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Contribution of Decentralized Financial Systems to increase farmers' income in Burkina Faso. A case study of FINACOM credit at Zoungou, Province of Ganzourgou



A Research project Submitted to Van Hall Larenstein University of Applied Sciences in Partial fulfillment of the Requirements for the Degree of Master of Development, Specialization Rural Development and Food Security

By

Moussa OUEDRAOGO

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Dedication

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Table of Contents

Acknowledgments.....	i
Dedication.....	ii
Table of contents.....	iii
List of tables.....	vi
List of figures.....	vi
Acronyms.....	vii
Abstract.....	ix
CHAPTER 1: INTRODUCTION.....	1
1.1 Background.....	1
1.2 Problem statement.....	4
1.3 Objective of the research.....	5
1.4 Main research question.....	5
1.5 Sub questions.....	5
CHAPTER 2: LITERATURE REVIEW.....	6
2.1. Definition of concepts and operationalization.....	6
2.1.1 Micro-finance and Micro-credit.....	6
2.1.2 Income.....	6
2.1.3 Sustainability.....	7
2.2 Evolution of micro-credit worldwide.....	8
2.3 Clients of micro-credit.....	9
2.4 Micro-credit and improvement of income.....	10
2.5 Controversy around micro-credit.....	12
2.6 Strategies to sustain micro-credit schemes.....	13
2.6.1 Interest rate.....	13
2.6.2 Repayment rate.....	14
2.6.3 Others strategies MFIs can use to make profit.....	14
2.7 Evolution of DFSs in Burkina Faso.....	14
2.7.1 Background information on DFSs in Burkina Faso.....	14
2.7.2 Legal framework for Decentralized Financial systems.....	15
2.7.3 Typology of DFSs in Burkina Faso.....	15
CHAPTER 3: STRATEGY AND METHODOLOGY.....	16
3.1 Study area.....	16

3.2 Research design	16
3.3 Research framework.....	18
3.4 Selection of respondents	18
3.4.1 Within the group of beneficiaries.....	18
3.4.2 within the group of non-beneficiaries.....	19
3.4.4 Interviews with key informants	19
3.5 Data collection	19
3.6 Data analysis	20
3.7 Limitations of the research	20
CHAPTER 4: PRESENTATION OF ODE.....	21
4.1 Background information on ODE.....	21
4.2 Objectives and missions	21
4.3 Major phases of the evolution of the ODE.....	21
4.4 Bodies of management and internal organisation	22
4.5 Main areas of intervention	23
4.6 ODE partners.....	24
4.7 Characteristics of FINACOM micro-credit scheme	24
4.7.1 The clients and activities financed.....	24
4.7.2 The interest rate and repayment rate	25
4.7.3 The selection of the clients for credit	25
4.7.4 The monitoring of the credit	25
CHAPTER 5: FINDINGS.....	26
5.1 Situation at Zoungou.....	26
5.1.1 Activities of ODE at Zoungou	26
5.1.2 Sources of income.....	28
5.1.3 Situation of food availability at Zoungou	28
5.1.4 Fluctuation of food prices.....	28
5.2 Background information of respondents	29
5.3 Impact of the credit on income improvement.....	30
5.3.1 Use of the credit by farmers at Zoungou.....	30
5.3.2 Evolution of the farmers' income	32
5.3.3 Use of income	33
5.3.4 Other advantages of the credit.....	34
5.4 Sustainability of the credit scheme.....	34
5.4.1 At farmers' level	34

5.4.2 At FINACOM level	36
CHAPTER 6: DISCUSSION.....	38
6.1 Financed activities	38
6.2 Loan and return on investment.....	39
6.3 Use of the profit.....	39
6.4 Sustainability.....	40
CHAPTER 7: CONCLUSION AND RECOMMENDATIONS.....	42
6.1 Conclusion	42
7.2 Recommendations	43
REFERENCES.....	44
ANNEXES.....	48
Annexe 1: ORGANIGRAMME DE L'ODE	48
Annexe 2: Evolution in crop production in the Province of Ganzourgou between 2009 and 2012	49
Annexe 3: Return on investment for beneficiaries	50
Annexe 4: Situation of food prices at Zoungou.....	51
Annexe 5: Traditional storage facilities.....	53
Annexe 6: Checklist for participants and non-participants in FINACOM microcredit scheme	54
Annexe 7: Checklist for ODE Programme Officer and Director of FINACOM.....	55
Annexe 8: Check list for ODE field worker	56
Annexe 9: Check list for focus group discussion.....	56

List of tables

Table 1: Evolution of the micro-credit sector from 1997 to 2002	9
Table 2: Economic Indicators of Sample Respondents.....	11
Table 3: Average effects of obtaining MFI credit on a set of outcomes	12
Table 4: Interest rates (%)	14
Table 5: Summary of respondents	19
Table 6: Evolution of the amount of money lent to farmers at Zoungou for the past 4 years.....	27
Table 7: Situation of food availability in the province of Ganzourgou between 2010 and 2012...28	
Table 8: Age group of respondents at Zoungou.....	29
Table 9: Level of education of respondents at Zoungou.....	29
Table 10: Marital status of respondents.....	30
Table 11: Financed activities of respondents at Zoungou.....	31
Table 12: Return on investment during 2010 and 2011	32
Table 13: Summary of the use of income of respondents.....	33
Table 14: Saving situation of beneficiaries and non-borrowers at Zoungou.....	35
Table 15: Forms of savings of borrowers.....	36

List of figures

Figure 1: Intervention method of ODE.....	4
Figure 2: Operationalization of income	7
Figure 3: Operationalization of sustainability in micro-finance.....	8
Figure 4: Map of Burkina Faso indicating the study area	16
Figure 5: Research framework.....	18

Acronyms

ADB	: African Development Bank
ADRK	: Association pour le Développement de la Région de Kaya
AICB	: Association Interprofessionnelle du Coton du Burkina
ASA	: Association for Social Advancement
CBOs	: Community Based Organisation
CEC/Z	: Caisse d'Épargne et de Crédit du Zoundwéogo
CGAP	: Consultative Group to Assist the Poor
DFSs	: Decentralized Financial Systems
ECLA	: Etre Comme Les Autres
FAARF	: Fonds d'Appui aux Activités Rénumératrices des Femmes
FAO	: Food and Agriculture Organization
FCPB	: Réseau des Caisses Populaires du Burkina
FINACOM	: FINAnce COMmunautaire
GDP	: Gross Domestic Product
IGAs	: Income Generating Activities
ILRI	: International Livestock Research Institute
JLL	: Joint Liability Lending
MAW	: Ministry of Agriculture and Water
MFB	: Ministry of Finance and Budget
MFIs	: Micro-finance institutions
MRFC	: Malawi Rural Finance Corporation
NGOs	: Non-Governmental Organizations
ODE	: Office de Développement des Eglises Evangéliques
PARMEC	: Projet d'Appui à la Réglementation des Mutuelles d'Épargne et de Crédit
PRODIA	: Promotion du Développement Industriel et Agricole
ROI	: Return On Investment
ROSCAs	: Rotating Savings and Credit Associations
SHGs	: Self Help Groups

UNDP : United Nations Development Programme
WAEMU : West African Economic and Monetary Union

Abstract

This research is about the impact of micro-credit provided by Decentralized Financial Systems (DFS) on income improvement of farmers in Zoungou in Burkina Faso. In Burkina Faso, several NGOs are engaged in micro-finance activities, among which the Office de Développement des Eglises Evangéliques (ODE). ODE set up a DFS in 2010 called FINACOM which gives small loans to rice farmers to invest in Income Generating Activities (IGAs). These farmers are former ODE beneficiaries and farmers of Zoungou are among them. Among the IGAs are cow fattening, purchasing and reselling of agricultural products (cowpea, groundnut, paddy rice) and horticulture production. The aim is to improve the living conditions of farmers by increasing household income through small credits. After two years, 644 loans of CFA F 110,675,000 were given to male and female rice farmers.

The objective of this research was to assess the contribution made by micro-credit on farmers' income improvement and how sustainable is the micro-credit scheme for farmers and FINACOM.

For this, the following research questions were formulated: 1. What was the income situation of beneficiary farmers at Zoungou before the intervention? 2. What is the current income situation of beneficiary farmers at Zoungou? 3. How has the income situation of non-beneficiary farmers evolved at Zoungou for the past two years? 4. What are the characteristics of FINACOM micro-credit scheme? 5. To what extent is the micro-credit scheme sustainable?

To answer these questions, individual interviews with beneficiaries, ODE staff and one focus group discussion were carried out. The focus group discussion consisted of 2 members of the credit committee, 3 members of the cooperative board and 5 beneficiaries. The 25 respondents interviewed were selected among the beneficiaries and the non-beneficiaries of FINACOM credit. Concerning ODE staff, the programme officer, the director of FINACOM and the field worker selected were. They were selected for their role in the credit programme delivery.

The outcomes of the different individual interviews and focus group yielded the following results: first of all while a man borrows between CFA F 200,000 and CFA F 500,000 and invests in cow fattening, a woman borrows between CFA F 25,000 and CFA F 100,000 and invests in purchasing and reselling of agricultural products. The profit generated by a man on average is higher than a woman's profit. The study found that both men and women borrowers use their profit for non-food expenditures (education, clothing, health) and the purchase of proteins (meat and fish) because cereals produced at Zoungou are sufficient. For farmers involved in horticulture production, the yield of the cereals they cultivate has increased. In fact, cereals cultivated after the harvest of horticulture benefit from remaining nutrients used during horticulture production. Concerning the sustainability of the credit scheme, the research found that it is sustainable for men and FINACOM; women have to borrow for several times. As for the non-borrowers, their financial situation has not changed.

Based on these findings, the study concludes that the credit has improved the income of borrowers. For the credit to reach more farmers and increase women's income, the study recommends that ODE should sensitize and train women to get involved in cow fattening to increase their income.

Key words: Decentralized financial systems, income generating activities, profit, sustainability

CHAPTER 1: INTRODUCTION

1.1 Background

“Burkina Faso is a transitional country landlocked in the heart of West Africa between the Sudan-Guinean region and the Sahel Region, covering about 274,000 Km²” (Aeschliman, 2007, p.6). With a total population of 16 million of whom 43.9 % lives below the poverty line, Burkina Faso is classified as both a least developed, a low-income and food-deficit country. The UNDP 2011 Human Development Report ranked Burkina Faso 181th out of 187 countries (World Bank, 2012). According to the Ministry of Economy and Finance (2011) in the Poverty Reduction Strategic Paper (PRSP) 2011, agriculture is the main source of livelihood of the rural population. It employs 80% of the active rural population whereby contributing to 16.9% to the Gross Domestic Product (GDP). Different commodities are produced in Burkina Faso but cotton is the most important crop in terms of its contribution to the national economy (World Bank, 2012). For example, records in 2008 showed that cotton contributed up to 20% to the GDP in 2008 (AICB, 2008).

The country frequently faces natural disasters like drought, floods and sometimes locust attacks which cause crop failure leading to high food prices (FAO, 2012; World Food program, 2012; Oxfam, 2009). This crop failure compromises food security and livelihoods in rural communities and the severe drought of 2011 according to official sources directly affected 2,000,000 people (International Federation of Red Cross and Red Crescent, 2011). Prior to that severe drought in 2011, poor rains led to an estimated 17 % decline in cereal production in 2009. The recurrent natural disaster led Jean-Pierre Renson, FAO's Emergency Coordinator in Burkina Faso, to say that *"This drought (which occurred in 2011) exacerbates an already difficult food security situation caused by persisting high food prices"* (FAO, 2012).

Since its independence, the Government of Burkina Faso, international and national Non-Governmental Organisations (NGOs) have tried many strategies to attain food self-sufficiency. Strategies that have been applied range from the construction of dams to harvest water to supplement the rainfall, the improved lowlands management for rice cultivation, the farm implement special operation, the sale of pumps for horticulture at subsidized prices, the credit allocation for farm inputs, the formation of farmers' associations to deal with their real needs, the distribution of improved seeds, the training of farmers on new farming techniques, the regulation of land tenure and the massive fight against locust attacks among others. The objective of these actions was to increase agricultural productivity so as to ensure food availability and accessibility to rural communities. All these actions have been accomplished with the help of bilateral and multi-lateral partners who have been assisting the country. Some International and National Non-Governmental Organizations also accompany the government efforts in its attempts to alleviate poverty of the rural population (Ministry of Economy and Finance, 2011).

