month in PSW (as of Oct. 2008)	Survey sample	Members who declared a disease
Average number of on going policies every month	3558	162	Total N = 57
Average policy member every month	13 964	517	
Utilization of HMF non financial services			
• Visit to Network Doctor	-----	31 (6%) (n=517)	12 (25%)
• Visit to Surrounding OPDs	185 (1. 3%) (n=13964)	62 (12%) (n=517)	23 (40%)
• Visit to Network Hospitals	137 (1%) (n=13964)	20 (3.8%) (n=517)	10 (18%)
• Using Helpline	25 (0.17%) (n=13964)	1 (0.6%) (n=517)	1 (1.75%)
• Attended Health Talks	191 (1.36%) (n=13964)	20 (3.8%) (n=517)	7 (12%)
• Attended Health Camps	194 (1.38%) (n=13964)	17 (3.3%) (n=517)	8 (14%)
Average utilization of service for members of sample who declared illness			18.4 %

Graph 130 : Utilization of HMF non financial services by Parvati total insured members in 2008



Graph 131 : Utilization of HMF non financial services by sample population



The utilization of HMF service on a yearly basis for PSW population seems to be under-utilized (on an average, 9 % of members use the services offered to them).

The Graph 131 of sample population is given for information. It is not possible to compare the 2 graphs since we have not specified in the questionnaire the period of utilization of the services. The results are illustrated as per the answer given by interviewee

and not weighted on a yearly basis.

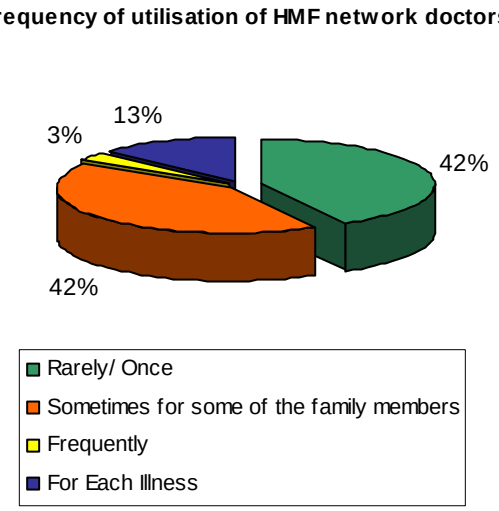
There is a scope for improvement of a larger utilization of the non financial services of HMF programme.

5.2.4 Utilisation of network doctors

Network doctor of Uplift India Association visits all the branches once a week. He provides medical guidance for patients along with referral sheet; looks after setting up of network of health care providers in the city and assures quality of diagnosis and treatment provided to partners. HMF partners visit the doctor in the branches.

Among the 162 HMF policies, total policy members are 517. Out of those, 31 partners (6%) reported that they visited the network doctor in the branch office.

Graph 132 : Utilization of HMF network doctors



If we look at the members who declared being sick from the last 3 months from IGP + HMF group (57), 14 of them have used network doctors (25%).

Factual data on number of patients benefited by the network doctor is not available as it is maintained at the branch level. Therefore comparison with the survey data is not possible. It also happens that many patients go directly to the network hospital without visiting network doctor, especially in case of emergency. Therefore there are chances that data on utilization of network doctor is under reported.

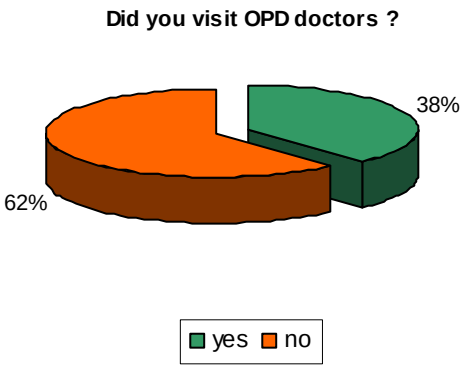
5.2.5 Utilisation of OPD doctors (general practitioners) in the surrounding area

General practitioners in the communities are also involved in the network as they are available all the time for the partners and they are the first contact in case of medical emergency.

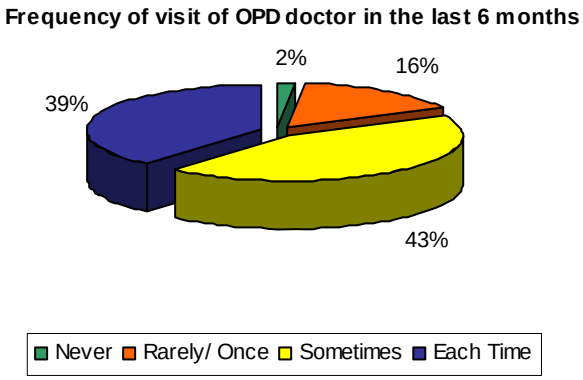
HMF team has visited and signed MOU with 26 slum OPD doctors across the slum of the city of Pune. The legal MOU results in concessions in consulting fees and medicines for Uplift health member. Data reported by the partners in the survey regarding their visit to OPD doctor is very high as compare to monthly average data coming from activity report. This might be because of methodological difference in the data collection, where it was asked personally to each partner during the survey whereas activity reports are based on data provided by the practitioners.

If we look at the members who declared being sick from the last 3 months from IGP + HMF group (57), 23 of them have consulted network OPD doctors (40%).

Graph 133 : Utilization of HMF OPD doctors



Graph 134 : Frequency of visit to HMF OPD doctors

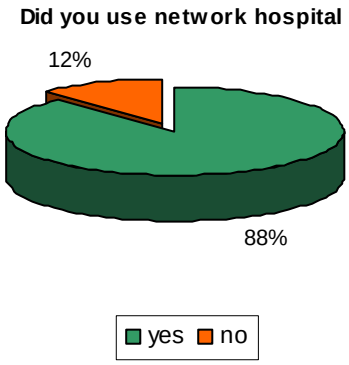


5.2.6 Utilisation of network hospital/ referral services

As it is mentioned above, the network doctor as well as the HMF field staff provides referral services to the partners. The surveyed sample shows a higher proportion of utilization of network hospitals as compare to population based data. Again it might be because of methodological data collection differences. Population data is monthly average and survey data is one time history.

The Graph 135 indicates that the network hospital is under utilized since only 12 % of IGP + HMF group (20 out of 162) have used it.

Graph 135 : Utilization of HMF network hospitals



Out of the 20 who have used it, 11 (55%) partners reported that they are benefited with the services of network hospitals. Seven partners said that their money was saved and they received good quality treatment at a lower cost. Remaining partners reported their satisfaction due to good quality treatment, information and receiving monetary benefit of claim reimbursement. The saved amount was reported minimum Rs. 80/- to maximum Rs. 600/-.

If we look at the members who declared being sick from the last 3 months from IGP + HMF group (57), 10 of them have consulted network hospitals (18%).

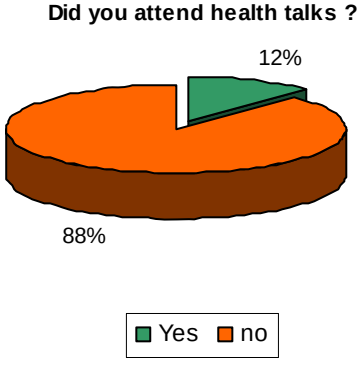
5.2.7 Utilization of 24X7 helpline

A 24 hour helpline is available for the partners in case of emergency. They call the doctor and seek advice and guidance regarding treatment. Only one partner in the survey reported that he took help from the helpline against 25 policy members from the total population of HMF who seek advice from the helpline every month. This same person also declared himself sick during the last 3 months.

5.2.8 Attendance to health talk

Health talks are arranged twice a month in all the branches of Parvati. The topics discussed are based on health information needs emerged from field. Service executives conduct the health talks with the help of visual aids.

Graph 136 : Health talk attendance by sample population



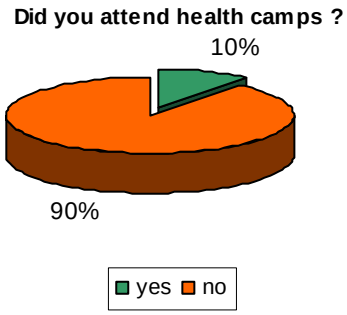
Only 12% of HMF members (20 persons) have attended health talks. Out of those 20, 13 partners attended it only once, whereas 7 partners attended it twice. However 10

partners could not mention the specific topic. They reported that either they do not remember the topic or it was general about health. Others have mentioned topics such as child care, HIV/AIDS, cancer, Jaundice, personal hygiene, summer illnesses, how to get treatment in low cost and how to apply for claims.

Out of those who declared being sick from the last 3 months from IGP + HMF group (57), 7 of them have attended health talks (12%).

5.2.9 Attendance to health camp

Graph 137 : Health camp attendance by sample population



Purpose of the health camps is early illness diagnosis and detection provided at a lower cost.

Health camp topics are organized according to the requirement of the members, with a frequency of 3 to 4 camps per month across the 7 branches of Parvati. In 2008, 27 camps have been organized with a total attendance of 1748 persons.

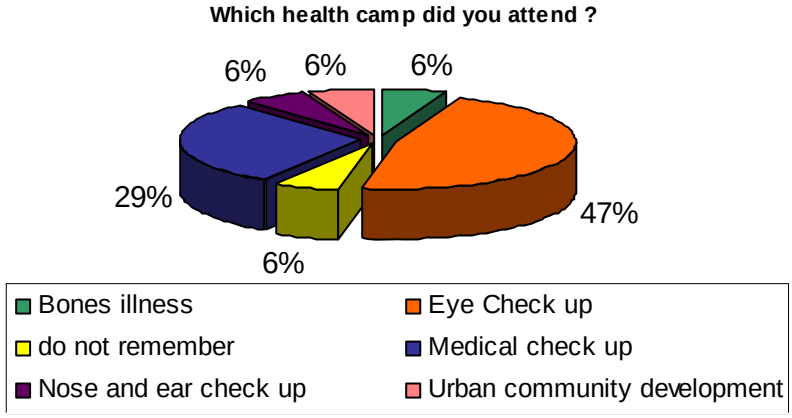
Regarding our sample, only 10% of members attended those health camps. 17 partners who attended health check up camps on the following health issues-

Table 28 Health issue during health camp

Health Issue	Frequency
Eye Check up	8
Medical Check up	5
ENT check up	1
Bone Density Test	1
Children's illnesses	1
Do not remember	1

Out of those who declared being sick from the last 3 months from IGP + HMF group (57), 8 of them have attended health camps (14%).

Graph 138 : Attendance by type of health camp by sample population

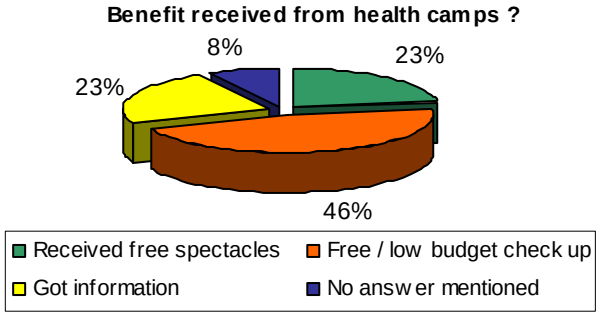


Eye check up camps is commonly arranged, at least once every 6 months as it is not possible to get a claim benefit for eyes problems. Benefits of health camps are reported by 13 partners out of 17.

