

◆◆◆ Microfinance in Burkina Faso ◆◆◆

An Evaluation of the Credit with Education program for Women



Resumé

Dans ce dossier, nous explorons le domaine de la microfinance ; des services financiers destinés aux populations pauvres et aux individus aux revenus modestes qui n'ont pas accès aux marchés financiers. Le but de notre étude est d'examiner si le crédit avec éducation fournis par l'institution financière RCPB au Burkina Faso, a eu des répercussions sur la prise de participation des femmes en ce qui concerne leur indépendance, leur connaissance du management/ PME et leur connaissance en matière de nutrition et de santé infantile. Nous utilisons les données de deux études menées en 2003 et 2004 par le cabinet de consulting Sud Consult que nous analysons qualitativement afin de répondre à notre question d'investigation. Ce dossier est basé sur les théories concernant le marché financier, l'importance de l'éducation de la santé et de l'indépendance des femmes. Nous abordons les faits du points de vue de la microfinance en général et du Burkina Faso en particulier et nous examinons des études réalisées précédemment traitant du même sujet. Nos résultats montrent que le crédit avec l'éducation ont largement participé à l'amélioration des connaissances des femmes en matières de nutrition et de santé infantile. Le programme a eu une influence plus modeste sur leur indépendance, particulièrement dans la région de l'ouest. Le programme n'a cependant pas réussi à améliorer leur connaissance du management durant la période analysée. Dans notre analyse nous présentons des propositions d'amélioration pour le programme.

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Abstract

In this paper we are exploring the field of microfinance; financial services given to poor and low-income individuals who do not have access to formal financial markets. The purpose of our study is to investigate if the Credit with Education program provided by the microfinance institution RCPB in Burkina Faso has had an effect on the participating women concerning their *empowerment, knowledge about management/micro enterprises and knowledge about child nutrition and health*. We are using data from two surveys made in 2003 and 2004 by the consultant bureau Sud Consult that we are analysing in a qualitative manner in order to respond to our investigation question. This paper treats theories concerning the financial market and the importance of education, health and women's empowerment. We present facts about microfinance in general and in Burkina Faso in particular and we review earlier studies on the subject. Our findings suggest that the Credit with Education program has achieved to increase the women's knowledge concerning child nutrition and health. The program has had a smaller but still a notable effect concerning the empowerment of the women, specifically in the region of West. The program has failed to increase the knowledge of business management in the years studied. In our analysis we present suggestions of improvements of the program.

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Acronyms

ATBM – Antenne Technique Boucle du Mouhon – The region of Boucle du Mouhon

BCEAO – Banque Centrale des Etats de l’Afrique de l’Ouest – The Central Bank of West African States

CGAP - The Consultative Group to Assist the Poorest

CMH – The Commission on Microeconomics and Health

CV – Caisses Villageoise - Village Banks

ECOWAS – Economic Community Of West African States

FCPB - Fédération des Caisses Populaires du Burkina Faso - Federation of credit unions in Burkina Faso

FINCA – Foundation for International Community Assistance

GNP – Gross National Product

HDI – Human Development Index

LDC – Least Developed Countries

MFI - Microfinance Institutions

NGO – Non-Governmental Organisation

PPP – Purchasing Power Parity

PRSP – Poverty Reduction Strategy Papers

RCPB – Réseau des Caisses Populaires du Burkina – Network of credit unions in Burkina Faso

UNDP – United Nations Development Program

URCP-CE- Union Régional des Caisses Populaires du Centre –Est – The region of Centre-East

URCPO - Union Régional des Caisses Populaires de l’Ouest – The region of West

WAEMU – West African Economic and Monetary Union

WDI – World Development Indicators

WHO – World Health Organisation

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1. Introduction

Burkina Faso is one of the poorest countries in the world. The country is on UNDP's list of LDC, which is a list of countries with the lowest indicators of socioeconomic development and HDI in the world. Burkina Faso does not have any essential natural resources and 90 % of the population is engaged in agriculture. The agriculture is heavily depended on the seasonal rain. Since neighbouring Ivory Coast, the main economic exchange country, has had a civil war during several years, the situation of Burkina Faso and their population has worsened even further.

There have been many solutions suggested throughout the years in order to develop the country. One of the most recent tool in order to fight poverty is the so-called microcredits – loans given to poor people who do not have any guarantee. Loans that are so small that even the poorest people in the rural areas can manage to pay back through their small scale business. *Microfinance* is by The Consultative Group to Assist the Poorest (CGAP) defined as the supply of financial services targeted to poor and low-income individuals who do not have access to formal financial markets. It includes services like *credits, savings, insurance* and *transfer services*. (CGAP, 2006)

Reviewing the history of microfinance, we find that subsidised credit projects targeting rural communities were developed already in the early 1950's, but at that time without major success. The repayment rates were poor, the capital base of many rural development banks became ruined and studies showed that the credits in many cases did not reach the very poor. A new form of lending emerged in the 1970's in Bangladesh and Brazil, where small, short-term loans were given to groups of poor women with joint liability for the repayment. During the 1980's and 1990's, the microfinance sector developed, taking advantage of earlier experiences. The investigations and impact studies concerning microcredits increased and it was shown that well performing microfinance institutions (MFI's) often had better repayment rates than the commercial banks in developing countries, with women presenting the best repayment performance. It was also demonstrated that poor people were both willing and capable of paying high interest rates in order to get access to credit. Well performing MFI's showed that it was possible to become financial sustainable in the long run and that it was possible to reach out to the poorest individuals. The microfinance is today seen as one of several tools to reduce poverty and to get closer to the Millennium Development Goals concerning *education, health* and *women's empowerment*. (CGAP, 2006)

Many MFI's offer its services mainly or exclusively to females. Women present the highest repayment rates and except for that, there are mainly three reasons to focus on women. The first reason is to *decrease gender inequalities in order to promote faster growth*. King et al. (2001) write that societies with large discrimination against women are proven to be characterised by higher poverty, slower economic growth, weaker governance and lower quality of life than countries with higher equality between the sexes. To give women access to credit decreases the gender inequalities and may thus increase the productivity, output and growth of the economy. The second reason is that *women are the poorest in the society*. The majority of the people living in poverty are women. They do not receive the same medical help, the same opportunity to go to school, get a job, earn money etc. To give women access to

credit may reduce the vulnerability of the women. (Cheston et al. 2002) The third argument is that *women prioritise their families* to a larger extent than men. Women spend their income according to the needs of the family (for example on education, health care and clothing), which implies that giving credits to women have a greater impact on the whole family's welfare. (Burjorgee, 2002)

Even though microcredits is seen as a tool for decreasing gender inequalities, decreasing poverty and increasing individuals' wealth, Cheston et al. (2002) point out that several studies have shown that only providing the women with financial services is often not enough to increase women's wealth and empowerment. Other services as education and health are equally important in order to achieve those goals. Therefore, some MFI's has chosen to design microfinance programs with integrated social services. In that way they can work more effectively towards the goals of women's empowerment and poverty reduction at the same time as they decrease repayment failures originating from illness. (Ohri, 2004)

In Burkina Faso, over 90 % of the women do not have any education at all. The microfinance institution Réseau de Caisses Populaires (RCPB) has chosen to focus on loans to women in a program where they provide financial services (credit and savings) together with education treating issues as child nutrition, health and business management. Through the loans the women are supposed to create a business on their own. Examples of businesses are selling mangos, making and selling dolo (a kind of beer) or opening a barbershop. If they are successful they can expand their business and hopefully take bigger loans, expand even more and finally be independent. The women will use their profits to improve the conditions for their families. In the long run this will hopefully lead to development for Burkina Faso.

1.1 Purpose

The purpose of our study is to investigate if the Credit with Education program provided by RCPB in Burkina Faso has had an effect on the participating women concerning their *empowerment, knowledge about management/micro enterprises* and *knowledge about child nutrition and health*. Additionally, we will investigate if there are any regional differences and if there is any correlation between the answers concerning these aspects.

- *Empowerment*: We will look into the women's participation in decision-making in the family. By exploring her participation in decision-making before she started to participate in the Credit with Education program and comparing that with her participation one year after, we will investigate if her position in the family has strengthened.
- *Knowledge about management/micro enterprises*: We will examine what the women knew about price setting, business management etc. before she became a program participant and compare that with what she knows after being in the Credit with Education program for one year.
- *Knowledge about child nutrition and health*: We will investigate what the women knew about child nutrition and other health issues before entering the Credit with Education program and compare that with what she knows after being a program participator for one year.

1.2 Method

In order to respond to the purpose, collect data and get a deeper understanding of our subject we made a field trip to Burkina Faso for nine weeks. We came in good contact with the biggest institution in Burkina Faso that deals with microcredits and who is the provider of the Credit with Education program; RCPB. They guided us through the subject of microfinance, Burkina Faso's history concerning the subject, provided us with documents and the contact with the consultant bureau Sud Consult. Finally they helped us meeting the women that are members in the Credit with Education program.

The Credit with Education program in Burkina Faso is divided into nine regions. We have visited the region of the capital Ouagadougou. In this region there are totally 203 village banks (CV), out of which we have visited two in order to understand how the program works and meet the women. Through Sud Consult we have obtained interview answers from a survey made in 2003 and 2004 in three regions in Burkina Faso where Credit with Education operates. By comparing the answers from the surveys we will analyse the effect the program has had on the participating individuals. To get a broader knowledge of our subject and of the opinion of the people living in Burkina Faso concerning microfinance and the Credit with Education program, we have carried out five semi structural interviews with three women working with the RCPB, one program participator and one man running an NGO that offers microfinance.

Our study is of a qualitative nature even though the results are illustrated in a quantitative manner with numbers and charts. Our study differs from traditional economics in the way that we are not using econometric tools to answer our investigation question. We have chosen this investigation method because there is a lack of already existing data in Burkina Faso, which is the case in most developing countries. We did not have the opportunity to collect data by doing our own household survey, since in developing countries it is a very time demanding method. The lack of data and records also makes it difficult to create a representative selection group. Therefore, we have chosen to build our thesis on the best available data on the subject, which is data collected by the consultant bureau Sud Consult. The limitation of using our method is that our result will only be true for the number of women that are included in the survey and we cannot draw conclusions for the whole country or microcredit institutions in general. A more detailed explanation of the method can be found in *4.1 Data Collection and Method*, under *Our Study*.

1.3 Disposal

- **In the next part** of the paper we present economic theories related to microfinance. We treat theories concerning development, the financial sector, education, health and empowerment. We explain the emergence of microfinance institutions and display the different microfinance approaches as well as the different structures microfinance can undertake. We also review earlier studies on the subject.
- **In the third part** we start with proving the reader with a background of Burkina Faso and an overview of the country's microfinance sector. After that we give a detailed explanation of the Credit with Education program in Burkina Faso. In this part, we also present interviews, which show us personal opinions about microfinance and Credit with Education in Burkina Faso.
- **In part four** we present our contribution to the subject; *Our Study*. We start by describing some background, the investigation method, data and data treatment in detail, which is followed by the results. We analyse the result and make comparisons and linkages with theories and earlier studies.
- **In the fifth** and last part we will conclude.

2. Microfinance – theories, facts and earlier studies

2.1 Theories

Neo-classical growth models emphasise the importance of savings in order for a country's economy to grow. For any given capital stock the production function¹ determines how much output the economy produces. The capital stock changes over time and those changes may lead to economic growth. Investment and depreciation affect the capital stock and there is one single capital stock at which the amount of investment equals the amount of depreciation; the steady state level of capital. The steady state level of capital is the long run equilibrium in an economy. The savings rate in an economy determines the allocation of output between consumption and investment and is thus a key determinant of the steady-state capital stock; *if the savings rate is high the economy will have a large capital stock and a high level of output.* (Lipsey et al., 1999)

One of the main constraints for poor households in developing countries is the lack of access to financial services. This is a consequence of poorly developed financial markets and commercial banks tending to offer its services almost exclusively to medium and large companies that are thought to be credit worthy. (Todaro et al., 2003) This implies a major consumption and savings constraint for the individuals living in developing countries and in view of neo-classical growth theories, it implies that the accumulation of capital is hampered and the growth of the country's economy is restrained. (Lipsey et al., 1999, Todaro et al., 2003)

The borrowing constraint makes it impossible for the individuals to smooth the consumption and to follow the optimal consumption pattern. The individuals find themselves in a corner solution where the desired level of consumption at each point of the life cannot be reached. (Bayoumi, 1993) The restriction of the possibilities to invest and consume makes it harder to obtain basic services such as food, education, health care and housing. In order to reduce the borrowing constraint, individuals that wish to obtain credits but who do not have access to the formal financial market are often forced to borrow from lenders in the informal market who charge high interest rates, which in some cases reaches up to 20 percent a day. (Todaro et al., 2003)

The emergence of microfinance institutions represents an option to going to informal moneylenders and presents a way to eliminate the borrowing constraint in developing countries. In countries where the financial system is not well developed and functioning, microfinance can lead to an increase in the individual's utility and wealth by enabling him or her to increase consumption and saving. It allows the individual to dissave and save which makes it possible for each individual to smooth consumption and follow his or her optimal lifetime consumption. (Todaro et al., 2003, Bayoumi, 1993)

¹ Cobb Douglas production function: $Y = K^\alpha (AL)^{1-\alpha}$

2.1.1 Asymmetric information, adverse selection and moral hazard

The badly developed financial markets in developing countries are often extremely unorganized and lack transparency. Banks do not have access to trustworthy information about borrowers, there are no records of the borrowers' earnings or financial status and there are no credit institutions that provide lenders with repayment history of individuals. The lack of information and data leads to that the credit markets in developing countries to a very large extent are characterized by *asymmetric information*. (Todaro et al., 2003) Asymmetric information signifies that some people are in the possession of information that other people lack. In credit markets it means that the borrower has better information than the lender about the risk of the project he or she is about to undertake. Asymmetric information generally leads to the problems of *adverse selection* and *moral hazard*. In developing countries, the lack of records leads to that asymmetric information, adverse selection and moral hazard are much larger problems than in developed countries. (Varian, 2002)

In credit markets, *adverse selection* occurs before a loan agreement has taken place. It arises when the "bad" borrowers (the borrowers with high credit risk) are applying for credit more intensively than the "good" borrowers, which leads to a higher probability that the loan will be granted to a high-risk borrower. Asymmetric information about the risk of the projects leads to that loan givers cannot adjust the interest rate according to the risk of each borrower; they have to offer the same interest rate to everyone. As the interest rate increase, good borrowers get even fewer and the profit of the lender decreases. (Stiglitz et al., 1981)

Moral hazard occurs after the loan has been granted and means that the borrower provides the lender with false information about his assets, liability, capacity to repay etc. This absence of perfect information implies that the lender cannot observe the behaviour of the borrower neither verify his or her profits, which becomes a problem if the borrower does not fulfil the repayments established in the loan contract. (Varian, 2002)

To reduce the risks associated with asymmetric information, lenders often require collaterals in form of fixed assets (often property such as land, house etc.). (Stiglitz et al., 1981) In developing countries, one major problem is that the property rights often are poorly defined and fixed assets are not worth enough to function as collateral. A large part of the inhabitants in developing countries live in rural areas with scarce physical capital. Since they do not have formal collaterals to offer they are often excluded from the formal financial market. (Besley, 1995)

In microfinance, one way of reducing the risk with moral hazard and adverse selection is through the so-called *social collateral*. Social collateral is when loans are given to a group where each group member is liable for the repayment. The best effect is according to Morduch (1999) achieved when the group members choose each other. They can then both exclude high-risk borrowers and monitor each other, since they have better information than the MFI's about the characteristics and behaviour of the individuals who wishes to receive credits. In that way the problem of imperfect information is decreased notably and the risk of the bank associated by

granting a loan without traditional guarantees (fixed assets) is reduced. (Morduch, 1999)

Walid Seddiki et al. (2005) have tested the hypothesis of group borrowers and joint liability in an experiment using a game theoretical model with a limited amount of loan periods. Game theory suggests that each player will repay nothing in the last loan period, since there is no incentive to repay. But since there is a sub-game equilibrium, no one will repay anything in the round before the last round, neither in the round before that and so on. The game will therefore end after the first loan period. The authors found that even though game theory recommends each player to free ride, the solidarity and the cooperation is high in all scenarios. High repayment rates are obtained which leads to the granting of new loans for several periods. The findings show that self-selected groups have a slightly higher willingness to repay. In situations where the members of the group are able to verify the outcome of the economic activities of the other members and punish them if they cheat, incentives to cooperate are proven to be stronger. According to Walid Seddiki et al., group lending out-performance individual lending in the view of risk reduction for the MFI's and repayment rates.

In the microfinance literature treating group lending there is a discussion about the importance of the size of the group. A too small group decreases the insurance effect while a too large group is characterised by lower solidarity among the group members, which leads to a higher probability for members to free ride. Today, MFI's lending to groups has group sizes with between 5 to 50 members. Abbink et al. (2002) have investigated the importance of group sizes for the repayment performance, with the help of a game theoretical model. Their findings suggest that both smaller and larger groups have good repayment performance. Large groups have slightly less solidarity than smaller groups but this is compensated by a larger distribution of risk. (Abbink et al., 2002)

2.1.2 Education and health

The endogenous growth theory emphasises the importance of *human capital* for the economic growth in a country. The model includes knowledge as a type of capital, which leads to that the production function² does not exhibit diminishing return on capital. In the endogenous growth model, both savings and investments in human capital can lead to persistent growth. Neo-classical growth theories as the Solow model also points out human capital as one of the factors³ affecting per capita growth. (Lipsey et al., 1999)

Todaro et al. (2003) argues along with many other economists that it is the human resources of a nation that determine its economic and social development. Both education and health are part of the human capital, which leads to that both aspects are fundamental in order to develop a country. The two aspects are closely related since school attendance relies on good health. Todaro et al. tells that there are evidences that prove that better education of the mother lead to better health of her

² $Y = AK$

³ The accumulation of human capital, the investment quota, technology and population growth determine the per capita growth according to Solow.

children. A good health and a better and longer education lead to higher future income and utility according to the human capital theory. (Todaro et al., 2003)

Literature treating economic growth on both micro and macro level emphasise the importance of education for both individuals and countries. Micro level literature treats the private monetary return and the social return⁴ on schooling. The macro literature focuses on the relationship between education and growth. Results from empirical studies have shown that higher education has a larger impact on aggregated growth than primary education. (Krueger et al. 2001) Todaro et al. (2003) means that the expansion of educational opportunities has contributed to aggregate economic growth by:

- Creating a more productive labour force with increased knowledge and skills in order to be able to absorb modern technology.
- Providing employment for teachers, school construction workers, textbook printers and school uniform manufacturers.
- Generating skilled people who can lead the country.
- Providing basic skills and encouraging modern attitudes.

There are high costs to consider when choosing to study instead of working, especially in developing countries. There is the indirect cost of forgone earning, but also the direct cost of fees, material and school uniforms etc. Surprisingly, Todaro et al. (2003) shows that the private rate of return to primary school in Sub-Saharan Africa is as high as about 40 percent. Despite this extremely high rate, the families cannot afford to make this investment since they cannot borrow and do not afford to miss the income that the child could earn instead. (Todaro et al., 2003) In developing countries the children's labour-supply potential is high, which leads to a high opportunity cost of putting the children in school. (Maldonado, 2005)

In the literature treating microfinance and education, there are several ways in which microcredits affect human capital. Maldonado (2005) has divided the effects into five categories:

- Firstly, there is an *income effect*. An increase in income lowers the opportunity cost of sending the children to school. (Behrman, 1999) This implies that if the microfinance leads to an increase in the household's income, the children should be sent to school to a larger extent than before since the return to primary school is high (the income elasticity on the demand for schooling is positive). (Maldonado, 2005)
- Secondly, there is a *risk-management effect*. Since poor individuals are vulnerable to external shocks, an adverse income shock often leads to that children enrolled in schooling are taken out of school. Access to microcredits can help smoothen the consumption and increase the household's capability to foresee and handle income shocks, which lead to a lower probability of taking the children out of school. (Ibid)
- Thirdly, there is a *gender effect*. Various studies has shown that women prioritize their children to a larger extent than men and microcredits given to women thus affect the children's schooling to a higher degree than credits given to men. (Ibid)

⁴ Generation of technological progress, reduction in crime and increase in welfare

- Fourthly, there is an *information effect*. Households in developing countries may take short-term decisions due to imperfect information about opportunities. If microcredit programs increase information and change the awareness about opportunities, they can contribute to households taking long-term decisions, for example taking into account the high return on primary schooling. One example is credit programs that combine financial services with education. This education of the program participants may change the preferences about schooling their children. (Ibid)
- Lastly, there is a *child-labour demand effect*. Microcredits may change the demand for child-labour. Microcredits that expands the economic activities in the household may lead to that the child have to work in the family business or take care of the children and as a result they can not be sent to school. (Ibid)

Concerning health, Todaro et al. (2003) means that the indicators of life expectancy and child survival used today when measuring the health of a nation are not sufficient since there are several more aspects to take into consideration than just how many years one live. He admits however that the measures illustrate a county's health situation to a rather good degree. In sub-Saharan Africa the health problems are especially high. Infant mortality is over 100 deaths per 1000 live births. In many of the sub-Saharan countries there is a bigger chance that a child dies before the age of five than going to secondary school. About 40 percent of the children are malnourished. The poor health has effects on the employment, the productivity and the wages. In order to reach poverty reduction, Todaro et al. explains that the basic health is very important because if the parents are too unhealthy to work then their children need to work and cannot fulfil their education and this becomes a vicious circle.