Despite the numerous efforts from the government to modernize the agricultural sector, subsistence agriculture still prevails. To reverse the situation, the Ministry of Agriculture with the assistance of its partners have undertaken initiatives to incorporate the private sector to bridge the existing gap that would create more value addition to the agricultural produce.

Nowadays, the government of Burkina Faso does not allocate agricultural credit to farmers. It rather provides farm inputs such as fertilizers and improved seeds as well as ploughs and tractors to farmers at subsidized prices. This is because farmers failed to pay back the loans that were given to them during previous years. Farmers explained their failure by low returns they made from the government loans. The government left that role of providing credit to the private sector including commercial banks, saving cooperatives and NGOs. The role of the

government in the current strategy is to create favourable conditions for any interested financial structure to venture in the credit sector. Based on the PRSP report, credit to rural poor farmers has been identified as one of the critical factors to improve food security (Ministry of Economy and Finance, 2011). In Burkina Faso, the micro-finance sector plays an important role in the national economy. As an illustration, in 2006, to finance their Income Generating Activities (IGAs), more than 600,000 people benefitted from eight micro-finance institutions set in Burkina Faso.

In Burkina Faso, several NGOs are engaged in micro-finance activities, among which figure the Office de Développement des Eglises Evangéliques (ODE). ODE was created in 1972 with the aim to promote Christianity while contributing to the social and economic development of the country. Existing MFIs can be categorised into four groups (see Chapter 2) and ODE falls under the third category and its actions focus mainly on rural people without any discrimination. Its approach is based on active participation of beneficiaries.

Since its creation, ODE has implemented a number of projects and programmes in favour of rural farmers. In addition to the projects and programmes, ODE decided to venture into the micro-credit sector to answer the call from its target groups. The decision was based on ODE past experiences in micro-credit such as:

- **Credit by Delegation**

Credit by delegation was implemented for 18 years (i.e. between 1975 and 1993) and consisted in putting a rotating fund at the disposal of selected farmers' groups. The main driver was to initiate and encourage self-financing as well as self-promotion of farmers' groups. Beyond this first initiative, credit was allocated to farmers to finance their different agricultural activities. Farmers' group leaders were assigned the responsibility to follow up on the reimbursement and the reattribution of credit to other group members.

- **Credit for Women's Income Generating Activities (IGAs)**

IGAs targeted only women in Ouagadougou and ran for about 14 years – between 1987 and 2001. The aim was to improve the living conditions of families by increasing household income through granting small credits to women. Target activities included petty trade, processing of agricultural products and urban and peri-urban livestock raising undertaken by women.

- **Direct credit linked to programmes**

Direct credit was initiated to intensify micro-credit through the implementation of integrated development programmes by ODE. Direct credit was linked to specific programmes with the aim of supporting productive and commercialisation activities of credit beneficiaries. This type of credit financed rural petty trading as well as farm implements. The credit benefitted 2,500 farmers and ran for 7 years between 1996 and 2003.

- **Intermediation with Decentralized Financial Systems (DFSs)**

Intermediation with DFSs was initiated in 2003 in response to technical and legal constraints in relation to saving and credit activities led by ODE. ODE then undertook a consultation with its Financial and technical Partners (see list of ODE partners) for financial intermediation in 2003. The objective was to facilitate farmers' access to credit through Decentralized Financial Systems. The mechanism of the credit to farmer put ODE in the role of simple intermediate between farmers' groups and the Decentralized Financial Systems. The main task of ODE was

to strengthen the technical and organisational capacities of farmers' groups so that they could negotiate partnerships with Decentralized Financial Systems in farmers' areas.

Unlike the aforementioned credit systems, the DFSs did not assign the responsibility to farmers in the management of the credit. The DFSs were profit-oriented and their actions were to defend the interests of their founders. In sum, improving the living conditions of the DFSs' founders was their reason on being. This situation made it difficult for ODE to reconcile the objectives of the Decentralized Financial Systems and its desire to make farmers more responsible of their actions in terms of money borrowing.

Considering its past experience in financial intermediation, ODE set a DFS called FINance COMMunautaire (FINACOM) to finance the IGAs of its clients. FINACOM also provides savings and credit services to its clients (FINACOM, 2009). The denomination FINACOM is due to the fact that its action will contribute to economic changes in organisations (Community Based Organisation (CBOs)), farmers' groups and cooperatives) existing in Burkina Faso.

The intervention method of ODE used during the financial intermediation framework is presented in fig.1. The framework is used by ODE to intervene at Zoungou in order to reach its objective. It shows the main role of ODE in the process of moving poor farmers out of poverty.

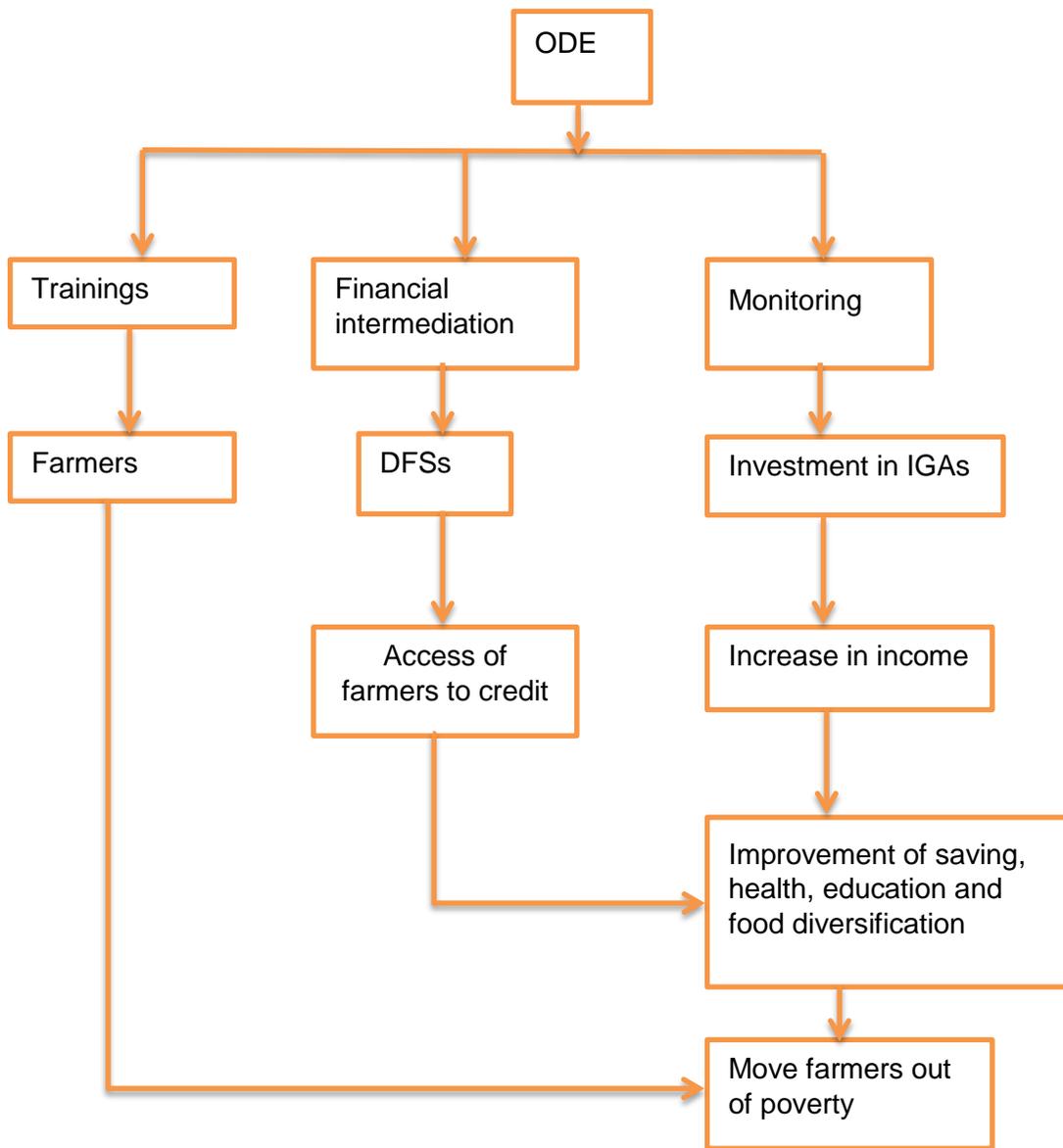


Figure 1: Intervention method of ODE

1.2 Problem statement

Since its creation, FINACOM has continuously financed some farmers' IGAs particularly farmers who are organised in groups and were former beneficiaries of ODE intervention. Farmers at Zoungou were among these former beneficiaries. Key criteria for farmers' selection included the existence of an irrigation infrastructure in the location and the commitment of farmers to pay back the loan (FINACOM, 2009). Eligible activities were cow fattening, purchasing and reselling of agricultural products and horticulture production. Farmers at Zoungou have benefitted from FINACOM for their IGAs. The philosophy behind the funding of the above mentioned activities was that the risk of failure is minimized as compared to other activities in the area. These activities have been implemented for about two years without ODE having any knowledge about their impact on the improvement of beneficiaries' income (ODE, 2011). In order to adapt its intervention, ODE showed interest in assessing the sustainability of the credit.

1.3 Objective of the research

The objective of this research was therefore to assess the impact that FINACOM credit made on the improvement of the income of beneficiary farmers at Zoungou and to analyse the sustainability of the credit scheme in order to make recommendations that could improve the intervention of ODE.

1.4 Main research question

What is the contribution of FINACOM credit on the improvement of the income of beneficiary farmers at Zoungou and how sustainable is the credit scheme?

1.5 Sub questions

1. What was the income situation of beneficiary farmers at Zoungou before the intervention?
2. What is the current income situation of beneficiary farmers at Zoungou?
3. How has the income situation of non-beneficiary farmers evolved at Zoungou for the past two years?
4. What are the characteristics of FINACOM micro-credit scheme?
5. To what extent is the micro-credit scheme sustainable?

CHAPTER 2: LITERATURE REVIEW

This chapter reviews the existing literature on credit scheme with focus on definition and operationalization of main concepts used in this research, the evolution of micro-credit worldwide, the clients of micro-credit, the impact of micro-credit on income improvement, the controversy about micro-credit, strategies to sustain MFIs and micro-credit in Burkina Faso.

2.1. Definition of concepts and operationalization

The concepts that will be defined are micro-finance, micro-credit, income and sustainability.

2.1.1 Micro-finance and Micro-credit

“The word micro-finance is being used very often in development vocabulary today. Although the word is literally comprised of two words: micro and finance which literally mean small credit; the concept of micro-finance goes beyond the provision of small credit to the poor” (Kiiru, 2007, p.14).

Several definitions of micro-finance exist. For example, the Consultative Group to Assist the Poor (CGAP, 2012) defines micro-credit as the supply of financial services targeting the poor and low-income individuals who do not have access to formal financial market; the services include credits, savings, insurance and transfer services. According to Misra (2004), micro-credit is credit and repeated credit provided in small measures to suit the recipients' requirements, with a comfortable pace of repayment and at an appropriate rate of interest. Hammill (2008, p.114) defined micro-finance as *“the delivery of loans, savings, insurance and other financial services to the poor so they can engage in productive activities, helping them build assets, stabilise consumption and protect themselves against risk”*. According to Kiiru (2007, p.14 cited in Christen, 1997), micro-finance is *“the means of providing a variety of financial services to the poor based on market-driven and commercial approaches”*.

Khandker (2005) developed the collateral-free group based lending strategies to overcome shortcomings of the lack of guarantee by individual poor. The strategy of the Joint liability lending (JLL) consists in targeting individuals who have organized themselves in borrowing groups and cannot borrow individually. This strategy lies on the fact that the groups use both pressure and monitoring to ensure that loans acquired by members are paid back (Kiiru, 2007).

The credit provided to groups and individuals are short-term. In his article on micro-credit and reduction of economic insecurity and poverty, Islam (2009) states that micro-credit finances production and processing activities. From the above definitions of micro-credit, micro-credit will be referred to as small loans given to a group to produce, process and even undertake Income Generating Activities within the scope of our study.