Table 29 : Benefits of health camp

Benefits of Health Camp	Frequency
Received free spectacles	3
Free / low budget check up	6
Got information	3
No answer mentioned	1
TOTAL	13

Graph 139 : Benefit received from health camp



5.2.10 Satisfaction expressed through policy renewal

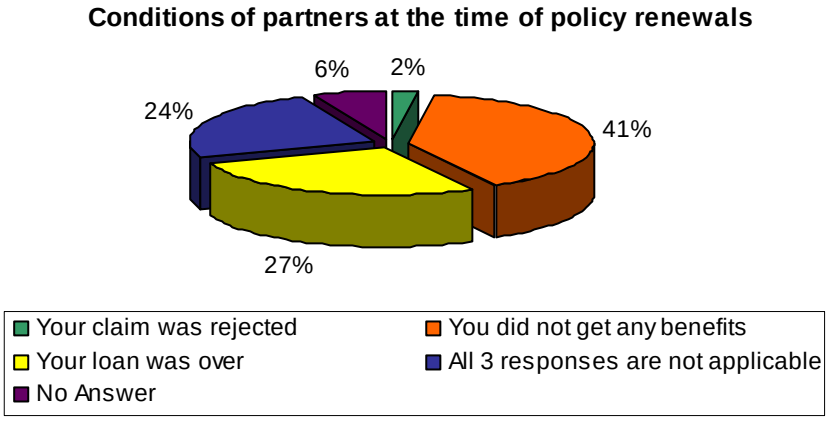
To know partners' perception about usefulness of the project, it was necessary to know what motivates them to renew their policy. From our sample population of 162, 95 partners (58%) have renewed their HMF policy at least once or more. This ratio is similar to HMF renewal ratio throughout the year (55%).

They were asked about the condition in which they renewed their policy. First three conditions mentioned in the table were probed; however freedom was also given to deny the answer.

Table 30 : Conditions of partner at the time of policy renewals

Conditions	Frequency	Percentage
Your claim was rejected	2	2,11
You did not get any benefits	38	40,00
Your loan was over	26	27,37
All 3 responses are not applicable	23	24,21
No Answer	6	6,32
Total	**95**	**100,00**

Graph 140 : Conditions of partner at the time of policy renewals

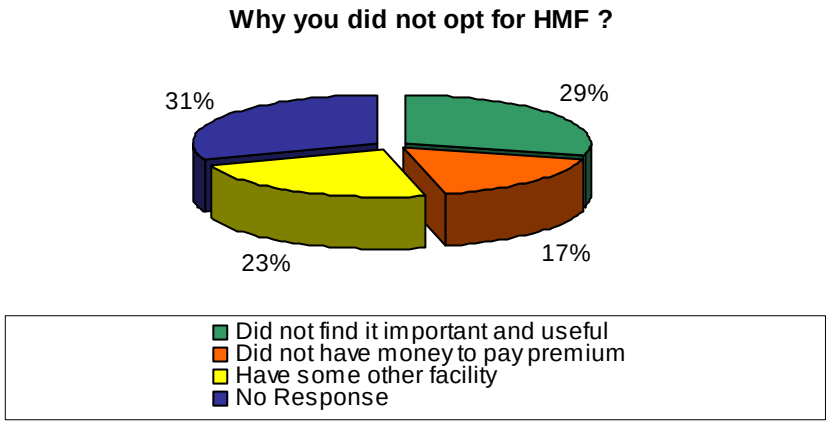


Interestingly, it appears from the table that although 69% of the partners did not get any direct benefit or monetary benefit from the programme they are still willing to continue it.

It is interesting also to mention that 71 (43.8%) partners quoted that that they would not have opted for HMF if they did not want to have loan.

The 123 partners from IGP group were asked about the reasons of not opting for HMF. Unfortunately, the proportion of `No Response' is quite high (31%). The question was either not understood by the investigator or because they were not confortable in asking it.

Graph 141 : Reasons for not opting for HMF declared by IGP group partners.

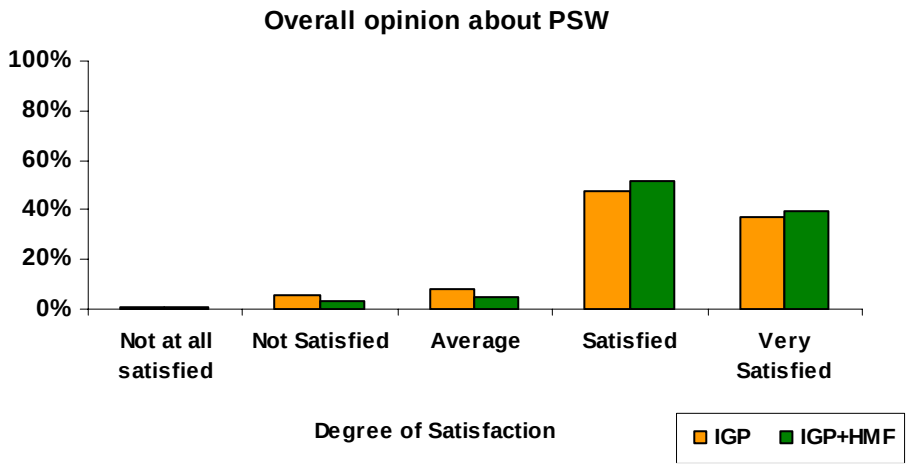


Main conclusion for this satisfaction survey of HMF: HMF non financial services could be promoted more largely to increase its utilisation as it is a significant competitive advantage. None of any other insurance company provides such type of services. However, the major concern in HMF is that all member shall benefit from at least one service during the year. Therefore, HMF keep track of each benefit members get and remind them at the time of renewal. The few members who have benefited from HMF services have expressed great satisfaction.

5.3 General satisfaction about PSW

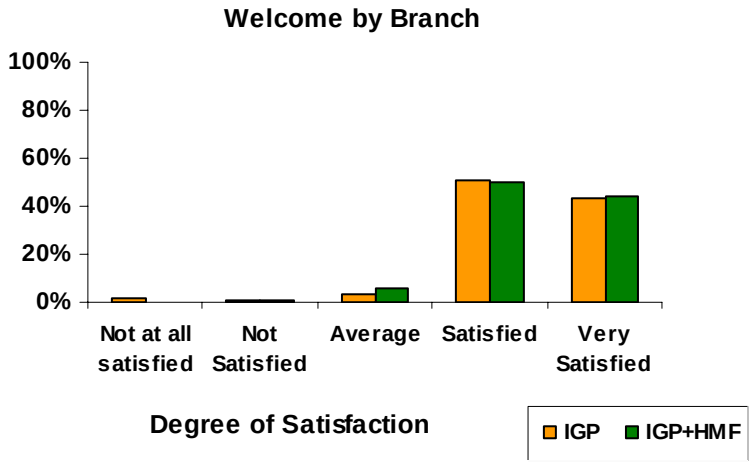
The satisfaction level of partners has been assessed by three questions.

Graph 142 : Overall opinion about PSW



Graph 143 : Satisfaction on the relation with PSW staff

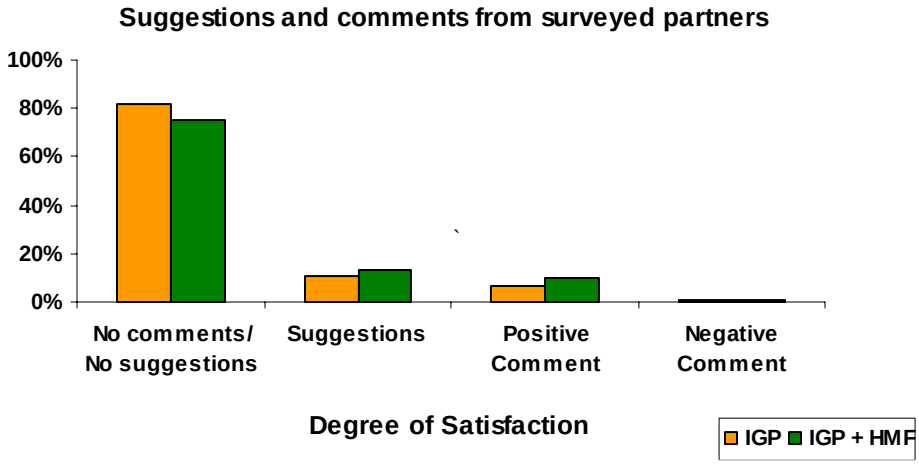
Graph 144 : Satisfaction on welcoming by the branch



The graphs illustrated above show that 80 to 90% of the partners are satisfied with the NGO, relations with staff and behaviour by the branch staff. There is very little difference among IGP and IGP+HMF group regarding degree of satisfaction.

At the end of the questionnaire partners were asked to write about their suggestions and comments regarding the NGO as well as work.

Graph 145 : Suggestions and comments



A lot of suggestions and comments are related more to the IGP program than to the HMF. They are mentioned as below-

Suggestions:

On financial services:

1. Loan amounts should be increased
2. Interest rates: Reducing interest rates, especially if the instalments are paid faster and it should be reduced as per the return of capital.
3. Reduction in instalment amount
4. Minimising / avoid to take the deposit amount.

On non financial services

5. Provision of more help in business and education.
6. Housing facilities for partners from below poverty line should be provided.
7. Initiation of income generation activities for women

On procedure:

8. Speeding up the loan process
9. Loan amounts should be paid in cash instead of cheque
10. Penalty for missing loan instalments should be avoided.
11. Payment of one time instalments should be allowed.
12. Provision of more facilities/ flexibility in loan instalment
13. Provision of conveyance to partners when they come for meetings and other procedures.
14. Updating partners about changing rules and interests.

15. Advance payment of one instalment
16. Needs more information and improvement in HMF
17. Call loan meeting only once.

Some of the suggestions include the procedures which already exist, indicating that partners sometimes are not aware of the actual procedures. Many of the suggestions appear as expectations about flexibility in rules and procedures. As it is mentioned above, there are no major suggestions about HMF.

Positive Comments:

1. This provides a good support for poor people
2. These activities are useful for business; it provides good economic help which has improved the conditions.
3. The procedure does not require more documents and lower amount of loan installments are point of satisfaction.
4. Work of the NGO is satisfactory.

Negative Comments:

1. Did not receive benefit of HMF, when it was required
2. Did not get Arogya Nidhi card for 3 years
3. 35% loan amount is taken by branch.

It is difficult to conclude from answers which are mentioned vaguely by few interviewees. Those questions were also asked at the end of the interview. It is possible that both partner and interviewers wanted to finish it off quickly with the interview. However, independently from the result of this satisfaction survey, loan product has been revised to decrease the cost.

6 Conclusion of the study

We have tried to analyse here the impact of the HMF programme on IGP programme on the socio economic conditions of the family. Many other points could still be studied to narrow down the analysis but we have to come to an end to the research to respect the time constraint given.

We will not mention on purpose here the key findings since they are stated in the executive summary of the report.

This study can be a starting point

- To follow in the future the tendency illustrated throughout the report and to measure the evolution. We have highlighted particularly certain dimension: for example saving capacity, health status of the population, discrepancy between the groups on health expenses, vulnerability of the population in terms on frequency of accident and illness, etc…
- To discuss on how the non financial services of HMF programme can be widely spread and used in order to improve health access and health care.
- To initiate the thinking process on the improvement of Inter Aide standard of living level tool and the process to improve accuracy of data collection. Indeed, it is the really first time that such a study is conducted and test the actual accuracy of the tool.

7 Annexes

7.1 Poverty assessement tool used

Impact Assessment Form (Urban)

Date of Survey: ____/____/___	SW Name / No:	Branch:
Date of Family Enrolment: ____/____/___	Date of Loan Disbursement: ____/____/___	New loan/ Reloan

Family Head Specifications & Family Details

House Number:	Area:	Sub area:	Loan No.:
Ration Card No:	Voter ID:	Since (Month)/(Year):	Phone:
First Name:	Middle Name:	Last Name:	M: ☐ F:☐

Marital Status: Unmarried: ☐ Married:☐ Widow (er):☐ Divorced:☐ Separated:☐ Multi-Married:☐

Religion: Buddhist:☐ Christians:☐ Hindu:☐ Jain:☐ Muslim:☐ Sikhs:☐ Other:☐ **No. of family members: <15:** <5: >60:

1. Food

1.Irregular Meals	2. Regular Imbalanced meals	3. Assured and balanced meal, but not diversified	4. Assured, balanced and diversified meals
Score ☐1	☐2	☐3	☐4

2. Health

1. Frequent non treated ailment	2.Frequent irregularly treated ailment	3.No frequent ailment but adequate knowledge of medical services	4. No.3 along with medical insurance.
Score ☐1	☐2	☐3	☐4

3. Housing

Rented House ☐ Own House (Electricity Bill / Photo Pass) ☐

1. Kachha housing	2. Water proof Pucca Housing/not spacious	3. Pucca housing with electricity and water	4. Pucca housing with own electricity account, water and toilets.
Score ☐1	☐2	☐3	☐4

4. Education Not Applicable ◯

1. No eligible children are in school	2. Only few eligible children go to school	3. All eligible children are in school, but performance is not satisfactory.	4. All eligible children are in school and performance is satisfactory.
Score ☐1	☐2	☐3	☐4

5. Documentation

0. No papers available	1. Birth Certificate for children ☐	2. Ration Card ☐	3.Election Card ☐	4. PAN Card/IT Receipt ☐
Score ☐0	☐1	☐2	☐3	☐4

6. Economic Activity

1. No eligible members/<15 are working	2. Some eligible members are working. Irregular income, no stable business	3. All/Few eligible members are working but income inflow is not assured (no payroll/Hawkers)	4. All eligible members are daily working with security (payroll/Market Place).
Score ☐ 1	☐2	☐3	☐4

7. Financial Links

In case of emergency, how much money can you gather from savings: Rs.

