

PLANET FINANCE

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The Microfinance Platform



Microfinance and Health Program in Benin

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Foreword

PlaNet Finance is an international non profit organization, which aims at alleviating poverty by contributing to the development of the microfinance sector. Since its creation in 1998, PlaNet Finance has become the head of a microfinance network whose mission is to use the enormous potential of the Internet to promote development and microcredit. PlaNet Finance offers its services to all microfinance practitioners and is also a working tool for microfinance experts all over the world.

PlaNet Finance directly works with MFIs and other organizations that provide banking services to the poor. With this objective, PlaNet Finance has created an international network of Non Governmental Organizations (NGOs) whose mission is to contribute to the development of microfinance in order to combat poverty more efficiently. In the United States, au United Kingdom and in Belgium, NGO members of this international network have a dual objective: to make microfinance better known and to seek means for developing the sector. In Benin, India and Morocco, the NGOs have a unifying role. They establish comprehensive programs to develop the microfinance sector on a national, or more often, regional basis. The ambition of this international network is to relay the actions initiated in Paris to these local areas. All local offices are headed by permanent representatives.

The mission of these offices is to offer PlaNet Finance support in the field, taking local needs into account to define and establish specific projects. In the continuation of this mission PlaNet Finance has decided to address the issue of malaria prevention in Benin. With SANOFI's financial support a "Microfinance and Health Programme" has been set up by PlaNet Finance in collaboration with the Benin Country Office and the thirty-nine local microfinance institutions (covering 150.000 clients) which are members of the PlaNet Platform in Benin.

In cooperation with it's country office, PlaNet Finance's Training and Technical Support Department has developed a survey designed to give a precise idea of demographic, socio economic and health characteristics of the programme's target population.

To realize the "Microfinance and Health Programme" fifteen partner microfinance institutions where targeted because of their specific profile. Out of these fifteen institutions, eight participated actively in the survey led during September 2004. The table bellow summarizes the participating MFIs, their number of clients and the number of potential beneficiaries of the "Microfinance and Health Programme".

Participating MFI	Number of clients	Potential beneficiaries
PEBCO	6000	6000 X 5
SINAI	350	350 X 5
RACINE	6000	6000 X 5
PROMUSAF	6000	6000 X 5
GERAPIA	1800	1800 X 5
IAMD	2000	2000 X 5
CIADIC	600	600 X 5
CBEDIBA	2000	2000 X 5
PADME	46000	46000 X 5
TOTAL	78750	393750

The "Microfinance and Health Programme" will be further developed in partnership with local MFIs, national and international organisations active in Benin in order to stimulate active partnerships and achieve maximum outcomes in the fight against malaria.

Mr. Arnaud Ventura,
CEO
PlaNet Finance

I. Introduction

1.1. Background

In order to fight malaria through an awareness campaign and education program, PlaNet Finance's Training and Technical Support Department has surveyed over 2000 women beneficiaries of Microfinance programs in Benin. The aim of the survey is to understand the socio-economic status and level of education amongst PlaNet Finance's microfinance platform members and their understanding of risks associated with malaria. Participation in the survey should enhance an effective linkage with local NGOs and stimulate MFIs to inform their beneficiaries on health issues so that they can increase consciousness about the disease.

The local microfinance institution has a unique institutional structure at the grass root level where women group meet once in a week in regular basis. The credit agent conducts the group meeting with help of women group leaders which can be considered as the best place to introduce social and education programs to empower communities. Microfinance network has an appropriate structure to carry out a massive scale awareness campaign against malaria. The integration and adaptation of such activities with credit plus program (Credit+ Health + Education) can minimize the additional cost and increase the outreach at the country level.

Using the NGOs networking platform should allow PlaNet Finance's initiative to reach a large number of people. The collected data through this survey and its outcomes will be exploited in order to design simple communication tools and basic education training material to launch this campaign. Finally, that will also lead to implement a "Training of Trainers" program to create health facilitators. Training will be provided to women group leaders at the community level so that they can teach and inform their fellows and family members about malaria risks.

At the same time, the survey results will help PlaNet Finance's Training Technical Support Department to determine an appropriate strategy and carry out this mission on the basis of real situations at the grass roots level. Through this data analysis we should have a clear idea about the client's behaviour pattern to continue this Microfinance and Health program in order to achieve maximum outcomes and reduce the number of victims of malaria.

Social mobilization is quite impossible without having people's participation. Once community people are willingly involved and able to understand their own problems through basic education there is great potential for a positive impact. The survey mission and several dialogs taken place with community people have shown positive hope and already created an enabling environment in favour of the campaign. The active participation of community people should allow the microfinance and health program in Benin to achieve its goals efficiently. This experience could be adapted and replicated in any other country, if we finally achieve the satisfactory results and ensure more effective partnership between private and development sectors.

1.2 Objectives of the Survey

In the framework of microfinance and health project - which aims to increase microfinance institutions' clients awareness in malaria prevention - this survey was carried out to gather baseline data and information on various socio-economic indicators among the target population. It helps the project management team to gain insight not only on current measures taken to prevent but it also identifies target population's socio-cultural behaviours and manners that may possibly play a role in the transmission of malaria.

Without having clear picture of the socio-economic context of the rural and semi urban areas of Benin it would be difficult to determine the strategy and action plan to run this project. It is also necessary to know more about and how local NGOs are in microfinance operations through man and women groups at the community level. This is why the objective of the survey is to provide relevant primary information so that appropriate measures can be designed to increase MFIs' clients awareness on malaria and so that target population can improve their ability to fight against the disease. Based on the results of this survey tailor-made, simple, and appropriate communication tools and basic education training material will be designed to train women community leaders to campaign against malaria in their respective communities. This survey will underline the salient issues that need to be addressed in the awareness campaign in order to maximize the positive impact of the project in a cost-effective way.

The survey will also enable efficient project monitoring and evaluation by establishing a baseline information on current situation. Based on this situation the impact of the project can be easily measured and positive impacts maximized.

1.3 Survey Methodology

In order to reach a large number of audience PlaNet Finance originally targeted 15 local NGOs/MFIs for this project. Finally, 8 organizations participated in the data collection phase and they are actively involved to carry on the survey in an effective manner. All together the sample consist of 2015 clients of 8 different microfinance institutions' who were interviewed in September 2004.

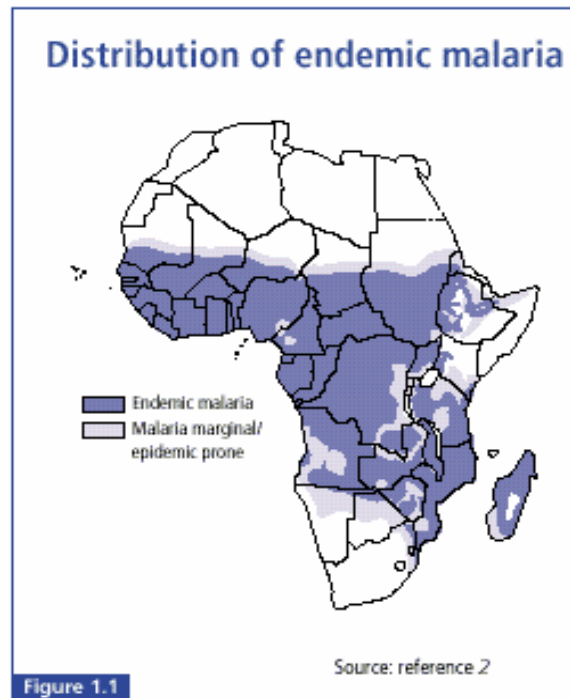
To undertake efficiently the collection process of primary data PlaNet Finance's Training and Technical Support Department in collaboration with planet finance office in Benin developed a semi-structured questionnaire consisting of some 30 quantitative and qualitative questions. The questionnaire was first tested to determine its relevancy vis-à-vis the objectives of the survey.

The people surveyed where mostly chosen amongst female clients of partner MFIs in Benin. During village meetings a few clients, preferably the poorest in each group, where chosen in order to participate in the survey. The final interviews were undertaken by local people who have close connections with the target communities and local people in order to avoid influencing interviewees' answers.

The results of the questionnaires were then put in a spreadsheet form and various quantitative analysis were undertaken by using Excel and Statbox software.

1.3.1 Targeted People

Targeted people live in the “red alarm zone” where malaria is highly visible. The IMFs involved in the survey are those who work with people located in malaria affected areas such as lake villages and valleys. The primary target group consists of MFIs/NGOs borrowers, community leaders, illiterate adults, and adolescents at the secondary school with priority on women and girls from poorest families and coming from rural zones.



Source: International Federation of Red Cross & Red Crescent

1.3.2 Sampling

In order to have a relevant sample, 2015 people were questioned for this survey. People surveyed came from 32 different villages. Planet Finance's partner MFIs/NGOs working in rural areas with poor populations were targeted: 15 MFIs were identified out of which 8 participated actively in the surveying campaign in September 2004.

Data collection focused on rural and poor areas. The sample addressed 70 % of people from rural areas and 30% from urban areas.

In the survey context, rural areas (RA) concern villages and peri-urban areas where poverty is highly visible.

Urban areas (UA) are poorest areas in town. The survey targeted people living in areas where poverty is highly visible.

Chart 1 : Number of people surveyed per MFI

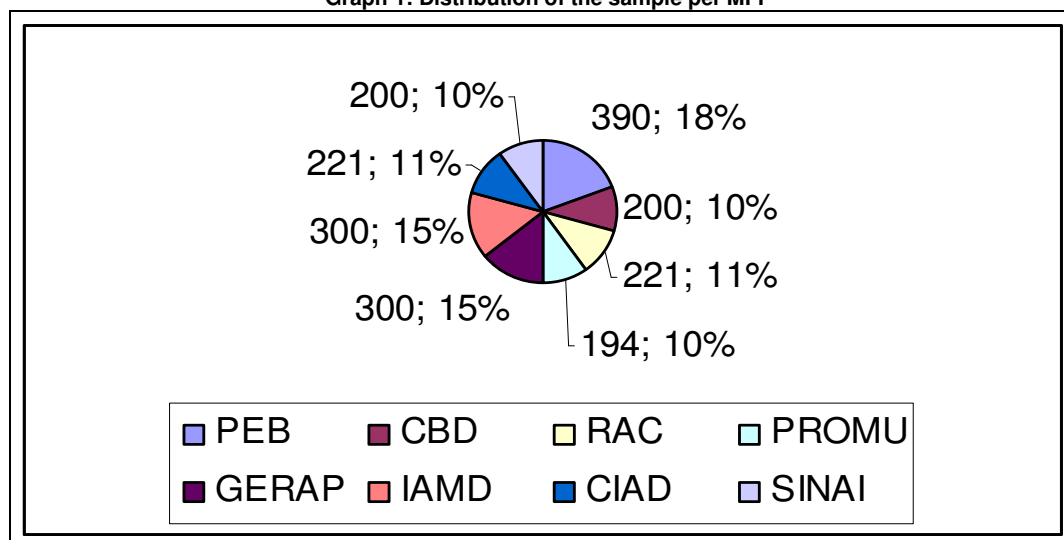
Total NGO	NUMBER OF CLIENT	TARGET PEOPLE	Targeted Client for Survey	
			Rural	Urban
PEBCO	6000	6000X5	0	390
SINAI	250	250 X5	200	0
RACINE	14000	14000X5	0	210
PROMUSAF	6000	6000X5	194	0
GERAPIA	1800	1800X5	300	0
IAMD	2000	2000X5	300	0
CIADIC	600	600X5	221	0
CBEDIBA	2000	2000X5	200	0
TOTAL	32650	413250	1415=70%	600=30%

II. Results of Data Analysis

2.1. The Number of People Interviewed per MFI

The participating partner organizations represent a very heterogeneous group of microfinance institutions. Two of them are operating in urban areas where as the rest are providing services for rural populations living under poverty line. In terms on number of clients served Racine is by far the biggest MFI with its 15 000 poor households covered. SINAI in contrast only has some 250 clients and the other 6 MFIs have between 600-7000 beneficiaries.