2.1.2 Income

According to Farlex (2012), income is the amount of money or its equivalent received during a period of time in exchange for labour or services, from the sale of goods or property, or as profit from financial investments. This definition explicitly mentions that income is either in cash form or in kind. It also takes into consideration the notion of time within which the activity is done. According to Bhakar, Banafar, Singh and Gauraha (2007) rural people get their income from farm, non-farm and off-farm activities. The operationalization of income can be summarized as:

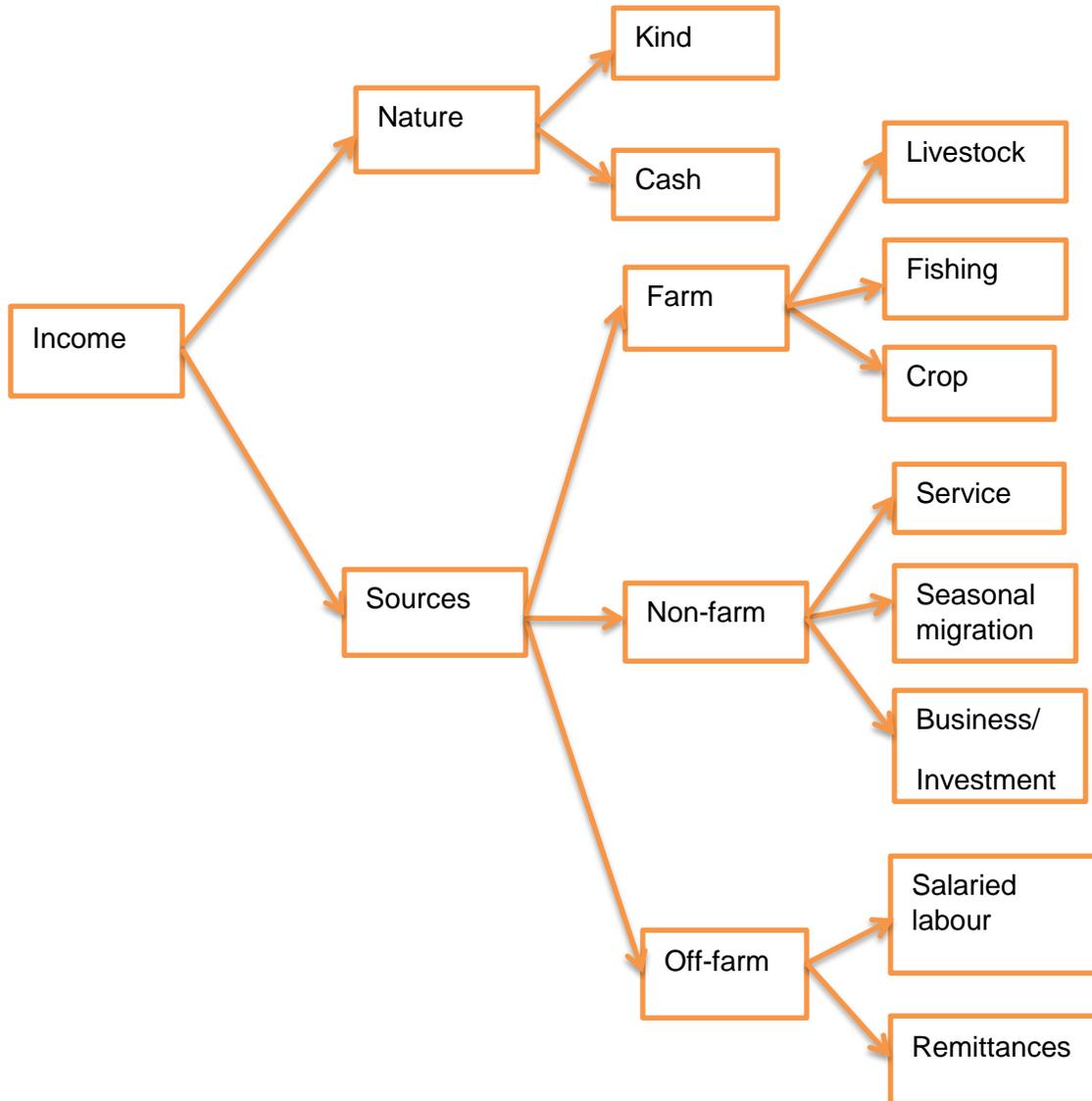


Figure 2: Operationalization of income

2.1.3 Sustainability

Rosengard (2001) defines financial sustainability as the development of products and delivery systems that meet client needs, at prices that cover all costs of financial services providers; the development of products and delivery systems should be independent of external subsidies. According to Adongo and Stork (2005), a sustainable MFI (Micro-finance Institution) should cover all its costs and risk provisions from the income that it generates. During the debate on the sustainability of micro-finance in Europe, the representatives of two well-known organisations that are active in the field of micro-finance gave different definitions of financial sustainability. Geert Jan Schuite (from TriodosFacet) defines Sustainability as long-term continuity in the key activities of an institution, while recognizing the economic, social and environmental effects of its activities, both for its internal and external stakeholders. On the opposite, Eric Duflos (from CGAP) defines sustainability in micro-finance as the ability of micro-finance institutions to stand on their own feet financially after a period of operations and to become financially sustainable an institution has to cover all costs (administration costs, cost of default, cost of funding, and reserves for expansion) (Molenaar and Lämmerman, 2009). From

the above definitions and within the scope of our study, sustainability in micro-finance will be defined as the ability to keep the activity going on for internal and external stakeholders.

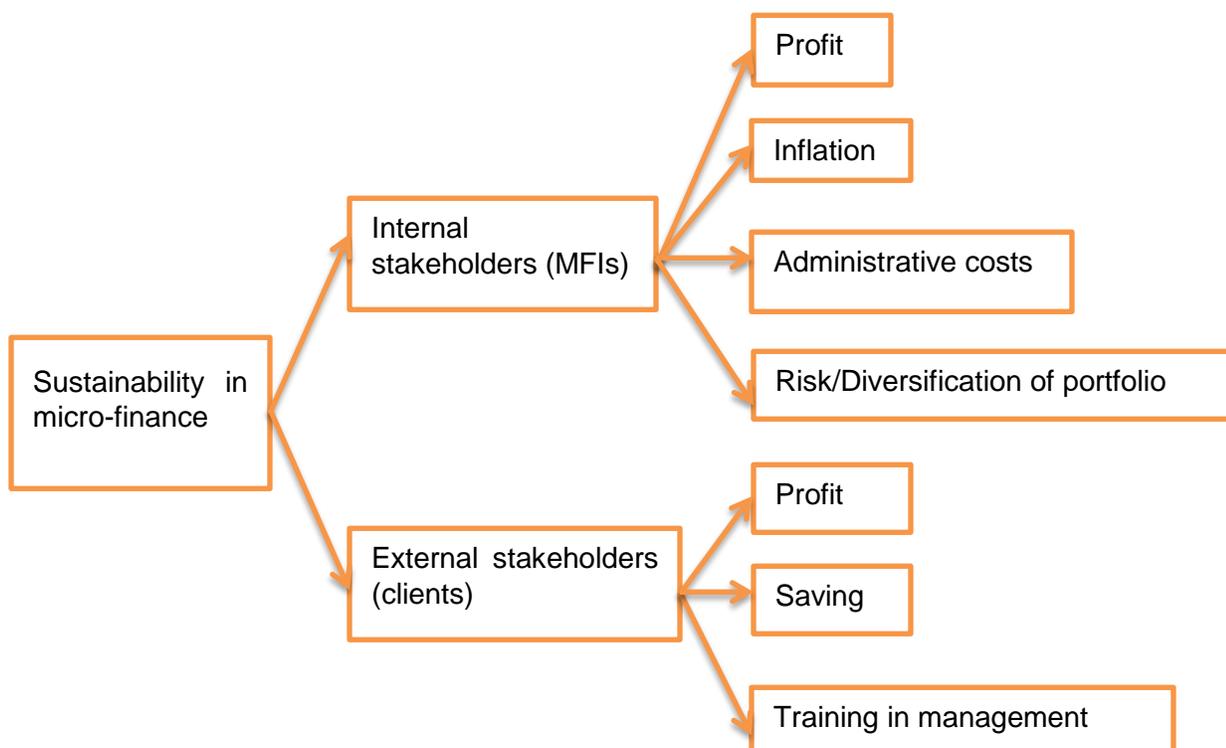


Figure 3: Operationalization of sustainability in micro-finance

2.2 Evolution of micro-credit worldwide

Since the start of micro-credit in Bangladesh with Dr. Yunus who, in the 1970s, lent his own money to villagers from Jobra to run simple business like rice husking and bamboo weaving, the micro-credit sector has kept developing and the figures in the table below illustrate it:

Table 1: Evolution of the micro-credit sector from 1997 to 2002

End of year	Total number of institutions	Total number of clients reached (millions)	Number of “poorest” clients reported (millions)
1997	618	13.5	7.6
1998	925	20.9	12.2
1999	1,065	23.6	13.8
2000	1,567	30.7	19.3
2001	2,186	54.9	26.8
2002	2,572	67.6	41.6

Source: Daley-Harris, 2003

The survey was conducted by the Micro-credit Summit Campaign and the results showed a continuous increase in the figures; the figures have been multiplied by four. For example, the number of institutions which offered micro-credit increased by 3.16-folds within a period of 15 years (i.e. from 618 in 1997 to 2,572 in 2002). Likewise, within the same period, the number of clients reached 67.6 million in 2002 and the poorest 41.6 million, totalling an increase of about 400% and 447% respectively.

2.3 Clients of micro-credit

The clients of micro-credit are individuals and poor people who do not have collateral and who cannot access formal banking system. When Dr Yunus started its initiative in the 1970s, he lent to both men and women. Nowadays, the situation has changed and many micro-finance institutions primary target the women as supported by Fofana in the case of micro-credit in developing countries. According to Fofana (2010, cited in UNDP, 1997 and ADB, 2000), poverty predominates in rural areas in developing countries especially in Africa where rural households reside and derive their daily living from agricultural activities. This statement explains the reason why micro-credit targets the rural areas where poor rural households in general and women in particular face challenges in generating income from agriculture. This challenge is mainly caused by the low level of productivity, which is partly due to limited access to adequate production inputs caused by the lack of financial resources. These constraints prevent the poor from achieving food security and earning a better livelihood.

In addition, men and women in rural areas need financial support to invest in agricultural production and non-agricultural income-generating activities such as small trade, food processing and handcraft as a strategy to achieve food security by farm household production activities diversification.

In their study of the category of the beneficiaries of micro-credit, Armendáriz and Morduch, (2005) found that at the Grameen bank 95% of the clients were women. A figure that is a bit higher than what was reported during the 2005 Micro-credit Summit where on a sample of 3100 programmes, 83.5% of the clients are women (Daley-Harris, 2005).

The MFIs are targeting the women for many reasons:

1. Difference in increase in per capital household food and non-food expenditures induced by an increase in the volume of borrowing

A study by Khandker (2005) showed a significant difference in per capita increase in household food and non-food expenditures between women and men borrowers. For example, a 100% increase in the volume of borrowing by both women would lead to an increase of 5% in per capita household non-food expenditure for women versus only 2% for men. Similarly, a 100% increase in the volume of borrowing would lead to 1% increase in per capital household food expenditures for women versus insignificant change for men. This means that lending to women could yield an increase of 0.4% in non-food expenditures and more change in food expenditure as compare with borrowing to their counterpart men borrowers. This trend is confirmed by the work of Skoufias (2001) who concluded that micro-credit programmes focusing on women in Mexico led to a 10% reduction in poverty, while school registration increased by 4%, food expenditures by 11%, and there was a significant improvement in adult health. Fofana (2010, cited in Niehof, 2007) found that though women were not more engaged than men in the fishery sector they earned good money and were even considered better than men in making profit and were significantly contributing to the household income. In addition, they used their money to meet household needs especially for kids whereas men use theirs to satisfy their own needs.

2. Women have good record for credit repayment

Women generally seem to be more credit-worthy than men because they have a better repayment record. Armendáriz and Morduch (2005 cited in Hulme, 1991 and in Khandker et al., 1995) found 92% repayment for women borrowers versus 83% for men. They also found that 15.3% of male borrowers against 1.3% of women had difficulties in repaying their loans.