Money lender debts/no eco transaction activity ☐	No savings, no debts, member of Bishis ☐	Savings <15000 / and access to Coop/MFI ☐	Savings > 15000 and access to banks Loan ☐
Score ☐ 1	☐2	☐3	☐4

Comments:

1. Family Details

Sr. No.	First Name	Middle Name	Last Name	Sex	Age/ Birth Date	Education	Occupation	Total Income	Contributed Income	Relation
1										
2										
3										
4										
5										
6										
7										
8										
10	**Other Source of Income** (from other family member, from renting, Retirement, Pension, other…)			Type:						
11				Type;						

← No of members	Total Contributed Income (TCI):	Per Capita Income : TCI/ No. of members

2. Monthly Expenditure

Food:	Education:	Health:	Housing:	Transport:
Electricity:	Festival:	Entertainment :	Additional Expenditure:	**Total**:

Total Saving:	Monthly Saving:				

3. Conclusion

Total Score:

Total :		6 - 9	L1 ☐	Reference :
FW/CM Signature:	If any field NA (Total Score obtained/Maximum Applicable Score) * 28	10 - 12	L2 ☐	Savings ☐ >HMF ☐
		13 - 15	L3 ☐	Training ☐
		16 - 18	L4 ☐	
		18 - 21	L5 ☐	FDP ☐
		22 - 24	L6 ☐	
		25 - 28	L7 ☐	

Employment/ Education Sector Category Codes:

External Employment: EH: Indiv Home; EG: Govt.; EN: NGO;EP: Pvt. Co. Self Employed: SB: Buy &

Sell ; SM: Manufacture ; SS: Service

Others: UE: Un-employed ; UT: Training; UH: Housewife ;UR: Retired ; ST Student)

7.2 Impact study questionnaire

IMPACT STUDY 2008

SWABHIMAAN- INTERAIDE

APRIL- JUNE 2008

QUESTIONNAIRE

SECTIONS:

Part I. Secondary Data from PSW

Part II. Primary Data from the Partners

A. Socio-Demographic Information of the Partner

B. Health, hygiene and Food

C. Housing

D. Education and Documentation Scoring

E. Household Expenditure

F. Business

G. Financial Links

Part III. Satisfaction Assessment on IGP and HMF Services

SWABHIMAAN

Interviewer Code: ☐ **Interview no:** ☐

To be Completed Before Beginning the Questionnaire					
LPF Code:	☐	Family Code:	☐	Partner code	☐
Branch Code	☐	Area			
H/H Address:					
Date of 1st visit	Day ☐☐	Month ☐☐	Year ☐☐☐☐		
Date of interview	Day ☐☐	Month ☐☐	Year ☐☐☐☐		
Time Required	From _____am/ pm	To _____am/ pm	Total _____Hours _____Min		
Name of the Partner:					

Interview Conducted By	CM Name	Monitored By	Cross Checked By	Questionnaire Checked By	Encoded By
Sign:					
Date:					

Part I. Secondary Data from PSW

(To be completed before beginning the questionnaire)

Interviewer Code: ☐ **Interview no:** ☐

LPF Code:	☐	Family Code:	☐	Partner code	☐
Name of the Partner:					

A. From LPF

IA1 Credit history with PSW: How many loans partner/ family has taken from PSW, including current one?

IA1.1 Loan no.	**IA1.2 When Received?**	**IA1.3 Amount**	**IA1.4 Type of loan** Business/ Housing/ Education/ Home appliances/ Old Debt repayment/ Consumption/ Other (specify)
IA1.1.1 First			
IA1.1.2 Second			
IA1.1.3 Third			
IA1.1.4 Fourth			
IA1.1.5 Fifth			

No.	**Question**	**Response**	**Comments**
IA2 Current Credit Record	**IA 2.1 Missed any loan instalments for ongoing loan?**	Yes ☐ No ☐	**If no, go to IA 3.1**
	IA2.2 If yes, how many?	☐	
	IA2.3 Reason for mispayments as reported by the CM:		
IA3 Saving Record at PSW	**IA3.1** Voluntary Saving a/c in PSW	Yes ☐ No ☐	**If no, go to IB1**
	IA3.2 Date of opening the voluntary saving account	____/____/____	
	IA3.3 Ongoing saving amount	Rs.	

IB. From SYSLIFT

No.	**Question**	**Response**	**Comments**
	IB1.1 Ongoing HMF Member	Yes ☐ No ☐	**If yes, go to IB1.2, If no, go to IB1.4**
	IB1.2 Since how many years?	☐	
	IB1.3 From (Date of first policy)	____/____/____	

	IB1.4 Had HMF Before?	Yes ☐ No ☐	**If no, go to IC**
	IB1.5 Period From___/___/___ **To**___/___/___		
	IB1.6 Reason for discontinuing policy:		
	IB1.7 Type of Policy (All)	Accidental ☐ Personal ☐	
	IB1.8 No. of policy renewals		
	IB1.9 How many family members in the current policy?		
	IB1.10 Ever had a claim?	Yes ☐ No ☐	
	IB1.11 If yes, How many times?		
	IB1.12 Claim Status	Accepted ☐ Rejected ☐	**If accepted, go to IB 1.13, If rejected, go to IB 1.15**
	IB1.13 Illness/ health complaint for which Claim was raised?		
	IB1.14 Amount Received	Rs.	
	IB1.15 Out of Pocket Expenditure	Rs. _____	

IC. From Branch/ CMs (From Loan Application Form- In Partners' File)

IC1 Family Information

IC1.1 Sr no	IC1.2 Name of the family members	Relationship with the partner	IC1.3 Age	IC1.4 Sex	IC1.5 Education (Completed)
1		**Self**			
2					
3					
4					
5					
6					
7					
8					
9					
10					

IC2 Other Services	**Received FLT**	Yes (If received loan **after** 1st May 07)	☐	
		No (If received loan **before** 1st May 07)	☐	

Part II. Primary Data from the Partners

A. Socio-Demographic Information of the Partner:

No.	Question	Code	Response	Comments
IIA1	Marital Status	1. Unmarried	☐	
		2. Married	☐	
		3. Widow/ Widower	☐	
		4. Divorced	☐	
		5. Separated	☐	
IIA2.1	Literacy: Can you write?	1. Yes	☐	
		2. No	☐	
IIA2.2	Literacy: Can you read?	1. Yes	☐	
		2. No	☐	
IIA3	Education	1. Illiterate	☐	
		2. Primary	☐	
		3. Secondary	☐	
		4. Higher Sec.	☐	
		5. Professional courses	☐	
		6. Graduate	☐	
		7. P. G.	☐	
IIA3 Occupation	Describe:			

IIA3.1 Eligible member of the family (Mention relationship)	**IIA3.2 Main Occupation Details** 1. Own business 2. Business own by family 3. Joined business 4. Salaried job 5. Wage labour/ seasonal 6. Unemployed 7. Other (specify) 98. Don't know 99. Refused to answer	**IIA3.3 Duration of this Occupation** (Since how many days/ months/ years you are involved in this job? 98. Don't know 99. Refuse to answer	**IIA3.4 For whom does he/she work?** 1. Government 2. Private business 3. Contractor 4. Others (SPECIFY) 98. Don't know 99. Refuse to answer	**IIA3.5 Number of days worked per month** 98. Don't know 99. Refuse to answer	**IIA3.6 What are this person's total earnings from this job/business for the previous month** (include profit from business only for own business, business for which the person has the primary responsibility, or outside business) in Rs. 98. Don't know/ Can't Say 99. Refuse to answer	**IIA3.7 Does this HH member have a secondary job i.e. another job other than his / her main job?** 1. Yes (If yes, repeat all the columns on the following row) 2. No 98. Don't know 99. Refuse to answer
Comments:						

IIA3.8 Other than you, is there any family member supporting family expenses?	1. Yes 2. No
IIA3.9 If yes, which one? *(several answers possible)*	1. Husband/wife 2. Relative (parents, child, brother, sister) 2. Relative abroad 99. Other *(specify)*
IIA3.10 What kind of support? *(several answers possible)*	1. Food 2. Housing 3. Medicine 99. Others *(specify)*

By the Surveyor:

IIA3.11 Out of total member of the family, how many people have a stable and assured income?	……out of ……..
IIA3.12 Average number of days worked in a month for the family (All Family members)	……..

B. Health, Hygiene and Food

No.	Question	Response	Comments
IIB1 Availability of Health Facilities	**IIB1.1** Do you have medical/ health insurance facility?	1. Yes ☐ 2. No ☐ 98. Don't Know ☐	**If no, go to IIB2**
	IIB1.2 If yes, from where?	1. PSW ☐ 97. Other (specify) ☐	

IIB2 Treatment Seeking Behaviour:

IIB2.1 Does anybody from the family **was ill during last 3 months**? Yes ☐ No ☐ , If **No- Go to IIB2.2**

IIB2.1.1 Relationship with the partner	IIB2.1.2 Age	IIB2.1.3 Sex	IIB2.1.4 Nature/ complaint of illness/ accident 1. Fever 2. Cold 3. Diarrhoea/ Vomiting 4. Cough 5. Injuries 6. Aches and Pains 99. Other *(specify)*	IIB2.1.5 Duration of illness	IIB2.1.6 What did you do for relief? 1- Private Hospital 2- Private clinic 3- Government hospital 4- Government community health centre 5- Traditional medicine 6- Self medication 7- None 99- Others *(specify)*	IIB2.1.7 Amount spent (Rs.)

IIB2 Treatment Seeking Behaviour:
IIB2.2 Does anybody from the family have any **accident during last one year**? Yes ☐ No ☐ ,
If **No- Go to IIB3**

IIB2.2.1 Relationship with the partner	IIB2.2.2 Age	IIB2.2.3 Sex	IIB2.2.4 Nature/ complaint of illness/ accident	IIB2.2.5 Duration of illness	IIB2.2.6 What did you do for relief? 1. Private Hospital 2. Private clinic 3. Government hospital 4. Government community health centre 5. Traditional medicine 6. Self medication 7. None 99- Others *(specify)*	IIB2.2.7 Amount spent (Rs.)

Comments:

IIB3 Personal Hygiene	Ask for all family members		Comments/ observations
	IIB3.1 Do all of your family members wash hands before and after meals?	Yes ☐ No ☐	
	IIB3.2 Do all of your family members take bath everyday?	Yes ☐ No ☐	
	IIB3.3. Do all of your family members wash hands after coming from toilet?	Yes ☐ No ☐	

	IIB3.4 If yes, with what?		