Graph 1: Distribution of the sample per MFI

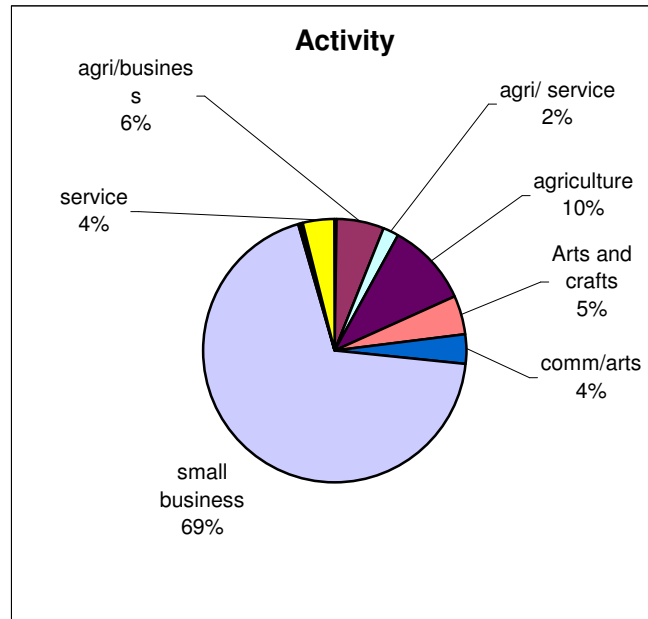


Clients of SINAI and CIADIC are less represented than clients of other institutions because these MFIs are smaller than the others. SINAI for example only has 250 clients altogether whereas CIADIC has 600.

2.2. Sector of Activities :

Nearly 79% of surveyed people work in small business. Agriculture (app. 18%) and craft industry(8%) come next. There are no employees in the sample. An important proportion of the sample works in many sectors at the same time (12,27%). The most frequent combination of activities is agriculture and business (5,86% of the sample).

Graph 2: Sectors-wise Activities



2.3. Family and Age

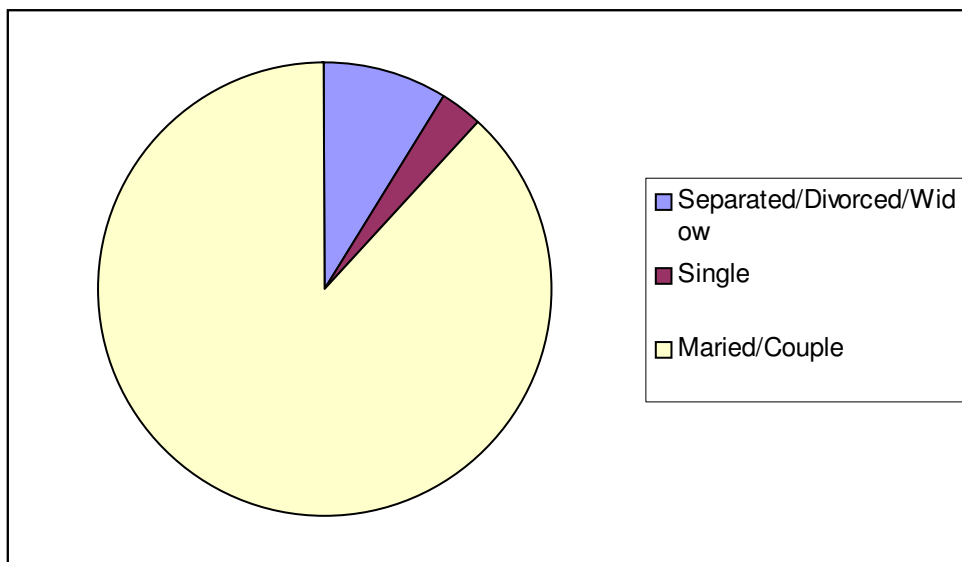
The following three chapters will present statistical information on participating people's marital status, age and, number of children. This information can be used to estimate potential direct and indirect outreach of the program. This analysis helps us to understand and identify the role that women can play in the dissemination of the information and awareness on malaria prevention from their house and community.

2.3.1. Marital Status

A vast majority of the people 88% surveyed are married or live in marital status. The others are separated, divorced or widowers (9%). Bachelors are a very small minority of the sample (3%).

It is important to consider the significance and fully understand the implications of the fact that such an important part of people are married or living in marital status in the sample. This will enhance the indirect impact of the project since wives/mothers can easily disseminate the information inside their families. More importantly it further demonstrates the importance of putting women as a primary target group of this awareness campaign. At the same time, cost-effective and perhaps alternative channels to best reach separated, divorced, widows, and single people should be considered.

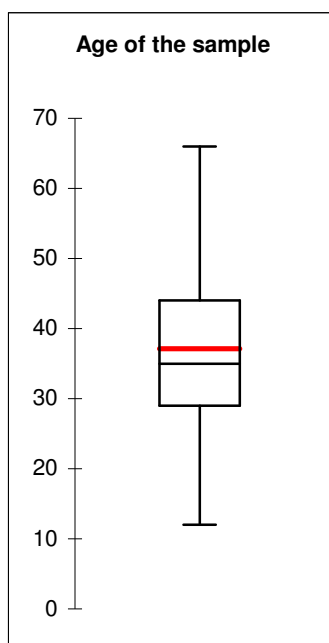
Graph 3 : Matrimonial Status



2.3.2. Age

The average age of the sample is 37,13 years. The median age is 35.

Graph 4 : Age of the sample



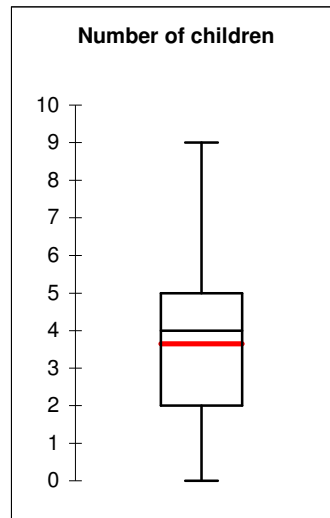
The **median** is the middle value in a distribution, above and below which lie an equal number of values. In this case for example there are as many people in the sample above the age of 35 than under the age of 35. It is different from the **average** which is obtained by dividing the sum of a set of quantities by the number of quantities in the set. In this example summing up the ages of each person in the sample and dividing it by the number of people surveyed gives an average age of 37,13 years.

The difference between the median and the average illustrates the distribution of ages in the sample: in this example there are more people that are younger than 37,13 than older. However the eldest are quite a bit older and make the average age of the sample boom up.

2.3.3. Number of children

Women surveyed have 3,65 children on average. Median is of 4 children per women.

Graph 5: Number of children



2.4. Income

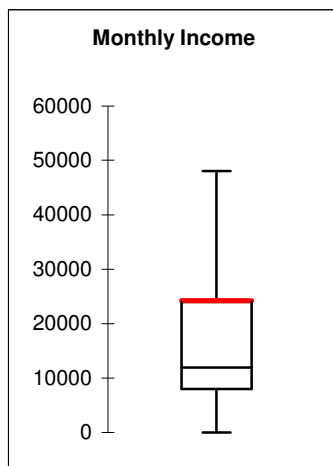
2.4.1. Average Monthly Income

Targeted people are living under the poverty line and have a low purchasing power. The average monthly income is of 24 700 CFA, however, the median monthly income is much lower and only reaches 12000 CFA. The difference between average income and median income reflects the fact that in the sample group there are few people who earn much more money than the average person. Therefore when withdrawing conclusions on income level the median income should be used as a reference.

The median monthly income is an important indicator of the purchasing power of the sample people. Low monthly income means that people often cannot afford to buy costly medicine and/ or undertake financially heavy preventive measures. When the monthly income rises above certain level it can be assumed that people have available income that can be used to other purposes than basic necessities (food and shelter). Increases in the average income should logically increase peoples possibilities to undertake measures to prevent and cure malaria.

Development of income generating activities of the poor people are in the very core of the idea of microfinance. Thus microfinance can play an important role in providing poor people with financial means to better fight malaria. This, in turn, justifies the fact that malaria awareness campaign can be cost-effectively implemented through microfinance institutions' client network.

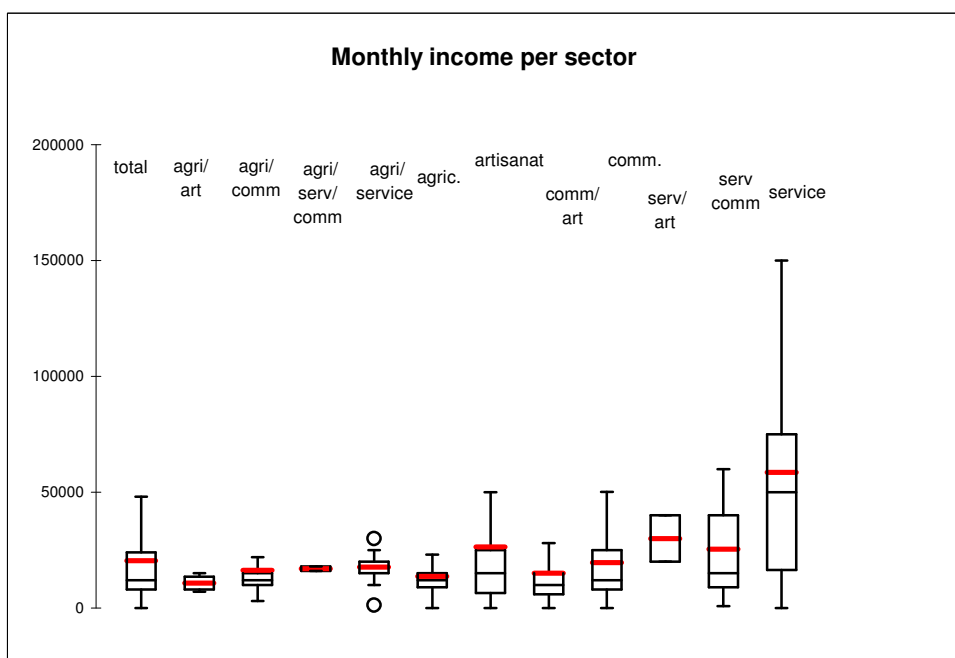
Graph 6: Monthly Income



2.4.2. Monthly income per sector

Among the surveyed people the average income of persons working in service sector is higher than in other sectors. Cumulating activities in different sectors doesn't account for higher monthly income, to the contrary : Except when an activity is combined with services, double or triple activities generally rimes with low income. Craft industry comes just after services as the best source of income, followed by small business. People associated with agriculture have the smallest monthly incomes be it a sole activity or an activity amongst others.