3. Mobility of men

According to Armendáriz de Aghion and Morduch (2005), women tend to be less mobile than men and that is an advantage for MFIs because it becomes easier and less costly for MFI managers to monitor them.

4. A way of narrowing gender discrimination while fastening development

According to Anderman and Kropp (2006, cited in King et al., 2001), targeting the women help narrow gender discriminations so as to fasten development. This is because studies have shown that in communities with significant inequality between men and women poverty is high, economic development is decelerated, governance is weak and the quality of life is lowered.

5. Women – vulnerable communities

Women are the poorest people in the society so targeting them reduce gender gaps and might increase productivity which leads to economic growth. (Anderman and Kropp, 2006)

2.4 Micro-credit and improvement of income

During the Micro-credit Summit 2002, Khandker stated after assessing the contribution of micro-credit in Bangladesh that *“micro-credit programs attack poverty at its source by increasing the household consumption expenditure of participants. Borrowing from a program is estimated to reduce moderate poverty among participants by as much as 20 % and extreme poverty by as much as 22 %. This means that as much as 5 % of program-participating households should be*

able to lift their families out of poverty every year by borrowing from a micro-credit program” (Daley-Harris, p.4, 2002). A similar study was carried out on the performance and prospects of micro-credit innovation in meeting sustainable household food and nutritional security in Cuddalore District of Tamil Nadu. The study conducted by Prabakar and Sita Devi found that micro-credit through the Self Help Groups (SHGs) enormously contributed not only to push back poverty but also to enhance food security especially nutritional security, which is one among the important food system challenges to be addressed in developing and under developed economies of the globe. Their study focused on employment, possessed assets, food consumption expenditure, household, savings and per day calorie intake of two categories of respondents. Category I is consisted of SHGs that have up to 2 years of existence, and category II is consisted of SHGs that have more than 2 years of their existence (Prabakar and Sita Devi, 2011). The result of their findings is compiled in the following table:

Table 2: Economic Indicators of Sample Respondents

S1 No	Particulars	Category I			Category II		
		Pre-SHG	Post-SHG	Increment	Pre-SHG	Post-SHG	Increment
1	Employment (man-days)	429	510	81 (18.88%)	420	527	107 (25.48%)
2	Income (Rupee)	35980	44356	8376 (23.28%)	35573	47467	11893 (33.44%)
3	Assets (Rupees)	9881	16325	6444 (65.22%)	9582	17244	7662 (79.96%)
4	Savings (Rupees)	697	2300	1603 (229.99%)	893	2773	1880 (210.53%)
5	Borrowings (Rupees)	4179	13663	9484 (226.94%)	4814	15024	10210 (212.08%)
6	Consumption Expenditure (Rupees)	19642	26731	7089 (36.09%)	21450	29948	8498 (39.62%)

Source: Prabakar and Sita Devi (2011)

The employment situation had increased to 18.88% in category I and 25.48% in category II and possessed assets to 65.22% and 79.96% in category I and category II, respectively. The average food consumption expenditures increased by 41.65% and 50.30%, Savings significantly increased passing from Rs.697 and Rs.893 to Rs.2300 and Rs.2773 in category I and category II respectively in the post-SHG situation. In Côte d'Ivoire, West Africa, the research conducted by Fofana (2010) in her analysis on the effectiveness and capability of MFIs in enhancing women's livelihood activities and empowerment, and ensuring food security in the

Abengourou region between the situation of two categories of women: the women with micro-credit and women without micro-credit, she came up with results that are summarized in the table below:

Table 3: Average effects of obtaining MFI credit on a set of outcomes

	Mean		Difference
	With credit	Without credit	
Income in FCFA/month	50,179	29,331	20,848
Women's assets (FCFA)	39,807	21,879	17,928
Household assets (FCFA)	552,312	312,721	239,591
Value of production/ha (FCFA)	597,138	447,464	149,674

Source: Fofana (2010)

The results in table 3 clearly showed the difference between women with micro-credit and women without micro-credit. This is an indication that women wisely use their loans and she went on to conclude that micro-credit really improves the level of female borrowers' income.

2.5 Controversy around micro-credit

Though micro-credit is identified as a tool to alleviate poverty, some studies have arisen controversial issues concerning its effectiveness. Fofana (2010, cited in Chua et al., 2000) found that the lending outreach of MFIs to poor borrowers is limited and then argued that the limited participation of the poor is a proof that the micro-credit programme failed to alleviate poverty. Kiiru, (2007, cited in Sharma, 2000) says that micro-credit does not help the poorest because it does not reach them. The detractors argue that micro-credit is a collective responsibility, consuming limited resources without significantly affecting long-term results. They even affirm that micro-credit has limited growth potential and has no sustained impact on the poor. For them, micro-credit makes the poor economically dependent on the programme. Other detractors like Adam and Hospes cited by Kiiru, (2007) are of the view that debt is not a real instrument for helping most poor people to improve their economic condition be they operators of small farms or micro entrepreneurs. Their main argument is that there are other difficulties small households face like product prices, land tenure, technology, market access and risk that could affect the effectiveness of micro-credit. Reviewing literature on the impact of micro-finance repayment on household assets, Kiiru, (2007, p.19, cited in Kiriti, 2005) found that "*poor households depleted livelihood assets in the course of loan repayment since the income generating activities were not raising enough profits to repay the loans on time*". He concluded that micro-credit tends to indebt poor women and leaves them more vulnerable and exposed.

While some proponents present the advantages of the joint liability lending, Diagne (1998) came out with the contradiction. In his study in Malawi, he found out that the groups which joined the Malawi Rural Finance Corporation (MRFC) failed to repay their loans and they could not participate in any micro-credit programme.

The idea according to which micro-credit does not reach the poor is contested by Congo. In fact, after studying the performance of micro-finance in Burkina Faso, he strongly defends that micro-credit does reach the poor (Congo, 2002). During Micro-credit Summit 2002, it was noticed that micro-credit reached the poorest. Some proponents are of the idea that since the traditional banks and financial institutions did not meet the needs of women and the poor, substitute financial institutions should be established to take into consideration these groups' demands for financial services and micro-credit is a good one because it increases the consumption and production of the poor who lack access to credit from banks. An explanation to the fact that micro-credit consumes scarce resources is from Bangladesh. In his work of assessing the role of Role of Micro-finance Institutions to Enhance Food Security in the Climate Change Context, Parvin (2012, p.15) found that unexpected shocks (like disease, drought) could cause an increase of poverty of micro-credit beneficiaries for they lose their assets and resort to other sources to pay back their loans. The MFIs only stick to their recovery policy "*regardless of any emergency, family crisis, shocks or job loss due to natural disasters*".

Whichever the view about micro-credit, there is one idea to keep in mind. Aghion and Morduch (2005) observe that micro-finance can make a real difference in the lives of those served, but micro-finance is neither a panacea nor a magic bullet against poverty, and it cannot be expected to work everywhere and for everyone. This is because socio-cultural and economic conditions of different settings affect results to the extent that whatever model worked well in one setting may not necessarily work the same in another setting.

2.6 Strategies to sustain micro-credit schemes

For Adongo and Stork (2005, p.1) "*Micro-finance can pay for itself, and must do so if it is to reach very large numbers of poor households*". For that, several strategies have been elaborated to sustain micro-credit which include:

2.6.1 Interest rate

According to Congo (2002), the viability of MFIs, and consequently their sustainability, is closely linked to their financial spread and lending interest rates. In order to sustain their activities, MFIs should apply an interest rate that can pay for all the costs (salaries of staff, housing, electricity, water, paper). Different researches have shown that the interest rate applicable to clients is different from one country to the other. According to Adongo and Stork (2005), the interest rate charged in Namibia is approximately 30% per year. This was because the Government of Namibia elaborated and applied the Usury Act to achieve financial sustainability, protect borrowers from the adverse social impact of high interest rates and efforts to increase access to financial services (Adongo and Stork, 2005). In Kenya, the rate ranges between 24 to 30 % (Kiiru, 2007). In Cambodia, the interest rate can reach 40 - 45% because the MFIs integrate the cost to move to the villages that are difficult to access (transaction costs) (Ben Barka, Tran, Delmas, n.d.)

In 2002, the interest rate applicable in Burkina Faso varied between 12 % and 24% (as shown in the table below) (Congo, 2002).

Table 4: Interest rates (%)

Year	Savings and credit cooperatives		Group credit institutions		Projects and NGOs	
	FCPB	CEC/Z	PRODIA	FAARF	ADRK	ECLA
Lending interest rate	10	15	17	10	12	15
Sustainable interest rate	11.85	31.25	42.34	25.12	23.76	44.19

Source: Congo, 2002

Morduch (2000) points out that the enthusiasm for micro-finance rests on an enticing win-win proposition that: Micro-finance institutions that follow the principles of good banking will also be the ones that most alleviate the most poverty. The assumption was that with good banking practices it is possible to cover costs and operate in a sustainable manner to continue serving clients and alleviating poverty.

2.6.2 Repayment rate

For any MFI to finance new clients, it is important to recover the money lent to borrowers. The idea by which poor borrowers are not credit worth has been contested by some researchers. In fact, in their different findings credit repayment is satisfactory. During the micro-credit summit 2002, it came out that the repayment rate in almost all the cases was above 95%. While at the Grameen Bank, the recent reported repayment rate was between 97–98% (Daley-Harris, 2002), at the Association for Social Advancement (ASA), the repayment rate in 2003 was 99.9% and their revenues had fully covered the different costs since 1993. When assessing the repayment rate of small loans in Burkina Faso, MULOT (2008) concluded that it was around 98%. In Kenya, the repayment rate was varying from 75% to 100% (Kiiru, 2007).

2.6.3 Others strategies MFIs can use to make profit

For MFIs to make profit there are two main ways which are the reduction of the administrative cost and the increase of revenues. The increase of revenues of MFIs can be to expand and to create new products that are adapted to its clients' needs (e.g. housing loans, transfers, etc.). The reduction of costs for MFIs can be the use of technology (front and back office) and the increase the productivity of staff, through incentives (Molenaar and Lämmerman, 2009). This is because it really is all about meeting the poor clients' needs.

2.7 Evolution of DFSs in Burkina Faso

2.7.1 Background information on DFSs in Burkina Faso

According to MULOT (2008), the experiences of saving and/or credit have existed in Burkina Faso since the late 1960s. The financial services provided by the DFSs to clients were adapted to their needs and closer to them. As a result, the sector was attracting more and more poor people who could not access the formal banking system which required guaranties before lending money to them. In the absence of a legal framework, the credit was administered on the functioning principles of the concerned MFIs till 1994 when the first regulatory law on micro-credit was adopted (The law was called Legal and Regulatory Framework applicable to MFIs is known as the law no 59/94/ADP of 15 December 1994). The motive behind the government deciding to adopt the law was to secure the clients from exploitation by the credit providers and to sustain the activities of service providers. Previously to the adoption of the law, during the

session of West Africa Monetary Union held in Dakar on 17 December 1993, the Council of Ministers adopted a legal framework (called *Projet d'Appui à la Réglementation des Mutuelles d'Épargne et de Crédit (PARMEC)*) to channel the activities of MFIs in their home country. So to conform itself to the regional regulation, Burkina Faso adopted the law on 15 December 1994 (MEF, 2005).

Being aware of the importance of the role of micro-credit for development, the Ministry of Finance and Budget (MFB) organised a National Conference in October 2003 on the topic "making the decentralized financial system/micro-finance institutions sustainable in the fight against poverty" so as to discuss the opportunities and constraints in the sector and come out with recommendations to improve the sector and sustain it. After the National Conference and wanting to have a clear idea about the number of MFIs operating in Burkina Faso, the MFB carried out a census in 2005. The result showed that of 335 MFIs identified 309 were officially registered with the MFB. (MFB, 2005)

2.7.2 Legal framework for Decentralized Financial systems

Burkina Faso forms with 7 other countries of West Africa (Benin, Côte d'Ivoire, Mali, Niger, Senegal, Togo and Guinea Bissau) the West African Economic and Monetary Union (WAEMU). All the country members are using a single currency which is the CFA franc (XOF) issued by the Central Bank (BCEAO) located in Dakar, Senegal. It is the Central Bank that controls the Banking Commission responsible for overseeing and supervising banks and financial institutions. It also controls the Savings and Financial Markets Regional Council. In the WAEMU zone, the micro-finance institutions are called Decentralized Financial Systems (DFSs) and they were regulated by PARMEC (*projet d'Appui à la Réglementation des Mutuelles d'épargne et de Crédit*). In 2007, the council of Ministers adopted a new law establishing regulations for DFSs. In Burkina Faso, the bill was passed in 2009 and since then, the sector has been regulated by the law on Decentralized Financial Systems. It is this law that allows each member state to monitor the micro-finance activities in the country (www.lamicrofinance.org).