	IIB4.1 Do your family consume	**IIB4.2 What variety?**	**IIB4.3 Frequency – 1. Daily 2. Thrice a week 3. Weekly 4. Fortnightly 5. Monthly**
IIB4 FOOD: Balanced Diet	**IIB4.1.1** Cereals		
	IIB4.1.2 Pulses		
	IIB4.1.3 Legumes		
	IIB4.1.4 Milk and Milk prod.		
	IIB4.1.5 Nuts and oilseeds		
	IIB4.1.6 Vegetables		
	IIB4.1.7 Green leafy veg		
	IIB4.1.8 Fruits		
	IIB4.1.9 Non Veg items		
IIB5 Regularity in the Diet	**IIB5.1 Which meals do your family have regularly?**	**IIB5.1.1 Breakfast**	Yes ☐ No ☐ Sometimes ☐
		IIB5.1.2 Lunch	Yes ☐ No ☐ Sometimes ☐
		IIB5.1.3 Snacks	Yes ☐ No ☐ Sometimes ☐
		IIB5.1.1 Dinner	Yes ☐ No ☐ Sometimes ☐

IIB6 Addictions	**IIB6.1** Does anyone in your family have habit of **applying mishri?**	Yes ☐ No ☐	**If no, go to IIB6.3**
	IIB6.2 If yes, how many members in the family?		
	IIB6.3 Does anyone in your family have habit of **Chewing tobacco/ gutkha** etc.?	Yes ☐ No ☐	**If no, go to IIB6.5**
	IIB6.4 If yes, how many members in the family?		
	IIB6.5 Does anyone in your family have habit of drinking **alcohol**?	Yes ☐ No ☐	**If no, go to IIB6.7**
	IIB6.6 If yes, how many members in the family?		
	IIB6.7 Does anyone in your family have habit of **Gambling**?	Yes ☐ No ☐	**If no, go to IIB7**
	IIB6.8 If yes, how many members in the family?		

Comments:

C. Housing: (Encircle the response)

No.	Question	Codes		Comments
IIC1 **Housing Conditions**	**IIC1.1** Type	1. Rental 2. Owner without title (legal papers) 3. Owner with title (legal papers) 4. Given by governement 99. Other……		
	IIC1.2 Monthly rent	|___|___||___|___| INR		
	IIC1.3 Number of room	|____|		
	IIC1.4 Roof of house	1. None 2. Metal sheets 3. Tile 4. Slab	5. Plastic 6. Wood 7. Thatched 99. Other	
	IIC1.5 Wall of house	1. Plastic 2. wood 3. Tile/ Bricks 4. Tick paper	5. Metal 6. Cement 99. Other ……..	
	IIC1.6 Floor of house	1. No flooring 2. Tiles 3. Cement	4. Cow dung 5. Wood 6. Mud	
	IIC1.7 Electricity	1. No electricity 2. Unauthorized	3. Rental 4. Own a meter 99. Other	
	IIC1.8 Can your house be locked?	1. Yes 2. No		
	IIC1.9 Ventilation: No. of windows:	|____|		
	IIC1.10 Cross ventilation facilities	1. Yes 2. No		
IIC2 **Hygiene: Toilet Facilities**	**IIC2.1** Toilet: What type of toilets do you use?	1. Own toilet 2. Paid Public toilets 3. Shared toilets	4. Unpaid public 5. Septic Tank/ pit 6. Open Air	
	IIC2.2 Do you share toilets with other households?	1. Yes 2. No		**If no, go to IIB3.1**
	IIC2.3 If yes, how many h/h	|____|		

IIC3 **Hygiene (Access to Safe Drinking Water)**	**IIC3.1** 1. What is the source of drinking water?	1. Public Tap 2. Private tap 3. Hand pumps	4. Canal 5. Any other (specify)	
	IIC3.2 Do you keep drinking water separately?	1. Yes	2. No	
	IIC3.3 Do you keep it on height?	1. Yes	2. No	
	IIC3.4 With what do you take water from the container?			
	IIC3.5 Do you purify the water before drinking?	1. Yes	2. No	**If no, go to IIC4**
	IIC3.6 If yes, what is the method used?	1. Straining 2. Boiling 3. Using filters	4. Use of chemicals (alum, mediclore etc) 99. Any other (Specify)	

IIC4 Measuring fixed asset

	Asset Name	**No.**		**Asset Name**	**No.**
IIC4.1	Bed	|____|	**IIC4.9**	Business tool Specify	|____|
IIC4.2	Table/chair	|____|	**IIC4.10**	House	|____|
IIC4.3	Gas/ strove	|____|	**IIC4.11**	Bicycle	|____|
IIC4.4	Cupboard	|____|	**IIC4.12**	Bike	|____|
IIC4.5	Sofa	|____|	**IIC4.13**	Handcart	|____|
IIC4.6	TV	|____|	**IIC4.14**	Car/ Rickshaw/ Tempo	|____|
IIC4.7	Fridge	|____|	**IIC4.15**	**TOTAL Asset**	|____|
IIC4.8	LPG + Cylinder	|____|	**IIC4.16**	Land	Yes ☐ No ☐

D. Education and Documentation scoring

IID1 Education Scoring	No eligible children are in school	1. ☐	
	Only few eligible children go to school	2. ☐	
	All eligible children are in school, but performance is not satisfactory (Any one of the School going children failed at least once).	3. ☐	
	All eligible children are in school and performance is satisfactory (All the School going children passing every year)	4. ☐	
	Not Applicable	☐	
If Score is 1 or 2 – Specify reasons for not going to school			
	No papers available	0. ☐	
	Birth Certificate for children	1. ☐	
	Ration Card	2. ☐	
	Election Card	3. ☐	

	PAN Card/IT Receipt	4. ☐	

Comments:

IIE1 Did you have from last year any important events that have lead to important expenses?

1. Yes ☐ **2. No** ☐

|____|

IIE1.1 If yes, which one and what was your expense?

1. |___|___|___|
2. |___|___|___|
3. |___|___|___|

IIE1.1.1 Illness / death |___|___|___| INR

IIE1.1.2 wedding…… |___|___|___| INR

IIE1.1.3 Other …… |___|___|___| INR

98. Don't Know ☐

99. Refused to answer ☐

IIE2 Current Routine Expenses (In Rs.)

	Daily	Weekly	Monthly	Yearly	Can't Say	Comments
IIE2.1 Food						
IIE2.2 Health						
IIE2.3 Education						
IIE2.4 Rent/ Housing						
IIE2.5 Travel						
IIE2.6 Clothes						
IIE2.7 Electricity						
IIE2.8 Festival						
IIE2.9 Phone/ Mobile						
IIE2.10 Other (specify)						

Comments:

F. Business : (Not Applicable - If Partner does not have business, Go to section G)

IIF1: Name of Business:

IIF2 Turnover Calculation

Calculation of Monthly Turnover for buy and sell and service business				
IIF2.1 Amount of best selling day (A)	Number of days (B)	**IIF2.2** Amount of least selling day -C	Number of Days (D)	For Grocery Shop : B+D= 30 days
				For other shops/ Manufacturing business : B+D= 26 days
IIF2.3 Monthly turnover= (AxB)+(CxD)				

Comments:

G. Financial links / Saving Habits

IIG1 Credit history with PSW: How many loans partner/ family has taken from PSW, including current one?			
IIG1.1 Loan no.	**IIG1.2 Purpose for which loan was taken?**	**IIG1.3 Purpose for which loan was used**	**IIG1.4 Can you mention the benefit you had due to loan?**
IIG1.1.1 First			
IIG1.1.2 Second			
IIG1.1.3 Third			
IIG1.1.4 Fourth			
IIG1.1.5 Fifth			
IIG1.1.6 Current			

IIG2 Indebtedness:

Do you have outstanding loan from anybody other than PSW? Yes ☐ No ☐, **If no, go to IIG3**				
IIG2.1 Where? (Probe)	**IIG2.2 Amount**	**IIG2.3 Freq. (Daily/Monthly/yearly)**	**IIG2.4 Period**	**IIG2.5 Total amount repaid till now**
IIG2.1.1 Relatives				
IIG2.1.2 Money lender				
IIG2.1.3 Bhishi/ Bachat Gat				
IIG2.1.4 Relatives				
IIG2.1.5 Other MFI				
IIG2.1.6 Bank/ cooperatives				

IIG3 Savings

IIG3 Do you save some money periodically? Yes ☐ No ☐, **If no, go to IIG4**					
IIG3.1 Where?	**IIG3.2 How much?**	**IIG3.3 Amount**	**IIG3.4 Frequency**	**IIG3.5 Period**	**IIG3.6 Total amount till now (Rs.)**
IIG3.1.1 At Home/ No formal saving					
IIG3.1.2 In PSW/ other MFI					
IIG3.1.3 In Bachat Gat					
IIG3.1.4 In Bhishi					
IIG3.1.5 In Post					
IIG3.1.6 In Bank					
IIG3.1.7 Life Insurance					
IIG3.1.8 Investment Specify					
IIG3.1.9 Any Other Investment					

Comments:

Part III. Satisfaction Assessment on IGP and HMF Services

A. Only IF FAMILY HAS HMF go for following questions:

No.	Question	Response		Comments
IIIA1. Utilization of Services by Network doctor	**IIIA1.1** Have you/ your family members ever visited the network doctor?	1. Yes ☐ 2. No ☐		**If no, go to IIIA1.3**
	IIIA1.2 If Yes, How many times?	1. For each illness in the family/ Very often	☐	
		2. Frequently	☐	
		3. Sometimes/ for some of the family members	☐	
		4. Rarely/ once	☐	
	IIIA1.3 Do you use the services of the OPD doctor in your area?	1. Yes ☐ 2. No ☐		**If no, go to IIIA2.1**
	IIIA1.4 If yes, How many times during last 6 months are you satisfied with the OPD services in terms of treatment and cost?	1. Each time 2. Sometimes 3. Rarely 4. Never	☐ ☐ ☐ ☐	
IIIA2 Utilization of Services of Network Hospital	**IIIA2.1** Have you/ your family members ever used referral services/ visited the network hospitals?	1. Yes ☐ 2. No ☐		**If no, go to IIIA3**
	IIIA2.2 If Yes, How many times last year?	1. For each illness in the family/ Very often ☐ 2. Frequently ☐ 3. Sometimes/ for some of the family members ☐ 4. Rarely/ once ☐		
	IIIA2.3 When before this?	**1.** During last week ☐ **2.** During last month ☐ **3.** 2-3 months back ☐ **4.** 4-5 months back ☐ **5.** 6 months back ☐		
	IIIA2.4 Did you realize any benefit?	1. Yes ☐ 2. No ☐		
	IIIA2.5 Which / what kind of benefit?			
	IIIA2.6 Have you saved any amount by visiting the network hospital?	1. Yes ☐ 2. No ☐		
	IIIA2.7 If yes, How much?			
IIIA3 Helpline	**IIIA3.1** Have you/ your family members ever used the help line?	1. Yes ☐ 2. No ☐		**If no, go to IIIA4**

	IIIA3.2 Were you satisfied with the answer provided and time taken?	Very satisfied Satisfied Not satisfied Really not satisfied	☐ ☐ ☐ ☐	
IIIA4 Health Talks	**IIIA4.1** Have you/ your family members ever attended health talks?	1. Yes ☐ 2. No ☐		**If no, go to IIIA5**
	IIIA4.2 If yes, On which topics?	**1**		
		2		
		3		
		4		
		5		
	IIIA4.3 How did it benefit you/ your family members?			
IIIA5 Health Camps	**IIIA5.1** Have you/ your family members ever attended health camps?	1. Yes ☐ 2. No ☐		**If no, go to IIIA6**
	IIIA5.2 If yes, which camps?	**1**		
		2		
		3		
	IIIA5.3 Did it benefit you/ your family members?	1. Yes ☐ 2. No ☐		
	IIIA5.4 If yes, How?			
IIIA6 Policy Renewal	**IIIA6.1** How many times have you renewed the HMF policy?			
	IIIA6.2 Did you renewed your policy in case,	**1** You claim was rejected ☐		
		2. You did not get any benefits ☐		
		3 Your loan was over ☐		

B. Reason for Not opting HMF

IIIB1 For only IGP partners	**IIIB1.1** What is the reason that you did not opt for HMF services from PSW?	1. Did not find it important and useful 2. Have some other facility 3. Did not have money to pay premium 4. Any other (specify)	
IIIB2 For IGP+HMF partners	**IIIB1.2** If you did not want to have loan, was there a possibility of opting for HMF?	1. Yes ☐ 2. No ☐	

C. For all the Partners

IIIC1 Satisfaction regarding PSW as an Organization				
	IIIC1.2 What is your overall opinion of PSW as a microfinance institute?	1. Not at all satisfied 2. Not Satisfied 3. Average	4. Satisfied 5. Very Satisfied	

	IIIC1.3 Do you think that PSW products and services are matching your needs?	1. Not at all (mention reasons) 2. Partially (mention comments) 3. Totally		
IIIC2 Rating of Staff Relations:	**IIIC2.1** How would you rate your relations with PSW staff? (includes clarity in information delivered, politeness, professionalism and availability)	1. Not at all satisfied 2. Not Satisfied 3. Average	4. Satisfied 5. Very Satisfied	
	IIIC2.2 Are you satisfied with the welcome by branch?	1. Not at all satisfied 2. Not Satisfied 3. Average	4. Satisfied 5. Very Satisfied	
	IIIC2.3 What Suggestions would you give to improve PSW's services?			