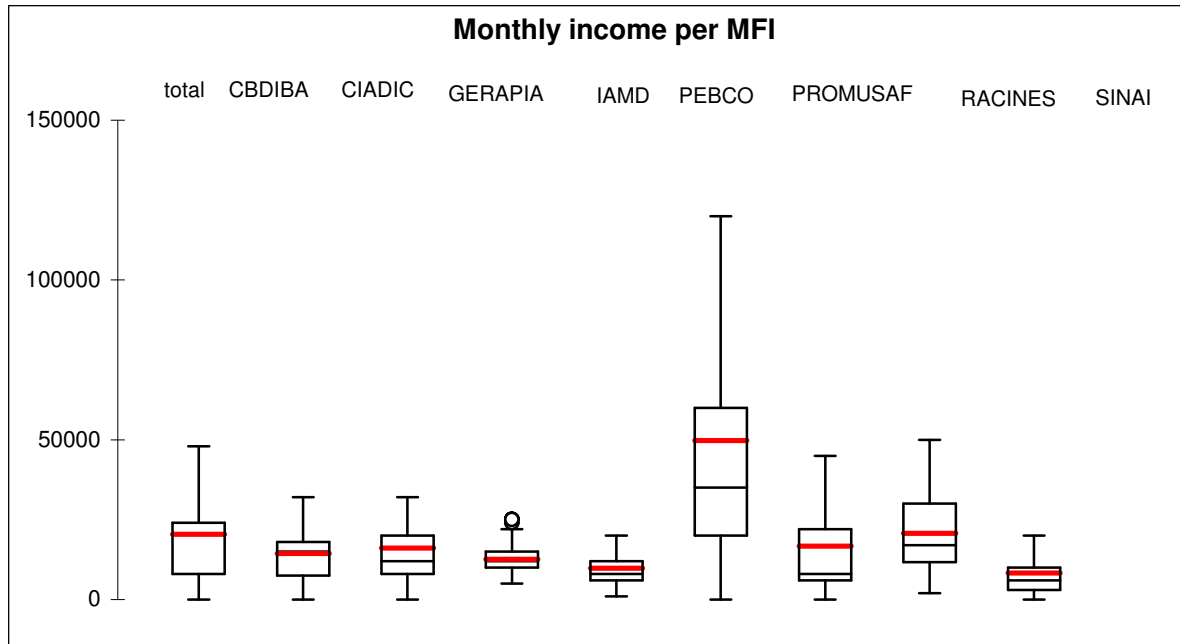
Graph 7: Monthly income per sector



2.4.3. Income per MFI :

PEBCO clients have the highest monthly income but disparities inside the group are high. Other MFI clients have smaller monthly income than the PEBCO clients. In order to realise the following box plot (graph 8) income over 300000 francs per month was left aside in order not to « squash » the graphic representation of monthly income per MFI.

Graph 8: Monthly income per MFI

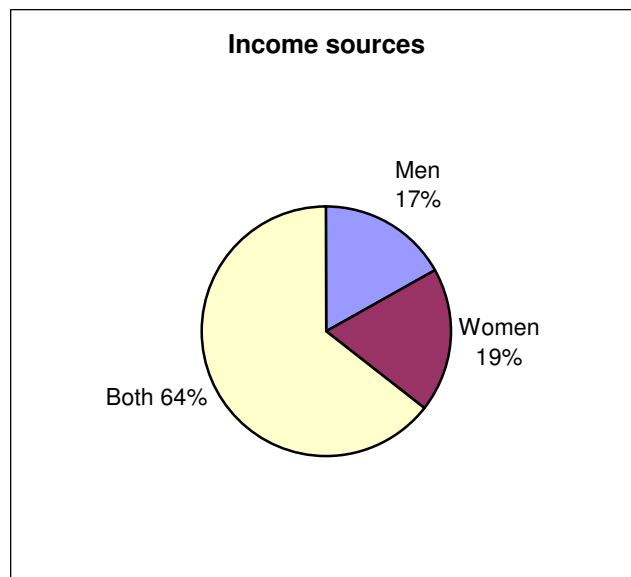


2.4.4. Source of income

In a vast majority of sample households (64%) both sexes participate in the household's revenue generation. Households where women are the unique source of income represent 19% of the sample, whereas household where men are the only source of revenue is 17%.

By combining households in which both sexes participate in household revenue generation with the households in which women are the only source of revenue we notice that in 83% of the sample households women are participating in household income generation. This clearly illustrates the important role that women play in target people's economic life. The fact that women are actively participating in households economic life justifies from the economic point of view the decision of women being the primary target group for malaria awareness building campaign.

Graph 9: Source of income in the family



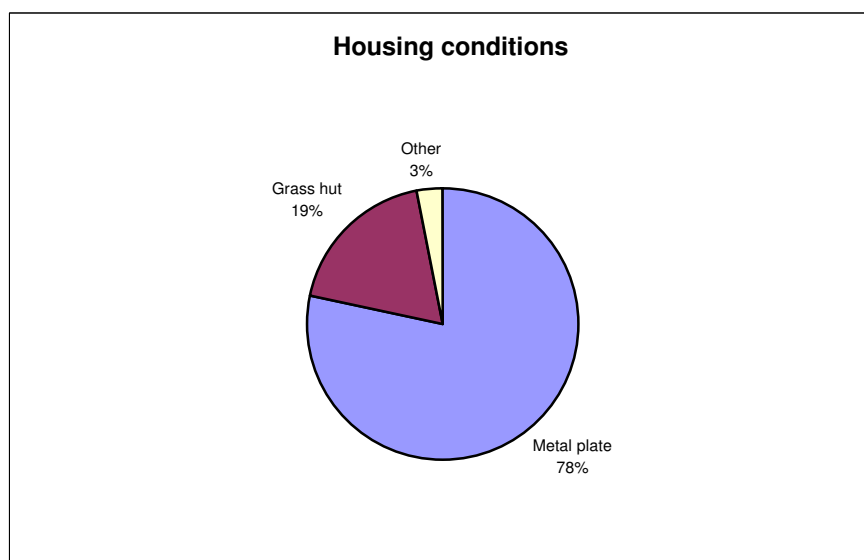
2.5. Housing conditions :

2.5.1. Type of housing :

Most people surveyed live in sheet-metal roofed houses (78%). An important part of the sample lives in grass huts (19%). Only a small minority live in an other type of dwelling (3%) generally related with high standard housing.

The type of housing plays a role in people's capacity to fight against malaria prevention. Well-constructed houses effectively prevent mosquitoes from penetrating inside the house, thus reducing greatly the risk of being bitten by an infected mosquito. If houses are properly constructed mosquitoes can only get into the house through open windows and doors.

Graph 10: Housing conditions



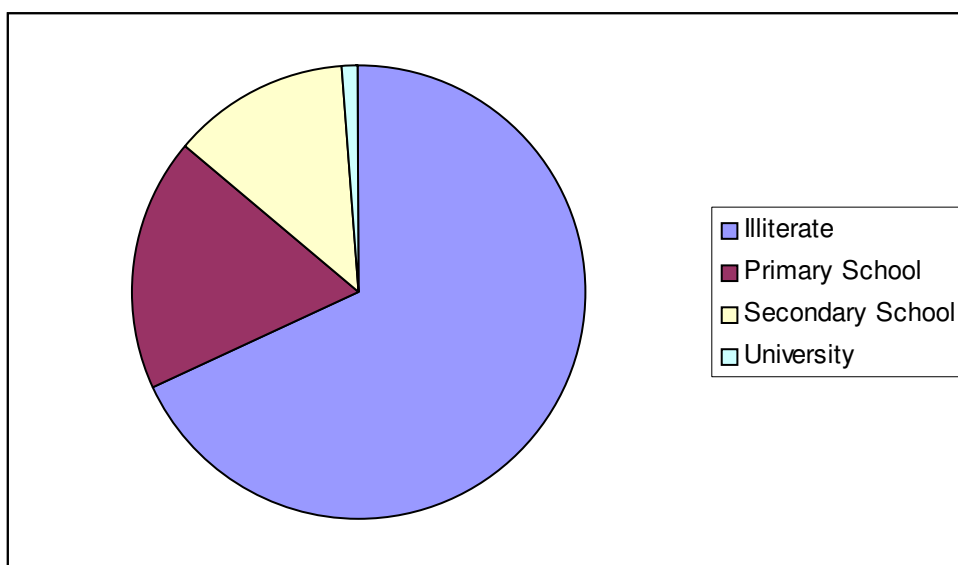
2.6. Education

2.6.1. Educational level:

The majority of people questioned are illiterate (68%). The Health and Demographic Survey2 (2001) found that 64% of women between 15 and 49 years old were illiterate. An important proportion of people has however attended primary school (18%) and secondary school (13%) whilst only 22 people out of more than 2000 have undertaken university studies (1%).

The target population's level of education is an important indicator when designing appropriate awareness raising campaign to fight against malaria. A vast majority of target population is illiterate. This means that awareness raising campaign has to be based on teaching techniques that are especially designed for illiterate target population. The utilization of images and simple practical oriented explications is highly important to make sure that target population understands the disseminated information.

Graph 11 : Average education level



2.6.2. Educational level per MFI :

It is important to emphasize the significant differences that exist in the average educational level of different MFIs' clientele.

PEBCO has the lowest level of illiterate people and it also counts the biggest amount of people with university attendance. This markedly higher educational level vis-à-vis the other microfinance institutions is probably explained by the fact that PEBCO operates in urban areas.

RACINES, which is the other MFI operating in urban area, also has a clientele that is slightly more educated than the clienteles of the MFIs operating in rural areas.

The significance for this information for project implementation lies in the fact that the pedagogic methods used should be adjusted according to the target populations educational level to maximize the positive impacts. The analysis suggests that two different pedagogic methods should be used in

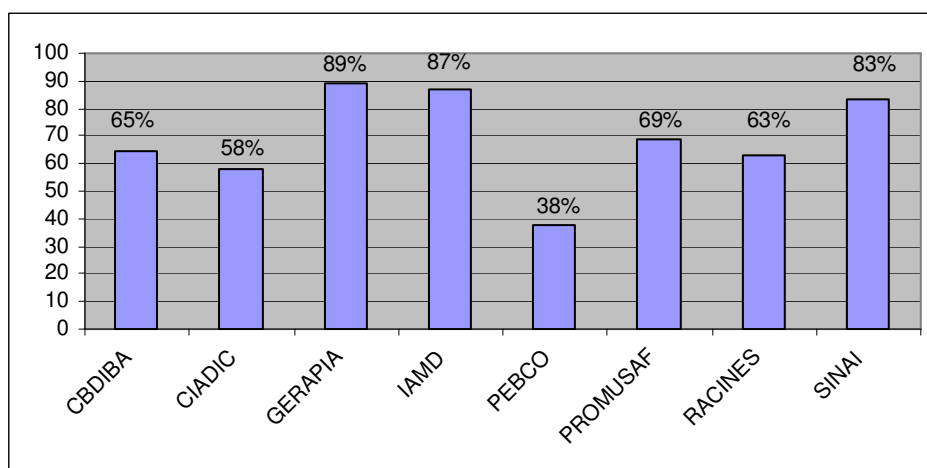
the project implementation; one for urban areas where literacy rate is higher and another for rural areas where target population is less educated and literacy rate is low.