2.7.3 Typology of DFSs in Burkina Faso

In Burkina Faso, four types of MFIs are identified (MEF, 2005):

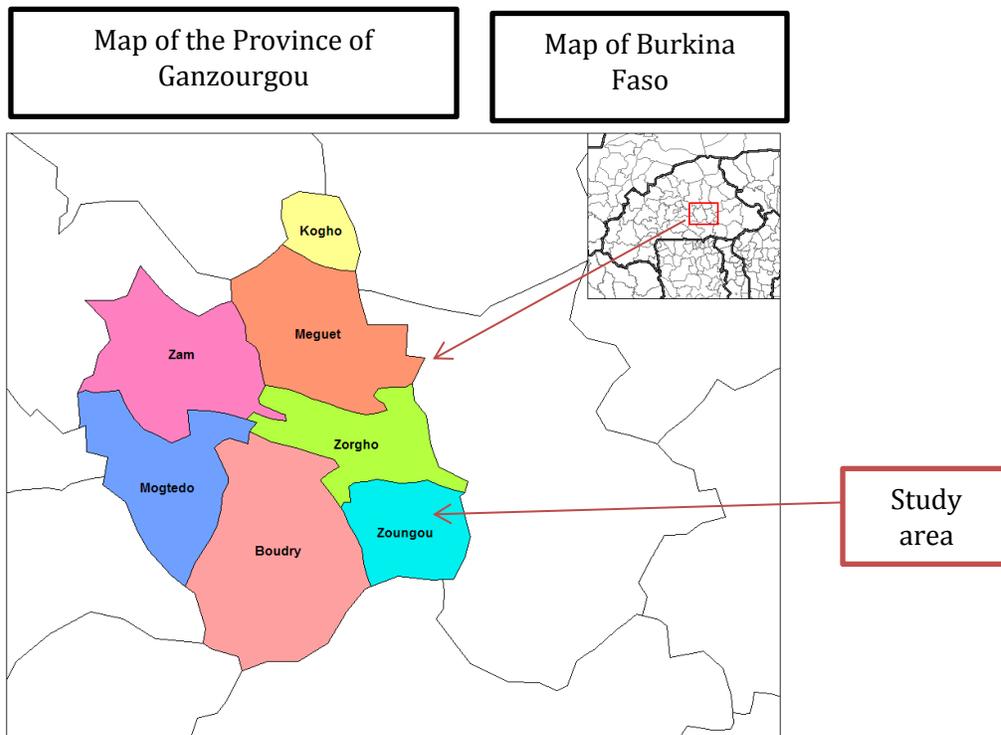
1. The saving and credit cooperatives represent the dominant form of DFSs and have more than 60% of the market share.
2. The structures of direct or solidarity credit which the main activity is to lend money on the basis of the credit line awarded by Technical and Financial partners or the resources borrowed from the banks.
3. The projects with credit department and Non-Governmental Organisations (NGOs)/associations which develop micro-credit to help achieve their objectives.
4. The National Funds which are created by the Government of Burkina Faso to promote employment. These funds finance income generating activities and have 7.3% of the market share.

CHAPTER 3: STRATEGY AND METHODOLOGY

3.1 Study area

The area of study is Zoungou, Province of Ganzourgou. Zoungou is situated 9 km away from the major road leading from Ouagadougou, the capital city of Burkina Faso to Tenkodogo, the capital of the Centre East Region. At Zoungou, there is a farmer cooperative composed of men and women who work together towards improving their livelihood. Zoungou was selected as study area because farmers got more loans than the other farmers' groups that ODE is assisting. They are also farmers at Zoungou who never got FINACOM credit for their activities and that an interesting comparison can be established between borrowers and non-borrowers for all climatic conditions being the same for the respondents. The geographical location of Zoungou is shown in figure 4.

Figure 4: Map of Burkina Faso indicating the study area



3.2 Research design

This research is a combination of desk study and case study focussing on qualitative data collection in order to get in-depth information on the link between micro-credit and income improvement. During desk study, the collection of data focused on definition and different concepts concerning micro-credit developed by different authors, how micro-credit is implemented, its impact on income improvement, the activities of FINACOM, its intervention strategy. This consisted in reading available ODE annual reports, books in the library and internet research. The desk study also helped in getting familiarised with concepts like sustainability in micro-credit, income and sources of income of rural farmers, livelihood

strategies applied and outcomes achieved by micro-credit beneficiaries. A field study complemented desk study and consisted in collecting data on past and current income situation of beneficiary farmers, on the sustainability for FINACOM credit scheme and for the beneficiary farmers. Data were also collected from farmers who did not receive FINACOM credit during the same period. For the field work, appropriate checklists for each category of respondents were elaborated. The use of the checklist was to get more details about the impact of FIANCOM credit on beneficiaries by giving them opportunities to fully express themselves about the topic in discussion. A first visit was undertaken at Zoungou before data collection to meet community leaders, resource persons and farmers and to create familiarities with them so as to get more reliable answers. During that visit, the purpose and the objective of the study were explained, as well as procedures to select respondents and how interviews would be conducted. That same day, respondents were selected and appointments were made.

During data collection at Zoungou, a focus group discussion was held to gather data about the actions the beneficiaries were undertaking to improve their income, how they can sustain their activities, their perception about the credit being borrowed in groups. This is done using a checklist.

Some keys informants like the director of FINACOM, ODE programme officer and ODE field worker were interviewed so as to get more in-depth information about characteristics and sustainability of FINACOM. The different interviews were conducted using checklists. The desk study and the field work were completed by some observations to cross-check the information collected.

3.3 Research framework

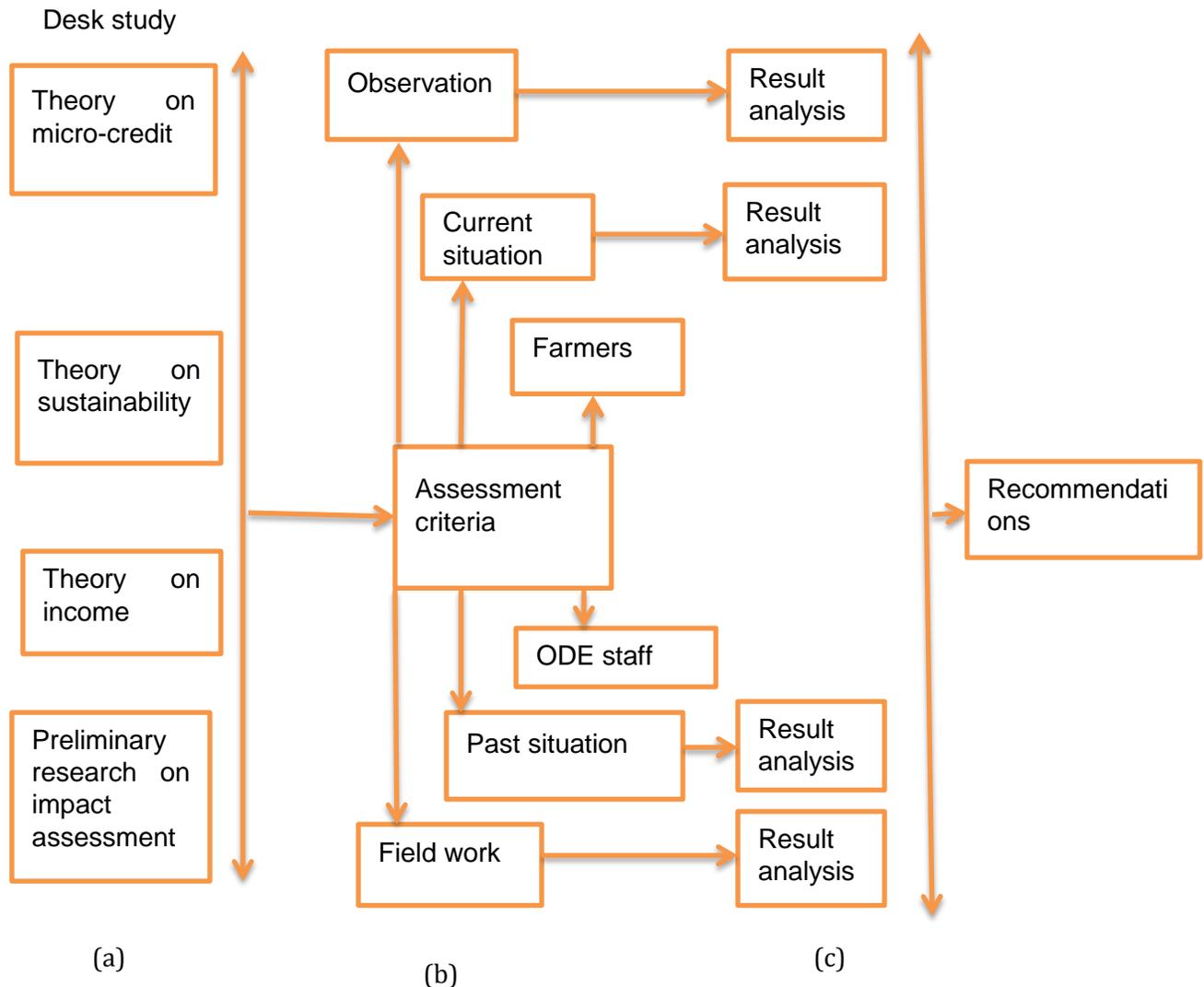


Figure 5: Research framework

This research framework can be described as:

(a) Relevant literature will be gathered concerning theories on micro-credit, sustainability, income and preliminary research on impact assessment through desk study. That will yield the assessment criteria (b) with which to assess the past and current situation of income through field work and observation (with farmers and ODE staff). An analysis of the result (c) will be done so as to formulate recommendation(s).

3.4 Selection of respondents

3.4.1 Within the group of beneficiaries

The selection in the group of beneficiaries of FINACOM credit was done with the help of the members of the credit committee who had a record of borrowers. The main condition for a respondent to be elected was that s/he should be a borrower of FINACOM credit for two consecutive years. After the establishment of the list of borrowers by the committee and the

researcher, 252 potential respondents (103 men and 149 women) were identified and numbered. The same numbers were written on small pieces and put in separate calabashes for men and women, stirred and of which 14 respondents (7 men and 7 women) were randomly selected. The equal number between men and women was that the researcher wanted to compare the income situation of these two categories because women are better than men in using micro-credit (Fofana (2010, cited in Niehof, 2007).

3.4.2 within the group of non-beneficiaries

Two lists of the non-beneficiaries (68 men and 136 women) of FINACOM credit were established by the credit committee. The names of non-beneficiaries came from the list the farmers who applied for loans but have not yet been selected. The same procedure which was applied to beneficiaries was also applied and 7 men and 7 women were selected. The selection of this category was to find how their income has evolved during the past two years.

In addition to the individual interviews with beneficiaries and non-beneficiaries, a focus group discussion was organised. It was attended by 2 members of the credit committee, 3 members of the board of the cooperative and 5 beneficiaries.

3.4.4 Interviews with key informants

They are selected based on their position and role in the management of the credit because the success of the FINACOM micro-credit scheme to a great extent depends on their actions.

Table 5: Summary of respondents

Number of respondents	Category of respondents	Method of collecting data
7	Women beneficiaries	Individual interview and observation
7	Men beneficiaries	Individual interview and observation
6	Women non-beneficiaries	Individual interview and observation
5	Men non-beneficiaries	Individual interview and observation
10	Women and men beneficiaries	Focus group discussion
3	Key informants	Individual interview

3.5 Data collection

This research which adopted the qualitative approach was based on empirical data and desk study. The different pieces of information were gathered by the researcher (here the researcher is a Food Security master student from Van Hall Larenstein University of Applied sciences in the Netherlands).