Comments:

SLL Scoring (For Investigators- Not to be asked to the partners)

Indicator	Description	Score	Comments
Food	Irregular meals (Can not afford regular Meals)	1. ☐	
	Regular Imbalanced Meals	2. ☐	
	Assured and balanced meals, but not diversified	3. ☐	
	Assured, balanced and diversified meals	4. ☐	
Health	Frequent non treated ailment	1. ☐	
	Frequent irregularly treated ailment/ treated but frequent illness/ chronic ailments irregularly treated	2. ☐	
	No frequent ailment but adequate knowledge of medical services	3. ☐	
	No.3 along with medical insurance	4. ☐	
Housing	Kaccha Housing	1. ☐	
	Water proof pucca housing/ not spacious	2. ☐	
	Pucca housing with electricity and water	3. ☐	
	Pucca housing with own electricity account, water and toilets	4. ☐	
Education	**Not Applicable**	☐	**If Score is 1 or 2 – Specify reasons for not going to school**
	No eligible children are in school	1. ☐	
	Only few eligible children go to school	2. ☐	
	All eligible children are in school, but performance is not satisfactory (one of the School going children failed at least once).	3. ☐	
	All eligible children are in school and performance is satisfactory (All the School going children passing every year)	4. ☐	
Documentation	No papers available	0. ☐	
	Birth Certificate for children (1 – 7 years)	1. ☐	
	Ration Card (newly married- > 1year, new born baby- > 1 year)	2. ☐	

	Election Card (At least 1 eligible member in the family)	3. ☐	
	PAN Card/IT Receipt (At least 1 member in the family)	4. ☐	
Economic Activity	No eligible members are working or <15 are working	1. ☐	
	Some eligible members are working. No stable income, no stable occupation	2. ☐	
	All/ Few eligible members are working but income flow is not assured (no payroll/ Hawkers)	3. ☐	
	All eligible members are working daily with security (payroll/Market Place)	4. ☐	
Financial links	Money lender debts/no eco transaction activity (no savings no debts or money lender debts, dependent on relatives/ friends)	1. ☐	
	No debts, No much savings Member of Bhishi/ bachat gat	2. ☐	
	Access to Coop/ MFI / Re loans from PSW, Savings <Rs. 15000, Life insurance, small RDs in post/ bank	3. ☐	
	Savings >Rs. 15000 and access to banks Loan	4. ☐	

CE – Feed back from survey (from investigator)

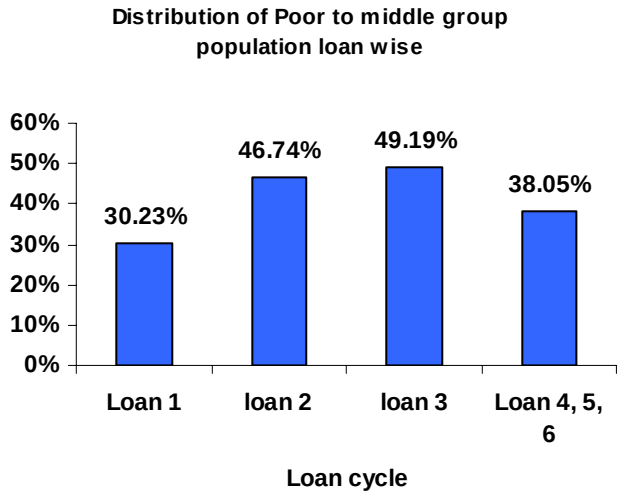
CE1. Quality of information collected during interview 1. Very good 2. Good 3. Average 4. Bad 5. Very bad	|____|

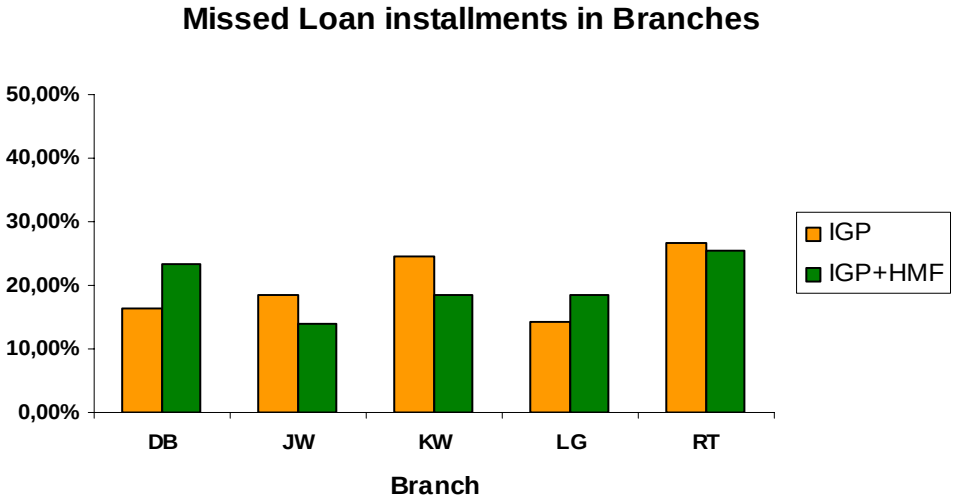
CE3. Comments by investigator for better understanding of information collected:

CE4. Other information that can be helpful for PSW

7.3 Annexe on description of sample

Graph 146 : Loan instalment missed per branch
Graph 147 : Distribution of poor to middle group population for first cycle





7.3.1 Table of education score table

Table 31: Frequency of education score table with socio economic quintile

Count of Socioecomomic quintile			
Education score	IGP	IGP+HMF	Grand Total
1	1	3	4
2	3	9	12
3	22	32	54
4	50	64	114
	76	108	184

Table 32: Percentage of education score table with socio economic quintile

% of Socioecomomic quintile		
Education score	IGP	IGP+HMF
1	0.54%	1.63%
2	1.63%	4.89%
3	11.96%	17.39%
4	27.17%	34.78%

Table 33: Percentage of education score table with SLL Inter Aide

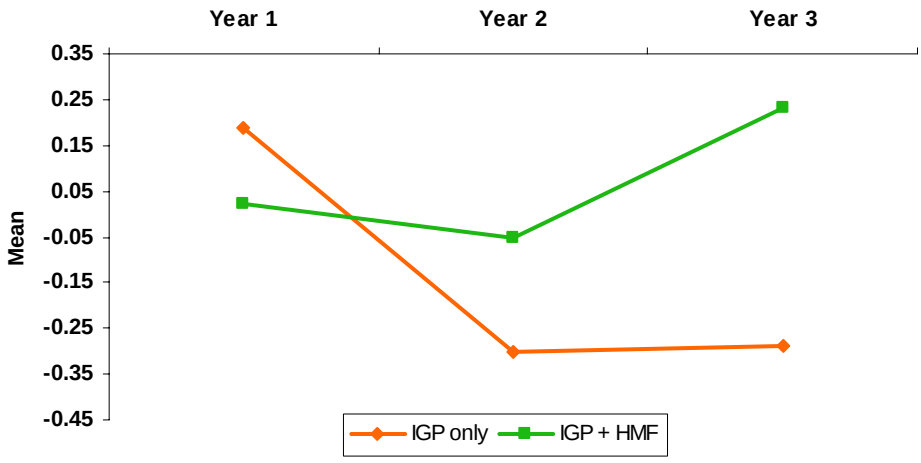
Inter Aide SLL	IGP	IGP+HMF
1	1.32%	2.78%
2	3.95%	8.33%
3	28.95%	29.63%
4	65.79%	59.26%

7.4 Annexes on socio economic chapter (SLL tables)

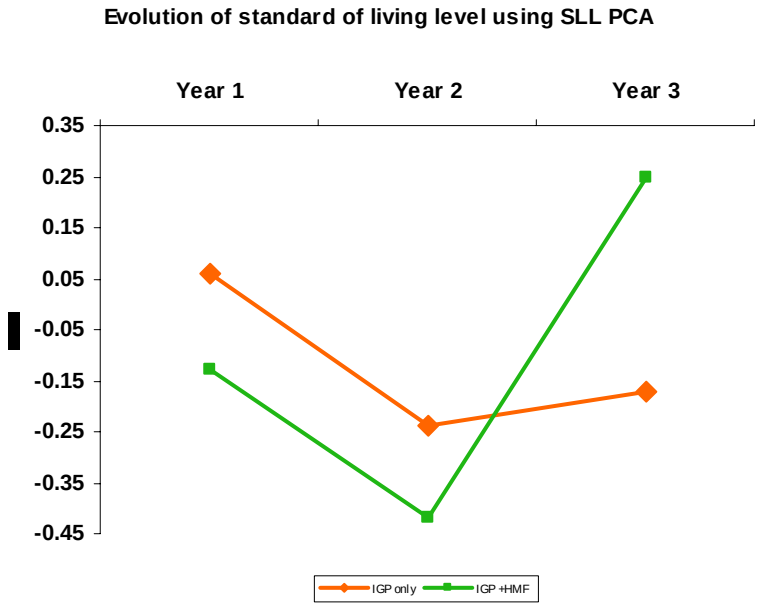
7.4.1 Annexe on the evolution of standard of living for IGP and HMF group having a loan with different indicator used

Those graphs with bigger scale are kind of zoom to show the trend but those variations are in fact infinitesimal as regards as the maximum and minimum of those indicators.

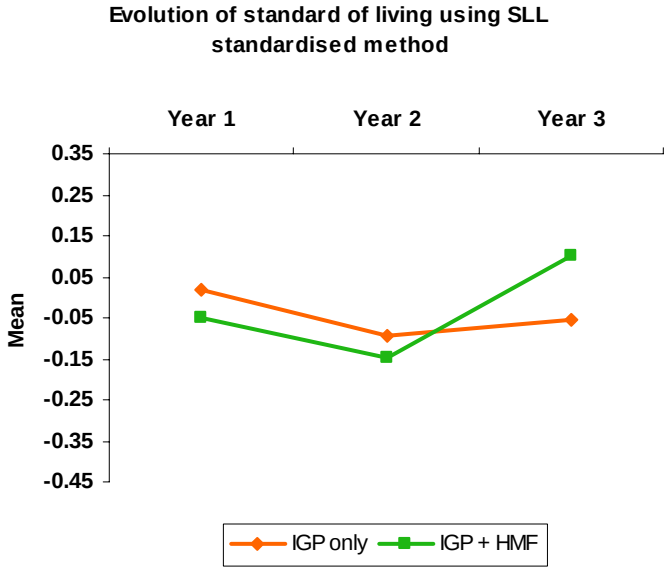
Graph 148 : Evolution of standard of living with socio economic score (large scale)



Graph 149 : Evolution of standard of living with SLL PCA (large scale)



Graph 150 : Evolution of standard of living with SLL standardized (large scale)



Graph 151 : Evolution of standard of living with SLL Inter Aide (large scale)