Chart 2 : Average educational level per MFI

	Illiterate	Primary School	Secondary School	University	Total
CBDIBA	64,58	21,88	12,50	1,04	100
CIADIC	58,06	32,72	9,22	0,00	100
GERAPIA	88,96	7,69	3,01	0,33	100
IAMD	86,96	6,69	6,35	0,00	100
PEBCO	37,53	23,01	34,52	4,93	100
PROMUSAF	68,95	17,89	13,16	0,00	100
RACINES	62,84	28,90	8,26	0,00	100
SINAI	83,25	11,33	5,42	0,00	100
Total	68,08	18,15	12,71	1,06	100

2.6.3. Illiteracy rate per MFI

Graph 12 : Illiteracy rate per MFI



Illiteracy rates are higher amongst GERAPIA, IAMD and SINAI clients. Illiteracy rates are less consequent among PEBCO clients which are also the richest in the sample.

In order to facilitate the crossing of income with other criteria, the incomes of people in the sample have been divided in to quintiles.

Each **quintile** corresponds to the portion of a frequency distribution containing one fifth of the total sample. This means that each quintile contains the same number of people. The first quintile is the poorest (class 1), the last quintile (class five) is the richest.

In this case, the first class of income regroups the people having a monthly revenues ranging from 0 to 6 000 CFA.

The second class of income regroups the people having monthly incomes ranging from 6 000 to 10 000.

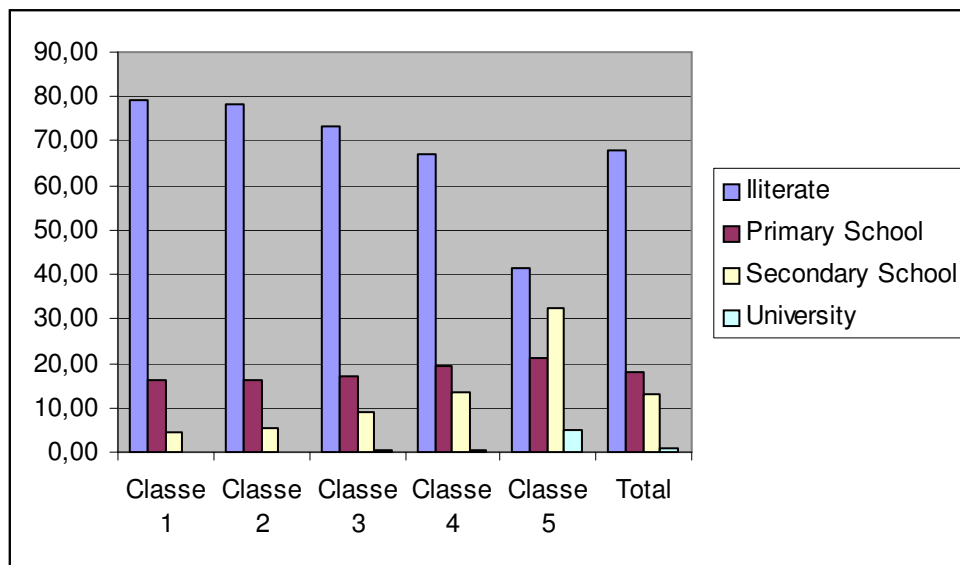
The third class of income regroups people having monthly income ranging from 10 000 to 15 000 CFA.

The fourth quintile regroups people having monthly income ranging from 15 000 to 30 000.

The last quintile contains people having monthly income ranging from 30 000 to 2 360 000 CFA.

Crossing educational level with monthly income shows that the poorest class of income is the group with the highest illiteracy rates. A vast majority of the people having been to university belong to the richest class of income.

Graph 13: Educational level according to monthly income class of incomes

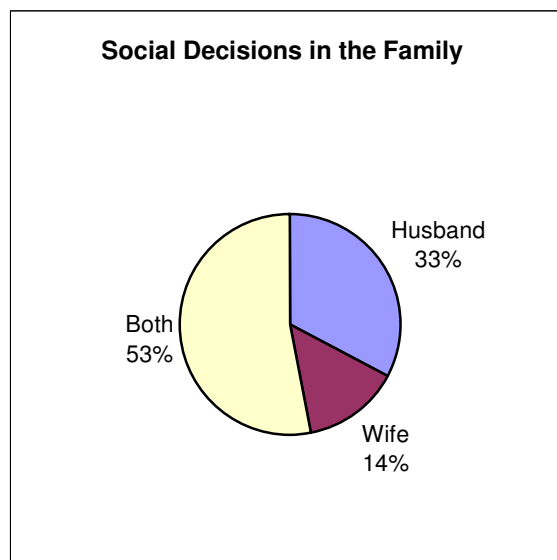


2.7. Women empowerment :

2.7.1. Social decisions in the family :

53% of the participants declare that in their household social decisions are made by husband and wife together. In 33% of the participating households husband makes social decisions alone, whereas in 14% of the sample households wives are alone responsible for making social decisions.

Graph 14: Social decisions in the family

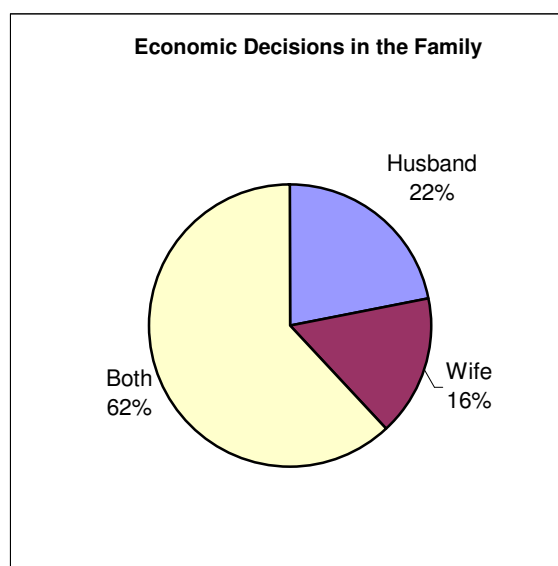


2.7.2. Economic decisions in the family :

In the majority of households (62%) economic decisions are made by wife and husband together. Households in which only husband takes economic decisions represent 22% of the total amount. more In 16% of the households women make economic decisions without consulting their husband.

Women take household's economic decisions alone slightly more often than they take social decisions. The data implies that all together women take part in economic decision making process in 78% of the households. This information illustrates that women play an active role in decision making process and that if women's awareness can be raised in malaria prevention and cure related issues they have the financial power to act in order to effectively fight against malaria.

Graph 15: Economic decisions in the family



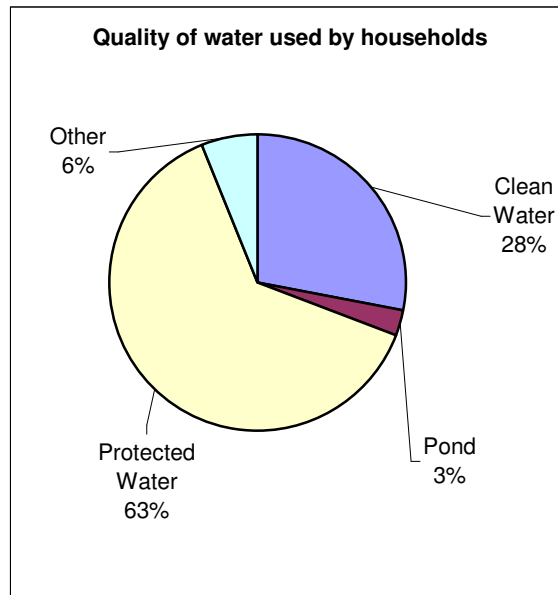
2.8. Water and sanitation

2.8.1. Water quality:

Most people surveyed use "protected" water (63%) to drink, cook, wash clothes and for other households uses. "Protected water" is said of water coming from a well with ledges on the sides but nothing covering the top of the well. Only a minority of people use « clean water" for these purposes (28%). Water coming from ponds is only used by 3% of households. 6% of the people surveyed used water coming from other sources.

Only a minority of target population has access to "clean water". This creates problems related to general hygiene and may result in the existence of small waste water reservoirs sporadically situated in the surrounding areas of housing facilities.

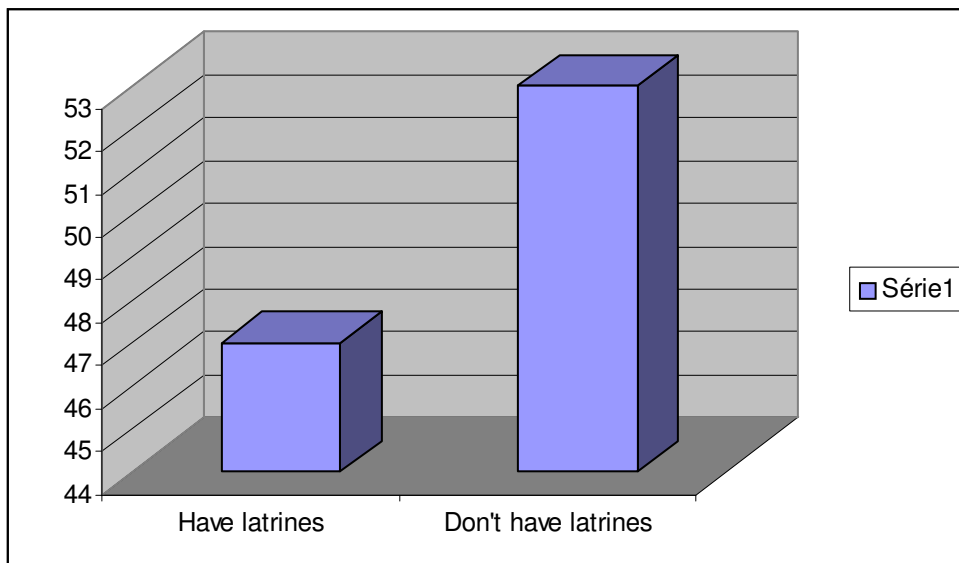
Graph 16: Quality of water used by households



2.8.2. Latrines

53% of people surveyed don't have latrines whereas 47% of the sample does.

Graph 17: Latrine possession



Type of latrines :

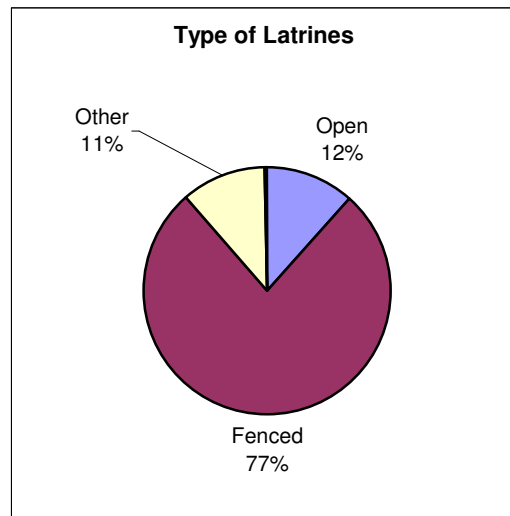
53% of the target population don't have any latrines at all. Out of the 47% that have latrines, 77% have "fenced" latrines. A minority has « open » latrines (12%) and 11% has a different type of latrine.