Individual interviews using checklists were carried out either at respondent's house or at work place so that they could feel confident and talk freely. Concerning the focus group discussion, it took place at the meeting place of the credit committee which is the same as the cooperative. Interviews and focus group discussion were conducted in Moré and details were being noted down in English.

3.6 Data analysis

Data collected during field work are summarised using Microsoft word through figures and tables. An emphasis was on comparing the situation of income before and after the intervention of the beneficiary and non-beneficiary farmers. Another comparison was established between men and women beneficiaries to know who was making good use of the credit.

3.7 Limitations of the research

The objective of this study was to assess the impact of FINACOM micro-credit on food availability and accessibility of farmers at Zoungou. This was because of amount of loan lent to farmers at Zoungou. In fact, farmers at Zoungou received more money than the other farmers ODE were assisting. The second reason for the researcher's choice was based on the recommendation made in one of ODE reports mentioning the necessity to know the impact of FINACOM credit on borrowers' food availability and accessibility (ODE, 2011). During the field work, the researcher found that the credit was financing IGAs and that the profit was used for other expenditures than buying food. According to the respondents, the production in cereals could satisfy their needs. Part of the profit was used to buy proteins (meat or fish) to diversify their diet. Research undertaken at the Provincial Direction of Agriculture and Water of Ganzourgou and even at the Direction de la Prospective et des Statistiques Agricoles et Alimentaires (it is the department that is responsible for collecting and processing of data concerning crop production and food prices) at the Ministry of Agriculture and Water revealed that the province for the time being was food secure (MAW, 2009, 2010, 2011). With that situation of food availability in mind, the researcher decided to focus on the impact of the credit on income. As a food security researcher, income is important and can be used to deal with the fourth dimension of food security which is stability. As mentioned in the introduction, Burkina Faso frequently faces natural disasters like drought, flood and pest attacks and in case they occur farmers can use their income to buy food.

The researcher found that the rotating fund that was given to farmers by ODE for the production of rice for consumption is still used by the cooperative and that for the production of improved rice seeds, farmers are also receiving financial and technical assistance.

During the field work, other difficulties were encountered by the researcher. Questions about income were not answered straight forward by the beneficiary or non-beneficiary respondents. They were letting the researcher calculate for himself. The researcher wanted to interview 14 non-beneficiaries but he only got 11 because non-beneficiaries were not eager to answer questions because for them it was irrelevant to investigate on their income they were getting from their activities. The researcher had to resort on the list to select other ones.

CHAPTER 4: PRESENTATION OF ODE

4.1 Background information on ODE

The ODE was officially established August 12, 1972. Originally called Project Office for Development (POD), it embodies the will of the evangelical community of Burkina Faso, gathered within the FEME, to show love of neighbour by contributing to the economic, social, cultural and spiritual development of Burkina Faso. Created in a context of food insecurity marked by severe droughts in 1973, the ODE was quickly erected as a partner of some churches from the Developed countries for the relief of many people affected by the drought and its side effects (starvation and lack of drinking water) in Burkina Faso. This role would greatly strengthen its position of NGO operating in the area of food security. Attention to the holistic development of man would bring it gradually to engage in most priority areas of economic, social, cultural and spiritual development of Burkina Faso. These include agriculture, health, education and drinking water.

4.2 Objectives and missions

As an evangelical organisation, ODE bases its vision and mission on the Bible, the Word of God, which enlightens Man's daily activities. The Bible teaches that Man is created in the image of God (soul and intelligence), which gives him a dignity (Genesis 1:27). But human dignity is being challenged by hunger, ignorance, disease, poverty, corruption ... This is why the vision of the ODE is a world where human dignity is restored by the promotion of an integral, responsible and sustainable development.

4.3 Major phases of the evolution of the ODE

Since its inception in 1972, ODE has been working in partnership with development agencies to improve the living conditions of people in Burkina Faso. If the approach which takes into account the participation of beneficiaries has remained the same, the overall strategies of intervention have undergone changes over time and space. They moved from projects embracing the entire territory of Burkina Faso to the integrated development projects focusing on specific areas. Three major periods stand in the evolution of the ODE:

- The First Decade: 1972-1989: ODE gathered and treated projects in a systematic manner and sometimes without any relation to a development issue.
- Transition: 1990 - 1995: Taking into account the recommendations from different evaluations on the performance of ODE, the NGO developed two intermediate programmes which consisted in focusing on one domain of development and one geographic zone at one time so as to achieve a greater impact.
- Integrated development: 1996 till nowadays: This period is characterized by a diagnosis of all programs of ODE. ODE reviewed all its programmes so as to identify obstacles and find ways to solve them. This period is crucial in the evolution of the ODE. During that period, three main programmes can be cited:
 - The Family Food Security Programme (FFSP 2003-2006);
 - The Support Programme for Family Food Security (SPFFS 2006 - 2009);
 - The Food Security Program in Passoré (PSAP 2008-2011).

4.4 Bodies of management and internal organisation

For the organogram of ODE, see annex 1.

As presented in the organogram, ODE is organised the following way:

- The Federation of Evangelical Churches and Missions (FECM)

Founded in 1960, the FECM currently has thirteen (13) churches and seven (7) mission members. It includes most of the Protestant community of Burkina Faso and is headed by an Executive Board which meets once a year in General Assembly. It is the FECM which is the guarantor of the political orientation of the ODE.

- Managing Committee (MC)

The ODE is administered by a Managing Committee composed of one representative from FECM members. The President of the FECM chairs meetings of the Managing Committee. Currently, the Managing Committee has eleven (11) members of which (10) representatives of FECM members and the President of the FECM. The Managing Committee, which meets thrice a year, acts as the Board of Directors of ODE.

- Technical Committee (TC)

The Technical Committee is composed of competent specialists in certain areas of intervention of ODE (education, health, socio-economics, etc.). The TC is responsible for advising the Managing Committee and ODE in the process of developing and implementing programmes and other issues eventually.

- The Executive Secretary

Under the authority of the Managing Committee, the Executive Secretary ensures the daily management of the institution which he represents. He is the linking pin between ODE and development partners (relief organizations of churches in the North, local authorities, etc.).

- The audit office

Article no 9 of the statutes of ODE states that the accounts of ODE must be audited annually by an approved auditor. To this end, the International Trust Chartered Accounting and Computer Science (FIDECI) is responsible for the audit.

- The Administrative and Financial Direction (AFD)

The Administrative and Financial Direction (AFD) is responsible for administrative matters and property of ODE. The AFD includes Financial Resources Manager, the Intendant, accountants, bookkeepers, cashiers, secretaries, imager, drivers and security agents and cleaners.

- The Department of Programs

The Department of Programs is the section of the ODE which is responsible for the implementation of various programmes and projects. Headed by a programme coordinator, it includes programmes officers and Community Development Consultants (CDC). The CDCs are under the authority the programs officers, who in turn report to the program coordinator. The

DCs in the same area of intervention are the Multidisciplinary Team Support Council of the area. They meet once a month to discuss the implementation of various programmes, to identify difficulties and to try to find applicable solutions.

4.5 Main areas of intervention

- Agriculture and environment

Burkina Faso is a country with an agricultural vocation. An estimated 85% of the population of Burkina Faso work in the agricultural sector. However, the Burkinabe agriculture still faces erratic rainfall and the limited means of production. ODE through its programmes contributes to the development of the sector by: a) The promotion of sustainable farming practices, b) Protection and Restoration of Soil & Conservation of Water and Soil (DRS / CES), c) post-harvest handling.

- Agricultural hydraulics

Agriculture is the largest sector which needs water, particularly in irrigation. Throughout the country, ODE has constructed about thirty dam to develop irrigation. Wells have also been constructed for the development of crops during dry season.

- Village hydraulics

"Water is life" is often said. However this label can be valid only in conditions where man takes care of the water and ensures its good management and its quality permanently. A look at the situation of poor countries shows alarming figures on the conditions of access to drinking water for people. This is why since its creation ODE has contributed to improve access to safe drinking water for rural people, who are more vulnerable and more exposed to waterborne diseases.

- Community health and fight against Sexually Transmitted Diseases (STD) and HIV / AIDS

The issue of health is crucial for a developing country like Burkina Faso. In addition to malaria and various epidemics (meningitis and measles) that plague each year, HIV / AIDS has become over the years a major cause of mortality in the country. ODE in partnership with Solidarity Protestant Belgium set up two centres of voluntary HIV / AIDS at Toma (Province of Tougan) and at Leo (Province of Sissili). On the sidelines of this, ODE provides spiritual and medical care and food to AIDS patients.

- Emergency and rehabilitation

Despite ODE' efforts to assist people to promote sustainable development, Burkina Faso, a Sahelian country, is confronted with erratic climatic conditions causing drought, floods, epidemics and other disasters which make people vulnerable to famine. It is in such contexts that ODE occurs from time to time to relieve the misery of the poor. This help is provided through emergency relief and rehabilitation programmes.

- Savings and credit

Before the setting up of FINACOM, the savings and credit policy of ODE was based on an intermediation strategy with the Decentralised Financial Systems (DFSs). In order to increase the income of target groups, they were linked with the DFSs for small loans for the promotion of

income generating activities (IGAs). ODE also trains on credit management and IGA development. From 2010, FINACOM plays the role of providing loans to ODE target groups as far as loan is concerned.

- Capacity building

Education and training are the keys to sustainable development. ODE' actions in this area can be summarized as: a) construction and equipment of functional primary schools and literacy centres, b) various trainings and study visits for the benefit of farmers' organizations.

- Local governance

Since 2006, Burkina Faso has taken a step in the decentralization process. Although this initiative is to be welcomed, it is limited by the actual capacity of the new municipal leaders and farmers' organizations to effectively engage in the development of their districts. These limitations are especially due to the illiteracy rate among councillors and in turn, their low level of understanding of key concepts and basic decentralization texts. ODE' work is to provide support and advice to local elected councillors (training, literacy ...) and sensitize communities through their organizations to participate in the development of their districts.

- Promotion of integral mission of the church

ODE, based on the growth model of Jesus according to Luke 2: 52 believes that human development necessarily takes into account the body, mind, and soul. When these three dimensions are not taken into account in the development, it is certain that this development is not smooth. So ODE is working to mobilize the church to make it a national instrument of transformation of its environment. This is especially important as the Bible invites to be the salt of the earth and the light to the world.

4.6 ODE partners

Among the Western partners that are involved in the social action in Burkina Faso with ODE, there are:

- Brot Fur Die Welt (BFDW), German partner
- Tear Fund Hollande (TFH), Dutch NGO
- Tear Fund/UK (TFUK)
- Service d'Entraide et de Liaison (SEL)
- Christian Aid (CA) in England
- Zending en Wereld Diakonaat (ZWD)
- EZE, HEKS, Menonite Central Committee (MCC), ICCO.
- European Union
- Dutch Embassy

4.7 Characteristics of FINACOM micro-credit scheme

The description of FINACOM micro-credit is done using the following characteristics: the clients and activities financed, the interest rate, the selection of clients for credit and the monitoring of the credit.

4.7.1 The clients and activities financed

The clients of FINACOM are various and come from different backgrounds. They are farmers through their organisations, workers from the public and private sectors, traders, entrepreneurs.

The activities that are financed by FINACOM are sheep fattening, cow fattening, horticulture and purchasing and reselling of agricultural products (FINACOM, 2009). FINACOM finances these activities because they are simple activities that can be handled by farmers.

4.7.2 The interest rate and repayment rate

In Burkina Faso, according to the law on Decentralized Financial System, the interest rate should not exceed 17%. But lots of Decentralized Financial Systems apply 9-11% interest rate. At FINACOM, the applicable interest rate is 10%. The repayment rate is 100%. But sometimes, delays are noticed.

4.7.3 The selection of the clients for credit

The selection of FINACOM credit beneficiaries is done by credit officers. In fact FINACOM being a saving and credit institution, the client has to save first before being able to ask for a loan. The approval of the application and the time of receiving the loan depend on the financial capacities of FINACOM and that is applicable to individual borrowers or clients. For the farmers who are working with ODE, they are organised in small groups of 5 individuals who have selected each other on the basis of trust. These small groups operate within the farmers' cooperative for which ODE has set a credit committee. The tasks of the credit committee is to assist farmers in writing their business plans, to collect and analyse the business plans of farmers and to select final beneficiaries of the loans. The credit committee is helped ODE field worker who is responsible of the credit aspect. After their selection, the files of selected farmers are transmitted to FINACOM for funding. In the case of farmers at Zoungou, the borrowers should also be a rice producer and if there is an impossibility of paying back the loan, his or her profit in the rice production will be used to repay the credit.