The Commission on Macroeconomics and Health (CMH) declare in a report that improvement in health, specifically in developing countries, would lead to increased income, higher economic growth and reduced population growth. The authors points out that in low-income countries, the main causes of death that in developed countries can be avoided, are illnesses as HIV/AIDS, malaria, tuberculosis and childhood infectious diseases. If the health conditions improved, the people would live longer, produce more and have fewer children. The CMH means that the importance of health for an economy has been underestimated to a great extent and that increased investments are needed in the area of disease control as well as in the area of reproductive health (as family planning and access to contraceptives). (WHO, 2001)

Macroeconomic evidence shows very clearly that health and education are two investments that are crucial in order to reach development and that social opportunities as education and health increase economic participation and promote growth. (WHO, 2001, Sen, 1999, Todaro et al., 2003) There is a need of programs that are engaged in the matter and one successful strategy that Todaro et al. writes about is the microcredit systems that include education and health in their programs. (Todaro et al., 2003)

2.1.3 Women's Empowerment

As mentioned in the introduction, societies with a high level of gender inequality are characterised by slow economic growth and high level of poverty. (King et al. 2001). Studies have shown that well performing microfinance programs, specifically the once providing programs integrated with social services, empower and increase the wealth of the borrower. This is one of the reasons of microfinance institutions to focus on women. This is also one of the reasons of why international donors, local NGO's and governments have put microfinance on both their gender and poverty reduction agenda. (Cheston et al., 2002)

Empowerment is a concept used in a variety of academic fields; sociology, economics, anthropology and public health. Despite that, the definition of the word is surprisingly alike in all the disciplines. The definition usually contains the words: *options, choice, control, and power*. The women's possibility to make decisions concerning themselves, their children and their family is one important aspect often underlined, the control over one's own life as well as the control over economic resources is others. Access to employment, education and financial resources are pointed out as central factors that contribute to the empowerment of women. The concept of empowerment can be divided into various dimensions and when looking into the *economic* and *familial/interpersonal* dimension, women's control over income, access to credit, decision-making in the household and birth control are emphasized. (See appendix 1) (Malhotra et al., 2002)

Todaro et al. (2003) has included the aspect of the women and their empowerment in many of his chapters. He states that the women often bear the heaviest part of the poverty, with no education, no job, an income in the formal sector and limited social mobility. If the women could achieve a better education, health and economic wellbeing, their status would improve in both the family and in the society. Todaro et al. makes the connection between empowerment of women and lower population growth. In many countries, the women have a low status, no control or power over their own body, which results in no birth control and high fertility rates. Consequently, the population growth can be the outcome of the women's lack of power. If a country wants to control the fertility rate of their nation they have to raise the social and economic status of the women. Empirical evidence shows that all improvement of the women's status will contribute to breaking the vicious circle of poverty and insufficient schooling. An employment outside their homes, which reduces their isolation and an independent source of income are aspects that would improve their roles. Here, microcredits can play a crucial role. (Todaro et al., 2003)

2.2 Facts about microfinance

2.2.1 Microfinance approaches

There are two diverse approaches in the literature treating microfinance, the *welfarist approach* (also called the direct credit approach) and the *institutionalist approach* (or financial market approach):

The welfarist approach focuses on the demand side, which is to say on the clients. This approach support the idea of subsidising microcredit programs in order to lower the cost for the microfinance institutions so they can offer low interest rates on their loans. The performance of the MFI's are measured through household studies with focus on the living standard of the individuals; number of saving accounts, number of loans, productivity improvement, incomes, capital accumulation, social services such as education and health as well as food expenditures. (Congo, 2002)

The *institutionalists* criticise the subsidization because it leads to high, unpaid rates and transaction costs, which have lead to the failure of many microcredit programs. They mean that it is not sustainable for the MFI's to be subsidised and that the subsidies leads to an inefficient allocation of the financial resources. The economists supporting this view mean that the welfarists make the wrong assumptions when they say that the repayment interest rate must be low, that the clients are not creditworthy and unable to save and that commercial banks could not survive in rural areas because of the high costs of offering financial services to poor households. The institutionalists suggest that the MFI's should operate according to the conditions of the market, charging high interest rates because of high costs and in that way operate in a sustainable manner. They mean that poor individuals are willing to pay high interest rates in order to have access to credit. The performance of the MFI's are measured through the repayment rate, transaction costs, financial self-reliance of the MFI's etc. (Ibid)

2.2.2 Different structures of MFI's

Rotating savings and credit associations (ROSCAs) and *group lending schemes* are the most common microfinance alternatives for poor individuals. In *ROSCAs*, around 40 to 50 persons form a group and each group member saves a fixed amount of money. The savings work as an interest-free loan, which is distributed on a rotating basis to each member by a designated leader. *Group lending schemes* function in the way that possible loan takers form a group and apply for a credit on a jointly basis. After receiving the loan they distribute it among the group members. Each individual is liable for the repayment. When one loan period has ended with successfully repaid loans, each individual in the group is granted a larger loan in the following loan period. This increase in credit amount induces the repayment of the loans. The group lending makes it possible for poor individuals to get access to commercial credits and to reduce the risk. (Todaro et al., 2003)

Village Banking is the type of group based lending most common today. *The Foundation for International Community Assistance* (FINCA) in Latin America developed village banking in the mid 1980's. The method emerged as a tool for fighting poverty and it targets women clients. The founder of FINCA, John Hatch,

states that: “*Our focus on women was the result of a growing conviction that the fastest way to affect the welfare of children was through aid to their mothers.*” (FINCA, 2006) In the places where MFI’s provide village banking (often in areas where no formal financial institution is present), individuals who want to receive a loan for income-generating activities may together form a *village bank*. Typically, the village bank consists of women formed in groups with between 20 to 40 members. (Dunford, 2001) The main idea with the village banking is to give the responsibility to the clients. Participation is a key word and the entire management of the loan (distribution, collection of repayment, repayment, book keeping etc.) is handled by the group members. (FINCA, 2006) There is initially a period of training when the groups learn to manage their own village bank and its rules. (Dunford, 2001)

Microfinance integrated with social services, where MFI’s combine microfinance services with social services such as *education* and *health*, is another alternative. This form emerged since it is often not enough to have access to financial services such as loans and savings for the very poor. There are principally three forms of how to integrate financial and social services: (Dunford, 2001)

- *Linked service*. A specialized MFI offers financial services to its clients and cooperate with one or more independent organisations that offer social services at the same time to the same clients.
- *Parallel service*. The same organisation/MFI offers financial and social services at the same time to the same clients through two or more different programs.
- *Unified service*. One organisation/MFI offers both financial services and social services at the same time to the same clients, through one unified program. The same personnel handle the two services.

The advantages of including social services as education and health in microfinance are several. Firstly, since human capital and health are important issues in order to fight poverty and increase development, MFI’s with the goal of reducing poverty will work more efficient if they include education and health in their agenda. Secondly, since illness and death are the major causes for MFI clients not to repay the loan, MFI’s can reduce the number of repayment failures and increase profit by providing the clients with basic health knowledge. Thirdly, many MFI’s have characteristics that make them suitable for delivering social services. For example, they often have branch offices in the rural areas and make home visits, which create a close relationship to the individuals taking credit. Specially within group lending, where the borrowers and a representative for the MFI meet regularly, it is easily reached to provide social services to the clients. This is also more cost effective than if two programs are working alone. (Ohri, 2004)

Grameen Bank is one example worth to mention of a MFI offering *parallel services*. It was one of the pioneers in the field of microfinance and it has inspired many microfinance programs with the same basic idea, to offer financial services together with social services as education to groups of poor individuals, in a cost effective way. The defenders of this model believe that it is essential to include both social and economic aspects in order to decrease the poverty in the world. (Dunford, 2001) The Grameen bank opened in Bangladesh in 1979 and offers one-year loans to a group of five women. Two group members first receive their credits and when they succeed to

pay back the next two group members receives their credits and finally the last member. The repayment rate of the Grameen Bank has been reaching almost 100 percent. (Sirima et al., 2001)

When establishing the Grameen Bank, the founder, Muhammad Yunus, started to give credits to women in order to decrease the discrimination against females in Bangladesh's gender-biased banking sector. He wanted to achieve that at least 50 percent of the clients were women. As time passed by, the reason for lending money to women shifted focus, from avoiding gender-bias to generating development at a faster rate. Yunus found that when the women were given an opportunity to improve their financial situation and get out of poverty they took it. Yunus realised that loans given to women generated faster changes than credits given to men, that women gave priority to the children and to the household while the priorities of the men were to advance themselves and that women were better at adapting to the self-help than men. (Yunus, 1999)

“If the goals of economic development include improved standards of living, removal of poverty, access to dignified employment, and reduction in inequality, then it is quite natural to start with women. They constitute the majority of the poor, the under-employed and the economically and socially disadvantaged. And since they were closer to the children, women were also our key to the future...” (Ibid)

2.2.2.1 The Credit with Education program

The most common model for unified delivery of financial services and education is the model developed by Freedom From Hunger in 1988 – the *Credit with Education program*. Credit with Education is today operating in 14 countries and the program in Burkina Faso is the focus of this study. Freedom from Hunger is an American NGO that is working with development questions, focusing on self-help to individuals with the aim of fighting hunger and poverty in the world. (Freedom from Hunger) The program has its foundation in the models developed by *the Grameen Bank* and *FINCA*. It combines the concepts of *group lending*, *village banks* and *social services*. The original idea with the Credit with Education program was to improve child health and nutrition, improve income, increase assets, promote saving as well as to increase the woman's self-confidence. (Dunford, 2001)

In the *Credit with Education* program there is a field agent, usually from the local area, who is responsible for promoting and recruiting new village groups, providing the new groups with initial training and attending each village bank's group meeting in order to assist with its financial matters. At each meeting the field agent also give a learning session (usually 20 to 30 minutes). In the learning session the field agent introduces a topic with relevance to issues in the group members lives. The field agent is responsible for helping the group members understand why the topic is relevant. The idea is to give basic information about practical actions the group members can undertake in order to improve their lives. Each *Credit with Education* program has its own mix of educational topics; examples are health, child nutrition, micro business, management etc. (Dunford, 2001)

2.3 Earlier Studies concerning microfinance

Since we are presenting a variety of earlier studies we have chosen to divide this part in three. The first contains *qualitative* research on microcredits, the second *quantitative* research on microcredits and the last one is qualitative research on *Credit with Education*.

Littlefield et al. (2003) have written a report to see whether microfinance is an effective strategy to reach the millennium development goals or not. They start their paper by declaring that even though there would be a great progress within microcredits, the area of the millennium development goals are in need of other aspects as well, such as a functioning government, physical security, economic growth, security and basic transportation. They continue and state that the microcredits allow poor people to plan for their future and to put their children to school for longer periods. The authors show results from earlier studies and evaluations that have been made on microcredit-programs around the world:

- In the CRECER program in Bolivia two thirds of the clients had increased their income.
- In a program in Indonesia the clients had increased their incomes with 12,9 percent whereas the control group had an increased income of 3 percent.
- In SHARE, a program in India, half of the clients managed to go out from poverty.
- In Bangladesh, five percent of the participants of the Grameen Bank credit program graduated from poverty each year. (Ibid)

In order to graduate from poverty, Littlefield et al. examines three areas that are of great importance. First of all, there is a need of promoting children's education. They mean that children of the microfinance clients are more likely to go to school and stay longer. The next aspect is the improvement of the health of children and women. They claim that the main reason for microcredit clients not to repay their loans is illness and the expenditures that come with it. They continue and proof that households that are members in microfinance institutions appear to have better nutrition and health practices if one compare with non-clients. The third and final aspect is the empowering of women. It has been shown that women are more likely to invest their income in their family's wellbeing than men. Littlefield et al believes that giving credits to women will result in that women get more access to money, which will empower them to become more confident, taking more decisions in the family and in the society and confront gender inequalities. Littlefield et al, conclude:

“Access to financial services forms a fundamental basis on which many of the other essential interventions depend. Financial services thus reduce poverty.”

In 1999, Morduch wrote a paper called ” The Microfinance Promise”. He writes that in many poor countries the people put much hope into the new financial sector that is going to change the economic and social structures by providing microcredits. Morduch writes that there are about 8 to 10 millions households in the world that are members in microfinance programs. In his paper, Morduch reviews earlier studies about different kinds of MFI's concerning structure, financial sustainability, repayment rates, outreach, collaterals etc. Morduch finds that very few impact studies

have been made with trustworthy treatment and control groups and he stresses the importance of better research on the subject. The existing reliable studies have shown mixed results. One major problem is that data collection often is very costly and difficult. Morduch finds that financially self-sufficient programs often give medium and large credits and are directed to individuals slightly above the poverty line. He means that these larger microcredits might generate employment and promote growth, but they do not alleviate poverty for the very poor. Subsidized MFI's on the other hand often reach out to the poorest in a society, which are often the women. The microfinance institutions have proven that it may be profitable to lend to low-income families and Morduch underline that the very poor even can manage to save. One drawback is that it is very difficult to create new microfinance institutions. They need a strong leadership and persistent donors, where the NGO's can play an important role. Morduch's result tells us that the programs are very cost-sensitive and that most of them rely on subsidies. In order to survive without subsidies, the institutions need to be more careful with their costs and more effective in the management. When it comes to whether the microfinance can alleviate the poverty or not, Morduch claims that the microcredits help people to self-employment but there is seldom a change in the pattern of employment and it does not generate new employment opportunities for others. In order to fight the poverty there is still a need of an increase in the overall level of economic growth and employment. Morduch finish his paper by stating that microfinance is however a mean to provide a lot of help to thousands of households, which shows that it is a success. (Morduch, 1999)

The two organisations United Nations Population Fund and the Microcredit Summit Campaign has written a report together which investigates if microfinance can lead to macro change. They start by saying that in order to reduce poverty the microcredits must be accompanied by the empowerment of women. They inform that one of the first aspects that have been found on the clients is the increased self-confidence. They continues and states that the households that receive microfinance have better health and nutrition than families that do not receive any credits. When it comes to whether or not it can lead to macro change they refer to the study made by Khandker in Bangladesh. (Dunford et al, 2006)

This second part includes the quantitative research on microcredits. Khandker (2003) has made a quantitative research paper for the World Bank. The objective of the study was to see the long-run effects of microfinance on household consumption and poverty in Bangladesh. Khandker used household data that was collected firstly during 1991-1992 and secondly during 1998-1999. He chose Bangladesh since it is the country where there is the largest microfinance operation in the world. To estimate the program's effect Khandker uses panel data at household level. In 1991/92 the World Bank surveyed 1769 households from 87 villages that were randomly chosen. They surveyed households within three different microcredit banks; BRAC (Bangladesh Rural Advancement Committee), Grameen Bank and BRDB's (Bangladesh Rural Development Board) RD-12 project and households that were not participants in any program. The villages that were randomly chosen had been within the project for at least three years and the survey was made during three different seasons. The same households were used for the follow-up survey made in 1998/99. During this survey some new households were included and the sample of households reached 2599. (Khandker, 2003)

The result that Khandker found was that the aggregate moderate poverty had declined from 83 percent in 1991/92 to 66 percent in 1998/99, which means a reduction of 17 percentage points over seven years. The program participant's poverty reduced with 20 percent whereas the poverty for the non-participants reduced with 15 percent. The overall reduction in extreme poverty was 12 percentage points between 1991/92 and 1998/99. He also looked at the consumption rates and could see that the consumption level had increased for participants in comparison to non-participants. The results are very strong. Khandker's result shows that microfinance matters to a great extent not only to the very poor that are within the program but also to the local economy. He finds that the microfinance program particularly has an impact on the consumption on non-food products. Thanks to the growth of the local economy, even the non-participants take advantage of the microfinance programs. Even though the programs reduce the extreme poverty, there is not such a big reduction in the aggregate poverty, which means that the microfinance may not be the instrument to solve the poverty problem of Bangladesh as a country. Khandker do believe in microfinance as an instrument in poverty reduction for Bangladesh, but to reach the national level the microfinance sector may need to improve the financial services. They need to improve the skills of the poor borrowers and educate them in marketing and management in order to improve their productivity and income. He concludes that microfinance only is one of many instruments in order to reduce the poverty and ads that the most important aspects are growth and investment in human capital. (ibid.)

Morduch, 1998, has made a quantitative research in Bangladesh on 1800 households. He starts his paper by declaring that very few evaluations have been made with rigorous statistics. He believes that simple evaluations are subject to multiple selection biases as self-selection and non-random selection. Morduch is using the same data as Khandker did, from the World Bank, but Morduch is using a difference in difference method. Morduch uses a cross-sectional survey with households that participate in the Grameen Bank, BRAC, and BRDB. Morduch also uses control groups from areas that are not served by microfinance programs. His result differs from Khandker's result and Morduch underlines that he did not find any evidence that the microfinance programs increase the consumption levels or increase the register of education for children if he compares to the control group. He suggests the explanation that many borrowers use the money for buying land instead of completing their projects. He adds that his result may be plausible in the way that even though his control group does not get microcredits they may get other help from NGO's that are operating in Bangladesh. (Morduch, 1998)

The third and last part is about qualitative research on Credit with Education. Concerning Credit with Education programs, studies have shown that well performing Credit with Education programs have lead to more regular earnings throughout the year, asset accumulation and consumption smoothing for the clients. For example in Mali, where non-program participants were significantly more likely than program participants to experience serious food insecurity, or in Ghana, where the non-farm income for program participants increased significantly compared to non-participants. When looking at the impact deriving from the education, studies show that the program participants have experienced a significant increase according to health knowledge. Examples are the Credit with Education program in Ghana,

where newborn children to program participants were given colostrum to a larger extent than children to non-participants. The women participating in the program also gave breastfeeding during a longer period than non-participating women. In Bolivia, women participating in Credit with Education gave their children extra fluid when they had diarrhoea, compared to the non-participating women who often gave less fluid than normally because they believed that the liquid would worsen the diarrhoea. (Dunford, 2002)

Barnes et al. (1999), have done a qualitative evaluation on the impact of Credit with Education in Uganda. They inform that the microenterprises are an important part of the Ugandan economy. They estimate that in 1995, 22 percent of all households were engaged in some kind of business activity. They have made the survey on three different programs and with three control groups. Their main findings are that the microcredits are the main source of income for the households and that their savings and earnings are used to expand their businesses. They also find that the female borrowers improve their decision-making, their financial management and leadership skills. This is due to practicing within the group as treasurer or chair, when borrowing as groups. Concerning health, their result shows that the program participants are trying new practices and informs other people about them to a larger extent than non-participants. This is thanks to the micro-finance institution's health education. Barnes et al are aware of that there may be self-selection biases in their evaluation in the way that there are often the same kind of people that becomes clients in the microfinance programs and therefore the clients may be different than the non-participants in many ways.