Hygienic conditions are poor among the target population. Bad hygienic conditions exposes people to diarrhoeas and can therefore make populations more vulnerable regarding malaria. Improvement in

the understanding of the importance of hygienic conditions is crucial for the fight against malaria among the target population.

The fact that over half of the population doesn't have latrines strongly indicates that favourable conditions for mosquito reproduction maybe encountered in the surroundings of housing facilities.

Graph 18: Type of latrines



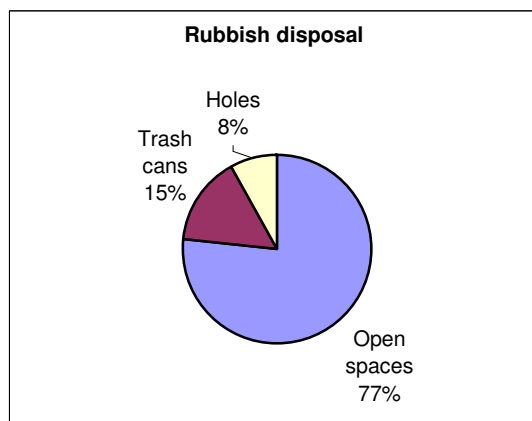
2.9. Hygiene

2.9.1. Rubbish

Most of the people surveyed throw their rubbish in an open space (77%). In lake villages, throwing rubbish in open space means discarding it directly in the water. Only 15% use trash cans and 8% throw their rubbish in holes.

Due to lack of basic education within the target population inadequate household rubbish treatment is widespread among the target population. This creates a favourable environment for mosquitoes to lay their eggs in the immediate vicinity of the housing facilities and thus increases people's propensity to be bitten by mosquitoes.

Graph 19 : Rubbish disposal



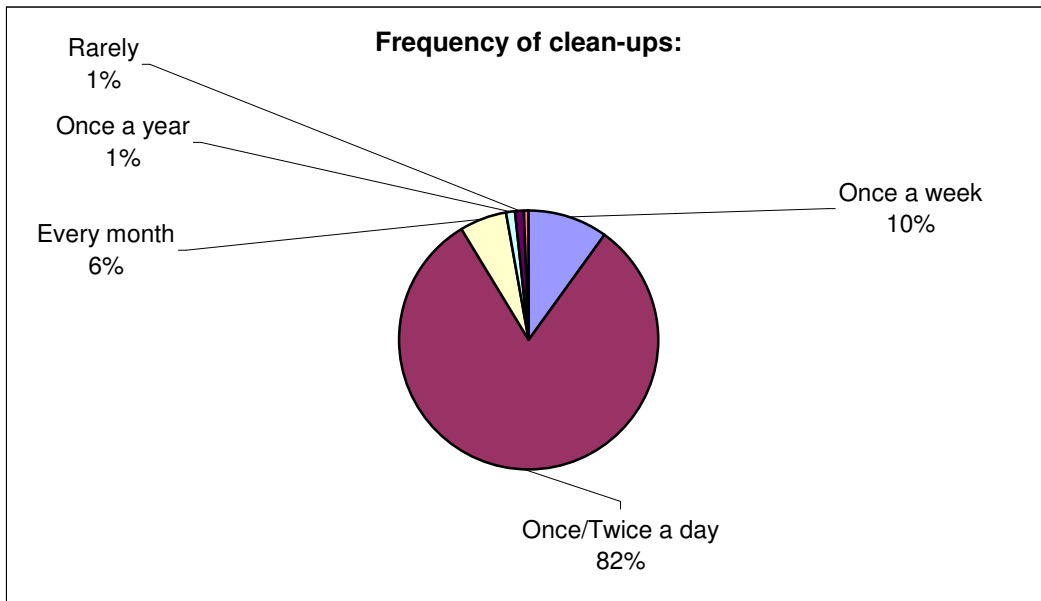
2.9.2. House cleaning

Frequency of clean-ups :

A vast majority of people surveyed clean-up their dwellings at least once a day (82%). Only 10% clean-up once a week and 6% clean-up every month. 1% of the sample cleans-up once a year and another 1% “rarely” cleans-up.

It should be noticed that 82% of the sample clean-up their dwellings every day. However, over three quarters of the people surveyed throw their rubbish in an open space without using adequate safety cautions. This means that households are generally clean inside but nearby surrounding areas are dirty and likely to host favourable conditions for mosquito reproduction.

Graph 20: Frequency of clean-ups



2.10. Fight against malaria

2.10.1. Protection against mosquitoes

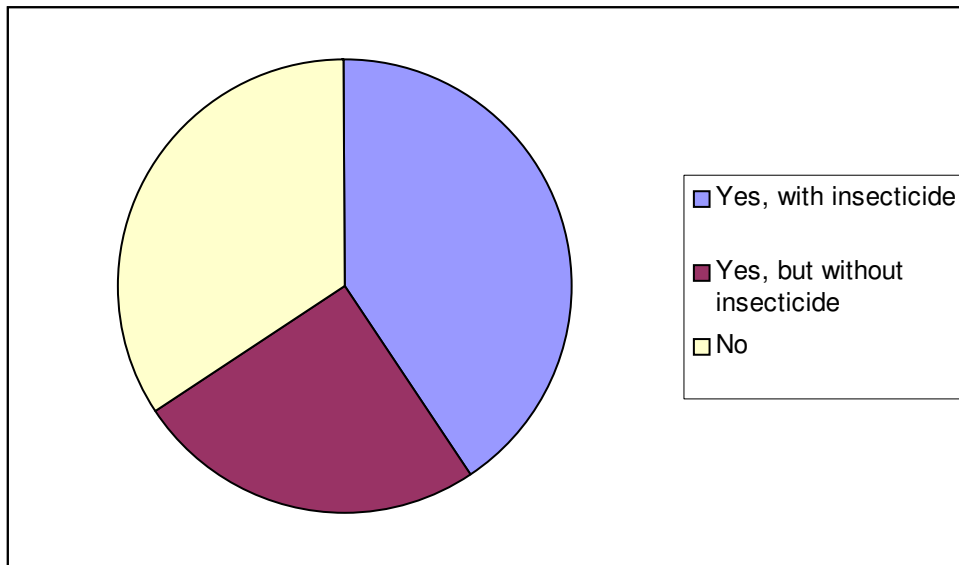
Among the surveyed people 67% use mosquito nets to prevent mosquitoes from biting. It needs to be highlighted though that in the poorest population segments mosquito net utilization is slightly lower than average. In contrast 90% of people belonging to the highest income group use mosquito nets. This seems to indicate that as households income rises above to a certain level they tend to protect themselves against mosquitoes with a mosquito net. Thus increasing target population's average income level by providing them with microcredit can greatly increase their ability to fight against malaria.

Use of mosquito nets :

67% of the people surveyed use a mosquito net to protect themselves for mosquito bites. 39% of the sample uses insecticide impregnated nets while 28% uses non-impregnated mosquito nets. One third of the sample doesn't use any mosquito net at all (33%).

In the project implementation process the 33% share of people currently not using mosquito nets needs to be one of the primary target groups. They need to be provided with easily understandable information on benefits of mosquito net utilization. Their financial capacity to buy mosquito also has to be enhanced.

Graph 21 : Use of mosquito nets

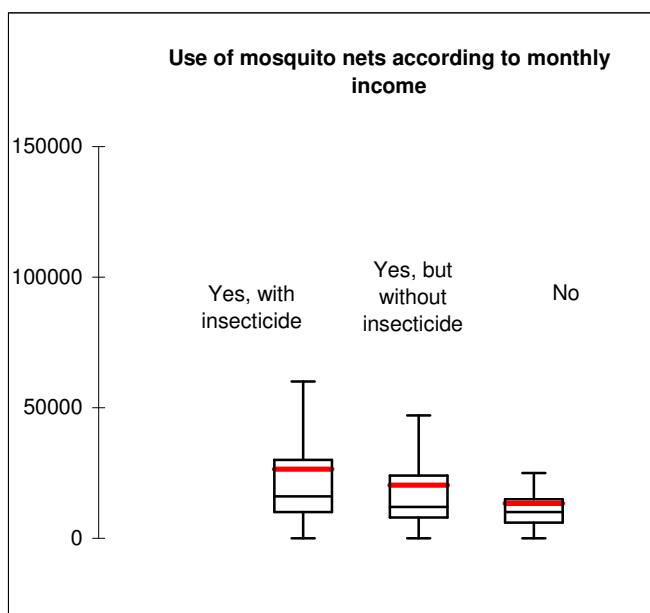


Use of mosquito nets according to monthly income:

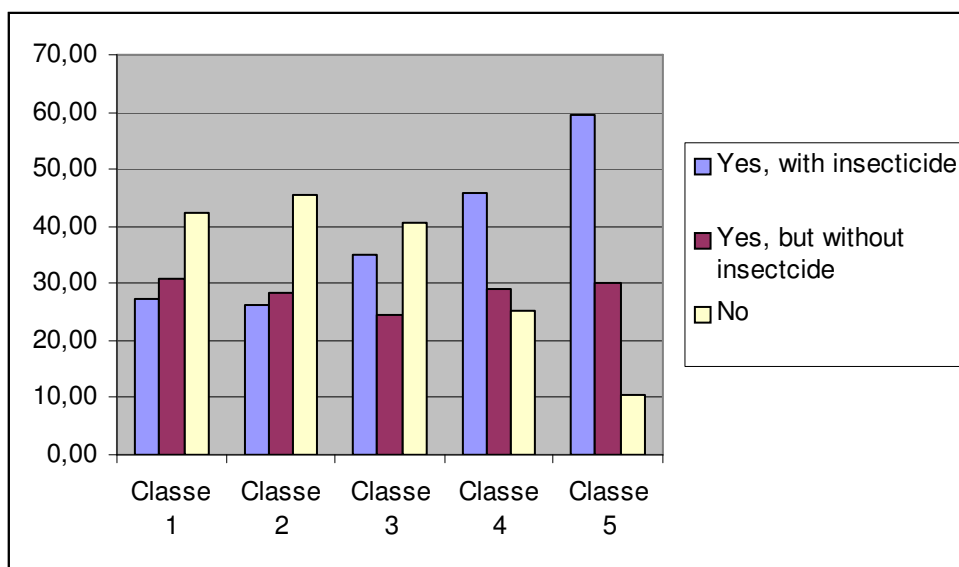
Around 50% of the people belonging to the poorest class of incomes don't use mosquito nets. Only 10% of those belonging to the richer class of incomes neglect this form of malaria prevention. The higher the monthly income, the bigger the use of impregnated mosquito nets (60% of the richest class of income uses them).

The people belonging to the poorer class of incomes probably don't have the buying capacity to equip their households with impregnated mosquito nets. The use of non impregnated mosquito nets is constant (around 30%) independently from the monthly income.