Contrary to the basics of MFIs which do not require collaterals, FINACOM being a saving and credit institution, requires from its clients a guarantee. For farmers at Zoungou, the guarantee is as follows:

- 10% of the total amount of the requested loan should be provided by a male borrower and kept in his account.
- 5% of the total amount of the requested loan should be provided by a female borrower and kept in her account.

According to the director of FINACOM, the difference in the guarantee is due to the fact that men borrow important amount of money while women borrow small amount. The different amount borrowed by men and women will be dealt with later on. Once the credit is paid back, FINACOM gives back the guarantee to farmers.

4.7.4 The monitoring of the credit

The monitoring of the credit concerns the beneficiary farmers. It is done by the credit committee. The field worker, who monitors the activities of the credit committee, makes sure that the members do their work properly and that things are going in the right direction meaning that the cows are well handled, the products are well stored and those who are involved in horticulture are applying the recommended technologies. It is important to mention that ODE has two field workers who are assisting the farmers in their activities. One is responsible of crop production and the other for credit aspect.

CHAPTER 5: FINDINGS

5.1 Situation at Zoungou

This section presents the activities of ODE at Zoungou, the sources of income, the food availability situation and the fluctuation of food prices at Zoungou.

5.1.1 Activities of ODE at Zoungou

ODE started its activities at Zoungou in 1994 with the construction of a dam and the irrigation infrastructure which covers 100ha. Since then, it has assisted farmers in various ways, ranging from trainings to financial supports. The topics of training sessions are summarised below as follows:

- Techniques of horticulture and rice production,
- Purchasing and reselling of agricultural products,
- Techniques of cow fattening,
- Marketing skills,
- Post-harvest storage techniques,
- Techniques of improved rice seeds production,
- Integrated pest management,
- Safety use of pesticides,
- Credit management for the committee responsible of credit and
- Irrigation water management for the committee responsible of water management.

About the prevailing situation of agricultural production at Zoungou, one of the respondents said:

Box 1:

Before the construction of the dam and the irrigation infrastructure, the food situation was very bad. Most young people here at Zoungou were migrating either to Ouagadougou, the capital city of Burkina Faso for off-farm activities or to Côte d'Ivoire where conditions were gathered for agricultural production. With this infrastructure and the different trainings delivered to farmers and financial supports, things have improved a lot and today the number of young people migrants has reduced considerably.

For the past years, an emphasis has been placed on the financial intermediation which started during the 2003-2006 period with only 22 men and 38 women undertaking some IGAs (Bazie, 2006). The IGAs concern two main activities: cow fattening for men and purchasing and reselling of agricultural products for women. All these activities are monitored by ODE field workers.

Table 6: Evolution of the amount of money lent to farmers at Zoungou for the past 4 years

	Years	Beneficiaries	Number	Amount of loan	Increase
Before FINACOM (financial intermediation)	2008	Men	--	27,325,000	
		Women	--	13,090,000	
		Total	--	40,415,000	
	2009	Men	--	31,700,000	4,375,000 (16.0%)
		Women	--	14,097,500	1,007,500 (7.7%)
		Total	--	45,797,500	5,382,500 (13.3%)
With FINACOM	2010	Men	105	33,300,000	1,600,000 (5.0%)
		Women	211	15,825,000	1,727,500 (12.3%)
		Total	316	49,125,000	3,327,500 (7.3%)
	2011	Men	118	43,625,000	10,325,000 (31%)
		Women	210	17,925,000	2,100,000 (13.3%)
		Total	328	61,550,000	12,425,000 (25.3%)

Source: ODE, 2011 and FINACOM, 2010 and 2011

NB: €1.00 = CFA 655.96 (fixed exchange rate)

From the table, three major conclusions can be drawn. First of all, the amount of money borrowed has kept increasing significantly and according to the Vice-President of the cooperative, “farmers borrow more and more money because they know how to use the loan in an efficient manner and they also make profit”. The amount of money increased for about 13.3% before FINACOM started its financial activity and more than 25% in 2011 with FINACOM. Secondly, the amount of money borrowed by men is higher than the amount borrowed by women because a man borrows between CFA F 0-500,000 and a woman between CFA F 0-100,000. According to ODE field worker, women borrow less than men because they fear putting the family assets at risk. Thirdly, the number of beneficiaries has kept increasing since the beginning of the financial intermediation with 22 men and 38 women in 2003.

5.1.2 Sources of income

The research conducted at Zoungou revealed that farmers did not stick to one activity to get income. They are involved in different activities to improve their livelihood. These activities included on-farm, non-farm and off-farm activities such as sale of livestock, sale of crops (rice, maize, sorghum, millet, cowpea and cotton) and fishing. The management of grain mill is a source of income as well for the owner. A recent activity for some farmers is the production of improved rice seeds which has generated for the past two years CFA F 43,000,000 in 2010-2011 for 86 tons produced and CFA F 37,000,000 in 2011-2012 for 74 tons (ODE, 2012).

5.1.3 Situation of food availability at Zoungou

The situation of food availability at Zoungou is explained by referring to the figures available at the provincial level. This is based on the assumption that with the dam and irrigation infrastructure which give possibilities to cultivate during rainy and dry seasons, the production at Zoungou is higher than the production of the province. The crop production situation at the provincial level is summarised in annexe 2.

The figures show that the size of cultivated areas and quantity of crops produced of the province are fluctuating. From 2009 to 2011 the areas of the cultivated fields increased and so did the production. But from 2011 to 2012, there was a decrease of the cultivated which led to a decrease in the production. The decrease in the production was also due to the drought which occurred during the 2011-2012 rainy season (FAO, 2012).

The above food production situation has led to the table below showing the availability of food in the province.

Table 7: Situation of food availability in the province of Ganzourgou between 2010 and 2012

Date	Population	Needs in tons	Food availability in tons	Food coverage rate (%)
30/04/2010	349,933	66,487	66,317	100
30/04/2011	356,582	67,751	89,841	133
30/04/2012	370,470	70,389	82,093	117

Source: MAW, 2010, 2011 and 2012

The figures show that the situation of food availability in the province of Ganzourgou is satisfactory because the needs of the people are covered. But between 2011 and 2012, there was a decrease in crop production; a decrease that has probably been caused by the severe drought that occurred during the 2011-2012 rainy season.

5.1.4 Fluctuation of food prices

Annex 4 presents the different food prices over four years to show the situation before and after FINACOM intervention at Zoungou. In fact, the figures show that the prices are low just after harvest (October and November) and higher after six or seven months. The tables also indicate the favourable period for purchasing and reselling agricultural products. This situation is exploited by women involved in that business to increase their income.

5.2 Background information of respondents

- Age of respondents

Table 8: Age group of respondents at Zoungou

Age group	Beneficiaries		Non-beneficiaries	
	Men	Women	Men	Women
30-39	-	3	2	3
40-49	2	2	3	2
50-59	3	2	-	1
60-69	2	-	-	-
Total	7	7	5	6

The finding about the ages of respondents shows that they range from 30 to 69 years with a concentration between 40 and 59 years. More beneficiaries and non-beneficiaries are in the productive age which is between 30 and 59 years.

For the activities financed by FINACOM, the credit committee thinks that when the age of beneficiaries is between 30-59 years they can work and repay the money borrowed from DFSs because the tasks required in the business do not involve too much energetic efforts. It is also the age of responsibility and respect at village level and individuals want to deserve other people's confidence.

- Level of education of respondents

Table 9: Level of education of respondents at Zoungou

	Beneficiaries		Non-beneficiaries	
	Men	Women	men	Women
Primary education	-	2	2	-
Secondary education	1	-	-	-
Adult literacy education	3	4	1	4
Illiterate	3	1	2	2
Total	7	7	5	6

The research found that 68% of the respondents can read and write either in French or in Moré (one of the local languages in Burkina Faso). Among the literates, only 5 have formal education and the rest that is to say the 12 others informal education. The inquiry revealed that the adult literacy education was initiated by ODE and the objective was to build farmers' capacities by giving them tools to understand their activities and plan for themselves.

- Marital status

Table 10: Marital status of respondents

	Beneficiaries		Non-beneficiaries	
	Men	Women	Men	Women
Married	7	4	3	4
Bachelor	-	-	2	-
Widower	-	-	-	-
Widow	-	3	-	2
Total	7	7	5	6

The majority of respondents are married. About 72% of the respondents are married, 8% are still bachelors and 20% are widows. At Zoungou, there is no widower.

5.3 Impact of the credit on income improvement

5.3.1 Use of the credit by farmers at Zoungou

The credit that FINACOM gives to farmers is a short-term one (nine months); it is given to farmers in September and farmers are expected to pay back at the end of May. But for farmers at Zoungou, July 25th is the last date for repayment. At Zoungou, the credit given by FINACOM to farmers was used to finance different activities and the table below gives a certain picture of situation of the financed activities in 2010 and 2011. The figures in table concern only the answers of the beneficiary farmers.

Table 11: Financed activities of respondents at Zoungou

Activities financed by FINACOM	Men	Percentage (%)	Women	Percentage (%)
Cow fattening	6	42.9	0	0
Purchasing and reselling of agricultural products (cowpea, groundnut and paddy rice)	0	0	5	35.7
Horticulture production	0	0	2	14.3
Grain mill	1	7.1	0	0

Source: Field work 2012

The table shows that at Zoungou, two activities are predominant: cow fattening and purchasing and reselling of agricultural products (cowpea, groundnut and paddy rice). These two activities were performed by 78.6%. The specification in the 2 activities (cow fattening for men and purchasing and reselling of agricultural products for women) observed during the financial intermediation has been maintained. The grain mill is owned by one farmer and two women are in horticulture production. During focus group discussion, it was noticed that some men are also involved in horticulture production; but their number is few.

The reasons for investing in the above mentioned major activities are that the risks involved are less or minimised.

- In fact, investing in cow fattening for the initiator means certain knowledge of the environment and opportunity. Cow fattening also means that any increase in the weight of the cow leads to an increase in its price. Another reason for investing in cow fattening is that the market is available. During the focus group discussion, it came out that the demand for cow fattening was higher than the supply and the number of buyers coming from Ghana, Côte d'Ivoire and Togo was increasing.
- As for the purchasing and reselling of cowpea and rice by women and referring to the table of prices, one can see that the appropriate period to buy agricultural products is in the months of October and November, period following the harvest when the prices are low. After 6-8 months of storage of these products, the prices increase and the women can sell them and make profits.

The tasks involved in cow fattening and purchasing and reselling of agricultural products are:

- For cow fattening

According to the animal district officer at Zoungou, cow fattening is a simple activity; but it requires attention from the initiator in the management of the cow. At Zoungou, cows belong to men but they are managed by women and children. The management consists in feeding, giving water to the animal and cleaning their shelter. For the vaccination, farmers resort on the district officer who is available and accessible.

- For the purchasing and reselling of agricultural products

It consists in buying the products from producers, drying it again, putting them in bags using the recommended technology for crop protection and placing the bags where the rats or other devastating insects cannot reach them. From time to time, the bags are monitored and if things are not normal necessary measures are taken to solve them.

5.3.2 Evolution of the farmers' income

The formula of the return on investment (ROI) is used to appreciate the income of beneficiary farmers at Zoungou. The formula is the following:

$$ROI = \frac{(\text{Gain from Investment} - \text{Cost of Investment})}{\text{Cost of Investment}} \times 100$$

The use of the formula is justified by the fact that:

- The activities the beneficiaries are involved in do not go on continuously but they take place within a given time (roughly 08 months). The activity starts and finishes with the sale of the cows or the agricultural products. After the sale, farmers pay back their loans. The next loan session is subject to new application for loan.
- Beneficiaries are engaged in these activities for quite some times so, the measurement of their profitability when the activities are finished can tell whether it is worth investing in them or not.

If the ROI is positive then it is a good business that is worth being undertaken; but on the contrary, if the ROI is negative then it is not a good business.