3. Burkina Faso

In the previous section we have talked about theories related to microfinance, we have provided the reader with facts about microfinance and we have reviewed earlier studies on the subject. In this section we will start with giving the reader a brief overview of Burkina Faso's economy and financial sector, followed by an overview over the microfinance sector in the country. We will then explain in detail how the Credit with Education program works in Burkina Faso and display the main evaluations of the program. In this part we also present the five interviews that we made with knowledgeable persons within the subject of microfinance. (See appendix 2 for more information about Burkina Faso)

3.1 Overview of Burkina Faso's economy and financial sector

Burkina Faso is one of the poorest countries in the world. In 2003 the country was ranked 173 out of 175 countries according to the Human Development Index of UNDP. Burkina Faso has 14 millions inhabitants and 45 % of the population live below the poverty line of one US Dollar per day. (SIDA, 2005) More than 70 percent of the population lives in rural areas, where agriculture and herding are the main activities. The harsh climate with drought and lack of rainfall affect production possibilities and a smooth cultivation is difficult to achieve. Another factor that makes inhabitants of Burkina Faso vulnerable is the poor health sector; many people die every year of diseases that could easily be treated with antibiotics and HIV/AIDS are expanding rapidly. (Hagberg, 2001)

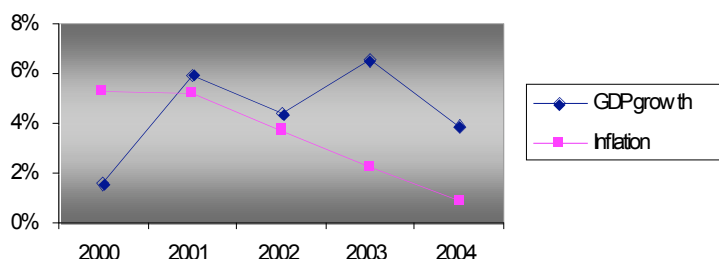
Burkina Faso is member of the Economic Community of West African States (ECOWAS) and the West African Economic and Monetary Union (WAEMU). WAEMU consists of eight countries; Benin, Burkina Faso, Ivory Coast, Guinea Bissau, Mali, Niger, Senegal and Togo. The countries have a common Central Bank, the Central Bank of West African States (BCEAO), who sets the monetary policy for all union members. The common currency in the union is the CFA Franc. The BCEAO supervises the financial sector, which is small and consists of commercial banks and MFI's. (First Initiative, 2006)

The banking system in Burkina Faso has undergone a significant change since the beginning of the 1990's. At that time there were three commercial banks operating in the country. The government has restricted its participation in the banking sector to 25 percent and has sold large parts of the commercial banks to local and foreign investors. As a consequence, one of the three original banks went bankrupt and one was privatised. In 2003, all major banks was partly own by foreign companies, mainly from France and other African countries. In 2004, eight commercial banks were operating in the country. Domestic savings, both private and public, are weak and nearly all public investments in Burkina Faso are funded by international donors. (First Initiative, 2006)

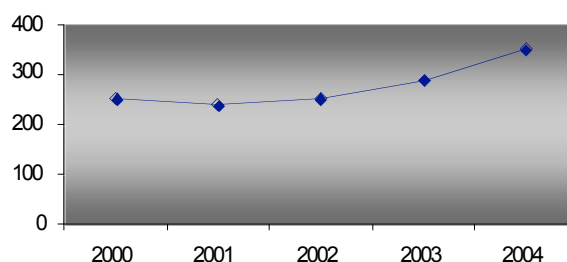
The CFA francs experienced a devaluation in 1994. Before the devaluation the Burkinabè economy grew at an annual rate of 3.1 percent during the years 1980-1993. After the devaluation, the economic growth increased and between 1995 and 1998 the growth rate was of 5 percent annually. As a consequence of the higher growth in the

economy, per capita income increased to 2 percent between 1995 and 1998 compared to – 0.5 percent before the devaluation (1980-1993). Even though the annual growth rate has been high since the devaluation of the CFA franc, it has not been enough to significantly improve the well being of the population. (Sirima et al., 2001)

**Development of GDP and Inflation (percent)
Burkina Faso 2000-2004**



**GN per capita, (current US\$)
Burkina Faso 2000-2004**



Source: *The World Bank, WDI 2006*

The Government of Burkina Faso has created a framework document called the *Poverty Reduction Strategy Paper (PRSP)*, stating the priority objectives of the government concerning development. (Sida, 2005) The PRSP mention the financial services as income-generating activities and microcredits. They mean that it improves the living conditions and incomes of poor groups. In order to increase the employment and create income-generating projects for the poor, the PRSP lists some areas of priority; *agriculture* (create jobs and income as well as reduce the vulnerability of agricultural activities), *infrastructure*, *rural women* (improving their living and working conditions), *credit access* as well as *income generating activities and self-employment*. (PRSP, 2004)

3.2 Overview over the microfinance sector in Burkina Faso

There are around 50 to 60 MFI's active in Burkina Faso. These MFI's generally offers financial services such as savings and credit products. Short-term savings are the savings the population put aside for emergencies and unexpected costs and the duration of the short-term savings is one month on average. There is normally not any interest rate on short-term savings at all. Long-term savings consists of money accumulated for specific, medium and long-term investments and the interest rate paid by the MFI's are between 3 to 5 percent per year. (Congo, 2002)

Characteristics of selected microfinance institutions

	Savings and credit cooperatives		Group credit institutions		Projects and NGOs	
	FCPB	CEC/Z	PRODIA	FARRF	ADRK	ECLA
Date of creation	1972	1989	1981	1991	1969	1991
Geographical coverage (%)	69	02	04	82	07	04
No of branches	102	09	02	45	290	03
Target population	Rural urban	Rural	Peri-urban	Women	Rural	Rural
% women	24	49	58	100	31	35
Average savings (US\$)	72	70	–	–	22	16
Average credit (US\$)	547	548	485	614	75	224

In this chart we present facts about some of the main MF's in Burkina Faso. FCPB is the provider of Credit with Education in Burkina Faso and the subject of our investigation.

Source: Congo, 2002

The credits provided by the MFI's are short-term credits offered to individuals or groups and medium and long-term credits offered to individuals. About 70 percent of all the loans are short-term credits with average loan duration of between 6-12 months and an interest rate of between 10 to 17 percent per year in nominal terms. The amount for short-term loans differs between CFAF 5000 (EUR 7) and CFAF 300 000 (EUR 457) Loans that exceed 12 months are defined as medium and long-term loans and are targeted principally to micro-entrepreneurs. The amounts are between CFAF 300 000 (EUR 457) and CFAF 3 million (EUR 4 573). Savings and credit institutions as well as projects and NGO's give loans for both productive and consumption purposes while group credit institutions give loans exclusively for productive/commercial purposes. (Ibid)

There are different ways of coping with the loan guarantee; the savings and credit cooperatives generally use traditional systems such as physical assets while group credit institutions lay emphasis on group-based liability. The repayment rates are high in all types of MFI's in Burkina Faso. The reasons are thought to be the loan guarantee system in group credit institutes (where every member of the group is responsible for the repayment) the strong sense of ownership in savings and credit cooperatives and the close relationship between clients and supervisors in projects and NGO's. (Ibid)

The clientele is very heterogeneous since the MFI's operate both in rural and urban areas. They reach mainly farmers, women, craftspeople, groups and associations in the rural areas and traders, micro-entrepreneurs, groups and associations in the urban areas. Women are under represented in general, even though they are the main, and sometimes the only, clients to group credits institutions. The total number of microfinance clients has steadily grown throughout the years, with an average annual growth rate of about 24 percent. The average growth rate for women has been lower, only 9 percent/year. In 2000, the total amount of clients were 497 000, which corresponds to 8.3 percent of the target population (which is estimated to about 6 million). The largest MFI in Burkina Faso is RCPB who stands for about 48 percent of all clients. (Ibid)

	Number of MFI clients						Total MFIs
	Savings and credit cooperatives		Group credit institutions		Projects and NGOs		
	FCPB	CEC/Z	PRODIA	FARRF	ADRK	ECLA	
1994	68,175	318	537	36,115	8,579	2,500	110,350
1995	82,769	2,862	730	55,256	8,033	2,216	155,951
1996	92,702	7,155	947	69,070	9,965	2,800	170,180
1997	120,000	12,972	1,207	74,706	12,428	2,935	257,944
1998	162,789	15,438	1,028	78,442	13,049	2,955	344,557
1999	196,892	18,801	994	84,717	14,466	2,750	468,446
2000	238,067	22,516	1,092	94,494	15,479	3,328	497,446

Source: Congo, 2002

The fact that the number of clients has increased rapidly has led to that also the savings deposits and the loan portfolio in the MFI's have increased at a significant rate. The loan portfolio has grown with an annual growth rate of 35.3 percent. Compared to the financial institutions in total (which includes MFI's, commercial banks etc.), the MFI's stands for 4 percent of the total savings and 2 percent of the total loans granted in the country. RCPB, which is the largest MFI in Burkina Faso, stands for the major part of all savings and loans granted by the MFI's in the country, 75 percent and 58 percent, respectively. (Congo 2002)

	Value of loans (in CFAF million)						Total MFIs
	Savings and credit cooperatives		Group credit institutions		Projects and NGOs		
	FCPB	CEC/Z	PRODIA	FARRF	ADRK	ADRK	
1994	961	212	112	33	228	6	2,122
1995	2,048	398	204	296	312	10	3,988
1996	3,959	496	317	719	487	6	6,085
1997	4,862	712	354	1,103	488	15	9,732
1998	6,063	883	361	1,247	498	36	11,229
1999	8,099	546	420	1,624	611	82	15,091
2000	10,228	573	504	1,721	641	172	17,625

Source: Congo, 2002

Congo (2002) has investigated the performance of the MFI's in Burkina Faso and he uses the performance criteria *outreach* and *sustainability*. Congo defines outreach as "the ability of a MFI to provide high quality financial services to a large number of clients" and sustainability is measured by the ability of the MFI to cover all costs, in example loan losses, administrative costs, financial costs etc., without receiving subsidies. The majority of the MFI's are highly dependent on subsidies, which indicates that they are not financially sustainable. They also have an interest rate that not corresponds to their costs, even though most of the rates are higher than the formal market rate. Worth noting is that the oldest MFI's are less dependent on subsidies than newer ones which can be interpreted as a sign that MFI's must be allowed time to become self-sustainable. Since the repayment rates are high, the quality of the loan portfolio is relatively high in all MFI's. When Congo looks at the administrative and productivity of the employees he finds out that the productivity is low in all MFI's. One explanation might be that many MFI's do not have good equipments like computers and management systems. The high administrative and financial cost makes it difficult for the MFI's to be sustainable.

Even though MFI's in Burkina Faso have experienced a rapid growth, the outreach of the MFI's is generally poor. There are still about 92 percent of the targeted poor households that have not been reached. Congo criticises that such a large part as 70 percent of all the granted loans have been short-term loans, he means that the clients are prevented from making long term sustainable investments. He also means that the MFI's should offer not only savings and credits but also other financial services such as insurances and money transfers. Congo emphasise that more attention should be put on mobilizing savings. He also advocates the use of higher interest rates, in order to cover the expenses of the MFI's. He means that the poor households are willing to pay a higher interest rate in order to have access to financial services. (Ibid)

Interview box 1: Clement Ouédraogo, specialist in microfinance in Burkina Faso

To get a deeper knowledge about microcredits in Burkina Faso and its positive and negative aspects we made an interview with Clement Ouédraogo, who has great knowledge about the microfinance sector and who has started a NGO where one part deals with microcredits. We ask him how he feels about microcredits and he declares:

“The people leave poverty in order to end up in misery”

He starts his explanation to this statement by criticising the institutions that deals with the poor people and that give them loans. *“The only thing they care about is the repayment of the loans.”* The reason for this is that the institutions and the banks measure their rentability through repayment rates. He underlines that it is hard for the individuals to repay, because if the individual already is very poor, then he or she might need the money in order to pay medicines, education for the children or even for food in order to survive. He continues and explains that these people may care more about survival for the day instead of making their business work in the long run. The consequence is that many of the loan-takers do not have money enough to repay their loans, although they almost every time manage to do it. When we ask him how they manage to repay without money, M. Ouédraogo says that they make new loans from family and friends in order to be able to repay the banks or institutions. *“The people leave poverty in order to end up in misery, they end up with even more loans than what they started with, and instead of owing money to one institution they now owe money to several people”.*

We continue our interview and ask what he thinks of the solidarity aspect of the grouplending. Then the individuals help each other? He says that the group solidarity might look good on the paper but in reality it might not always work very well. He says that if a group needs one more person in order to have the right to take a loan they might not discuss if that person has the right qualifications. They may choose a person just in order to make the loan because they are in need of money. The last person may not have the ability to repay and then the whole group will have a problem, but they cannot ask her to leave. Another negative aspect with groups can be in the case that one person needs extra money for herself. Then she might convince the others to take extra loans in their names in order to help her. If she does not repay the others the next time, the animatrices will ask the one that has put her name on the loan to repay. M. Ouédraogo says that the women always wants to help each other and may not think of their own best.

He underlines that the system of microcredits works inversely. Within microcredits one starts with a small loan, and if you are successful with the repayment you are allowed to take a bigger loan etc. In his opinion, this should be the inverse, because if you are successful, then you should not be in need of a new, larger loan. M. Ouédraogo means that the lenders falls into a trap. They continue to take loans and live with credit the whole life. They have to borrow in order to buy anything – all the time. He adds that it would be better the inverse way that you start with a big loan and then makes it smaller and smaller.

So what could be done in order to improve the microcredit sector? M. Ouédraogo believes in the microcredits, he himself has a microcredit program within his NGO, but he emphasises that the microcredit program has to be well designed. When giving a loan the responsible should give individual coaching and education in management in order to help the individual to make profits out of his or her business. He adds that the aspect of saving, which each individual undertakes when signing up for a loan, is a good aspect.

After listening to both negative and positive aspects we are interested in knowing whether microcredits can be the answer to poverty reduction and development of Burkina Faso.

“The answer to Burkina Faso’s development is not microcredits – it is education!”

At the moment, the education in Burkina Faso is very scarce. Not many people go to school. And even if they did there is much to develop within the education. M. Ouédraogo tells us that the school system is still built on the French system. They have French school books, they learn how to read and write in French, they learn the French history etc. The education should be about Burkina Faso and since Burkina Faso is such a poor country they should change the education in order to inform children about how to survive and how to act in order to develop their country. The children should learn how to read and write in Moré (the local language). M. Ouédraogo adds that one subject that is very important is the gender question. Women/ girls need to be encouraged and empowered. He says that more women in the government in the future will help the country.

Our final question is about the future. How does the future look like for Burkina Faso, and would the microcredits be of any help? M. Ouédraogo puffs and does not look couraged. *“We need a change. We need a new government. Concerning the microcredits they could be a help, but since the government have plans on decentralising the power, which means that they will create communities, it will end up in the creation of taxes in the rural areas. The institutions and banks dealing with microcredits will get huge problems. The poor people in the rural areas will not be able to pay taxes on their small-scale business. The people in the rural areas will not understand why they have to pay taxes and no one will explain it to them. Because when politicians go out to meet the people in the country they always speak French in order to show their power and the distance between them and the people and the result is that people do not understand.”*

3.3 RCPB and Credit with Education in Burkina Faso

RCPB is a savings and credit cooperative established in 1972. It has 102 branches in Burkina Faso and covers 69 percent of the country's geographical area. RCPB offers short-term savings and loans to 240 000 clients in both rural and urban areas, out of which 24 percent is women. (Congo, 2002)

In Burkina Faso, RCPB provides, among other services, the microfinance program *Credit with Education* targeted to women in rural areas. The program started in 1993 as a joint venture with Freedom from Hunger. The targeted clients are poor women who often lack basic facilities such as electricity and access to health care. There are four objectives with the program; i) raise the incomes that women earn through their market activities; ii) promote savings; iii) reinforce and deepen the bonds of collective solidarity among women, and; iv) improve the client's knowledge about health, nutrition and business management. (Kevane et al., 2002)

Women in the villages are encouraged to form groups of four to six persons: These groups are called solidarity groups. Several solidarity groups (usually six but larger or smaller formations also exist) form a *village bank*, which is called *Caisse Villageoise* (CV). Typically there is one CV in one village. The members of the CV jointly guarantee the repayment of the loan and this group guarantee is the only guarantee needed for the women to be granted a loan. The loan is granted at the same time to all members in the CV and each CV sets up an account at the local credit union, the *Caisse Populaire*, which is a member of RCPB. The CV is then seen as one borrower and counts as a single credit union member. If one member of a solidarity group fails to repay the loan the responsibility lies on the solidarity group. If the solidarity group fails, the responsibility falls on the CV as a whole. If a CV fails to repay the loan it will not be granted a new loan in the future, that is to say that every member of the CV may be penalized if only one fails to repay. The CV is responsible for all bookkeeping of the loans, repayments and savings made. The repayment interest rate is 10 percent of the total amount of the loan. (Coulibaly, N., 2006, Nbariam, 2006)

A CV is established by an *animatrice* (loan officer) working for the RCPB. There is one animatrice functioning in each area and she is normally responsible for around 40 to 50 CV:s. When a CV is established, the members participate in an initial four week education period. During this period the members are given information and education about the RCPB, the CV, the rules and regulations, the repayment and saving procedures etc. Each member is obligated to save CFAF 100 (0.15 EUR) each week during this training period. On the fifth week, when the individuals have saved CFAF 500 (0.75 EUR) each, they are granted their first loan. To be accepted as a creditworthy member of the CV and receive a loan, a woman has to perform a market activity. She has to know the activity well; often she has already performed the activity previously. At the beginning of a cycle, a meeting is held where everyone in the CV is given the loan. Witnesses (normally men) are present and each woman leaves her fingerprint when receiving her individual loan. (Ibid)

There are several loan cycles, each with a minimum and a maximum loan amount. The minimum amount is CFAF 5000 (8 EUR) in each cycle and the maximum varies between CFAF 25 000 (38 EUR) in the first cycle to CFAF 150 000 (228 EUR) in the

sixth cycle. A woman can participate in as many loan cycles she desires. Each loan cycle lasts either four or six months. Usually the first cycles have a repayment period of four months and later cycles have a repayment period of six months, which is the maximum repayment period. When a loan is granted in the first cycles the repayment normally occurs weekly and in later cycles it occurs monthly. (Coulibaly, N, 2006)

The obligatory saving is added to the repayment sum. The amount is usually five percent of the loan, but additionally savings are encouraged. The savings can be withdrawn in the end of each cycle. Additionally, each woman has to contribute with CFAF 300 (0.46 EUR) in each cycle to a group fund. This is a “social fee” that goes to expenses in the village such as schooling or wells, activities that the whole village can benefit from. (Ibid)

At each meeting an educational session is held. In the first loan cycles the education treats questions relating to health and child nutrition. Later on education about business development and management is given. The topics are taken from a module developed by experts from the *Burkinabè Ministry of Health, Social Action and the Family* and examples are breastfeeding, food preparation, diarrhoea treatment, HIV, malaria, vaccinations, management and micro-enterprise. (Kevane et al., 2002)

If a woman has gone through five cycles successfully she can move on to the *second generation* of borrowers where the maximum loan amount is higher than in the first generation. One CV now consists of between 5-10 women and loan amount differs from CFA 100 000 (152 EUR) to CFAF 300 000 (457 EUR). Women who have finished the 2nd generation of loans successfully are entitled to receive *individual* loans at *Caisses Populaires* (the local credit union). (Coulibaly, N, 2006)

Interview box 2: Madame Coulibaly, economist RCPB

We interviewed Madame Coulibaly, who is the economist at RCPB, because she has great knowledge in the program Credit with Education. She explained everything in detail for us and we could see that she was passionate about the program and really believed in it as a solution to help the women in the rural areas.

Most of what Madame Coulibaly told us was positive aspects. We asked her why she believed in the program so much. She informed us that she had been working with this program from its start and she was the one that asked for the study made by Sud Consult. She has followed and seen many women that successfully has continued within the program and taken larger and larger loans. She tells us that there are even some women that have reached amounts of up to one million CFAF (1524,49 EUR) in one loan. Madame Coulibaly is very impressed by the success stories and declares that one day she wants to write a book about these women.

When we ask her if there are any negative aspects of microcredits she admitted that there are several. She states: *“For many women, microcredits help them to get out of poverty, but for some, the situation does not improve”*. She sees the problem within this sector as a coordination problem between the different organisations and institutions that give the loans. *“The area of microcredits is very popular and it is a very current topic at the moment in the media and finally it is the hope of the country and the people to help them develop and to exit from poverty.”* She believes that there are sometimes too many organisations and institutions working with microcredits and women in the rural areas. Since the women are often very poor the natural result of this is that many women take advantage of the situation and take loans from several institutions at the same time. These women have no intention in repaying and often end up with a big sum of money that they use for other things than economic activities. Then they will have great problems when they have to repay. *“There are also women that wants to be in the program in order to get education but they do not want to take a loan”*. She tells us that this is not a major problem but it illustrates the need of education.

We ask her if she has any idea of how they could be better with the coordination. She has two ideas. The first one is about gathering the lists of customers from the different institutions, organisations and banks. Like that they can see if an individual already is member of another program. The other idea is about creating an umbrella organisation over all the microfinance institutions. She suggests that they could have information about which institutions that is operating in which region and with what kind of target group.

Madame Coulibaly sees the poverty and believes that her institution RCPB is doing a good job in helping the women of her Burkina Faso. She has plans for the future in order to improve the sector and in writing a book about the strong women that have succeeded.

Interview box 3: Madame Tassembledo and Madame Nbariam, animatrices

We interviewed two of the animatrices responsible for the Credit with Education in the Ouagadougou region; Natalie Tassembledo and Sane Nbariam. The reason for interviewing them was that we thought that they would know how the women acted and what their thoughts really were. They see the Credit with Education very close from two perspectives; the RCPB and the clients. The two animatrices work six days a week and their assignment is to visit the groups of women in the rural areas in order to collect money, have lessons/educate them, and visit new villages in order to inform them about RCPB and try to form new groups. We interviewed them and also visited some groups of women to see how they collected money and gave lessons in health issues.