Graph 22 : Use of mosquito nets according to monthly income



Graph 23 : Use of various types of mosquito nets according to the class of income



Traditional protection against mosquitoes

Most of the people surveyed don't use traditional methods to repel mosquitoes (89%). However, 11% of the sample use other forms of protection than mosquito nets. Among these 11% some people use spray insect replants (Mostyko, Rambo, Rampant...), others use smoke from a type of certain leaves (mainly « nime » leaf and sometimes citronella leaf). Few people mention herbal tea, oil, along with the fencing windows and doors for protection against mosquitoes.

2.10.2. Medicine absorption

Absorption of anti-malaria medicine in the month preceding the survey:

Over half of the people surveyed absorbed anti-malaria remedies in the month preceding the survey (52%).

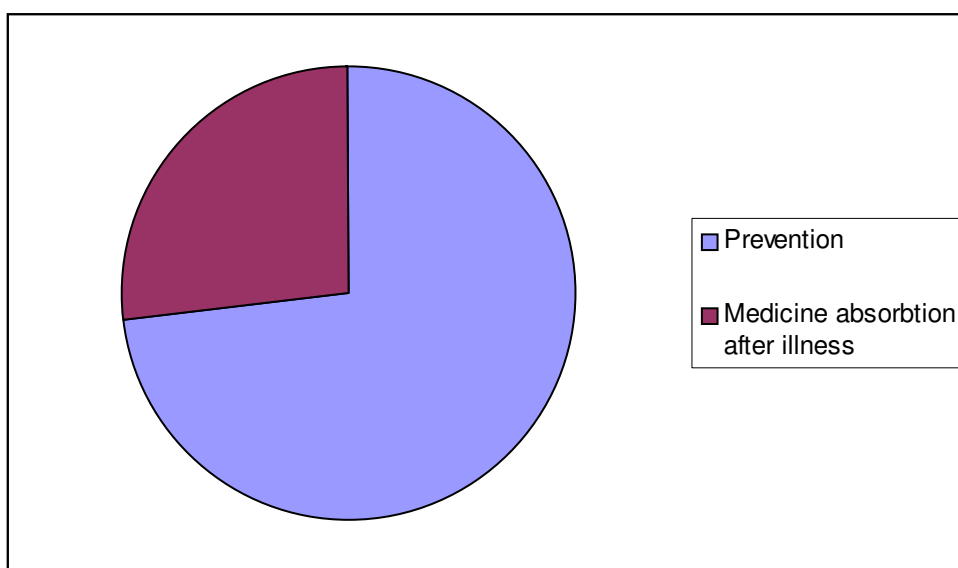
Child malaria prevention :

Just over half of the people surveyed assert that their children absorbed anti-malaria remedies during the month preceding the survey in order to prevent the disease. 43% of the sample say their children took no kind of anti-malaria drug in the month preceding the survey. It must be noted that in Benin health policies, only authorize pregnant women malaria-preventive drugs. The main method of prevention against malaria is therefore the use of mosquito nets.

2.10.3. Preferences in Fight against malaria

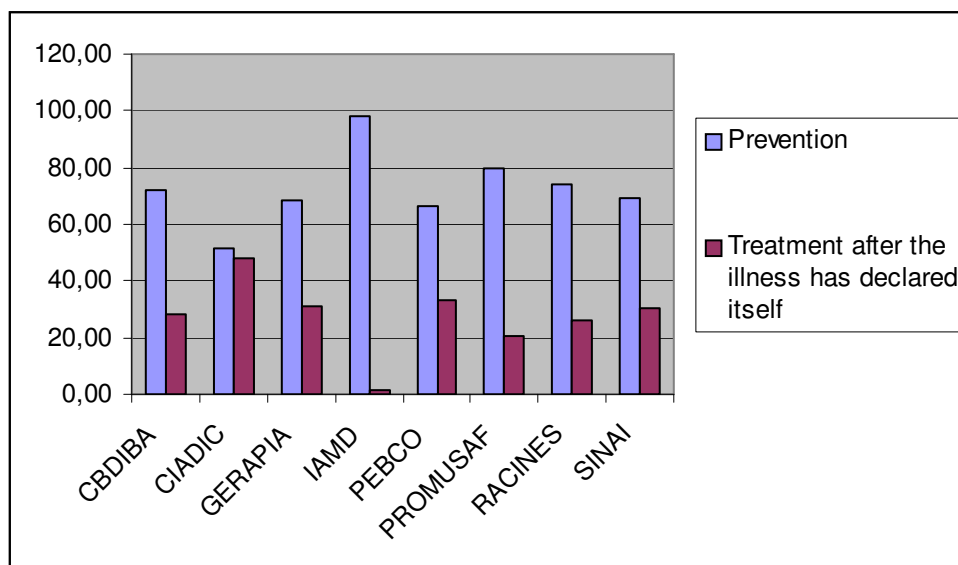
A vast majority of people prefer prevention against malaria (73%) to the fact of taking remedies once the illness has declared itself (27%).

Graph 24: Fight against malaria preferences



These preferences vary little according to the monthly income. However preferences do vary according to MFIs.

Graph 25 : Fight against malaria preferences per MFIs



2.11. Observation of malaria symptoms inside the family

2.11.1. Observation of malaria symptoms inside the family for the whole of the sample

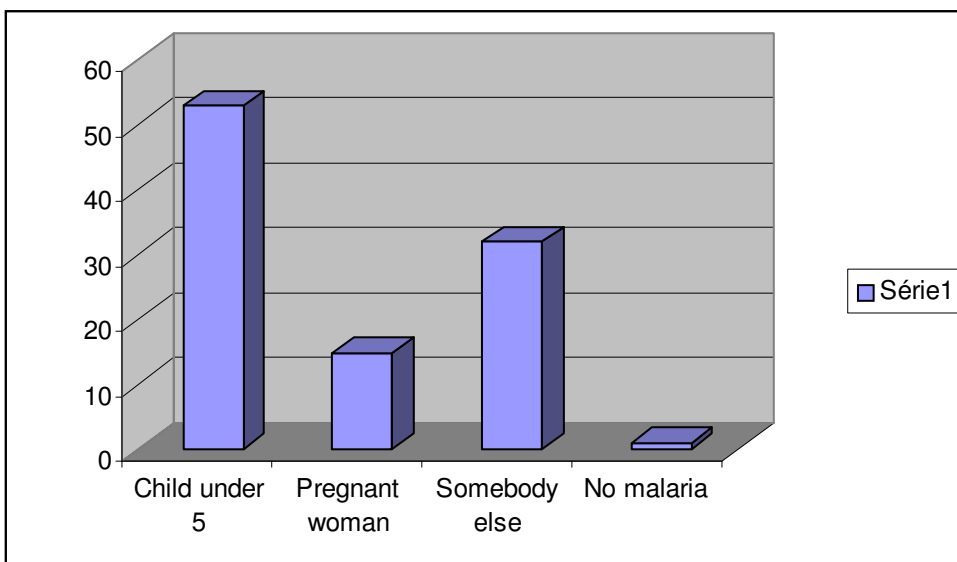
A vast majority (76%) of surveyed people observed malaria symptoms on at least one person inside their family during the year preceding the survey.

The most affected population segment within the target group is children under 5 years old. In the year preceding the survey 53% of the sample observed malaria symptoms on a child under 5 years of age. The second most affected population segment is pregnant women, 15% of pregnant women observed malaria symptoms.

32% of the people surveyed observed malaria symptoms on someone else inside the family during the year preceding the survey.

Under 2% of the people surveyed didn't observe malaria symptoms on anybody inside their family in the year preceding the survey. The only MFIs where a few people didn't observe and malaria symptoms at all on their relatives are RACINES, IAMD et CIADIC.

Graph 26: Observation of malaria symptoms on a member of the family in the twelve months preceding the survey:

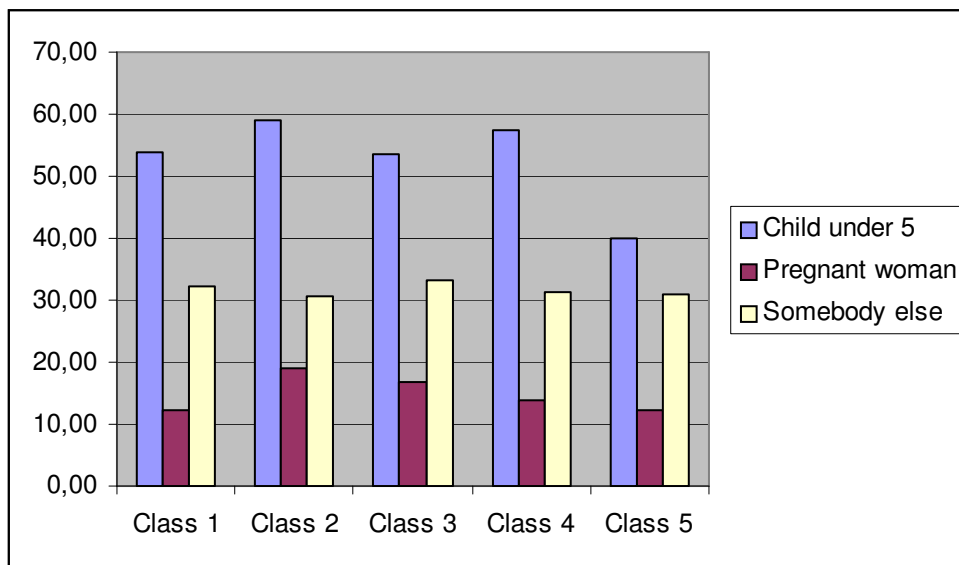


2.11.2. Observation of malaria symptoms on a member of family during the year preceding the survey according to the class of income

People belonging to the richest class of income are those who are confronted with the smallest number of malaria cases among their relatives.

Observation of malaria symptoms on a pregnant woman or another member of the family is quite stable according to the class of income. However, observation of the symptoms on a child under five years of age diminishes by 10% in the richest class of income. This probably has to do with the greater use of impregnated mosquito nets in richer households.