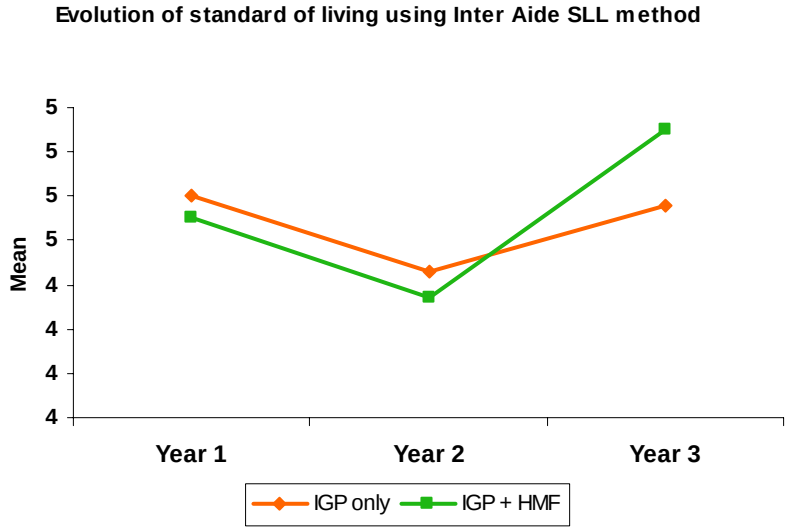


Table 34 : Descriptive statistics Table with loan variable for IGP + HMF group

IGP+HMF group

-> loan_cycle_categorie = 1

Variable	Frequence	Mean	Std. Dev.	Min	Max
Socio economic score	45	.0213303	1.63878	-3.461841	3.520978
SLL inter Aide	45	4.555556	1.012548	3	7
SLL standardised	45	-.0553961	.5785041	-1.207322	1.226751
SLL_PCA	45	-.1341284	1.488235	-3.147537	3.238779

-> loan_cycle_categorie = 2

Variable	Frequence	Mean	Std. Dev.	Min	Max
Socio economic score	53	-.0558456	2.374216	-5.12035	6.870416
SLL inter Aide	53	4.377358	.945158	2	7
SLL standardised	53	-.1576832	.5406763	-1.369786	1.247826
SLL_PCA	53	-.4227566	1.465699	-3.631589	3.268396

-> loan_cycle_categorie = >=3

Variable	Frequence	Mean	Std. Dev.	Min	Max
Socio economic score	64	.2303925	1.939704	-3.977225	6.036768
SLL inter Aide	64	4.75	.8544933	3	6
SLL standardised	64	.1030438	.5085293	-1.106442	1.117197
SLL_PCA	64	.2583569	1.351827	-2.939804	2.854166

TOTAL OBS 162

Table 35 : Descriptive statistics Table with loan variable for IGP group

IGP group

-> loan_cycle_categorie = 1

Variable	obs	Mean	Std. Dev.	Min	Max
Socio economic score	41	.1979851	2.321289	-3.148648	7.983874
SLL inter Aide	41	4.609756	1.021715	3	7
SLL standardised	41	.0202333	.5831852	-1.107549	1.558033
SLL_PCA	41	.0594313	1.571056	-2.933553	4.074725

-> loan_cycle_categorie = 2

Variable	obs	Mean	Std. Dev.	Min	Max
Socio economic score	39	-.303072	2.07436	-4.319049	6.023224
SLL inter Aide	39	4.435897	.8206182	3	7
SLL standardised	39	-.0925288	.4597683	-1.106442	1.213436
SLL_PCA	39	-.2432748	1.257714	-2.939804	3.211895

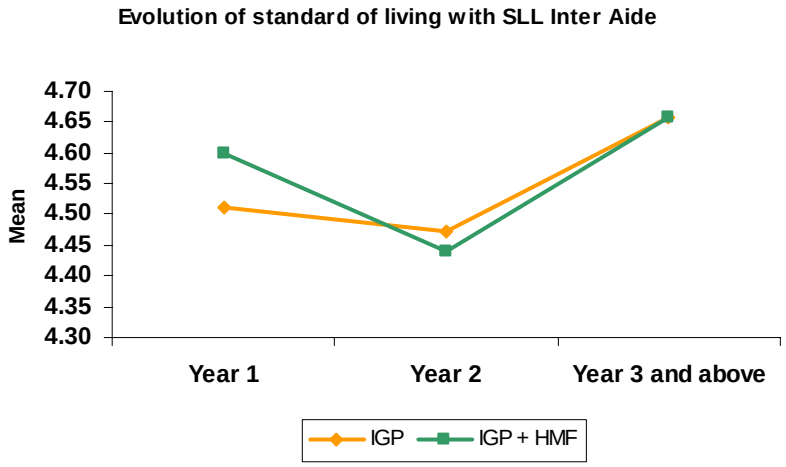
-> loan_cycle_categorie = >=3

Variable	obs	Mean	Std. Dev.	Min	Max
Socio economic score	43	-.2951254	1.913038	-4.002313	4.808968
SLL inter Aide	43	4.581395	.8516806	3	6
SLL standardised	43	-.0572465	.4523818	-.9179223	.7243624
SLL_PCA	43	-.1728664	1.198914	-2.709219	2.221438

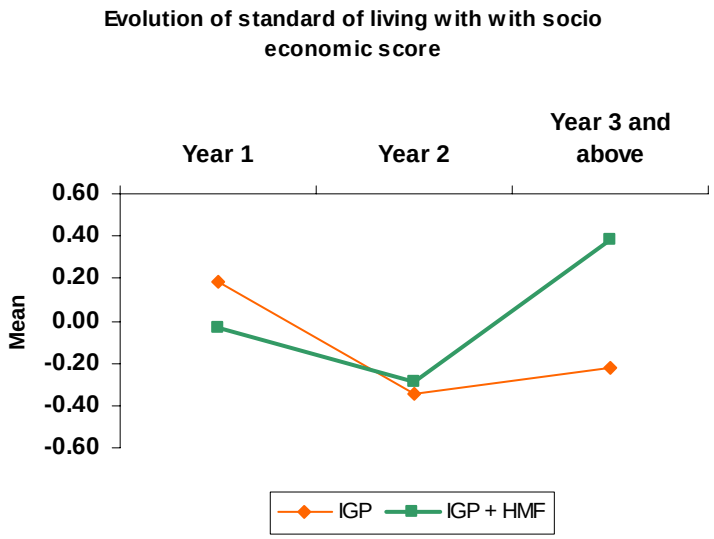
TOTAL OBS 123

7.5 Evolution of standard of living for IGP and HMF group having a loan and insurance with different indicator

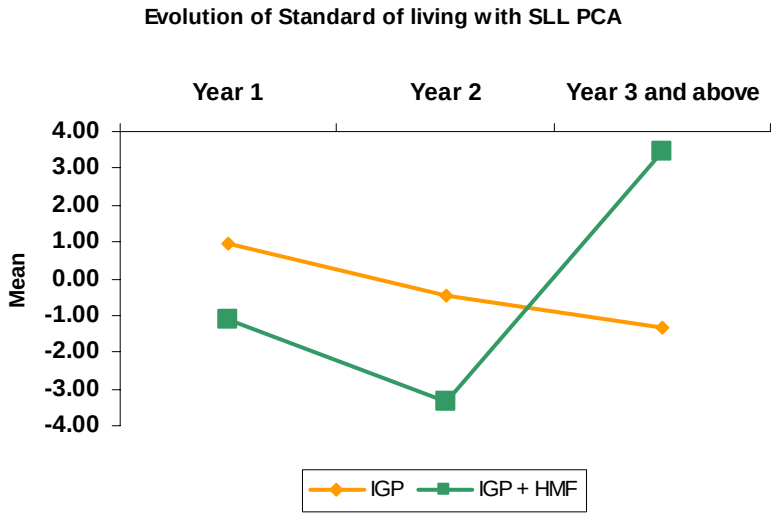
Graph 152 : Evolution of standard of living with SLL Inter Aide with loan and policy renewals variables (large scale)



Graph 153 : Evolution of standard of living with socio economic score with loan and policy renewals variables (large scale)



Graph 154 : Evolution of standard of living with SLL PCA with loan and policy renewals variables (large scale)



Graph 155 : Evolution of standard of living with SLL standardised, loan and policy renewals variables (large scale)

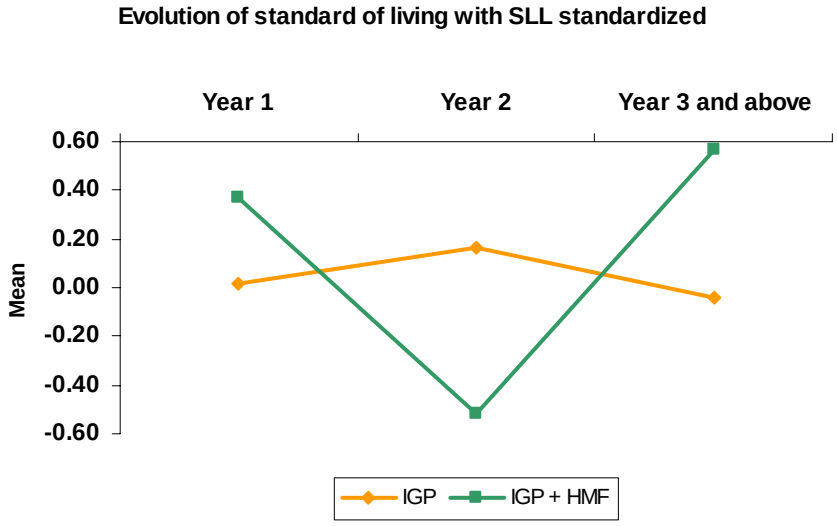


Table 36: : Descriptive statistics Table with loan and policy renewals variables

	Frequency IGP		Frequency IGP + HMF	Indicator	IGP	IGP + HMF
Loan 1	41	HMF year 1	40	**Socio economic score**	0.1803	-0.0370
Loan 2	38	HMF year 2	25		-0.3420	-0.2894
Loan > 3	44	HMF year 3	44		-0.2257	0.3815
Loan 1		HMF year 1		**SLL standardised**	0.01780	0.36856
Loan 2		HMF year 2			0.16063	-0.51885
Loan > 3		HMF year 3			-0.04063	0.56509
Loan 1		HMF year 1		**SLL PCA**	0.93226	-1.08994
Loan 2		HMF year 2			-0.43826	-3.33477
Loan > 3		HMF year 3			-1.35918	3.47720
Loan 1		HMF year 1		**SLL Inter Aide**	4.51220	4.60000
Loan 2		HMF year 2			4.47368	4.44000
Loan > 3		HMF year 3			4.65909	4.65909

7.5.1 Analysis of variance and covariance (ANOVA) for socio economic conditions

→ Dependent variable is Socioeconomic quintiles

Table 37 : Variance and covariance analysis for socio economic quintile

Number of obs = 285 R-squared = 0.0153
Root MSE = 1.43963 Adj R-squared = -0.0096

Source	Partial SS	df	MS	F	Prob > F
Model	8.90450404	7	1.27207201	0.61	0.7444
HMF_year	1.9405576	4	.485139399	0.23	0.9190
loan_cycl~s	4.39384739	2	2.19692369	1.06	0.3479
igphmf	.400679284	1	.400679284	0.19	0.6605
Residual	574.091987	277	2.07253425		
Total	582.996491	284	2.05280455		

→ Dependent variable is SLL PCA Quintile

Table 38 : Variance and covariance analysis for SLL PCA quintile

Number of obs =	285	R-squared =	0.0461
Root MSE =	1.40793	Adj R-squared =	0.0220

Source	Partial SS	df	MS	F	Prob > F
Model	26.5366829	7	3.79095471	1.91	0.0676
HMF_year	11.4189407	4	2.85473518	1.44	0.2209
loan_cycl~s	7.76542346	2	3.88271173	1.96	0.1430
igphmf	1.88266855	1	1.88266855	0.95	0.3306
Residual	549.091387	277	1.98227938		
Total	575.62807	284	2.0268594		

7.5.2 Analysis of variance and covariance (ANOVA) for health score

→ **Dependent variable is health score**

Table 39 : Variance and covariance analysis for health score

Number of obs =	285	R-squared =	0.0599
Root MSE =	.53173	Adj R-squared =	0.0362

Source	Partial SS	df	MS	F	Prob > F
Model	4.99408062	7	.713440088	2.52	0.0157
HMF_year	4.1662049	4	1.04155123	3.68	0.0061
loan_cycl~s	.250988528	2	.125494264	0.44	0.6420
igphmf	.187481932	1	.187481932	0.66	0.4162
Residual	78.3182001	277	.282737184		
Total	83.3122807	284	.293353101		