First we met the animatrice Nathalie Tassembledo and we asked her what she thought of the idea of making a loan to a group. She informed us that the groups makes all the decisions together and form their own rules, which she finds a good idea. She says that they form the groups on their own, so the members in the group trust each other. We ask whether there is a chance that the group could try and trick the RCPB only in order to get money. *“Oh, no, there is no chance at all, because if they do not repay, then the whole village will be ashamed and get a bad reputation in the surroundings. That would be impossible. And there are also men at the meetings, that are listening as witnesses, and the women would not trick them.”* She finds the program of Credit with Education to be a very good idea and believes that it creates development in the long run. She confirms her thoughts with the knowledge that the women are satisfied with getting better life situations. We continue and ask her to mention some negative aspects of the program. She cannot find any, but tells us that the women are not satisfied with the time of repayment, which they find too short. The time of repayment is often only 6 months, which is a short time. Another drawback that the women have mentioned is the rainy season, when they sometimes cannot work with their business.

The second animatrice that we had the chance to meet was Sana Nbariam, who worked in the same region but in another town. We asked her if she had seen any improvements made by the women she is working with? She told us that she could see an improvement concerning the women’s economy. After being in the program for a while she had seen families that had enough money to buy bicycles and enough to pay for education to their children. *“In the beginning the women had no material things at all”*. She adds that in her opinion the women have also become more loyal, which she believes come from the group lending. We ask her if she has any negative aspects about microcredits. She thinks, as Nathalie Tassembledo mentioned, that the repayment time is too short. She can see that some women have difficulties in repaying in time. We ask: How about microcredits as a mean to help the women to stop their poverty? She answers, *“The government has to help too!”*

3.4 Previous evaluations of Credit with Education in Burkina Faso

Kevane (1996, 2002) have made two qualitative evaluations of the Credit with Education program in Burkina Faso. Kevane visited three village banks with about 20-40 members and the objective of the first study was to investigate program effects for participants after two years of performance. Kevane found that the borrowers increased the scale of their activities, bought larger amounts of inputs and in that way increased their profit margin, for example, they made investments such as larger cooking pots. He also found that the profits were used according to the program goals; to buy more and diverse food, to pay children's school fees and to buy cloths and tools. Kevane means that these positive effects is true for the majority of the women participating in the program, even though there exists a number of women who have not experienced a noteworthy change. Considering the health and nutrition impact, Kevane also here finds positive impacts on the program participants, who had started to give colostrum to the newborn babies, learned how to prepare porridge, and learned when to start giving food to babies and how to treat diarrhoea. One problem emphasized by Kevane was the lack of awareness of risks, for example considering stocks. Many women held disproportionately large stocks, not considering that the price of the product could fall. The author suggested an introduction of risk management in the educational section. (Kevane, 1996)

In his second study, realized in 2002, Kevane visited the same village banks. This time the focus of the study was not on the program effects for participants but on the strengths and weaknesses of the program. Kevane means that one thing reflecting the success of the program is the great expansion that has taken place since 1993, when the program initiated. Even though the technical assistance and financial support from Freedom from Hunger have ended, the program has continued to expand every year. (Kevane, 2002)

Kevane (2002) points out some weaknesses regarding the program design and the implementation of the program. Concerning the program design he observes that after several years the clients were not often the same as from the beginning. He means that the number of members in each village bank should be decreased and more focus should be placed on the penalties from non-repayments. High turnover in economic activities was observed and Kevane suggests better training in best practices. The program design should build up methods to lower the commodity price risk related to the high stocks held by many of the women. For example, commodity price risk insurance could be developed.

Concerning the implementation of the program Kevane observes that in the villages there were different ways of treating debts from clients who had died. Kevane means that the guidelines from the RCPB of how to handle this must become clearer and that the program should induce the members of the village banks to construct repayment plans in the case of sickness etc. Another problem is that since the clients often are illiterate, the animatrice often takes the role as bookkeeper. Kevane found signs of fraud in two of the three village banks, for example in one village where the animatrice did not let the members withdraw the social fund. (Ibid)

Interview box 4: Madame Ouédraogo, program participant

We wanted to talk with some women that are within the program. We met approximately 35 women that receive microcredits. Because of the lack of time and language barriers we did not have the opportunity to interview them. One major difficulty in talking to the women in the rural areas is that many of them do not speak French. We also understood that in order to get trustworthy answers from the women it would take many visits in order to get to know them and then ask the same questions several times to finally be able to use the information. We did get the chance to talk with one of them and ask some questions; Mariam Ouédraogo.

Mariam Ouédraogo is one of the women that are within the program of Credit with Education. We met her after one session of education concerning health and children. She was full of joy and wanted to tell us about how satisfied she was thanks to RCPB. She told us that she had several children that were all in the schooling age. For her, the most important matter was to be able to pay for the children's education. We asked her how she came in contact with RCPB and what made her want to take a loan. *"I had already a business with my husband when RCPB contacted us and when it was relevant to join a group of women."* She continues and tells us that she saw her chance of expanding her business. The business they had at the first time was cultivation. They were gardening onions. *"Since Burkina Faso is heavily dependent on rain, and since here it rains only during two months a year, we were not able to produce our onions all year round."* When she started taking loans, they could install a water pump in order to water the fields, which also grew in size. *"As we live in a small village some kilometres from the capital Ouagadougou, we are not able to sell all our onions here, therefore we are selling them to women, that in their turn go to Ouagadougou to sell them in markets."* She tells us that she is very happy now, since she knows that she will have an income all year round, which gives her and her whole family a security that not many people in Burkina Faso has. We ask her what she thinks of the repayment period? She says that she does not find it to be a problem at all that the repayment period is short. When we ask her whether she has any negative aspects to tell us about the microcredits she says no – one more time.

4. Our study

Our contribution to this subject is to investigate whether the women's *empowerment, knowledge about management and micro enterprises* and *knowledge about child nutrition and health* have improved or not because of the Credit with Education program. We will present the method and the result of our study in this chapter. We will start with a detailed description of the data collection and the method and then continue with a presentation of the results. Finally in this chapter our analysis will take place.

There is a great difference between data collection in a developed country and a developing country. In a well-developed country like Sweden we have facilities like official databases, institutions, organisations and enterprises, both public and private that share information and statistics with other people. When doing surveys with questionnaires and interviews there are facilities like Internet, telephone and most of the people know how to read and write. As in other developing countries, this is not the case in one of the poorest countries in the world; Burkina Faso. There are many difficulties when collecting data even for the institutions or organisations in the country that have knowledge of both the country and the different languages spoken. Even though the official language is French, it is mostly used in the capital Ouagadougou and not very common in the rural areas. Most people in the rural areas do not know how to read or write and most of them have only gone to primary school.

Foreigners are very popular in Burkina Faso and the Burkinabè do everything they can to make you feel welcome. Despite this social aspect it would be needed several meetings, several hours of communication or even living with the families for a foreigner to be able to do an interview were the answers will be truthful. Other researchers that we met during our stay in Burkina Faso were in the country for several years and lived with the people in rural areas and learned how to speak their language.

Since we were in Burkina Faso for nine weeks all together it was not possible for us to collect our own data with our own questionnaires. We decided to contact the institution providing Credit with Education in Burkina Faso, which is also the most well known institution concerning microcredits in the country– RCPB. We were also in contact with UNDP and other organisations with the target to find statistics. RCPB helped us to come in contact with the consultant bureau *Sud Consult* who provided us with the best data available concerning Credit with Education in Burkina Faso.

4.1 Data collection and method

On the commission of RCPB, Sud Consult has made two surveys with the women participating in the Credit with Education program in Burkina Faso. They used the surveys to write a report for RCPB where they presented the differences. The survey contained questions concerning several areas of interest. We took part of the interview answers that treated our question of investigation: *empowerment* (decision-making in the family), *knowledge about management/micro enterprises* and *knowledge about child nutrition and health*. We will analyse the interview answers in order to answer our investigation question. We will also make regional comparisons

concerning the three areas and with the help of scatter diagrams will we investigate if there is any correlation between the answer options.

Since RCPB started the Credit with Education program, several surveys and evaluations have been made. The consultant group Sud Consult criticises these studies since they did not compare the situation of the women with their situation before they received the credits. Some evaluations have compared their results with control groups, and here Sud Consult criticises them since many of the women in the control group have benefited from credits from other organisations. The objective of Sud Consult was to first establish the situation of the women that *will* receive Credit with Education but that has not yet started and then, one year later, ask the same questions to the same women to see if there had been a change. In other words, they wanted to see the difference before and after becoming a program participant in the Credit with Education program. (Coulibaly et al., 2006)

Sud Consult thus made a reference study in 2003, where they interviewed 348 women in three different regions in Burkina Faso. An impact study was made in 2004 and 308 women (the same women as before minus some dropouts caused by death, movements etc) were interviewed. The same questions were used in both studies. (Ibid)

When collecting the data, Sud Consult used a qualitative method with semi structured interviews. When forming the questionnaire they took help from the MARP, *Méthod Active de Recherche Participative*, a method often used in developing countries.⁵ When choosing which regions, *Caisses Populaires*, CV's and women to survey, they used a selection method. They took into account the economic influence of the regions, ethnic diversification, geographical situation and the age of the *Caisse Populaire* in order to create a representative selection group. When choosing the women to interview, they prioritised *women with children in ages between 6 months and 3 years and women that have adopted children in these ages*. They chose three different regions; *ATBM (Boucle du Mouhoun)*, *URCP-CE (Centre-East)* and *URCPO (West)*. From the region *Boucle du Mouhoun* they chose three local credit unions (*Caisse Populaires*), in *Centre-East* they chose five and in *West* they chose four, which gave them a total of twelve credit unions. They chose twenty-four village banks (CV's) and in each CV they chose fifteen women to interview. (Ibid)

In order to fulfil the interviews eleven *animatrices* were given the questionnaires and it took them three months to complete the interviews. Before starting the *animatrices* were informed about how to use the questionnaire and how to follow the MARP. The interviews with the women were divided into two phases; the first time they explained everything and why they were going to do this and the second time they asked the questions. All the questions that we have received the answers to and that we will examine in this paper are also presented in appendix 3. (Ibid)

⁵ MARP is the Francophone equivalent of Participatory Rural Appraisal. PRA is a community-based method used by development practitioners mainly in rural areas when collecting data. The data collection is made by local people, with outsiders facilitating rather than controlling. The method can be used in urban areas as well and often in country economic and sector work. (World Bank Participation Sourcebook)

4.2 Results

In this part we will present the results of our study. This means that we are presenting the answers of the surveys made in 2003 and in 2004 with the women participating in the Credit with Education program. We have chosen to present the results in text form but we have also created charts to give the reader a simple overview of the answers (see appendix 4). The results are divided between the three areas that we are investigating; empowerment, knowledge about business management and knowledge concerning health issues, which is followed by a part where we present the result from a comparison over regions. After presenting the regional outcome we present the result concerning the correlation between the answers. In the end of this section we will analyse the results.

4.2.1 Empowerment

In this part we look into the women's *participation in decision-making in the family*. In the first question the women had to answer who in the family that take the decision concerning *whether they should take the loan or not*. When comparing the answers between 2003 and 2004 there is no change. In both years, between 55 % and 67 % answered that the *husband and wife* take the decision together. 19 % answered *wife* and between 9 and 13 % answered *husband*. The result shows that there has been hardly any change in the answers between the both years and that it is not common for the women to decide on her own if she should to take a loan.

When it comes to who decides about *what to use the loan for*, in 2003 the women have mainly answered either *wife and husband* (41 %) or *wife* (38 %). In 2004 there has been a change towards becoming a decision mainly for the *wife* (77 %) and only 12 % has answered that the *wife and husband* takes the decision together. The result indicates that the womens' position in this issue has been strengthened.

Concerning who decides *how to use the benefit* there was a significant increase in the option *wife* alone. In 2003 the answers were divided principally between the alternatives *wife and husband* (37 %) and *wife* (43 %) and in 2004 the option *wife and husband* was chosen by 13 % of the women and the option *wife* by 77 %. The result indicates, as above, that the wife has strengthened her position in the decision-making concerning how to use the benefit.

The result of the question of *who is deciding about the economic activities in the household* shows not much of a change between 2003 and 2004. What we can see is that the answers are divided primarily between either the *wife and husband* or only the *husband*. The *husband* has straightened his position, from 37 % in 2003 to 46 % in 2004 while the *wife and husband* has slightly declined, from 52 % to 46 %. The alternative *wife* has as low as 8 % of the answers in both years. The results show no major difference in the answers between the two years. The wife does not take the decision of economic activities in the household on her own, but in many cases the wife and husband take the decision together.

A result that differs from the others is the one of *who decides about the family's budget*. What we can see here is that there is a change in the answers between the years. The result in 2003 is divided between *wife and husband* (45 %) and *husband*

(44 %) whereas in 2004 the answers are mainly *husband* (72 %). This shows that there is a noteworthy decrease in the answers *wife and husband* and *wife* and that the husband seems to have strengthened his position concerning the family's budget.

The last question in this area has to do with *who decide about the children's education*. In 2003 the answers are divided mainly between *wife and husband* (56 %) and *husband* (29 %). In 2004 there is a small change towards becoming a decision that is taken together by the *wife and husband* (86 %) and the amount that have answered only *husband* has decreased to 8 %. This result point out that the wife's position has strengthened since she now takes the decision of her children's education together with her husband.

4.2.2 Knowledge about management/micro enterprises

This part is mainly about what the women know about how to act in their own businesses. In this part the women can choose one or several options among the answers.

In the first question the women are asked *how they set the price on their product that they are going to sell*. The answers are almost the same in both 2003 and 2004. Most of them have answered *the price others use* (53-60 %) or *to cover expenses* (41-48 %). There are not many women that have answered the other options of *what the head of the family says*, *what the buyer is ready to pay* or *I do not know how to set the price*.

The next question is also about the price setting but more specifically *what elements to consider when setting the price*. Here, as well as above, there is not a significant change between 2003 and 2004. Between 76-89 % of the women answered that the *purchase price* is the most important factor to consider when setting the price. Almost no woman answered that the following aspects are of importance: *taxes on the sales*, *family expenses*, *interest on loan*, *cost to cover equipments*, *my salary* or *I don't know*. The results indicate, as in the previous question, that there is not much of a change in their answers between the years.

When the women are asked *what the profits correspond to*, most of them have answered either *revenues of selling my product* (19 %) or *revenues of sold products minus expenses* (55 %) in 2003. Remarkably, the following year the percentage answering *revenues of selling my product* has increased to 44 % while *revenues of sold products minus expenses* have decreased to 44 %. Not many of the women have answered the remaining options of *interest rate on my loan*, *my salary* or *my consumption*.

The women are then asked about what they *know about their surplus*. In 2003, 35 % of the women are sure that their surplus *cover the purchase price of the product*, 16 % answers *give them a salary* and 31 % *pay the taxes and expenses*. 10 % answered that the surplus *covers the interest rate of their loan*. In 2004 there is a notable increase in the answer option *purchase price of the product* to 68 %. There is also an increase to 28 % in the option *cover the interest rate of my loan*. The women answering *pay the taxes and expenses* have decreased to 15 % and *give me a salary* have decreased to 3 %. The results indicate a change between 2003 and 2004.

The following question is *when to order/buy new products*. In both 2003 and 2004 the women have chosen the options of *when they are sold out*, *when they soon will be sold out* or *when I have money*. Even though they chose the same options the percentage of how many women that did it changed slightly over the year. The result shows that there is an increase in the amount choosing *when they will be sold out soon* from 36 % to 54 % and a decrease in the answer *when they are sold out* from 47 % to 40 %. The option *when I have money* has decreased from 35 % to 20 %.

In the last part the women are to answer the question: *Under what circumstances do you have to sell more expensive or less expensive according to you?* In both 2003 and 2004 the most frequent answer is *more expensive when others do not sell the product*, where we can see an increase from 44 % to 63 %. In 2003 many women answered *less expensive to sell more* and *less expensive when I need money*. In 2004 we can see a considerable decrease in these two aspects from 25 % to 9 % and from 22 % to 10 %, respectively. One option that has increased is the answer of *when the client does not have money* concerning when to sell less expensive, from 4 % in 2003 to 13 % in 2004. The result as a whole concerning the above answers indicates that the women have changed their mind during the year even though the pattern is not very clear. The clearest improvement is that the women in 2004 have got the knowledge of increasing the price when others do not sell the product.

4.2.3 Knowledge about child nutrition and health

The first question is *whether you should give colostrums to the child or not*. The results are surprisingly different between 2003 and 2004. In 2003, the majority of the women (70 %) answer *no* compared to 2004 when the majority answered *yes* (89 %). Since colostrums is very important for the child in the beginning of its life in order to prevent infections etc., the result is very promising. The result indicates that the women in 2004 are aware of the importance of giving colostrums to their children.

The second question is *at what age (months) the women should start giving porridge to the child?* In both 2003 and 2004 most of the women have answered between *4 to 6 months*. If we look closer at the result we can see that in 2003, 18 % of the women answered *1 to 3 months*, 61 % answered *4 to 6 months* and 11 % answered *7 to 10 months*. If we look at 2004, 3 % answered *1 to 3 months*, 85 % answered *4 to 6 months* and 7 % answered *7 to 10 months*. The result indicates that the knowledge concerning when to start giving porridge to the child has increased.

The following question is *at what age (months) the women should wean the child from the breastfeeding*. Most women have answered either between *24 to 26 months* or *more than 35 months*. In 2003 the division between the two years is almost equal: 49 % for *24 to 26 months* and 41 % for *35 months or more*. In 2004 we can see that the option of *24 to 26 months* has increased to 57 % and the option of *more than 35 months* has decreased to 33 %. The result indicates that the women have learned that the best for the child is to be weaned after 24 to 26 months. This is a result that will lead to improvement in the health of the child, even though many still believe that you should wait more than 35 months.

When asking the women *if they control and try to prevent diarrhoea*, there is, as well as above, a significant change between year 2003 and 2004. In 2003, 19 % answered *yes* compared to 82 % in 2004. The result indicates that the women's knowledge about how to prevent diarrhoea has increased and that they try to prevent it to a much greater extent.

The two last questions have to do with family planification. The first question is *whether the women have got information about family planification or not?* 74 % answered *yes* in 2003 and 88 % answered *yes* in 2004, which is a relatively small increase. The second question that is related to the first one is *whether the women use contraceptives or not*. What we can see here is an increase from 19 % to 38 % between 2003 and 2004. The results indicate an improvement in both aspects.

4.2.4 Regional differences

In order to see if there were any differences across regions we created charts where we divided the questions and answers between the three regions. When looking at the questions all together we observe large regional differences. What will follow here is a conclusion of the results.

Concerning decision-making:

In the region of Boucle du Mouhon, the answer *wife* has increased only in two questions, concerning *who decide what to use the loan for* and *who decide how to use the benefit*. The answer *wife and husband* has increased concerning *who decide whether to take a loan*, *who decide what to use the loan for*, *who decide how to use the benefit* and *who decide about the children's education*. At the same time and quite surprisingly, the answer *husband* has increased regarding almost all questions, except for the question about the children's education.

In the region of Centre-East, the answer *wife* has increased concerning the same questions as above, *who decide what to use the loan for* and *who decide how to use the benefit*. The *wife and husband* has increased about *who decide whether to take a loan*, *who decide about the household's economic activities* and *who decide about the children's education* and decreased regarding the remaining three questions. In this region, the *husband* has only strengthened his position concerning *who decide about the family's budget*.

In the third region, West, the *wife* has strengthen her position concerning *who decide whether to take a loan*, *who decide what to use the loan for*, *who decide how to use the benefit* and *who decide about the household's economic activities*. The *wife and husband* alternative has increased only on the subject of the children's education and the answer *husband* has experienced no change except for the question about the children's education, where his power has decreased.

To conclude we can from the results see a tendency of convergence between the regions concerning decision-making in the family. In 2004 the regional differences are slightly smaller than in 2003 and we can see that the women across regions are more agreed to the same answer. The region that has experienced the largest change

between 2003 and 2004 is without doubt the Western region, where the empowerment of the women has been largest.

Concerning knowledge about management/micro enterprises:

In the region of Boucle du Mouhon, the knowledge has increased about that the selling price should *cover the expenses* and that *the purchase price* should be considered when setting the price of a product. Considering the profit, a majority of the women believed in 2003 that the profits correspond to *revenues of sold products minus expenses*, while in the 2004 the majority believed that it correspond to only *revenues of the sold products*. This implies a *decrease* in knowledge. Further on, there is a large change in the answers considering the question about *what the surplus cover*. The options *cover the purchase price of the product* and *cover the interest on my loan* have increased greatly while the options *give me a salary, pay taxes and other expenses* and *pay the equipments* have decreased. There has been an rise in the knowledge about that you should order the products *when they will soon be sold out*, even though the number of women answering *when they are sold out* also increased. The results indicate that the women have learned that they can raise the selling prices when *other does not sell the product*.