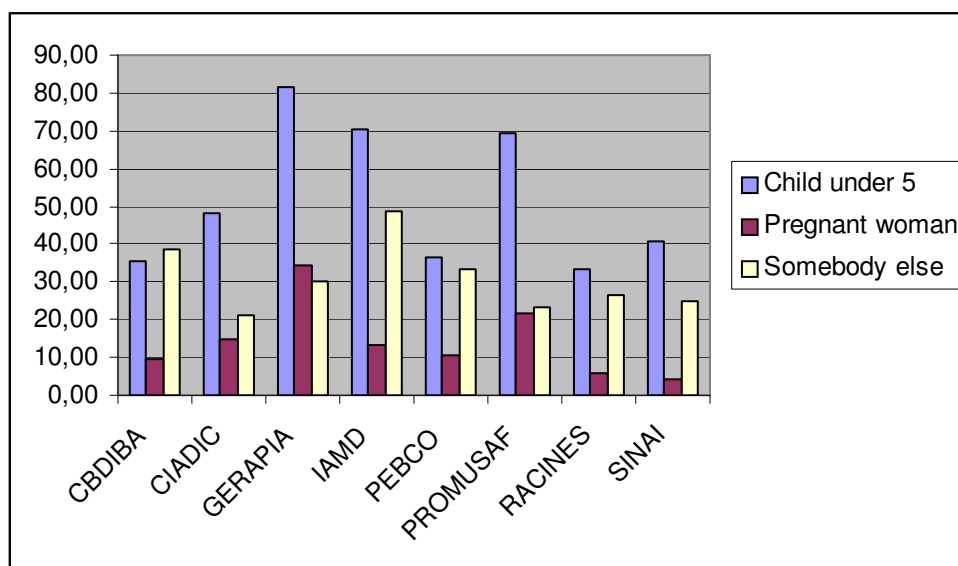
Graph 27: Observation of malaria symptoms on different members of family during the year preceding the survey according to the class of income



2.11.3. Observation of malaria symptoms inside the family during the year preceding the survey according to the MFI:

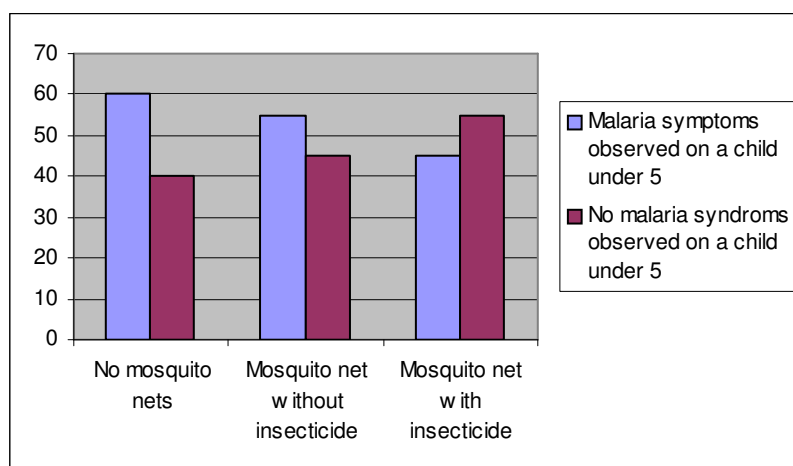
Observation of malaria symptoms on a member of family is varies widely according to MFIs. GERAPIA, IAMD and PROMUSAF have the highest rates of malaria symptoms observation on children under five years of age during the year preceding the survey. These three MFIs work in lake villages where mosquitoes are omnipresent and where people get more bitten. This underlines the idea that the contrast between MFIs is certainly due to the localities where the institutions work.

Graph 28: Observation of malaria symptoms inside the family during the year preceding the survey according to the MFI



2.11.4. Observation of malaria symptoms on a child under 5 years of age according to the use of mosquito nets

Graph 29: Observation of malaria symptoms on a child under 5 years of age according to the use of mosquito nets:



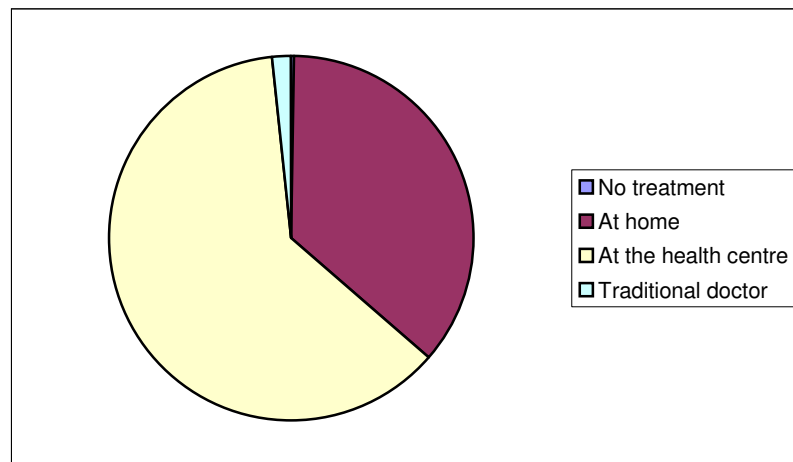
The observation of malaria symptoms on a small child is increased by 15% in families that do not use mosquito nets in comparison with those that do.

2.12. Treatment

2.12.1. Place where the treatment is undergone

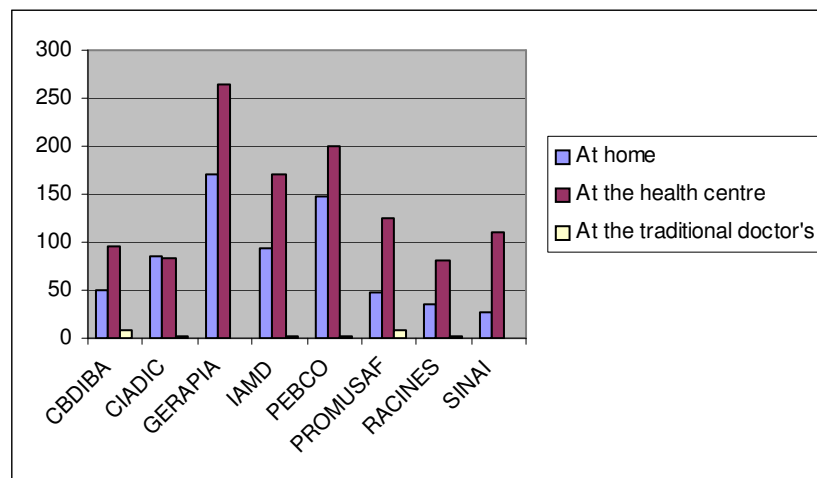
Nearly all the people surveyed who did observe symptoms of malaria on a member of family during the year preceding the survey assert that the sick person did undergo a treatment (only two people out of over 2000 say the sick person didn't undergo any kind of treatment). Most people undergo a treatment at the medical centre (63%), but an important number of the sick are treated at home (36%) while allegedly only 1,6% of the sick people go to see a healer.

Graph 30: Place where the treatment is undergone



2.12.2. Place where the treatment is undergone according to the MFI:

Graph 31: Place where the treatment is undergone according to MFIs



2.12.3. Type of medicine utilized

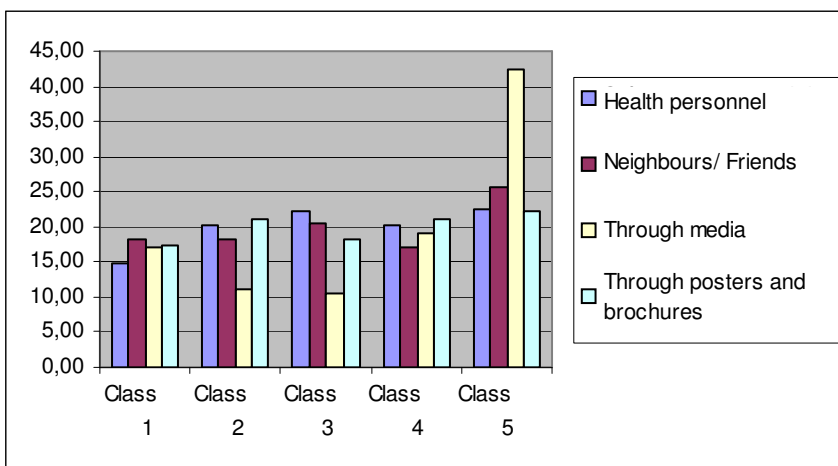
The most widely taken remedies are chloroquine in 30% of cases and quinine in 13% of cases. According to the national health policy, quinine is used to treat severe malaria sickness. Around 11% of the people surveyed say that the sick person was treated through injections whereas, around 10% mention paracetamol as an anti-malaria drug. 22% mention different types of herbal tea and over 15% don't know what sort of remedy the sick person was given at health centre.

2.13. Information on malaria:

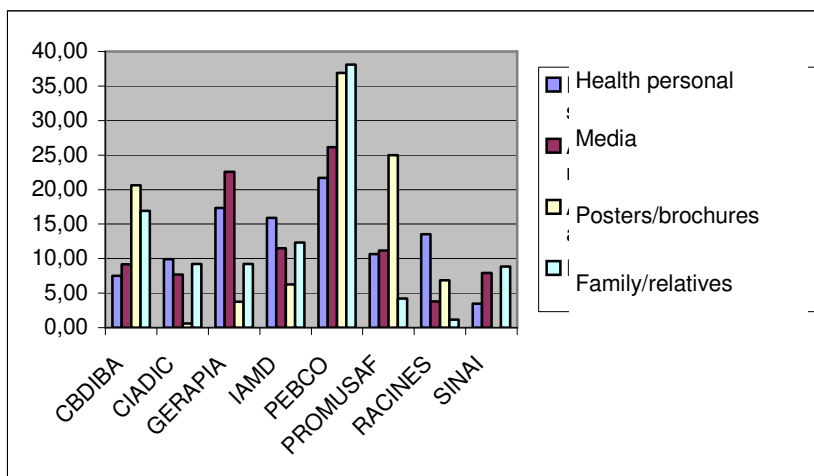
Most of the people surveyed (over 93%) say they had been previously informed on malaria related risks. However 6,8% of the sample says that they had never gotten any information on the disease.

People who know about the disease get information on malaria through various means: most of them are informed on malaria through health professionals (66%). Medias (Television and radio) are the second source of information (47%). Relatives count for 13% of the awareness raising while posters and brochures only count for about 8%.

Graph 32 :Sources of information on malaria



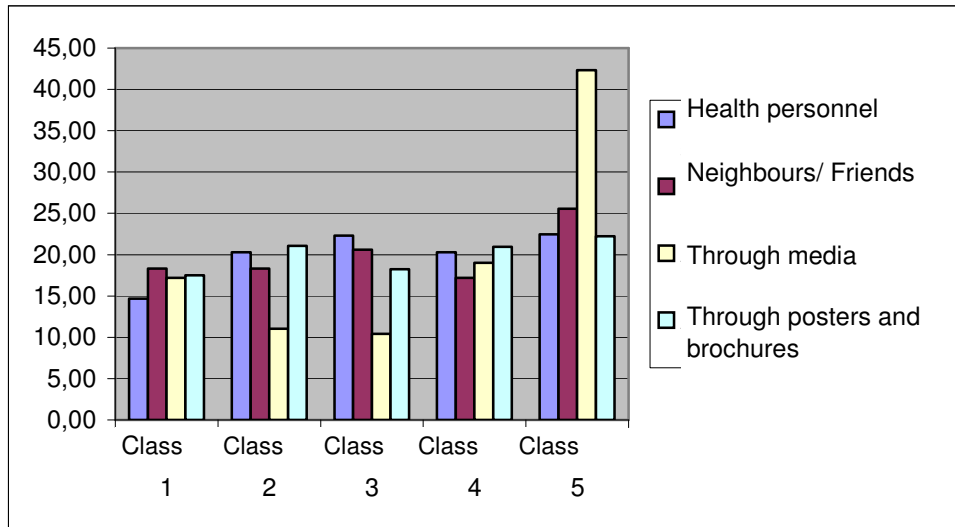
Graph 33 : Sources of information on malaria according to the MFIs



Clients of PEBCO are best informed on malaria. They have the highest information rates for all four means of information. These clients also belong to the richest class of income inside the sample and they all come from urban areas.