7.5.3 Analysis of variance and covariance (ANOVA) for food score

Table 40 : Variance and covariance analysis for food score

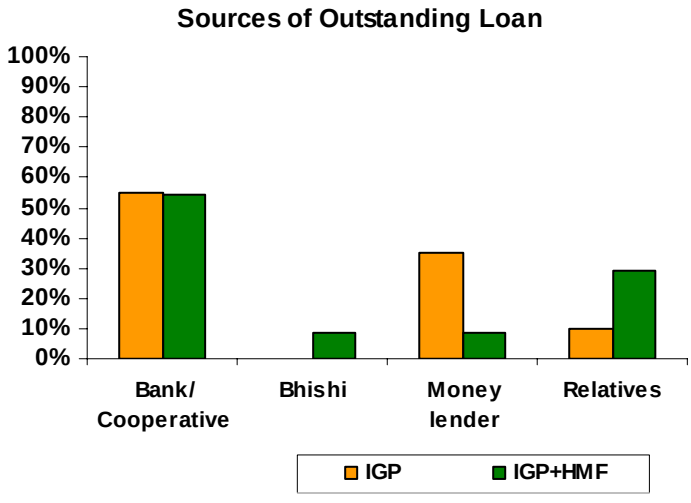
Number of obs =	285	R-squared =	0.0546
Root MSE =	.66686	Adj R-squared =	0.0307

Source	Partial SS	df	MS	F	Prob > F
Model	7.119088	7	1.01701257	2.29	0.0280
HMF_year	2.8494845	4	.712371125	1.60	0.1740
loan_cycl~s	1.83141979	2	.915709895	2.06	0.1295
igphmf	.13842202	1	.13842202	0.31	0.5774
Residual	123.182666	277	.444702767		
Total	130.301754	284	.458808994		

7.6 Annexe on indebtedness

Data on indebtedness and savings was essential to assess the indicator `Financial Links'. Indebtedness is a major hurdle in improving standard of living. It indicates lack of capacity of managing the expenses within the income and a negative balance of income and expenses. Out of 285 partners, 44 (15.4%) reported that they have old debts other than PSW. Out of these 44, 20 (16.3%) are from only IGP group and 24 (14.8%) are from IGP+HMF group. Sources of outstanding loans are described in the following graph-

Graph 156 : Sources of outstanding loan



Out of the sources of loans mentioned by the partners, Banks or a cooperative is an organised sector. Therefore, partners having loans from these sources are safe and secured. Receiving a loan from this sector also needs certain credibility such as identification, residential and income proofs. Therefore partners taking loans from these sources certainly have higher standard of living. Whereas, sources like money lenders, which are mostly opted by IGP group, is the most unsafe source with high interest rate.

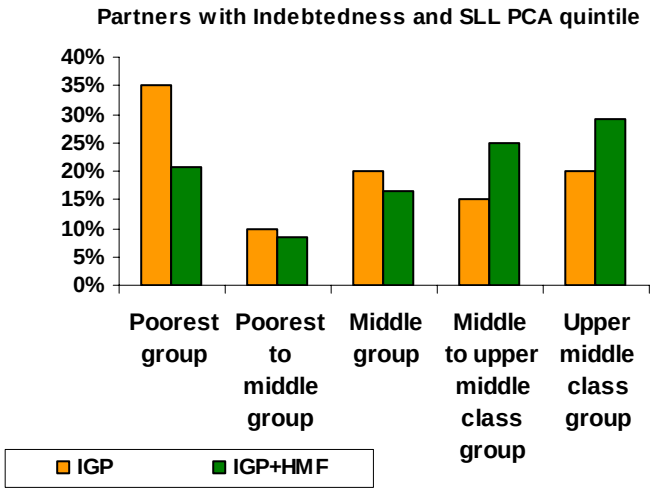
Amount borrowed by partners mostly exceeded Rs. 10000/- when they have taken loans from bank or cooperatives. Whereas, 71.4% partners from only IGP group restricted the loan amounts borrowed from money lenders up to Rs. 10000/-, this propor-

tion is 100% in IGP+HMF group.

A relative is known as social capital and she/he is a source which completely depends upon personal relationships, usually without interest rate.

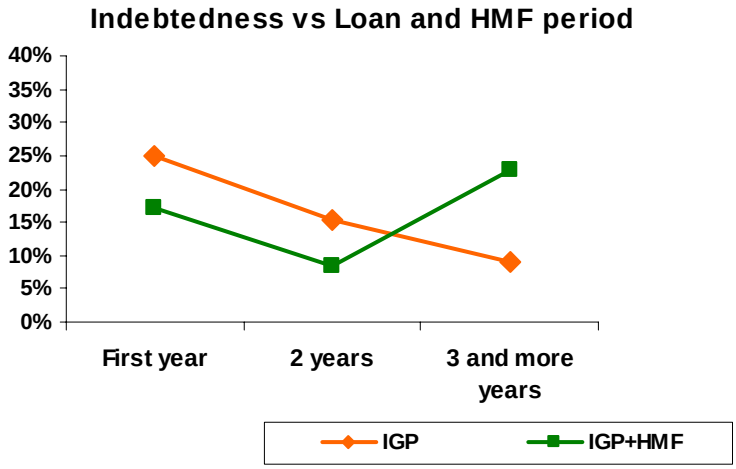
Bhishi is a small group and an informal and unsafe way of saving money. Small amounts are contributed by everybody in the group and the total amount is given to every member cyclically and periodically. There is no formal registration of the group and members have no guarantee that they can get back the money they have invested initially.

Graph 157 : Indebted partner with SLL PCA quintile



Period in the years in the intervention shows a direct evolution on the indebtedness pattern. Following graph can be interpreted as only IGP members who have borrowed mostly from unreliable and insecure sources have reduced their indebtedness over a period of time, whereas IGP+HMF members increase their credibility and borrow more from reliable sources like banks and cooperatives.

Graph 158 : Evolution of indebtedness with year of service



7.7 Annexes on Health expenses, health status, hygiene and food

7.7.1 HMF sub limits policy

- ***On Day Discharge with a Limit of Rs. 2500****: CLW, simple Fracture (needing closed reduction without general Anesthesia). Biopsy done under local anesthesia, Traction therapy on OPD basis.(for 1st time only.),* Traction process for the first time(treatment given on – on admission diagnosis for 1st time only (Provided the diagnosis is made after enrolment .Day care procedures not needing general anaesthesia.
    - *Maternity: Abortion (medical/ missed/spontaneous/ incomplete abortion / threatened / complete / inevitable abortion) to save life of mother or in case of not liveable child (physical & mental abnormality) or for social Indication when done in fist 8 weeks.(D&C).*
- ***Limit Rs. 5,000:***

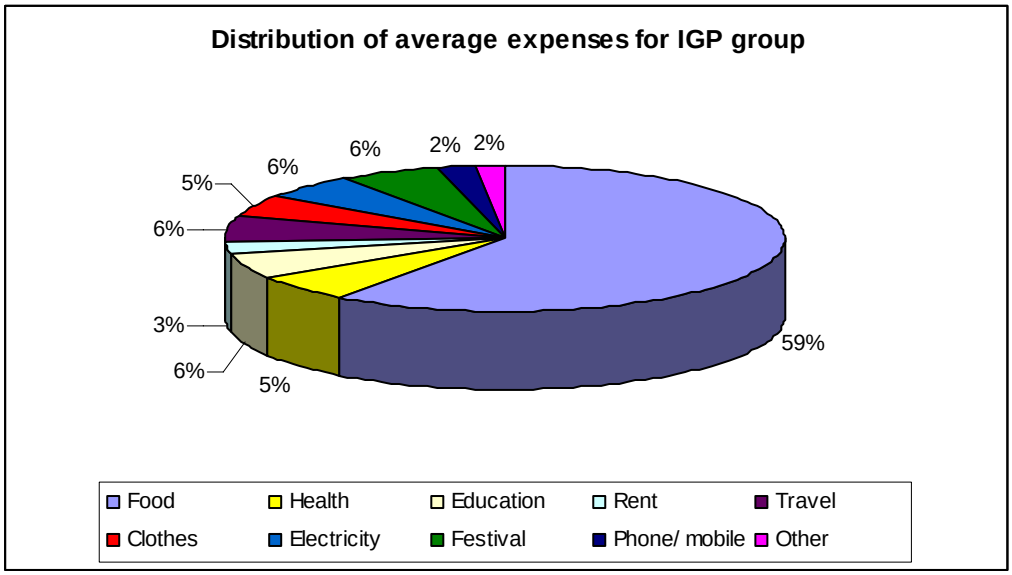
  Medical Treatment: Pyrexia of unknown origin, , Upper Respiratory Tract Infections, Lower Respiratory Tract Infections, Typhoid, Malaria, Sub – acute intestinal obstruction needing conservative treatment.
  Opht: Pterygium, Stye, Surg: lymphoma(small), Abscess(small/medium) – requiring local anaesthesia ,
  Accident: simple fractures needing anaesthesia, Head injury under investigation (CT Scan needed) for a day – when the report is normal ,
  Genito-Urinary Syst: Urinary tract infection, Hydrotherapy for kidney stone, Circumcision (unless it is congenital)
  ENT: Tonsillectomy Acute Gastro- enteritis Pleural effusion.
    - *Maternity/Gyneac:*
        - Abortion to save life of mother or in case of not liveable child (physical & mental abnormality) or for social Indication when done in second trimester (Intrauterine instillation of hypertonic soln).
        - Hyper emesis Gravidum
        - Polyhydramnios, Oligohydramnios, Eclampsia, post partum haemorrhage (Conservative Treatment)
        - Severe Anemia, Jaundice related to pregnancy
        - Premature rupture of membranes, Puerperal Sepsis
    - *Children:* Tract infection, Bronchitis, Pneumonia, Aspiration Pneumonia, Diarrhoea, Dysentery, Vomiting, Cholera, Bronchiolitis, Pneumonia, Empyema, Ingestion of foreign body. Asthma, Gastro enteritis, epileptic attack.
- ***Limit of Rs. 7,500:***
  Medical Treatment: Complex medical diseases e.g. Hepatitis, Cardiac problems, Emphysema, COPD, Asthma. Complex diseases not needing ICU Treatment. Cardiac problems not needing ICU Treatment. Emphysema,
  Surgery: Piles/ fistula, Abscess (medium - large), Breast lump(medium), Appendix, Hernia, biopsy done under spinal and general anaesthesia for investigation.
  Accident: multiple open wounds not in strategic area , Fractures needing invasive procedures,
  Genito-Urinary System: lithotripsy
  ENT: DNS, Tymphanoplasty, COPD, invasive
    - *Maternity/Gynec:* Hydatidiform mole, Polyhydramnios, Oligohydramnios,
    - *Children:* diseases of the previous section with treatment requiring 1 day ICU usage.

- ***Limit of Rs. 10,000:***
  Medical Treatment: Multiple diagnosis (diseases) each requiring separate line of treatment. , Debilitating condition (disease) not needing ICU but many days of stay (detected only after the policy has started), Lung consolidation, Pericarditis, Septicaemia
  Surgery: Breast Lump/ Abscess (big), nerve decompression, Cholecystectomy, Thyroidectomy. operatives for – slip disc, disc bulging and other spinal cord related diseases. Intestinal obstruction needing invasive therapy.
  Accident: fracture humerus involving invasive procedure,
  Genito-Urinary System: stag horn kidney, prostate
    - *Maternity:* Fibroid with pregnancy, Tumour with pregnancy, operative procedure for ectopic pregnancy,
    - Eclampsia, post partum haemorrhage (invasive Treatment) L.S.C.S., Hysterectomy (Vaginal Laparoscopic)
- ***Limit of Rs. 15,000:***
  Accident: multiple joint fracture, multiple wound (open wounds) at vital areas compound fracture. Fracture joint, involving invasive procedure.
  Surgery: joint replacement, vertebrae replacement, CABG, organ transplant. , kidney removal, angioplasty, valve replacement, cancer treatment. Abdominal operatives – spleenectomy, jejunectomy, and other intestinal operatives.