Almost all women in the Centre-East region have in 2004 answered that you have to consider the purchasing price when setting the price of a product. This is a major increase compared to 2003. When looking at the price setting more people have answered that they *use the price others use* and less people have answered that the selling price should *cover the expenses*. Almost all women have responded that the profits correspond to *revenues of sold products minus expenses* and less responded only *revenues of sold products*. In this region the knowledge thus has increased when looking at this aspect. Considering what the surplus covers, there has been an increase in both the answer *cover the purchase price of the product* and *cover the interest on my loan*. Also the option *pay the equipments* increased while the other options decreased. There is a major increase in the belief that you should order the products *when they will soon be sold out* and a major decrease in the belief that you should order new products *when they are sold out*. Surprisingly many women answered that they order *when they have money* (47 % in 2004 compared to only 6 % in 2003). Also in this region more women answered that they can sell their product more expensive *when others do not sell the product*. When asked when to sell the products less expensive, the alternatives *to sell more* and *when the client does not have money* increased considerably and the option *when I need money* also increased.

In the region of West, when looking into what the women consider when setting a price of a product, the option *cover the expenses* has increased while the option *the price other use* has decreased. In 2004, less people than before think that they have to consider the *purchase price* when setting their selling price. More people have answered that their profits correspond to the *revenues of sold products* and less people have answered that it correspond to *revenues of sold products minus expenses*. This implies that their knowledge has worsened also in this region. Considering what the surplus cover, there has been a major decrease in the belief that it covers *the purchasing price* and a major increase in that it covers *the interest on the loan*. Considering when to order new products, there is no change between the years. About

the same amount of people have answered either *when they are sold out* or *when they think they will be sold out soon*, both years. There is not a large change when looking into when to sell the products more or less expensive either. The only thing worth to mention is the increase in belief that you should sell *more expensive to get more money* and the decrease in belief that you should sell *less expensive when you need money*.

To conclude the regional results concerning knowledge of the market, there is a large difference across regions in both 2003 and 2004 and there is no tendency of convergence between the regions concerning this issue. The knowledge has worsened in some regions considering some aspects and improved considering others. There is no common pattern, except for the question about what the surplus should cover, where there has been an increase in all regions in the belief that it should *cover the interest on the loan*.

Concerning knowledge about child nutrition and health:

In all regions, the knowledge about child nutrition and health has increased noteworthy. The knowledge about that you *should give colostrums to the child*, at *what age you should start to give the child porridge*, at *what age the child should be weaned* from the breast milk, *how to control and prevent diarrhoea* as well as the *knowledge about family planification* and the *use of contraceptives* has increased in all regions studied. In 2003 there is a larger difference in the answers across regions. In 2004 there has been a convergence of knowledge between the regions concerning these areas.

4.2.5 Result of correlation

When looking at the results above we can see that the two aspects that have improved are health and decision-making. Therefore, we have chosen to create cross tabulations and scatter diagrams in order to investigate if there is any correlation between the answers. We wanted to see if the women that decided more in the families also have more knowledge in health issues. The scatter diagrams do not indicate that there is a correlation between the two variables. We can only see a small movement of the two variables indicating the already confirmed results; a greater knowledge in health and the empowerment of the women in 2004 compared to 2003. The cross tabulations validate that there is practically no correlation between the answers in the two areas, the Phi coefficient⁶ and the Cramer's V show only a weak positive association between the variables. (See appendix 5 for presentation of the scatter diagrams, cross tabulations and a detailed description of the method)

⁶ Phi coefficient between 0,3 and 0,7 indicates a weak positive association

4.3 Analysis

We will start analysing the result above one at a time and link them to theories and earlier studies. We will continue with an analysis that is more general over the subject as a whole. Every part of the analysis is followed by a concluding comment *in italics*.

In the area of decision-making in the family we see that concerning two questions (*whether to take the loan or not* and *who is deciding about the economic activities in the household*) there were no major change in the answers between the years. The results indicate that the Credit with Education program has not had an impact on the women's empowerment concerning these questions. When looking at *who decide about the family's budget*, the husband is the one who have improved his position. On the other hand, when looking at the remaining three questions (*what to use the loan for*, *how to use the benefit* and *who decide about the children's education*), the results indicate that the womens' power in the decision-making has improved between 2003 and 2004. This result suggests that the women have been strengthened through the program of Credit with Education, mainly when it comes to *her* loan and *her* profit.

What is the explanation of that the husband's decision-making concerning the family's budget and the household's economic activities increased? May that be because the wives decisions have increased concerning the aspects within their own loan and then the husband takes more control of their common part? If that is the case, the Credit with Education might not have succeeded in empowering the women concerning the family's decisions, only concerning their own activity. On the other hand, the women have learned how to deal with a project of their own, where the husband does not have the power to decide. This might empower the women, when they see that they can handle something on their own. If we see the development through this angle, then we can conclude that the women has gone from first being a part of taking some decisions with their husbands to making decisions totally on their own. That is an improvement that should increase the power of the women. The question that deals with the children's education shows that the decision is taken together between the wife and the husband, which means that the women seem to have become stronger in the family and is taking decisions that are not only of an economical nature.

As we have learned through this paper the empowering of women does not only lead to their own development and strength within the family. According to various studies (Burjorgee, 2002, Yunus 1999 etc.), the women prioritise the development of the whole family and when she gets to take the decisions it leads to development for the whole family. This in turn leads to more children going to school, a greater number of educated people in the nation which in the long run leads to development according to the human capital theories. It is not a coincidence that most MFI's in the world prefer to give the loans to women as the earlier studies indicate. Yunus, the founder of the Grameen Bank, even changed the purpose for giving the loans to women from avoiding discrimination to promoting development. He did that after seeing that giving credits to the women led to faster development.

When giving loans to women most MFI's choose to give them in groups in order to have a collateral. This leads to that the women can choose which persons to invite to

their group and they can monitor each other. From the theories about women's empowerment, that defines empowerment as increase in *option, choice, control* and *power*, we draw the conclusion that this formation of groups might as well strengthen the women. At the same time the groups decreases the adverse selection and the moral hazard, which enables more organisations to avoid the problems of asymmetric information and to venture into the business of microcredits. What we are assuming here is that the group lending both is empowering the women and strengthening the MFI's.

Another aspect of the groups that we find very interesting is that when the women gather under that tree in order to take new loans or to repay earlier ones they get the chance to meet other women in similar situations. The women have much responsibility within the homes with finding food, cooking, taking care of children etc; duties that take much longer time in Africa than in Europe because of the lack of resources like electric cooker, supermarkets etc. When sitting there under the tree they might find common problems or common solutions without the men sitting there beside them telling what to do. These meetings is a chance to meet other women and at the same time an animatrice from RCPB is there to empower them and to give them education, only them – the women.

From the results of the questionnaires we draw the conclusion that the program Credit with Education has lead to the empowering of the participating women when it comes to decisions concerning what to use the loans and the benefits for as well as the children's education. Theories and earlier studies suggest that this increase in the women's decision-making concerning children's education should lead to sending the children to school to a larger extent. The position of the women concerning whether to take a loan, general economic activities as well as the family's budget has not been strengthened.

If we continue with the next area, which deals with the market and the business management, the pattern is not that clear as above. When analysing the results we see that there is not a significant change between the two years of 2003 and 2004. There are only some aspects that are worth mentioning. One of them is that the women seem to have learned that the surplus must cover the purchase price of the product and the interests of the loan. Another positive change is that they have learned to order the products in time. Two remarkable observations are that the women have got *worse* knowledge about what the profits correspond to and that the belief that you should decrease your price in order to sell more products has *diminished*.

The above results reveal that in the few questions were we can see any positive change in knowledge, RCPB almost certainly have a large interest. For example, they care about that the surplus should cover the interests on the loans. We believe that the reason for the scarce change in business knowledge is that the study is done with only one year of difference. We have been informed that the education of the women starts with health issues and that business management comes later on, in later loan cycles. It might be the case that the education about business management are in the initial phase or even did not start in some of the CV's. The groups generally meet only once a month and since the education session only is about 15-20 minutes it takes a long time to move on to the next subject, which would be business management.

As mentioned, the result indicates that the women have learned some important aspects concerning business management, which in our opinion could have to do with the interest of RCPB. The specialist Clement Ouédraogo supports this belief, even though he is much more critical and believes that many MFI's only care about their repayment rates. We will not go that far but we understand the importance of the repayments because without them many MFI's would not exist.

The aspects of price setting are very important according to us. What we have learned during our field trip is that the price setting is not something as easy to understand as one might think when living in the western world where everybody seem to know how to make profits etc. In developing countries it might not always be the case that the people understand the importance of buying at one price and selling at a higher price. We believe that the women could earn much more money if they were more business minded. If they could earn more they would be able to save more and to consume more, which, according to the economic growth models will lead to faster growth. Microcredits is a good start that enables the women to start their business, but in order to increase their own capital stock, business and profit there is a need of learning more about business management. In order to expand their businesses the women are in need of personal coaching. This is what Clement Ouédraogo suggests and this is what we believe in too.

The evidence from the results suggest that the Credit with Education program has not achieved its goal of increasing the women's knowledge about business management, during the years studied. We want to underline the importance of the above subject and we suggest that this is an area that needs more effort from RCPB.

The third and probably the most interesting aspect is the health issue. The results show very clearly that the knowledge about child nutrition and health has improved. Concerning some aspects, as when to start giving porridge to the child, when to wean the child from the breastfeeding and the questions concerning family planification, the improvements are smaller. Concerning whether to give colostrums to the child and how to control and prevent diarrhoea the improvements are greater. Since RCPB started with the educational part concerning these issues from the very beginning of a person's first loan, we draw the conclusion that this improvement in knowledge has a direct connection with the Credit with Education program of RCPB. The women have learned that they should give colostrums to their children, they have learned how to prevent and treat diarrhoea and much about how to feed their children. All these aspects lead to better health, decreasing diseases and lower child mortality. The fact that many women do not use contraceptives (even though the number has increased) probably have many explanations such as traditions, gender inequalities, and the non-availability of contraceptives.

An obvious basic condition for development in poor countries is, as we have learned through both the theories and earlier studies in this paper, a good health. Without the health there is no strength and willingness to work or to go to school. Our results indicate that teaching basic health knowledge and giving easy tips about how to improve the health through small means that do not cost anything is a good idea. What in concerning us is that these simple health improvements for the children are

not enough. There are more serious illnesses for both children and grown-ups that are in need of medicine or hospitals. These are services that cost money. This may lead to, as Clément Ouédraogo mentioned, that the microcredits that the women get are used for medicines instead of economic activities. In this case the women might lie to RCPB in order to get a loan. This can create a problem for the indebted women as well as for RCPB. The group liability as well as the close relationship between the group members and the animatrice helps reducing this problem. Theories about microcredits and the problems of imperfect information (Morduch 1999, Walid Seddiki et al. 2005) confirm this statement.

The results show that there is an improvement concerning the knowledge of health issues for the women participating in the Credit with Education program. This improvement in health knowledge is according to us a very important result, since in order to have strength to start a business and be able to make profits and in that way break the vicious circle of poverty you are in need of a good health.

After studying the results we wanted to see whether there were any regional differences concerning the three areas of investigation. We found large differences in the regions in 2003, differences that to some degree seemed to converge in 2004. The most puzzling result is the result concerning the knowledge about management/micro enterprises. In two regions, the knowledge about what the profit correspond to has experienced a major decrease. Concerning the remaining questions the answers are very different, the knowledge goes up and down without pattern comparing the both years with each other. The fact that all regions in 2004 increased the belief that the profit should cover the interest of their loan strengthen our argument above, that the RCPB priorities the areas of great interest to them. The improvement in knowledge about child nutrition and health across all region shows that Credit with Education has had an impact on the participating women in all region concerning these questions.

It is hard for us to say what the regional differences depend on since there is a great lack of regional information concerning most areas and we can only speculate. At the moment communities does not exist in Burkina Faso, which makes regional data even harder to obtain. If we look at the geographical differences, all three regions are on the southern half of Burkina Faso, which means that the weather conditions and soil conditions should be rather similar. The different regions have different distances to firstly Ouagadougou and secondly to other land borders. This might influence the businesses that are already going on in the areas. The region of Centre- East for example is rather close to Ouagadougou, which might lead to more business with the capital or with people from the capital. It is a bigger chance that they have been in the capital, where there is a chance that they have learned more efficient ways of selling their products etc.

The fact that the educational part starts with health issues explains the increase in knowledge across all regions concerning this area. It might also be the case, as mentioned earlier in this analysis, that the education concerning business management has not yet started in some CV's or is in its initial phase. But why the decrease in knowledge? This might be a sign of the importance of a good manager and teacher, that is to say a good *animatrice*, who put effort in giving the women

correct knowledge in all areas. Kevane (2002) showed signs of fraud in his study of the CV's in Burkina Faso, which indicates that not all animatrices are following the guidelines of RCPB. One explanation might be that they did not follow the education module to the same extent in different regions.

We can from the regional results draw the conclusion that the Credit with Education program has achieved to increase the knowledge of the women concerning child nutrition and health in all regions participating in this study. The program has also impacted the participating women concerning empowerment, but to different degrees in different regions. The region where the women have been most empowered is the region of West. The program has failed to increase the knowledge of business management in all regions for the years studied. Because of the lack of data and facts about the regions we can only speculate about the reasons of the sizeable differences across regions concerning many aspects and we admit that this subject would be very interesting to investigate further.

When analysing the result as a whole we can see that the Credit with Education program has had a great effect on the participating women concerning the area of education in child nutrition and health. The program has had a smaller but still a notable effect concerning the empowerment of the women, specifically in the region of West. The last field of investigation in this thesis was the education about management/micro enterprises. In this area, the program has failed. Even though we do not see any change in the last issue, we interpret the results as promising. This is because the results concerning health indicate that the education given by RCPB is effective. The education about management is still in its initial phase and we draw the conclusion that when the education in business management has come a bit further, the knowledge concerning these question will increase.

When collecting information about the subject both on earlier studies and facts from institutions and organisations, both in Burkina Faso and in Sweden and when meeting the people in Burkina Faso, we tried to stay as neutral as possible concerning whether microcredits were good or not for the development. We have not found much that is negative on microcredits. Most of the researchers, most of the people, most of the leading organisations in the world, among them the UN, believe that microcredits is a tool for fighting poverty and reaching the Millennium Development Goals concerning education, health and women's empowerment. But, it is not the only answer to development. We consider the Credit with Education program as a means to decrease the individual's budget constraint, increase women's empowerment and wealth as well as to give the women of Burkina Faso information. Information about health, management and also about other essential things as the high return to education (Todaro et al., 2003) If the mothers knew that the return is that high on education after the primary education then several families probably would put their children in secondary school and then even in universities.

As our theories about growth explain, health, education and women's empowerment are some of the fundamental aspects of development. The people of Burkina Faso are in a great need of improvements concerning all these aspects. They need to develop their health sector and they need more and better education. They need an education that is built on aspects concerning Burkina Faso and that include information of how

they can affect their own lives and their own future. The women need to have power over their own body, they need to know how their body is affected by different circumstances, they need information and education about how their children are affected by the nourishments etc. These are aspects that are natural and obvious to us but not to all women in Burkina Faso. When the three aspects of health, education and women's empowerment are improved we can start talking about growth and development of a nation as a whole. This is what we have shown through all the earlier studies that we have presented in this paper. Most of the papers are very positive to the microcredits and the programs that include education and mean that access to microcredits have a positive effect on the individuals. Our study supports this result. At the same time most of the studies underline that there are more aspects apart from microcredits that are needed to develop a poor country; health, education, empowering of women, economic growth but also the intervention and the help from the government.

Concerning RCPB and their program Credit with Education, our results show that the program has had a positive impact on the individuals' participating in the program concerning various aspects. Another thing indicating the success of the program is the great expansion during the years. RCPB today covers all regions in the country and the number of clients in the Credit with Education program has steadily grown. The repayment rates have increased and are today reaching 100 percent. (Congo, 2002) When looking at the ways to measure a good performing MFI, RCPB receives good grades both when considering the welfarist approach and the institutionalist approach. Despite that, we do believe that there are drawbacks with the program. Firstly, all loans granted in the Credit with Education program are short-term loans with a repayment period of 4 to 6 months. Through our interviews with the animatrices we got the negative aspect of that the repayment period was too short. This view is supported by Congo (2002) who argues that the short-term loans do not allow the individual to make any larger investments. We understand the idea of granting loans on short term in the very beginning, when the women are not used to taking loans. But after a few loan cycles we suggest RCPB to offer loans on longer terms to the women.

Secondly, the interest rate on the loan is high considering the short repayment period. This, as well as the findings in Congo (2002), indicates that the management is not efficient. We saw how both the company management and the staff at the local credit unions worked. They hardly have equipments like computers and Internet is only available to the secretaries of the company managers. The telecommunications network is not well expanded. All this leads to that in order to give information to the local credit unions and other branch offices, the only way is through sending letters. Another example is that the only means of transport for the animatrices when visiting the village banks is mopeds. We advise RCPB to find ways to improve their staff productivity and lower their administrative costs.

Since a good health is fundamental for reducing poverty, we believe that one of the best aspects of the Credit with Education program is that they are giving education about health. But we do not consider this as sufficient and we support the view of Clement Ouédraogo that education in management is equally important. We suggest that the Credit with Education program should change its educational structure and

mix the topics of health and business management from the very beginning. This would lead to more effectively run businesses and higher profits of the women. This may in turn lead not only to faster growth and development but also improvement and expansion of RCPB.

The economist at RCPB, Madame Coulibaly, informed us about that there is no cooperation at all between all the MFI's in Burkina Faso. In our opinion they are in urgent need of this. Firstly in order to decrease moral hazard and adverse selection and secondly it would lead to a more efficient work. We would like to suggest the establishment of an umbrella organisation or alternatively an exchange of the registers between the MFI's, to start this cooperation.

We have learned from earlier studies (Morduch 1999, Congo 2002 etc.) that most MFI's are subsidised, even though there are some examples of financial sustainable institutions. We did not have access to information about the financial sustainability of the Credit with Education program in Burkina Faso or about RCPB as a whole. But we know that the technical assistant and financial support from Freedom from Hunger have ended several years ago. This does not exclude the possibility that RCPB is receiving subsidies from other sources. Concerning the matter of subsidies, we believe in the welfarist approach. We believe that microfinance is such an important tool in fighting poverty that subsidised programs is a matter of course. With this we do not want to say that the programs should be subsidised forever, the MFI's must strive for financial sustainability in order to allocate the financial resources more effectively. Evidence from Congo (2002) shows that older MFI's in Burkina Faso are less dependent on subsidies than newer ones, which indicate that the MFI's must be allowed time to become financial sustainable. A good idea according to us is to give subsidies on finite time.

Finally, one might want to discuss the advantages and disadvantages of providing financial services together with social services. Is it not the case that the interests become divided, and should it not be more effective to have two totally separate programs, one for microfinance and one for education, that work towards their goals independently? The fact that our results show that the only improvement concerning knowledge in decision-making is that the women learned that their profit must cover the interest of their loan confirms this idea. But reviewing the literature we have seen that there are several advantages of offering the two services together, by the same institution (Ohri, 2004). Especially in MFI structures working through group lending and village banking, where the groups meet regularly to repay the loan, it is very suitable and cost effective to offer the services together. An example is that RCPB already knows the women and have many contacts in the rural areas and therefore it may be easier for them to give the education than a new organisation. There is also the fact that RCPB offers loans and access to money, which may lead to that more women are interested in attending the education sessions and in that way it is more efficient than for a new organisation that only offers education. The loan becomes an incitement for attending the education.

We would like to see further research on the subject concerning the advantages and disadvantages of providing financial and social services together. One interesting angle would be to compare and investigate the efficiency of the three methods of

providing financial services together with social services; linked service, parallel service and unified service. It would be interesting to see how the three systems differ concerning interests, goals etc. When the same organisation offers both credits and education, are the interests divided and is it as effective as two programs working alone?

We also see a need of more research on the subject of microfinance in general. We wish to see more impact studies made with quantitative methods and econometric tools, in order to receive more general results and relations. In order to do so, there is a need for increased data collection through household surveys. Concerning qualitative impact studies we see a need of studies made with proper control groups, randomly selected and representative groups.

As a concluding comment on our analysis we would like to confirm that the sector of microcredits is promising for the future. We believe that the results that we have contributed with show the success of RCPB's program of Credit with Education in Burkina Faso concerning various aspects. There may be some drawbacks and there may be improvements to make but as a whole we support their program.