The richer clients are better informed on malaria than the poorer clients. Their major source of information on the disease is the media (television and radio). Richer people probably have better access to media and also evolve in an environment which is more aware of malaria risks; this might explain why relatives are a greater source of information to them than to poorer groups.

Graph 34: Sources of information on malaria according to the classes of income



2.14. Nutrition and food preparation:

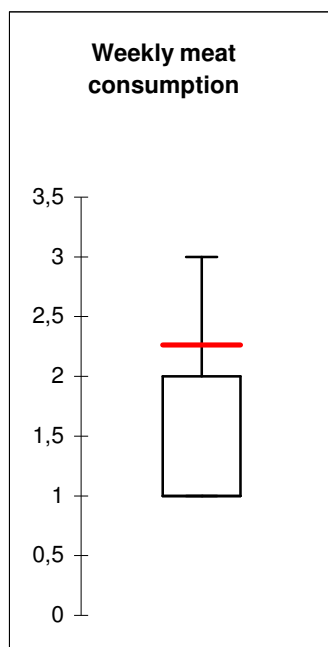
2.14.1. Vegetable cultivation :

Only one third of the people cultivates vegetables whereas the majority of people doesn't grow vegetables (66%).

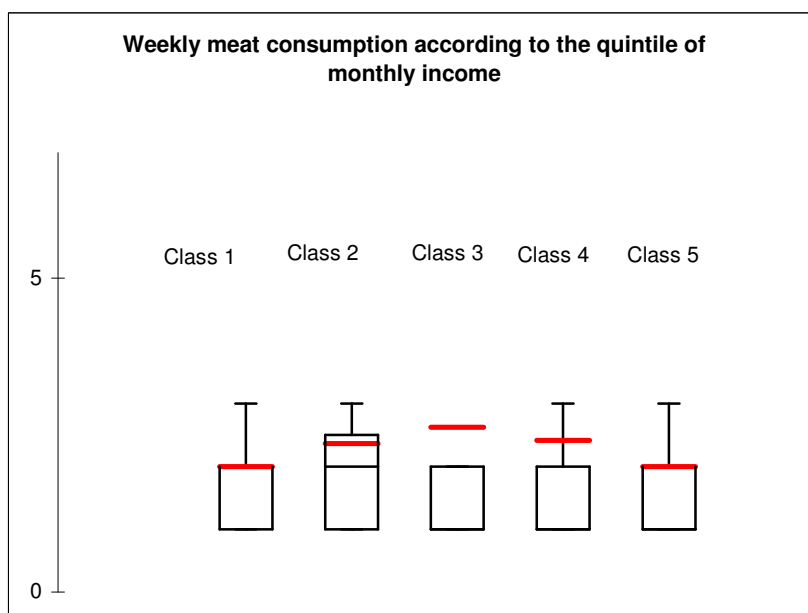
2.14.2. Weekly meat consumption :

People surveyed eat meat 2,26 times a week on average. The median weekly consumption is however only of once a week. This means some people eat meat much more frequently than others do. Big meat eaters « puff up » the average weekly consumption. However a majority of people only eats meat once a week.

Graph 35: Weekly meat consumption

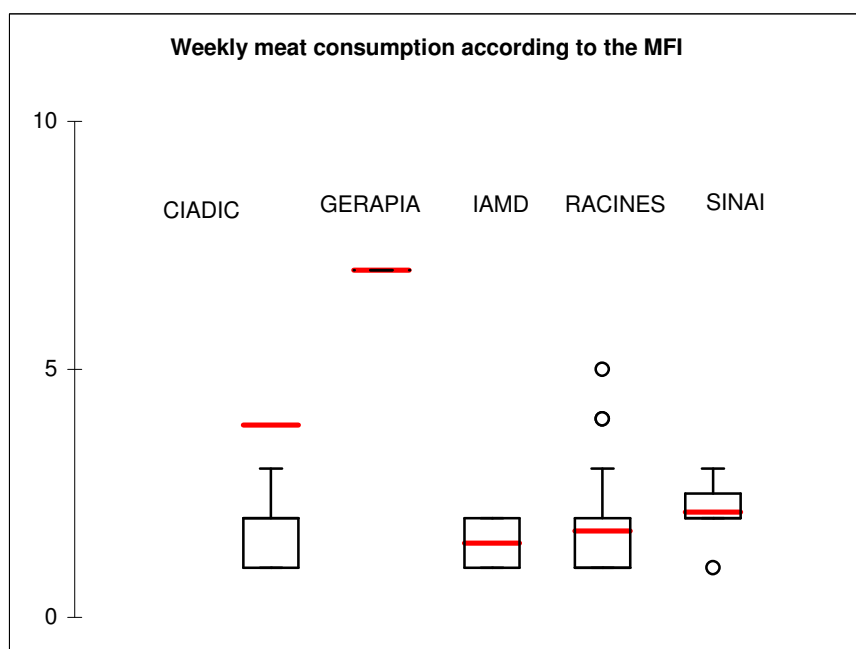


Graph 36: Weekly meat consumption according to the class of income



Weekly meat consumption doesn't vary as much with the class of income than with the MFI. This might mean that in some localities meat access is more difficult than in other localities, making the weekly consumption vary according to the MFI because of the locality the institution works in.

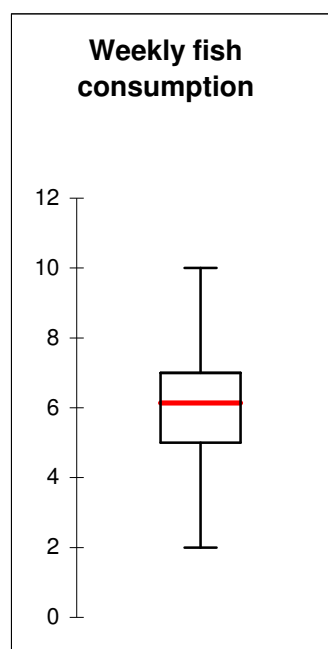
Graph 37: Weekly meat consumption according to MFIs



2.14.3. Weekly fish consumption :

People surveyed eat fish 6,14 times a week on average. The median consumption is of 7 times a week; the difference between the average and the median consumption means that even though most people eat fish every day, some people rarely eat fish, thereby diminishing the average consumption rate of the sample.

Graph 37: Weekly fish consumption



2.14.4. Consumption of rice with the water it has been cooked in (source of proteins) :

A vast majority of the people surveyed (78%) eats rice with the water it was cooked in benefiting therefore from a source of proteins. 22% of the sample neglects this source of protein.

2.14.5. Washing vegetables before cooking them :

Almost every person surveyed (99%) says they wash vegetables before cooking them.

III. Survey results

The main socio-economic findings of the survey are as follows:

- 1) **Poverty is widespread and target population has a low monthly income**
 - i. The sample's median monthly income is 12 000 CFA
- 2) **Basic education level of target population is low**
 - i. The sample's average illiteracy rate is 68%.
 - ii. Illiteracy rate is higher in rural areas than in urban areas
- 3) **Malaria is extensively present among the target population**
 - i. 76% of the sample observed malaria symptoms on a member of family in the year preceding the survey
- 4) **Children are most affected by the disease**
 - i. Malaria symptoms were observed on children under five in 53% of families during the year preceding the survey
- 5) **Housing conditions are poor in target area**
 - i. 78% of the sample lives in corrugated iron roofed houses and 19% lives in grass huts
- 6) **Sanitary measures taken by target people are insufficient**
 - i. 77% of the sample doesn't use any sort of rubbish disposal
 - ii. Areas around houses are favourable to mosquito reproduction
 - iii. 53% households in the sample don't have latrines
- 7) **Clean water is scarce and not widely utilized**
 - i. Only 28% of the sample uses clean water at home (drinking, cooking, washing...).
- 8) **The protective measures against mosquito bites are inadequate**
 - i. 33% of the sample households use no mosquito net whatsoever
 - ii. Poorest households have higher infection rates than richer households

IV. Recommendations

Certain common and significant socio-economic characteristics can be identified in the target group that need to be taken into account in the project design and implementation. These particularities in the socio-economic context greatly influence not only the target populations ability fight against malaria but also their capacity to absorb malaria awareness building related information. Successful project implementation calls for sufficient understanding of these particularities and adjustment of project activities accordingly in order to maximize the positive impacts of the project on target population.

Based on questionnaire and primary data analysis we recommend the following general guidelines for project design and implementation.

In terms of **needs of target population** issues that need to be addressed are as follows:

- 1) Target population needs basic education and awareness building to fight malaria
- 2) Simple, cheap, and cost-effective methods to fight mosquito reproduction should be communicated to target people
- 3) People should be informed about how the surrounding environment influences malaria mosquitoes reproduction and how important it is to undertake individual and collective actions to keep immediate vicinity of the dwellings clean
- 4) Target population needs to be provided with concrete, cost-effective, and simple methods to protect themselves from mosquito bites
- 5) Target population needs information and methods regarding various sanitary issues such as; toilets, suitable rubbish disposal and general cleanliness

In terms of effective **methods to provide** target population with relevant information the following issues should be emphasized:

- 1) Basic education and awareness building programs need to be based on learning methods appropriate for illiterate adult population
- 2) Basic education and awareness building programs should be undertaken in a decentralized way in community level mostly at rural areas
- 3) Women need to be the main target group and women group leaders in the village level should be empowered
- 4) IMF Staff capacity building can help the program to reach good impact on target population during and after the project life.
- 5) The local NGOs must enhance their collaboration with the public health facilities to better the observation of malaria management and counselling
- 6) MFIs and NGOs can introduce micro-insurance services to cover the risk of health hazard and to make sure that their recovery rates don't suffer due to sick people

V. Conclusion

Based on the findings of the survey PlaNet Finance's Training and Technical Support Department has designed and developed a road map to implement the project. This road map will allow a cost-effective implementation of the project and maximize the positive impacts of the project on target population. Target population will significantly increase their knowledge on malaria, they will be able to fight against malaria in a more efficient manner.

Sl.No.	Activities	Responsible	Timeframe	Status
1.	Logical Framework & Action Plan	MA/DK	By 30 August	Done
2.	Training on Survey Method for Data Collector	MA/DK/DD/AH	By 30 August	Done
3.	Base Line Survey & Data Collection	DD/AH	By 20 October	Done
4.	Data Tabulation and Report Writing	MA/AH	By 20 November	On going
5.	Design and Development of Information tools & Training Materials + Printing	MA/DK/DD/AH	By 30 December	On going
6.	TOT Module Development	MA/VL	By 20 December	On going
7.	Implement of Training Program to Train Women Community Leaders and MFIs staff	MA/DK/DD/AH	By 15 January	
8.	Massive Scale Campaign at the Community level	DD/AH	By 15 February	
9.	First Evaluation	MA/DK/DD/AH	By 15 March	



Picture- 1: Survey Mission



Picture- 2: Poverty



Picture- 3: Poverty and Environment



Picture- 4: Growth Centre of Mosquitoes



Picture- 5: Unhealthy water facilities



Picture- 6: Open toilet on the lake. Lake water is used for washing and cooking.



Picture- 7: Poverty and Environment



Picture- 8: Fight against malaria with insecticide spray which is unhealthy and costly



Picture- 9: Poverty