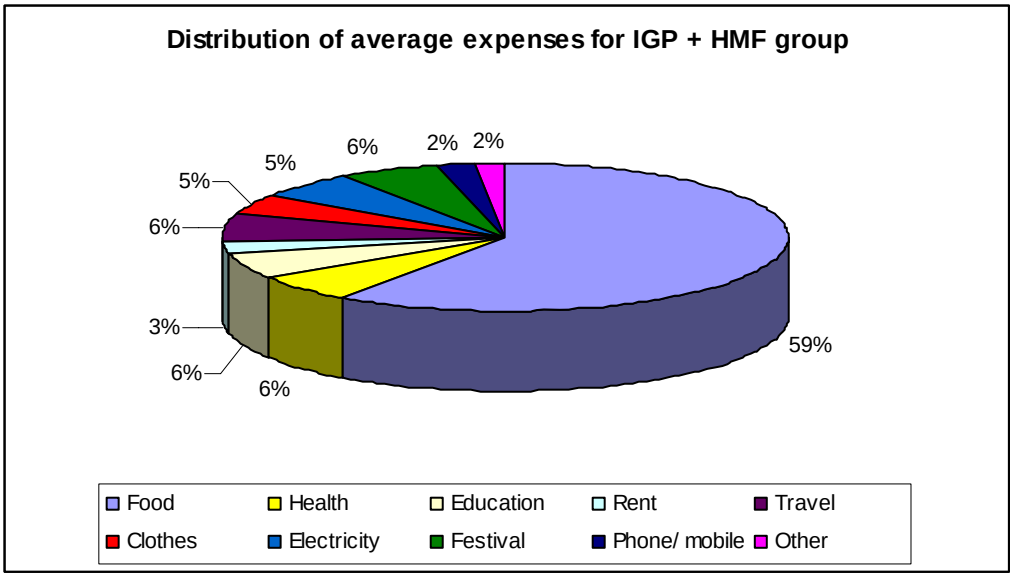
  Medical Treatment: ICU treatment for medical, surgical and accidental reasons, cancer treatment.
    - *Maternity/gynaecology:* Rupture of uterus , carcinoma of breast

7.7.2 Proportion of Health expenses in total monthly average household expenses

Graph 159 : Distribution of average expenses for IGP group



Graph 160 : Distribution of average expenses for IGP + HMF group



7.7.3 Age group of sick families

Table 41 : Age group of sick members

Age groups of sick family members

	Frequency			Column %		
Age group	IGP	IGP+HMF	Grand Total	IGP	IGP+HMF	Grand Total
0-5	6	4	10	14,63	5,56	8,85
6 to 15	1	7	8	2,44	9,72	7,08
16 to 30	11	23	34	26,83	31,94	30,09
31 to 50	16	30	46	39,02	41,67	40,71
More than 50	7	8	15	17,07	11,11	13,27
Total Frequency	41	72	113	100,00	100,00	100,00

7.7.4 Type of illness

Table 42 : Frequency and percentage per type of illness

	IGP	IGP+HMF	Grand Total
Illness groups	yes	yes	
Fever, Cold Cough	12	23	35
%	34.29%	40.35%	38.04%
Aches and pains	4	10	14
%	11.43%	17.54%	15.22%
Other	1	6	7
%	2.86%	10.53%	7.61%
Info not available	10	8	18
%	28.57%	14.04%	19.57%
Chronic problems	4	6	10
%	11.43%	10.53%	10.87%
Infections	4	3	7
%	11.43%	5.26%	7.61%
chronic illness		1	1
%	0.00%	1.75%	1.09%
Total Frequency	35	57	92
Total Column %	100.00%	100.00%	100.00%

7.7.5 Accident probabilities

Table 43 : Accident probabilities

Product N°1		2006			
Name:	Health Mutual Fund				
Benefits Probabilities and costs		Event Proba	Event Cost	WL Proba	WL Cost
Benefit N°1: systematic	*OPD*	*100.0%*	*10*	*0.000%*	*0*
Benefit N°2	A1 : Accident without surgeries	0.17%	2500	0.043%	360
Benefit N°3	A2 : Accident with minor surgeries	0.20%	2950	0.050%	240
Benefit N°4	A3 : Accident with major surgeries	0.06%	7900	0.015%	390
Benefit N°5	D1 : Medical admissions without surgeries	0.65%	2500	0.163%	312
Benefit N°6	D2 : Medical admissions with minor surgeries	0.22%	4500	0.055%	498
Benefit N°7	D3 : Medical admissions with major surgeries	0.02%	5500	0.005%	720
Benefit N°8	M1 : Maternity without surgeries	0.20%	2500	0.050%	120
Benefit N°9	M2 : Maternity with minor surgeries	0.09%	4800	0.023%	402
Benefit N°10	M3 : Maternity with major surgeries	0.01%	7800	0.003%	402
Benefit N°11					
Benefit N°12					
Benefit N°13					

7.8 Annexe on documentation analysis

Another indicator is documents available with the partners. These includes important documents required everywhere as identification proofs and other purpose. It includes Birth certificate, Ration card, Election card, and PAN card.

Scoring is done on the basis of number of valid documents available with the family at the time of interview.

`0' Score: If the family does not have birth certificates of children, ration card, election card or PAN card, it will get `0' score. Each available document will get one point additional. Following conditions should be considered when we say that the documents are available.

a. **Birth certificate** from Municipal Corporation should be available for all the children who are more than one year till 7 years old. This is assessed for children studying till second standard as it is compulsory for admissions at school. We can then consider that birth certificates are available and counted as 1. Only hospital receipt should not be considered.

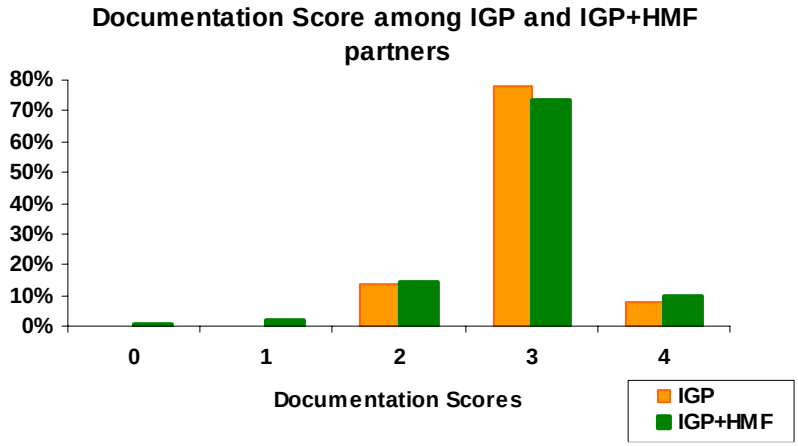
b. **Ration Card**: If names of all the current family members are included/ deleted in the ration card, it is considered as valid ration card and score is counted. A breathing period for some new comers in the family is considered. Ration card should be in the updated condition with additions of new family members.

c. **Election card** can be available for some of the eligible family members. Even if it is available for head of the family or for the partner, then it will be considered for scoring.

d. **PAN Card:** PAN card Permanent Account Number card. Permanent Account Number (PAN) is a ten-digit alphanumeric number, issued in the form of a laminated card by the Income Tax Department. All Income Tax payees must possess this card. Availability of PAN card with any one of the family members is considered while scoring.

The survey included questions regarding each document available with the family and the score was assessed. Availability of documents is illustrated in the following graph.

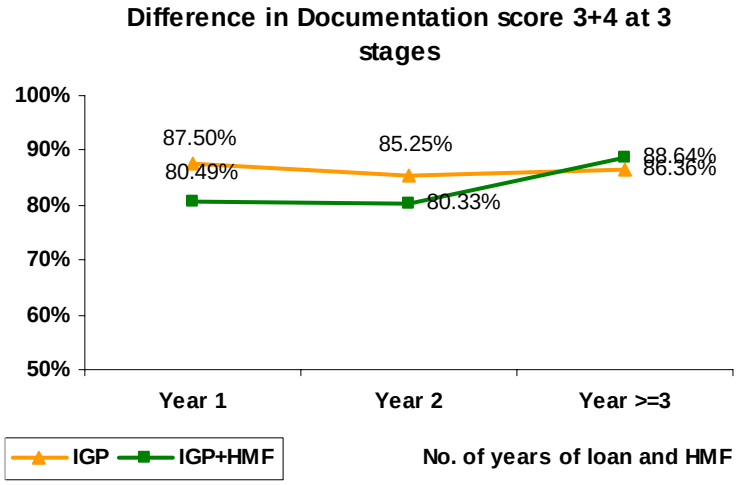
Graph 161 : Score of documentation parameter of SLL Inter Aide



0.6% of IGP+HMF families do not possess a single document for identification. Birth certificates ration card and election cards are the most commonly available documents with the family

Although, the trend shown above appears similar globally for IGP and IGP+HMF partners, it differs over a period of time according to loan and HMF years. Following graph shows difference in proportion of IGP and IGP+HMF partners having 3 and 4 scores for documentation.

Graph 162 : Difference in documentation score 3 and 4 with year of services



Low proportion of IGP+HMF partners at higher scores of documentation increases gradually and overtakes higher IGP proportion after 3 years of IGP and HMF services.

Documentation is always required to get a loan right from the first cycle whereas HMF programme has very light documentation requirement at the time of enrolment.

However, in order to get a claim, the partner needs to present all the needy documents. Without proper medical proof, HMF team cannot meet its financial responsibility to refund its beneficiaries. Hence, it is possible that the partner's awareness of having proper documentation increase while sustaining in HMF programme if they want to get the benefit of their enrolment.

7.9 Annexes on HMF satisfaction survey

Table 44 : Frequency of utilization of network doctor

Frequency of visit	No. of Partners	Percentages
Rarely/ Once	13	41,94
Sometimes for some of the family members	13	41,94
Frequently	1	3,23
For Each Illness	4	12,9
Total	**31**	**100.0**

Table 45 : Frequency of reasons for not opting for HMF services

Reasons for not opting for HMF	Data	Frequency
Did not find it important and useful	Frequency	36
	Column %	29,27%
Did not have money to pay premium	Frequency	21

	Column %	17,07%
Have some other facility	Frequency	28
	Column %	22,76%
No Response	Frequency	38
	Column %	30,89%
Total Frequency		**123**
Total Column %		**100,00%**

Table 46 : Satisfaction with OPD doctor during last 6 months

		n=62
Frequency of Satisfac-tion	**No. of Part-ners**	**Percentages**
Never	1	1,61
Rarely/ Once	10	16,13
Sometimes	27	43,55
Each Time	24	38,71
Total	**62**	**100.0**

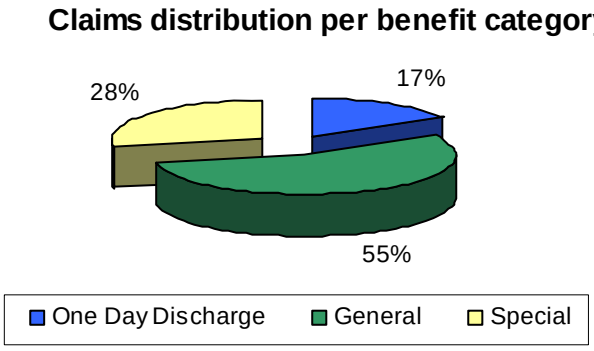
7.10 Annexes on Claim analysis

While calculating the OOPE; we have taken into consideration the following indicators and formulas :

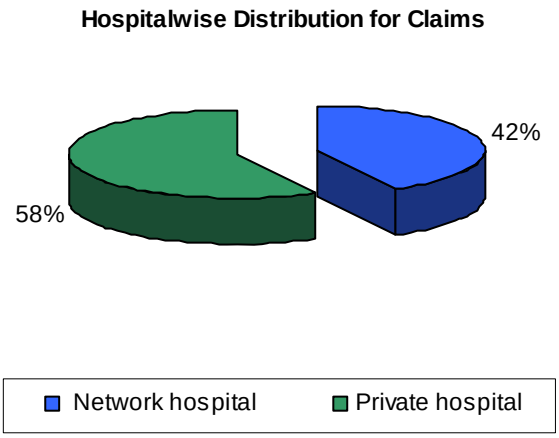
Total expenses incurred: Amount claimable + (concession &/or approx. amount saved)

Out of pocket expenditures indicator (OOPE)= Total expenses – [claim amount disbursed + (concession &/or approx. amount saved)]

Graph 163 : Claims distribution per benefit category



Graph 164 : Hospital distribution for claim



Graph 165 : Illness versus emergencies claims