5. Conclusion

The purpose of this paper was to investigate if the Credit with Education program provided by the microfinance institution RCPB in Burkina Faso has had an effect on the participating women concerning their *empowerment, knowledge about management/micro enterprises* and *knowledge about child nutrition and health*. Our findings suggest that the Credit with Education program has achieved to increase the women's knowledge concerning child nutrition and health. The program has had a smaller but still a notable effect concerning the empowerment of the women, specifically in the region of West. The program has failed to increase the knowledge of business management in the years studied. We see the results as promising since we know that the education in business management is in its initial phase and the results concerning health indicate that the education given by RCPB is effective. Concerning the regional results we can conclude that there are differences across regions that we are not able to fully explain because of lack of information and data. Our examination of the correlation between decision-making and health shows a weak positive association, but not strong enough for us to make a connection between the two. Limitations of our investigation method is that our results are only true for the number of women that are included in the survey and we cannot draw conclusions for the whole country or for microfinance program in general.

Our results, the majority of earlier studies reviewed as well as theories presented in this paper support the idea that microfinance is an important tool to increase individual's wealth, increase women's empowerment and fight poverty. When it comes to development on a macro level we underline in our analysis the importance of a good health sector and educational system as well as the empowerment of women. We draw the conclusion that these factors as well as a good governance are crucial for Burkina Faso to develop.

Even though we are positive to the Credit with Education program in Burkina Faso on the whole, we recommend certain improvements. *Firstly* we suggest that RCPB give loans also on longer terms in order for the women to be able to make larger investments for their businesses. *Secondly* we would like to see a more efficient administration and an improvement of the staff productivity, which in turn could lead to improvements of the whole institution. *Thirdly* the education topics should be considered given in another order. We suggest that RCPB give more attention to education in business management at an earlier stage together with the health education because of the great importance of knowing how to make profits. *Fourthly* the MFI's in Burkina Faso are in need of an umbrella organisation or an exchange of registers in order to improve the whole sector and decrease the problems of imperfect information.

We have learned through this paper that there is a great need of more research on the subject; research made with representative selection groups and randomly selected groups. There is also a need of an increased data collection in order to be able to make quantitative studies.

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Ouédraogo, C. P., president, Association de soutien aux enfants en circonstance Difficile

Ouédraogo, M., participator in the Credit with Education program in Tanguin Dassouri.

Appendix 1 – Dimensions of women’s empowerment

Dimension	Household	Community	Broader Arenas
Economic	Women’s control over income; relative contribution to family support; access to and control of family resources	Women’s access to employment; ownership of assets and land; access to credit; involvement and/or representation in local trade associations; access to markets	Women’s representation in high paying jobs; women CEO’s; representation of women’s economic interests in macro-economic policies, state and federal budgets
Socio-Cultural	Women’s freedom of movement; lack of discrimination against daughters; commitment to educating daughters	Women’s visibility in and access to social spaces; access to modern transportation; participation in extra-familial groups and social networks; shift in patriarchal norms (such as son preference); symbolic representation of the female in myth and ritual	Women’s literacy and access to a broad range of educational options; Positive media images of women, their roles and contributions
Familial/ Interpersonal	Participation in domestic decision-making; control over sexual relations; ability to make childbearing decisions, use contraception, access abortion; control over spouse selection and marriage timing; freedom from domestic violence	Shifts in marriage and kinship systems indicating greater value and autonomy for women (e.g. later marriages, self selection of spouses, reduction in the practice of dowry; acceptability of divorce); local campaigns against domestic violence	Regional/national trends in timing of marriage, options for divorce; political, legal, religious support for (or lack of active opposition to) such shifts; systems providing easy access to contraception, safe abortion, reproductive health services
Legal	Knowledge of legal rights; domestic support for exercising rights	Community mobilization for rights; campaigns for rights awareness; effective local enforcement of legal rights	Laws supporting women’s rights, access to resources and options; Advocacy for rights and legislation; use of judicial system to redress rights violations
Political	Knowledge of political system and means of access to it; domestic support for political engagement; exercising the right to vote	Women’s involvement or mobilization in the local political system/campaigns; support for specific candidates or legislation; representation in local bodies of government	Women’s representation in regional and national bodies of government; strength as a voting bloc; representation of women’s interests in effective lobbies and interest groups
Psychological	Self-esteem; self-efficacy; psychological well-being	Collective awareness of injustice, potential of mobilization	Women’s sense of inclusion and entitlement; systemic acceptance of women’s entitlement and inclusion

Appendix 2 – Facts about Burkina Faso



Bordering countries: Benin, Cote d'Ivoire, Ghana, Mali, Niger, Togo

Government type: Parliamentary republic

President: Blaise Compaoré (1987)

Independence: 5 August 1960 (from France)

Capital: Ouagadougou

Population: 13,902,972 (2006)

Population growth rate: 3% (2006)

Nationality: Burkinabè (singular and plural)

Ethnic groups: Mossi over 40%, Gurunsi, Senufo, Lobi, Bobo, Mande, Fulani

Religion: Muslim 50%, indigenous beliefs 40%, Christian (mainly Roman Catholic) 10%

Languages: French (official), native African languages belonging to Sudanic family spoken by 90% of the population

Population below poverty line: 45 % (2003)

Literacy: 26.6%

Life expectancy at birth: 48.85 years (2006)

Infant mortality rate: 91.35 deaths/1,000 live births (2006)

People living with HIV/AIDS: 300,000 (2003)

GDP (PPP): USD16.95 billion (2005)

GDP/cap (PPP): USD 1,300 (2005)

Inflation: 3 % (2005)

Monetary unit: CFA franc

Natural resources: manganese, limestone, marble; small deposits of gold, phosphates, pumice, salt

Main export products: cotton, livestock, gold (2005)

Main import products: capital goods, foodstuffs, petroleum (2005)

External debt: USD1.85 billion (2003)

Economic aid recipient: 468.4 million (2003)

History and political situation

During the second half of the 19th century the French expanded their territory and colonized a great part of the western Africa, which broke up the traditional Mossi states. In 1932, the French divided their Western Africa into Ivory Coast, French Sudan (today Mali), Niger and Upper Volta (today Burkina Faso). During 60 years, the French held Western Africa and during this time they focused principally on Ivory Coast and did little to develop Upper Volta. (Hagberg, 2001)

The independence came in 1960. The first president, Yaméogo, was very autocratic and banned all oppositional political parties. During the following decades there were several military coups and the last one was in 1982 when Captain Thomas Sankara seized power. (Hagberg, 2001)

Sankara was from the left-wing and started a profound economic and political change with focus on self-adjustment, self-reliance (domestic products was favoured) and anti-corruption policies. He renamed the country to Burkina Faso, which means *Country of Honest Men*. (Hagberg, 2001) Except for fighting corruption, Sankara put

effort in social programs as vaccinating the children and improving education. (Nationalencyklopedin, 2006)

The social progress was unfortunately not followed by economic progress and stability. In 1987 a group of officers shot Sankara and seized power. One of them, the new president, was a former friend and co-revolutionary of Sankara. Captain Blaise Compaoré is still the president today. Today, there are more than 60 political parties in the country but the fraud is still extensive. There have been several elections since the coup and Compaoré has won every time with suspect high percentage of the votes. (Hagberg, 2001) Burkina Faso remains one of the more stable countries in the region, even though there have been demonstrations with demands for greater democracy as late as in the year of 2000. (Nationalencyklopedin, 2006)

Appendix 3 - Survey questions

The questionnaire is divided into three different parts.

Part one: Decision-making in the family

Question 1: Who decide whether to take a loan or not?

Answer options:

- Wife and husband
- Husband
- Wife
- Other family member
- Friend
- Do not know

Question 2: Who decide what to use the loan for?

Answer options:

- Wife and husband
- Husband
- Wife
- Other family member
- Friend
- Do not know

Question 3: Who decide how to use the benefit?

Answer options:

- Wife and husband
- Husband
- Wife
- Other family member
- Friend
- Do not know

Question 4: Who decide about the household's economic activities?

Answer options:

- Wife and husband
- Husband
- Wife
- Other family member
- Do not know

Question 5: Who decide about the family's budget?

Answer options:

- Wife and husband
- Husband
- Wife
- Other family member
- Do not know

Question 6: Who decide about the children's education?

Answer options:

- Wife and husband
- Husband
- Wife
- Other family member
- Do not know

Part two: Business management (In this part the woman can choose one or several options among the answers)

Question 1: Do you set the price according to?

Answer options:

- The price others use
- What the head of the family say
- To cover expenses
- What the buyer is ready to pay
- I do not know how to fix the price

Question 2: What are the elements to consider when setting the price of a product?

Answer options:

- Purchase price
- Taxes on the sales
- Family expenses
- Interest on loan
- Cost to cover equipments
- My salary
- I don't know

Question 3: My profits or benefits equals or correspond to?

Answer options:

- Revenues of selling my product
- Interest rate on my loan
- Revenues of sold products minus expenses
- My salary
- My consumption
- I don't know the definition of profit

Question 4: I am sure that my surplus or benefits:

Answer options:

- Cover the purchase price of the products
- Cover the interest on my loan
- Give me a salary
- Pay taxes and other expenses
- Pay the equipments
- I don't know the definition of surplus

Question 5: I order or buy the products when:

Answer option:

- They are sold out
- I think they will be sold out soon
- The supplier pass by
- The head of the family or other family member tells me
- I have money
- I don't know

Question 6: Under what circumstances do you have to sell more expensive or less expensive according to you?

Answer options:

- More expensive to get more money
- More expensive because the others do not sell the product
- More expensive because the clients are ready to pay
- Less expensive to sell more
- Less expensive because the client does not have money
- Less expensive because I need money
- I don't know

Part three: Child nutrition and health

Question 1: Should you give colostrums to the child?

Answer options:

- Yes
- No

Question 2: At what age (months) can you start to give the child porridge?

Answer options:

- 1-3
- 4-6
- 7-10
- 11-15
- 16 and more
- Do not know

Question 3: At what age (months) should the child be weaned?

Answer options:

- 6-11
- 12-15
- 16-19
- 20-23
- 24-26
- 27-30
- More than 35
- Do not know

Question 4: **Do you control and try to prevent the diarrhoea?**

Answer options:

- Yes
- No

Question 5: **Have you been informed about family planification?**

Answer options:

- Yes
- No

Question 6: **Do you use contraceptives?**

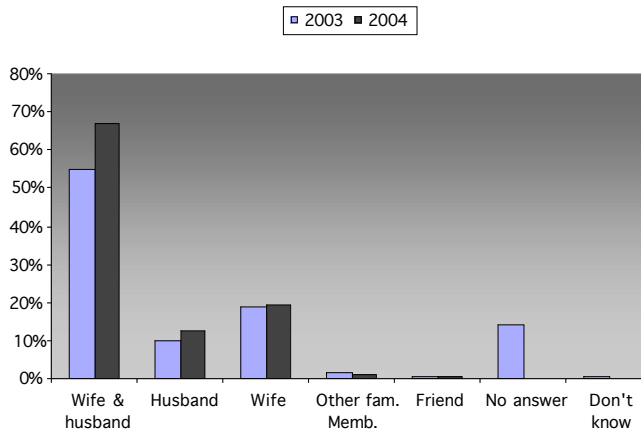
Answer options:

- Yes
- No

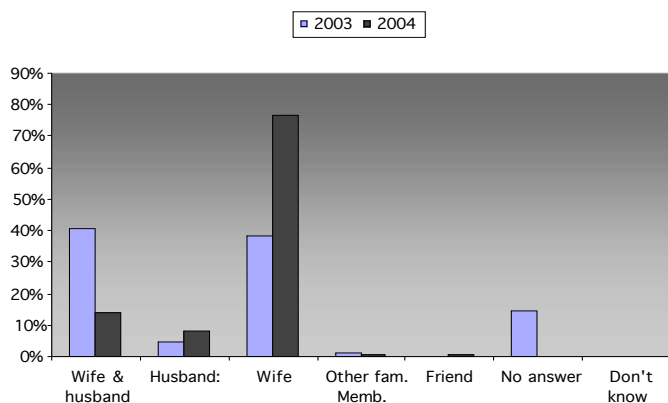
Appendix 4 - The results presented in charts

Decision-making in the family

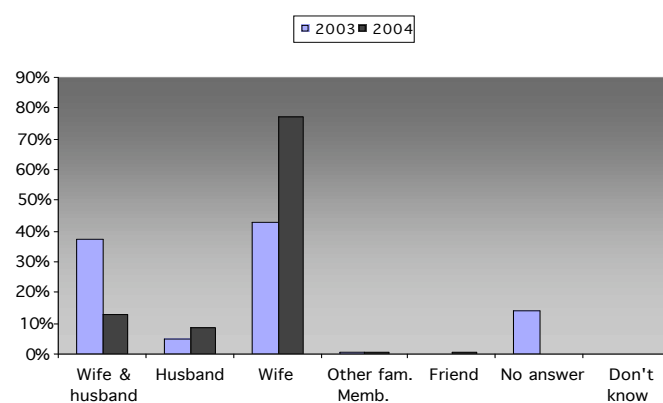
Who decide whether to take a loan?



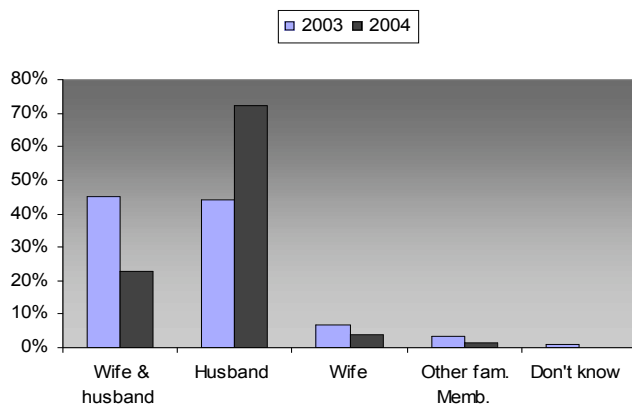
Who decide what to use the loan for?



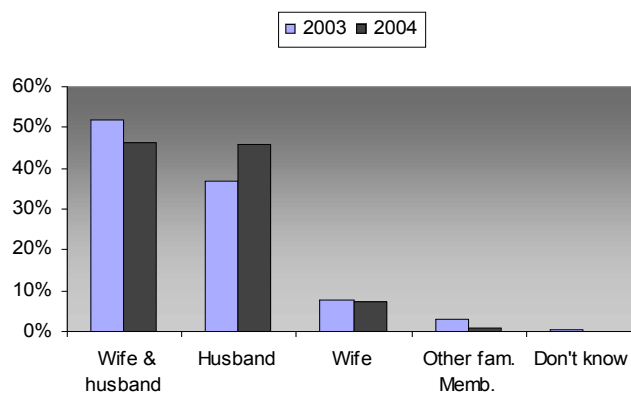
Who decide how to use the benefit?



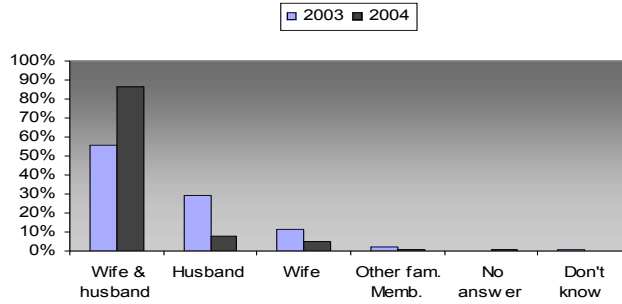
Who decide the family's budget?



Who decide the household's economic activities?

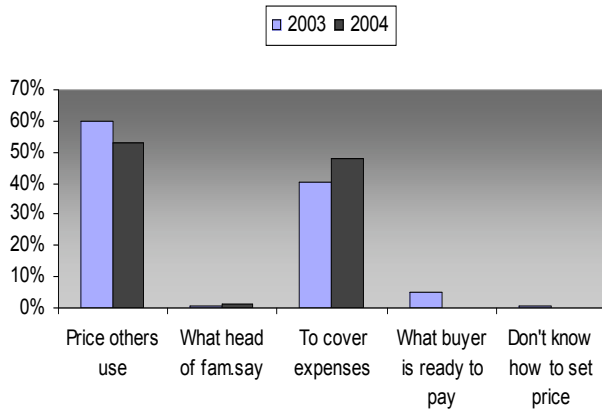


Who decide about the children's education?

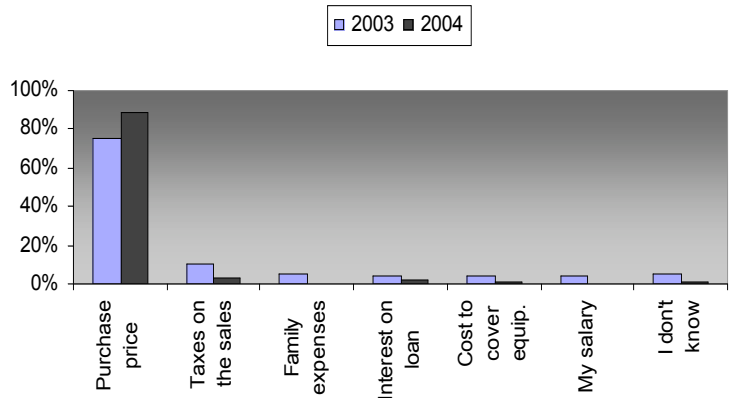


The market: Business management

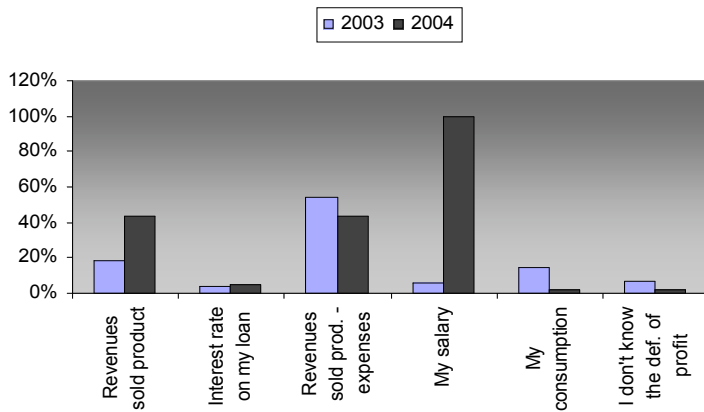
Pricing of your product according to?



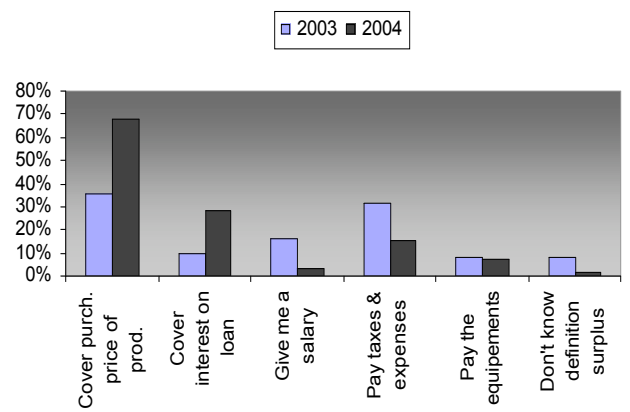
Which of these elements should you consider when setting the price of a product?



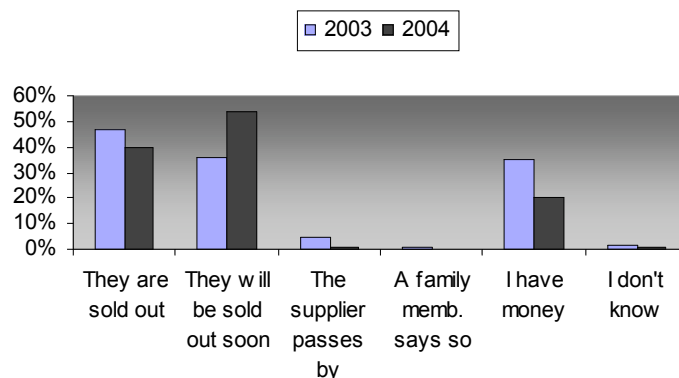
My profits correspond to:



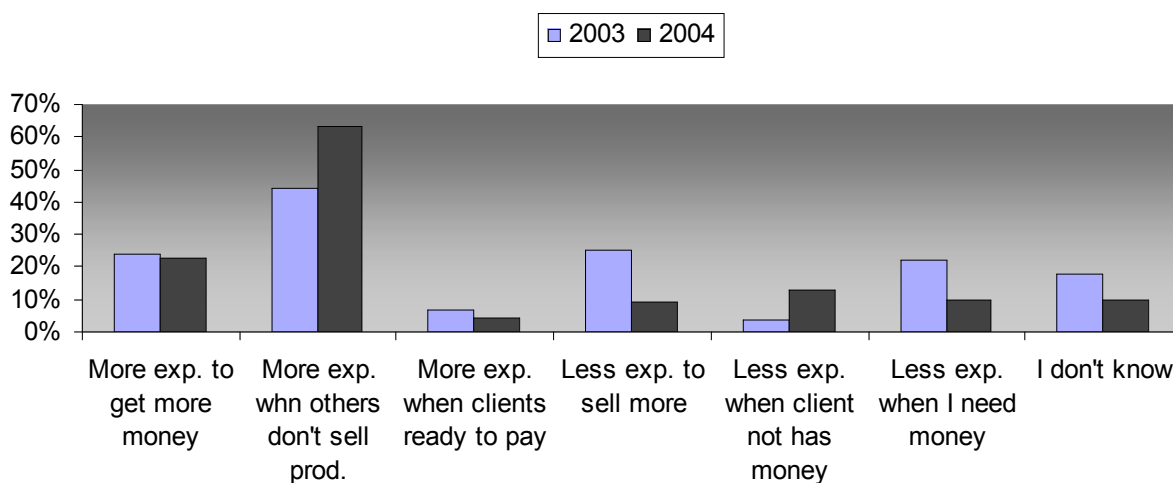
I am sure that my surplus or benefits:



I order or buy products when:

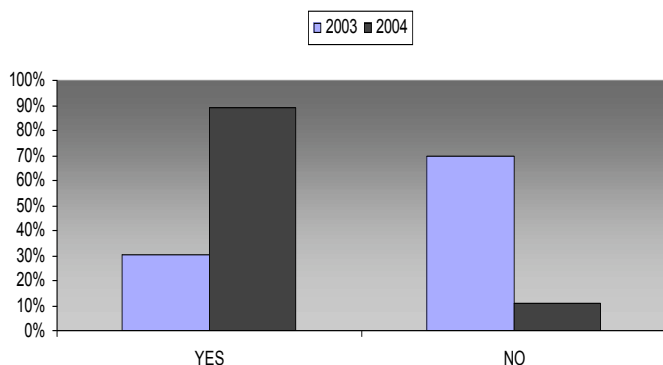


When do you have to sell your products more or less expensive?

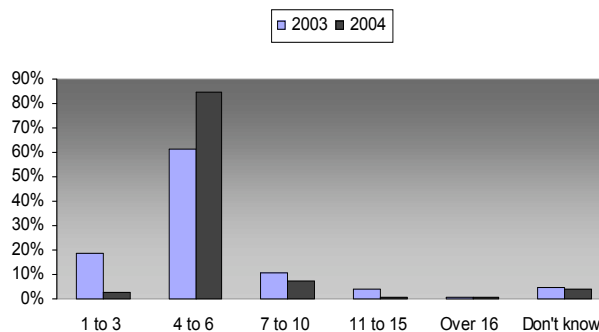


Knowledge about child nutrition and health

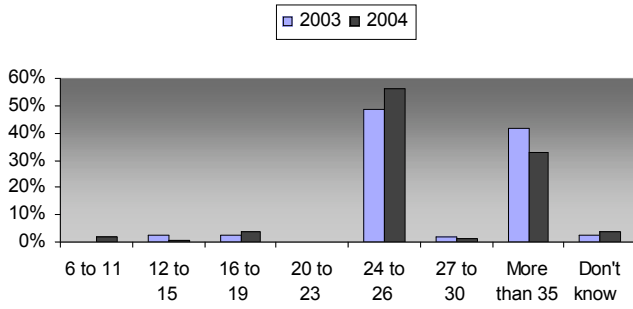
Should you give colostrum to the child?



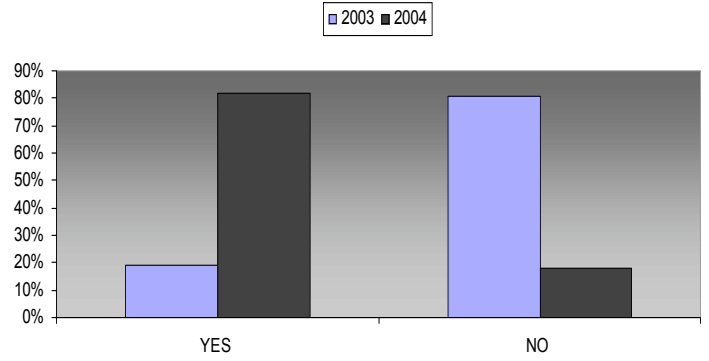
At what age (months) can you start give porridge to the child?



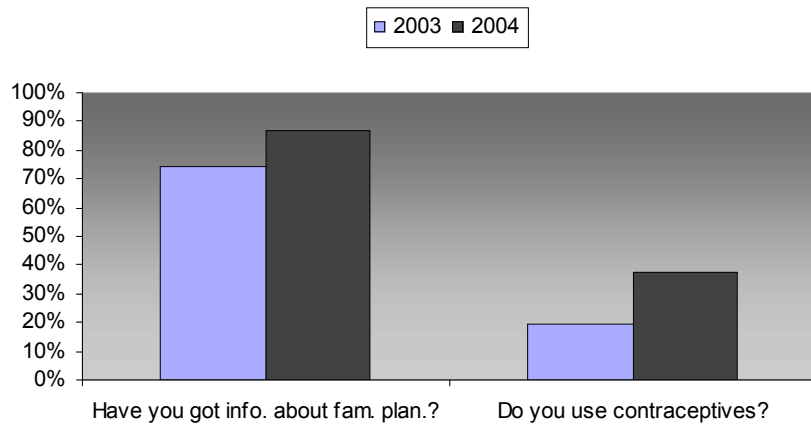
At what age (months) should you wean the child?



Do you control and try to prevent diarrhoea?

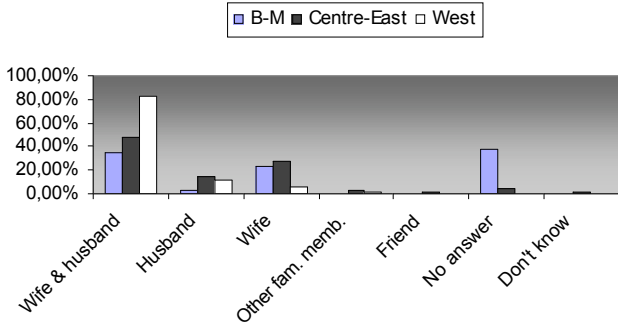


Family planification

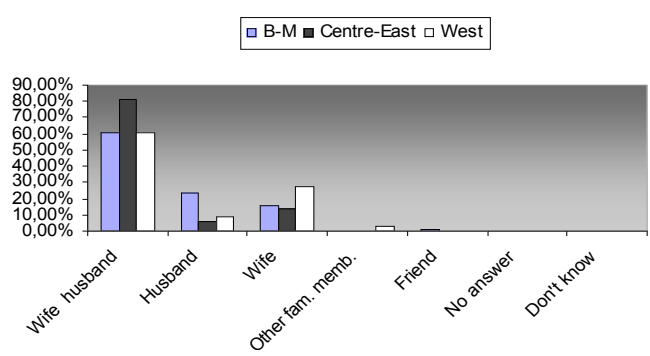


Regional differences – Decision making in the family

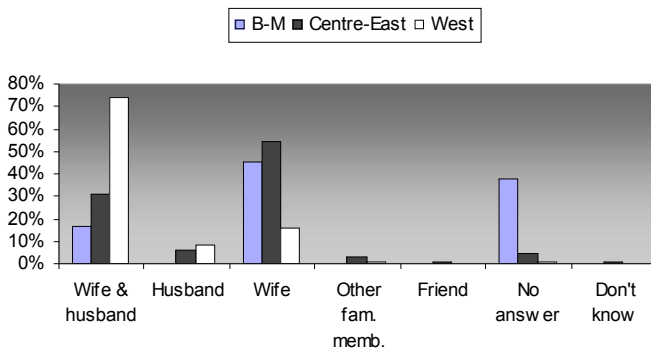
Who decide whether to take a loan?
2003



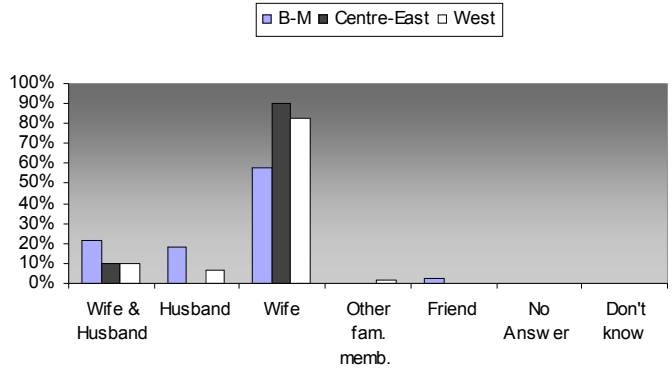
Who decide whether to take a loan?
2004



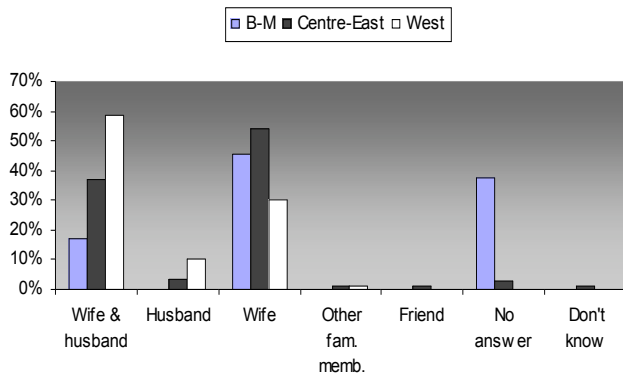
Who decide what to use the loan for?
2003



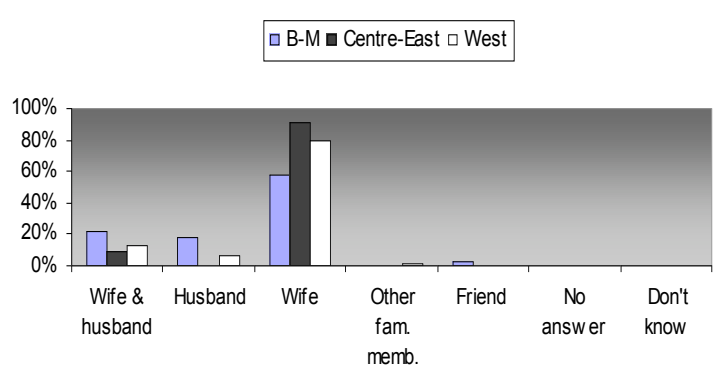
Who decide what to use the loan for?
2004



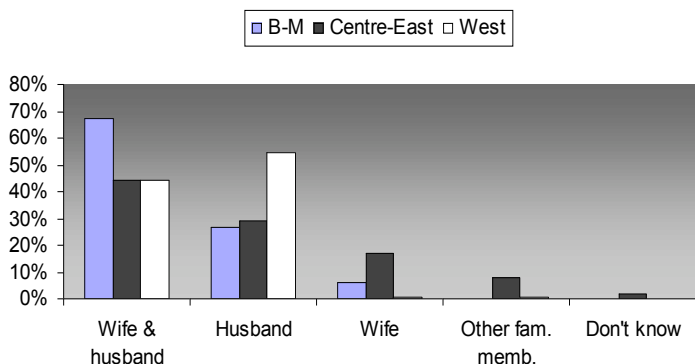
Who decide how to use the benefit?
2003



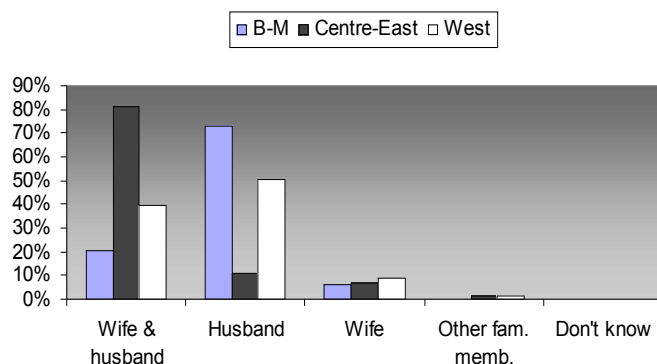
Who decide how to use the benefit?
2004



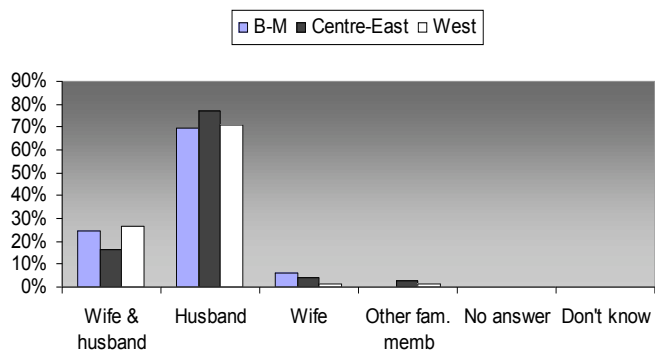
Who decide about the household's economic activities?
2003



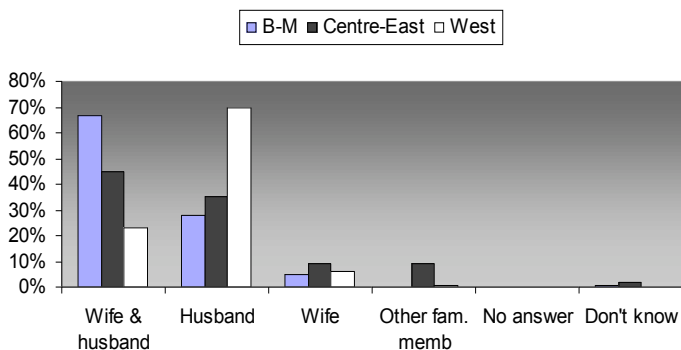
Who decide about the household's economic activities?
2004



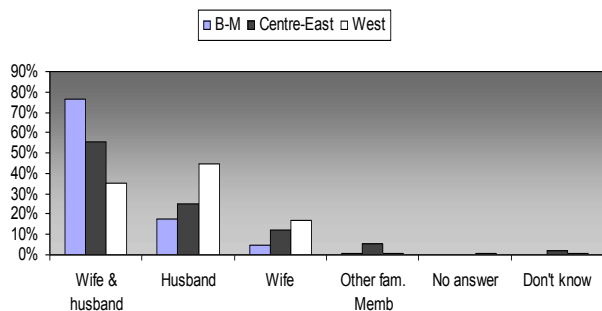
Who decide about the family's budget?
2004



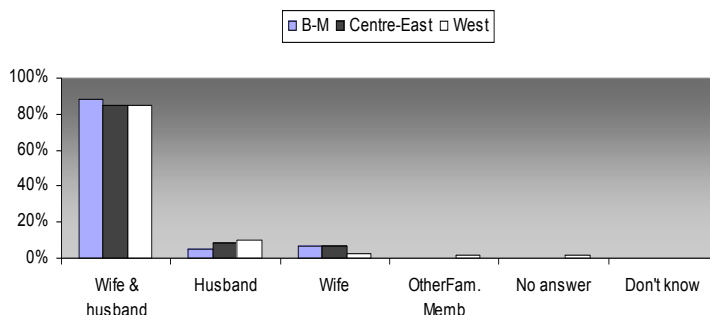
Who decide about the family's budget?
2003



Who decide about the children's education?
2003

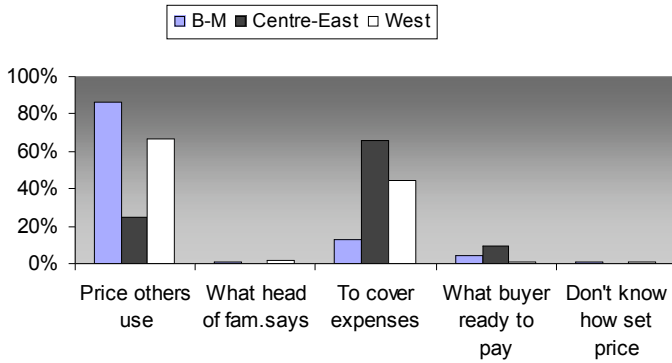


Who decide about the children's education?
2004

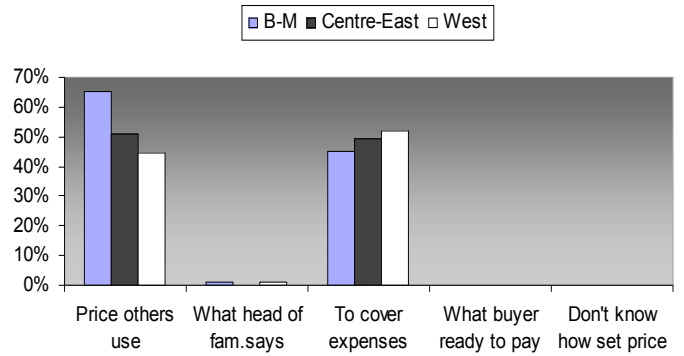


Regional differences – The market: business management

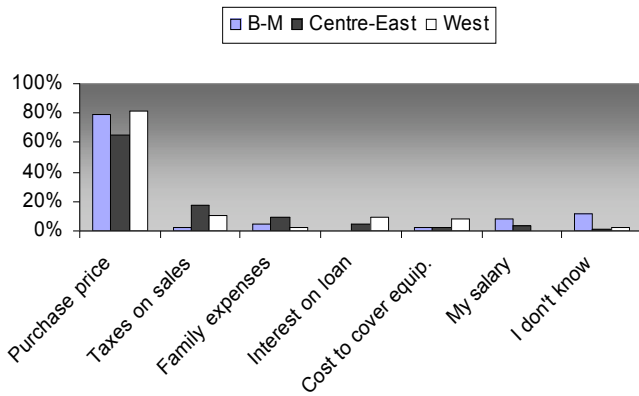
Pricessetting of your product according to?
2003



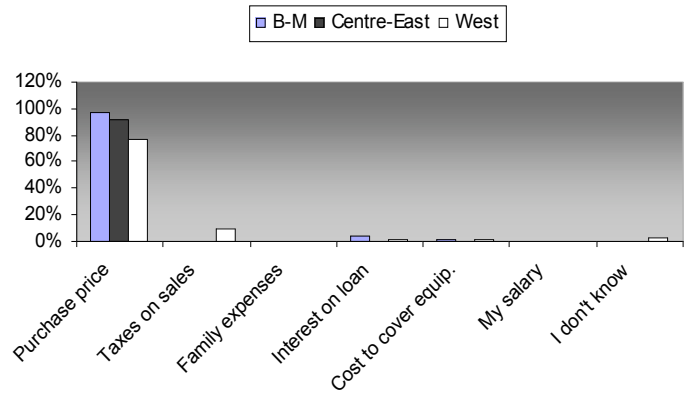
Pricessetting of your product according to?
2004



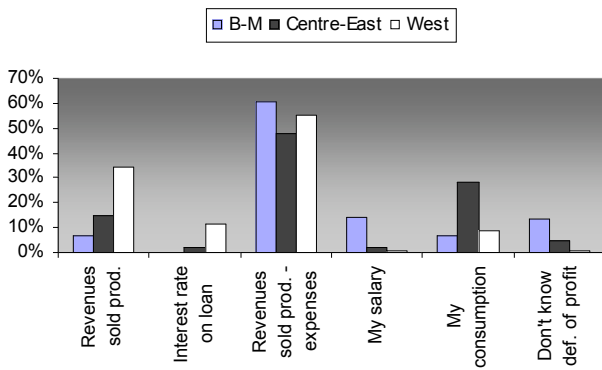
Which of these elements should you consider when setting the price of a product? 2003



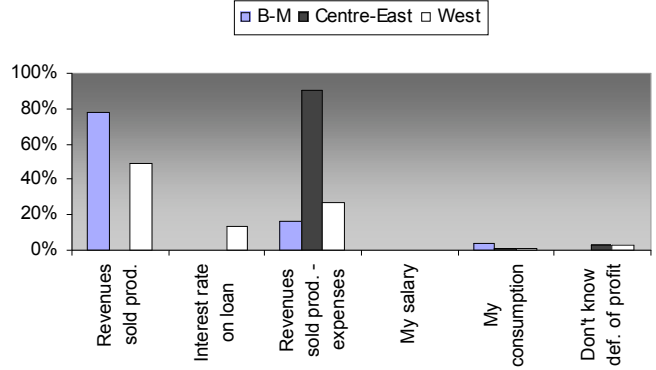
Which of these elements should you consider when setting the price of a product? 2004



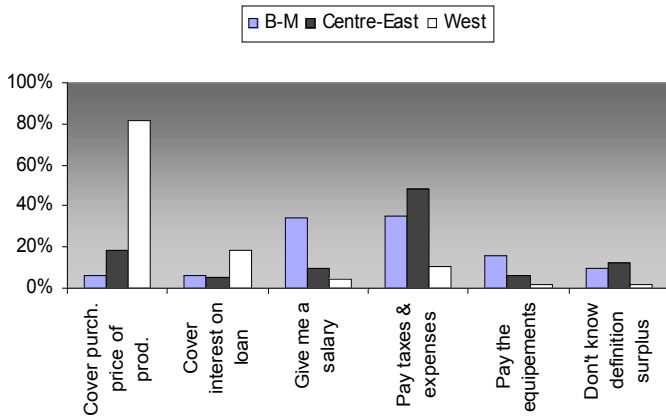
My profits correspond to:
2003



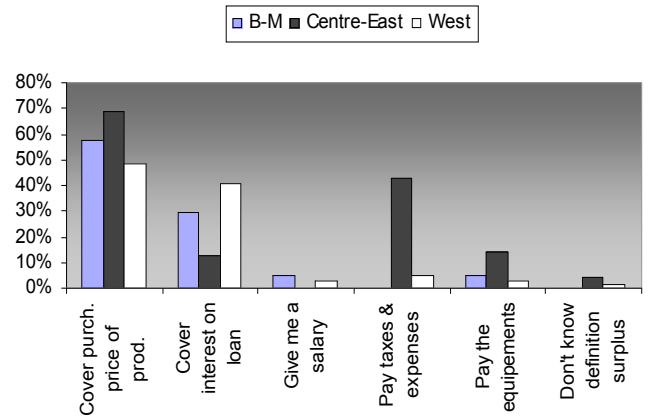
My profits correspond to:
2004



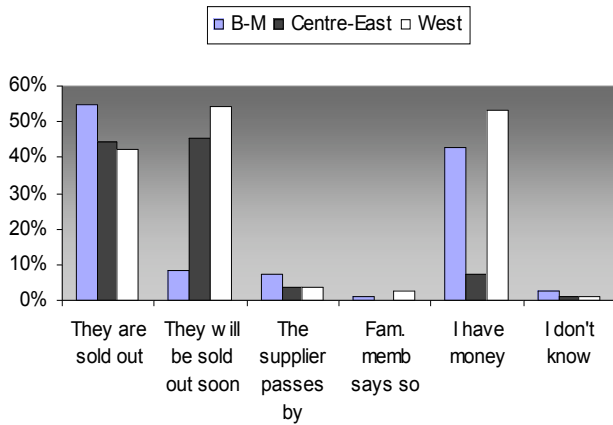
I am sure that my surplus or benefits:
2003



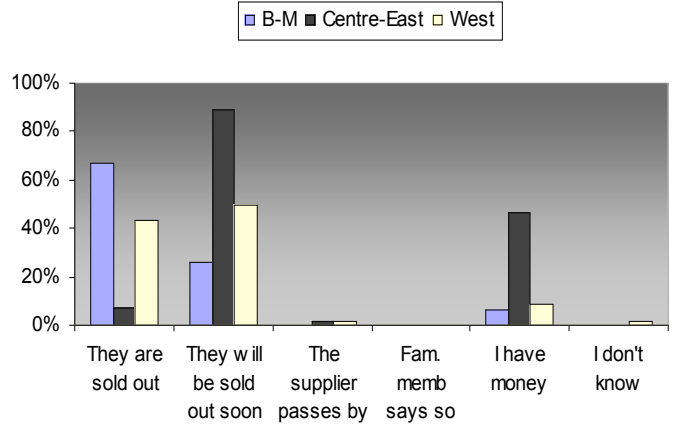
I am sure that my surplus or benefits:
2004



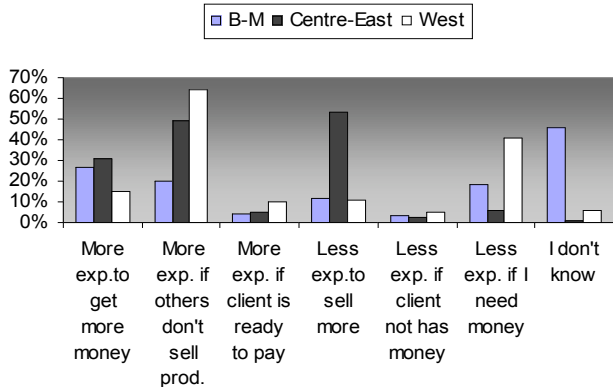
I order/buy the products when:
2003



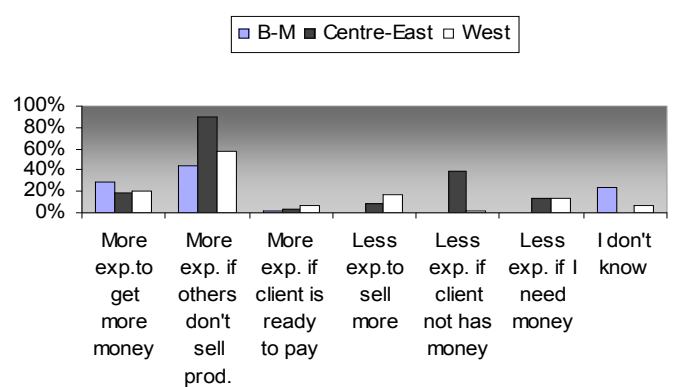
I order/buy the products when:
2004



When do you sell your products more or less expensive? 2003



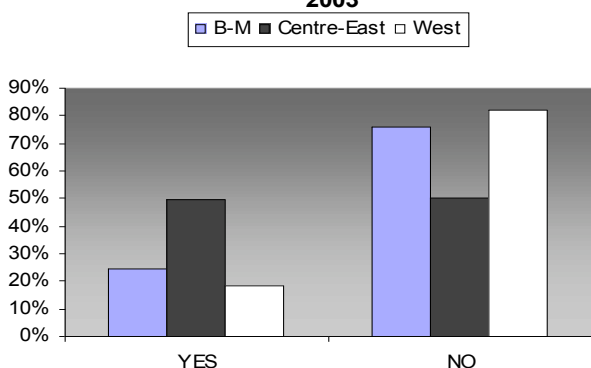
When do you have to sell your products more or less expensive? 2004



Regional Differences: Knowledge about child nutrition and health

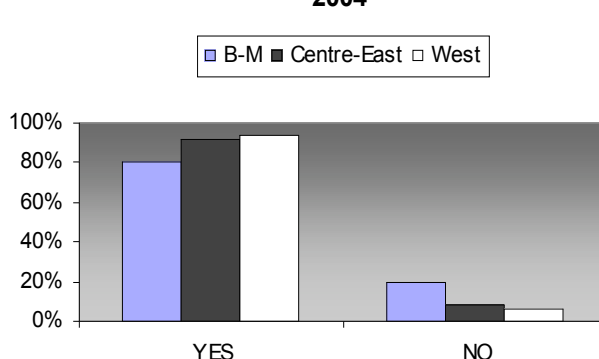
Should you give colostrum to the child?

2003

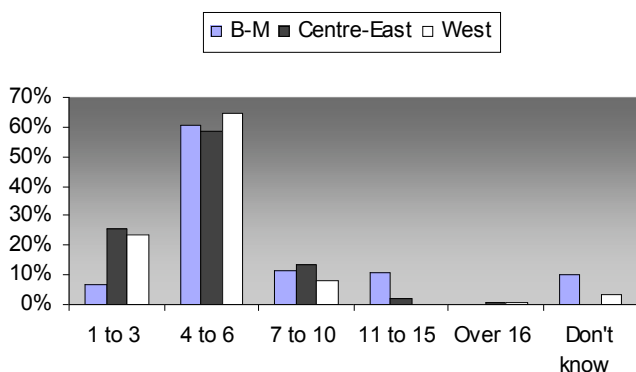


Should you give colostrum to the child?

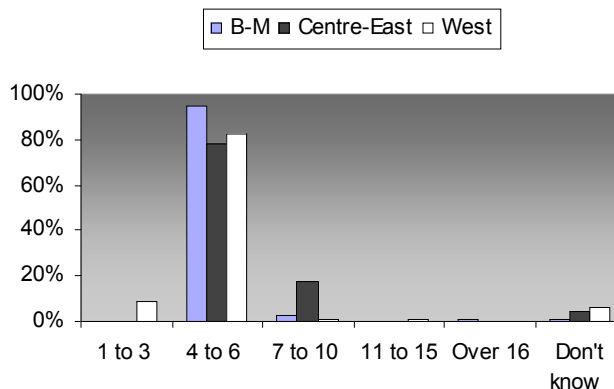
2004



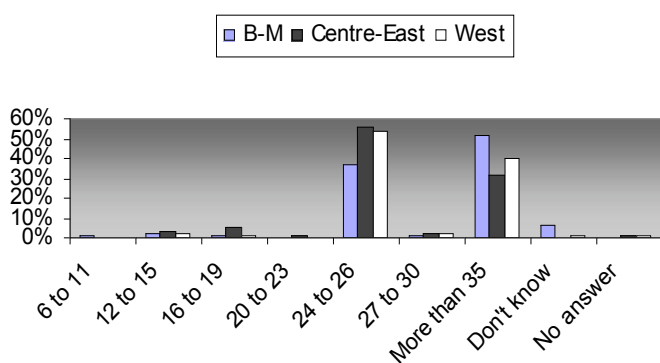
At what age (months) can you start giving porridge to the child? 2003



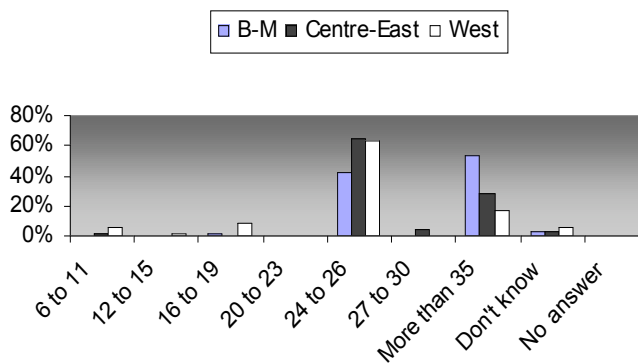
At what age (months) can you start giving porridge to the child? 2004



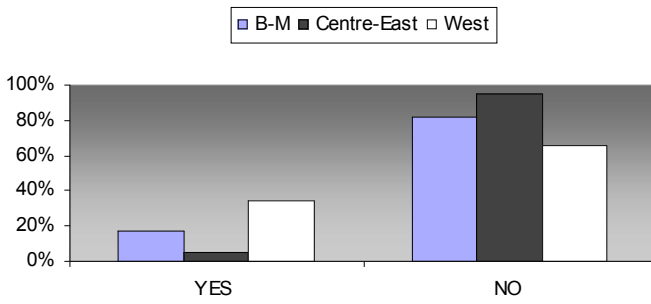
At what age (months) should the child be weaned? 2003



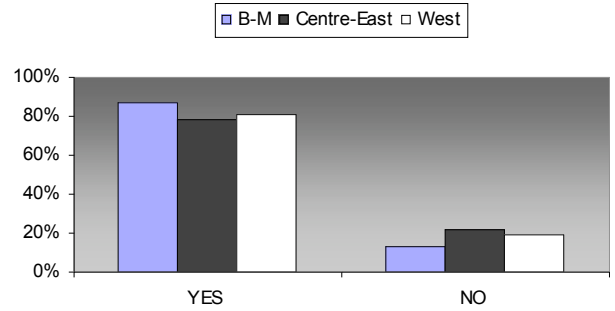
At what age (months) should the child be weaned? 2004



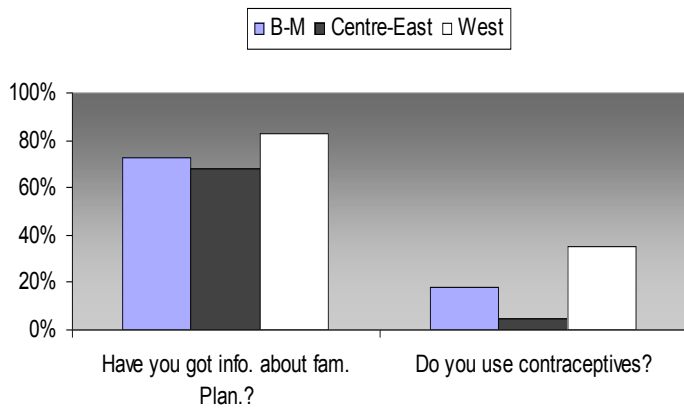
**Do you control and try to prevent diarrhoea?
2003**



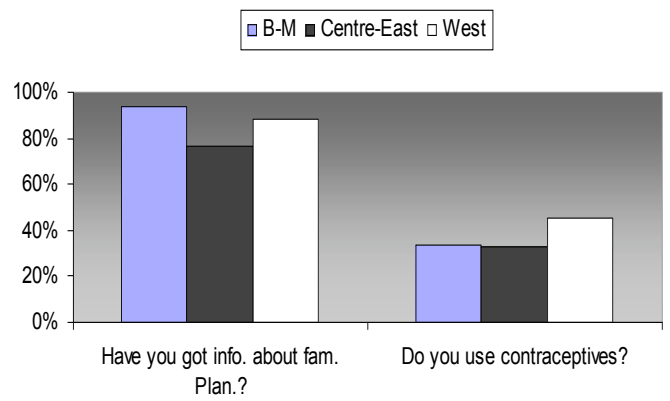
**Do you control and try to prevent diarrhoea?
2004**



**Family planification
2003**



**Family planification
2004**



Appendix 5 –Correlation graphs and cross tabulations

In order to investigate if there were any pattern/correlation in the answers concerning *decision-making* and *health*, we made two cross tabulations over the variables, one for 2003 and one for 2004. We also created scatter diagrams over the years in order to illustrate the distribution of the answers. The graphs and tables below have been made in the following way.

Firstly, we created an index of power for each woman. We did this by grading the answer alternatives the women could choose from concerning the decision-making. The answer *wife* got 3 points, *wife and husband* got 2 points and *husband* 1 point. The remaining alternatives received 0 points. Finally, we summed up and each individual received a number between 0 and 18, where 18 indicated the strongest power in the family and 0 indicated the weakest power. The power index is on the y-axis.

Secondly, we created an index of health knowledge for each individual. In the questions concerning health the women could choose between *yes* and *no*, or between different time intervals, depending on the question asked. We gave all the correct answers 1 point and all the wrong answers 0 points. This gave us an index scaling from 0 to 6, with 6 indicating the best knowledge in health and with 0 indicating no knowledge in health concerning the questions asked. The health index is shown on the x-axis.



Tabulation of decision-making and health 2003

Included observations: 348

Measures of Association Value

Phi Coefficient 0.585741

Cramer's V 0.239128

Contingency Coefficient 0.505420

Test Statistics df Value Prob

Pearson X2 90 119.3962 0.0208

Likelihood Ratio G2 90 124.6268 0.0092

					HEALTH			
		0	1	2	3	4	5	6
	0	0	1	0	0	1	0	0
		<i>0.00</i>	<i>0.29</i>	<i>0.00</i>	<i>0.00</i>	<i>0.29</i>	<i>0.00</i>	<i>0.00</i>
	3	0	0	0	1	0	1	0
		<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.29</i>	<i>0.00</i>	<i>0.29</i>	<i>0.00</i>
	5	0	0	0	2	1	2	0
		<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.57</i>	<i>0.29</i>	<i>0.57</i>	<i>0.00</i>
	6	0	13	21	9	6	2	1
		<i>0.00</i>	<i>3.74</i>	<i>6.03</i>	<i>2.59</i>	<i>1.72</i>	<i>0.57</i>	<i>0.29</i>
	7	0	0	2	2	3	0	0
		<i>0.00</i>	<i>0.00</i>	<i>0.57</i>	<i>0.57</i>	<i>0.86</i>	<i>0.00</i>	<i>0.00</i>
	8	1	3	3	4	0	0	0
		<i>0.29</i>	<i>0.86</i>	<i>0.86</i>	<i>1.15</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
	9	1	6	13	5	5	6	0
		<i>0.29</i>	<i>1.72</i>	<i>3.74</i>	<i>1.44</i>	<i>1.44</i>	<i>1.72</i>	<i>0.00</i>
	10	0	6	8	7	2	1	1
DECISION-MAKING		<i>0.00</i>	<i>1.72</i>	<i>2.30</i>	<i>2.01</i>	<i>0.57</i>	<i>0.29</i>	<i>0.29</i>
	11	0	8	7	13	7	3	0
		<i>0.00</i>	<i>2.30</i>	<i>2.01</i>	<i>3.74</i>	<i>2.01</i>	<i>0.86</i>	<i>0.00</i>
	12	5	19	14	18	10	4	1
		<i>1.44</i>	<i>5.46</i>	<i>4.02</i>	<i>5.17</i>	<i>2.87</i>	<i>1.15</i>	<i>0.29</i>
	13	1	3	7	16	6	5	0
		<i>0.29</i>	<i>0.86</i>	<i>2.01</i>	<i>4.60</i>	<i>1.72</i>	<i>1.44</i>	<i>0.00</i>
	14	2	2	6	6	0	3	1
		<i>0.57</i>	<i>0.57</i>	<i>1.72</i>	<i>1.72</i>	<i>0.00</i>	<i>0.86</i>	<i>0.29</i>
	15	1	9	7	5	1	0	1
		<i>0.29</i>	<i>2.59</i>	<i>2.01</i>	<i>1.44</i>	<i>0.29</i>	<i>0.00</i>	<i>0.29</i>
	16	0	0	1	0	3	0	0
		<i>0.00</i>	<i>0.00</i>	<i>0.29</i>	<i>0.00</i>	<i>0.86</i>	<i>0.00</i>	<i>0.00</i>
	17	0	0	0	1	0	0	0
		<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.29</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
	18	2	5	3	0	1	0	1
		<i>0.57</i>	<i>1.44</i>	<i>0.86</i>	<i>0.00</i>	<i>0.29</i>	<i>0.00</i>	<i>0.29</i>

Number of observations presented in the first rows, percentage presented in the second rows in italics.

Tabulation of decision-making and health 2004

Included observations: 221

Measures of Association Value

Phi Coefficient 0.534673

Cramer's V 0.239113

Contingency Coefficient 0.471507

Test Statistics df Value Prob

Pearson X2 6563.178330.5409

Likelihood Ratio G2 6557.944950.7203

					HEALTH		
		1	2	3	4	5	6
	4	0	0	0	0	1	0
		<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.45</i>	<i>0.00</i>
	5	0	0	0	0	1	0
		<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.45</i>	<i>0.00</i>
	6	0	0	2	1	1	1
		<i>0.00</i>	<i>0.00</i>	<i>0.90</i>	<i>0.45</i>	<i>0.45</i>	<i>0.45</i>
	7	0	0	3	5	5	1
		<i>0.00</i>	<i>0.00</i>	<i>1.36</i>	<i>2.26</i>	<i>2.26</i>	<i>0.45</i>
	9	0	1	1	1	1	0
		<i>0.00</i>	<i>0.45</i>	<i>0.45</i>	<i>0.45</i>	<i>0.45</i>	<i>0.00</i>
	10	0	0	0	4	2	0
		<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>1.81</i>	<i>0.90</i>	<i>0.00</i>
	11	0	0	1	2	3	1
DECISION-MAKING		<i>0.00</i>	<i>0.00</i>	<i>0.45</i>	<i>0.90</i>	<i>1.36</i>	<i>0.45</i>
	12	3	4	12	20	34	13
		<i>1.36</i>	<i>1.81</i>	<i>5.43</i>	<i>9.05</i>	<i>15.38</i>	<i>5.88</i>
	13	0	1	5	15	22	12
		<i>0.00</i>	<i>0.45</i>	<i>2.26</i>	<i>6.79</i>	<i>9.95</i>	<i>5.43</i>
	14	1	0	1	6	3	4
		<i>0.45</i>	<i>0.00</i>	<i>0.45</i>	<i>2.71</i>	<i>1.36</i>	<i>1.81</i>
	15	0	1	2	7	5	0
		<i>0.00</i>	<i>0.45</i>	<i>0.90</i>	<i>3.17</i>	<i>2.26</i>	<i>0.00</i>
	16	1	0	0	2	0	0
		<i>0.45</i>	<i>0.00</i>	<i>0.00</i>	<i>0.90</i>	<i>0.00</i>	<i>0.00</i>
	17	0	0	0	1	0	1
		<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.45</i>	<i>0.00</i>	<i>0.45</i>
	18	0	0	3	1	2	1
		<i>0.00</i>	<i>0.00</i>	<i>1.36</i>	<i>0.45</i>	<i>0.90</i>	<i>0.45</i>

Number of observations presented in the first rows, percentage presented in the second rows in italics.