Table 12: Return on investment during 2010 and 2011

ROI	2010		2011	
	Men	Women	Men	Women
0-25%	-	-	-	2
26-50%	5	4	2	-
51-75%	1	2	2	2
76-100%	1	-	1	1
>100%	-	1	-	2
Total	7	7	5	7

Source: field work 2012

NB: For the remaining two men, the first one has not yet sold his cow and the second one is earning between CFA F 2,500 and 5,000 as daily income.

The figures show that women are occupying the two extremities of the ROI. During the two years only two women had less than 25% ROI and two other women had more than 100% ROI. While in 2010, 64.3% had between 26% and 50% ROI, it was between 51% and 75% for four beneficiaries in 2011. No man managed to get a ROI that was more than 100% over the two years compared to women who had one in 2010 and two in 2011. A small calculation of the income of the grain mill owner can show that his ROI higher than 100%. The results also show that though women borrow smaller amount of money, the ROI of their activities is greater than one of men.

In terms of return on investment, women are better than men; but behind that reality of ROI, men are getting more money than women. For an investment of CFA F 500,000, a man can get on average CFA F 744,000 which corresponds to 48.8% ROI (i.e. CFA F 244,000). For a woman, an investment of CFA F 75,000 yields on average CFA F 167,400 and corresponds to 123.20% ROI (i.e. CFA F 92,400).

5.3.3 Use of income

Since beneficiaries are involved in many activities to improve their livelihood, the profit they get from the activities (cow fattening and purchasing and reselling of agricultural products) is added to the profit from other activities they are doing. Non-beneficiaries are also involved in the same activities as the beneficiaries. Both categories (borrowers and non-borrowers) spend their income in different ways which are: education, health, clothes and food diversification. Part of their income is saved for future expenditures.

Table 13: Summary of the use of income of respondents

Domains	Education				Health				Clothes				Food diversification			
	Before 2010		After 2011		Before 2010		After 2011		Before 2010		After 2011		Before 2010		After 2011	
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W
Borrowers	7	4	7	7	7	7	7	7	3	6	7	7	2	4	7	7
Non-borrowers	5	4	5	3	5	6	5	6	5	6	5	6	2	2	2	2

Source: Field work 2012 M: men W: Women

- Education

Both category of men (borrowers and non-borrowers) equally invest in the education of their children; a situation which was maintained during the two years. Investing in the education of children is either paying school fees or giving the children some pocket money when they are going to school. Women also invest in their children's education. This research shows that when there is money women also want to participate in the education of their kids.

- Health

Concerning the health situation of respondents, both borrowers and non-borrowers do invest in it. The situation before and after the intervention has remained the same.

- Clothes

The figures show that before 2010, 100% of non-borrowers spend part of their income in clothes while 42.9% of borrowers were doing so. But after 2011, the situation has been levelled as far as the respondents are concerned.

- Food diversification (diversity of the diet)

In this study, food diversification refers to the diversity of the diet. In fact, the availability of cereals (sorghum, millet, maize and rice) and leguminous (like cowpea) being attained, the question now is how to diversify the food intake in a balanced way to meet the dietary needs of farmers for a healthy and active life. The question asked to farmers was “How diversified was/is your diet?” it came up that the diversity of diet at Zoungou was more related to the presence of meat or fish in the sauce. The answers got from the respondents show that the food diversification situation of borrowers has changed positively after 2011 compared to the situation before 2010. In fact, during the interviews, 100% of beneficiaries affirmed that they now ate more proteins more frequently though they were not able to specify the frequency. The idea of eating the same food for many days had gone. One of the male borrowers expressed his happiness by saying that: *“Today, my family members eat well, they are happy and if I give them a work to do, they do it well even when I am not present.”*

Compared to the other category of respondents, only 36.4% of non-borrowers were happy with their food diversification situation during the past two years. The two women who are not in the programme affirmed that their food intake was diversified because their husbands were participating in the credit programme and it was their responsibility to make the food diversified. 18.15% of non-borrowers admitted that they borrowed money from traders to finance their activities; but today, they finished paying back the traders.

5.3.4 Other advantages of the credit

The credit has some secondary impacts on the livelihoods of the borrowers. The beneficiaries who are in cow fattening get animal manure to fertilize their farms. The use of animal manure has lots of advantages in crop production. The 6 respondents who are engaged in cow fattening have seen an increase in their production. Only one farmer could tell that his rice production has increased by 25% (i.e. from 6 bags of 100kg to 7.5 bags of 100kg). The farmers who are engaged in horticulture production and in favour of crop rotation have seen that the yield of the cereals they are cultivating has increased. During the dry season, those farmers grow horticulture and they apply fertilizer; after the harvest, the crops (mainly sorghum and millet) they cultivate later on benefit from the rest of the nutrients. There is no need fertilizing the same plot any longer. This has contributed not only to improve an already improved food availability situation at Zoungou but the money to buy fertilizer is used for other expenditures.

5.4 Sustainability of the credit scheme

The sustainability of the credit scheme is dealt with at two levels: at farmers’ level and at FINACOM’ level.

5.4.1 At farmers’ level

The indicators used to measure the sustainability at the level of farmers are profit and saving.

- Profit

The interview conducted at Zoungou showed that all the beneficiaries are making profit from their activities and at the moment they (all the beneficiaries) finished paying their loans. The return on investment (see annexe 3) shows that the different activities are worth being undertaken. When considering the time between the investment and the selling of the produce and even the limited risk involved, these activities are sources of additional income for borrowers.

- Saving

To avoid uncertainties in the future that can prevent beneficiaries from getting access to financial services for their activities, they have thought of saving parts of their profit. The findings concerning the saving situation are summarised in the table below:

Table 14: Saving situation of beneficiaries and non-borrowers at Zoungou

	Before 2010			After 2011		
	Men	Women	Percentage (%)	Men	Women	Percentage (%)
Borrowers	2	3	35.7	6	3	64.3
Non-borrowers	1	2	27.3	1	2	27.3

Source: Field work 2012

Before 2010, only 35.7% of borrowers were saving money compared to 27.35% non-borrowers. After 2011, the saving situation of borrowers has evolved to 64.3% while the number of non-borrowers has remained unchanged.

Before 2010, the 35.7% of borrowers were saving differently the profit they were making from their activities. While men were buying small ruminants to rear, women were saving either in cash at home or participating in ROSCAs. Two of the three women were savings CFA F 10,000 and CFA F 20,000. The woman involved in ROSCAs was contributing CFA F 100 every three days. After 2011, saving has become a habit for a lot of borrowers especially for men.

The remaining 35.7% borrowers who did not save explained that their profit was just enough for current expenditures (diversity of diet, clothes). Indeed the profit they are making is not sufficient to think of saving particularly the women who get roughly CFA F 20,000 to CFA F 60,000 on top of the amount of money they borrow.

- ✓ Forms of savings

Farmers at Zoungou have adopted different forms of saving of the profit they are making from their activities. The habit of saving started during the 2003-2006 period.

Table 15: Forms of savings of borrowers

Forms of savings	Men	Women	Percentage (%)
At DFSs	2	-	14.3
Small ruminants (sheep and goats)	4	-	28.3
At home	-	2	14.3
Others (like ROSCAs)	-	1	7.1

Source: Field work 2012

The research conducted at Zoungou found that men save their profits mainly by buying small ruminants. In fact, 28.3% men borrowers use their profit to buy small ruminants and 14.3% of them (i.e. 2 men) save in DFSs. In reality, the situation is a bit complex in that the 2 who save in DFSs also buy small ruminants. This is because investing in small ruminants is more profitable than putting the money in FDSs at the interest of 4-5% per year. 14.3% of women save their profit at home because according to them the amount they get is not sufficient to put it in DFSs. In fact, the amounts of money saved by women at home are CFA F 10,000 and CFA F 20,000. When asked why they were saving at Caisse Populaire de Zorgho, beneficiaries explained that Ouagadougou is far from Zoungou. In fact, the distance between Ouagadougou and Zoungou is roughly 140km while Zorgho is 26 km away from Zoungou.

5.4.2 At FINACOM level

Sustainability of FINACOM is described using indicators like interest rate, saving, credit repayment rate, diversification of the services provided.

- Interest rate applicable to clients

The interest rate applied to farmers at Zoungou is 10%. According to the explanation and clarification of the Director, the 10% interest rate covers the administrative cost and even can create profit. The Director added during the interview that for the year 2011, FINACOM made a profit. For the Director of FINACOM, the 10% can sustain the activities of FINACOM since the Decentralized Financial Systems do not need to employ highly educated staff and that if FINACOM faces a difficulty, a consultant can be hired to research on it. However, since the beginning of the activities of FINACOM, the institution has not yet faced a problem it has not been able to solve.

- Saving

Farmers at Zoungou have yet not been able to save at FINACOM; but the Director said that the possibility is being examined and soon decisions would be made about that issue. Some male farmers during the focus group discussion affirmed that they were thinking of using their guarantees as a step in saving at FINACOM. This is because according to FAO, savings are the source of credit. To save is to "set aside" resources, either passively hoarding them, or actively investing them, for use at a later date. As these savings may be used to provide credit, credit is linked to savings (FAO, 1994).

- Repayment rate

According to the Director of FINACOM, his institution has not yet experienced problems in recovering the loan. It just faces delays. In fact, 90% of the borrowers respect the repayment deadline and only 10% delay in the repayment. However, the delay does not exceed two months. At the moment, the farmers FINACOM works with are former beneficiaries of ODE intervention. In fact, during the 2003-2006 period, ODE implemented a project in 40 villages and Zoungou was one of the villages. Among the activities involved in the project, there was the financial intermediation which consisted in linking the farmers to financial institutions. In return, the financial institutions asked for guarantee before they could lend money to farmers and ODE was the guarantee provider.

During that period, a lot of sensitization sessions were done and farmers were aware that the success of their activities depended on their capacities and volunteer to repay their credits which would give them opportunities to borrow more money from the DFSSs.

- Diversification of portfolio

In order to minimize risks and attract more clients from various horizons, FINACOM has diversified its services. The services provided are credit based on joint liability for SHGs, credit to regular wage earners like public and private workers, credit to individual agribusiness men for equipment purchasing. It also delivers attestation for financial capacities for companies or individuals who want to take part in tender.

In addition to giving credit, FINACOM collects savings from its clients. For the SHGs, according to the Director, they are not saving yet; but the possibility is being examined.

CHAPTER 6: DISCUSSION

This chapter discusses the major findings of the current study and focuses on the opportunities of the financed activities, loan and return on investment, use of the profit and sustainability of the credit scheme.

6.1 Financed activities

Cow fattening and purchasing and reselling of agricultural products are the main activities of borrowers at Zoungou.

- Cow fattening

According to ILRI (2011), cattle fattening is a low-risk short-term venture with fast financial benefits for poor farmers. In Burkina Faso, cow fattening is conducted for 3-4 months during dry season. Each cow is purchased at the local market for roughly CFA F 150,000 and the average selling price after 3-4 months of fattening is nearly double. When considering the return on investment, after 2-3 cycles, borrowers should be able to finance their activities without resorting on credit. In the case of the project implemented by ILRI in Ea Kar, Daklak, Viet Nam, after the end of the test case (2 cycles), three of the five households involved were able to continue cattle fattening on their own (ILRI, 2011). With the findings of this research, it can be said that cow fattening is a strategy to accumulate financial assets. A small calculation shows that if the male borrower saves the profit or part of it, he can stop borrowing after three years. The opinion of one of the borrowers at Zoungou about loan is meaningful:

Box 2:

At the beginning of ODE intervention, I could not afford to buy a cow. With ODE intervention, buying a cow is no longer a problem. Imagine that you borrow 500,000, you invest and after 3-4 months, you get almost the double of the money you invested. If you manage to save at least half of the profit, I think after three years, you should be able to finance yourself. If you continue borrowing money, instead of enriching yourself, you are enriching the financial institution because you will be paying the interest rate and here it is 10% so CFA F 50,000 every year. But if you stop after that period three years, you will be getting CFA F 50,000 and at the same time you give opportunity to someone else to benefit from the financial institution and here at Zoungou, there are a lot of farmers who are not benefitting yet.

- Purchasing and reselling of agricultural products

This activity has the same functioning principle like a cereal bank; but the main objective is to make profit. It consists of buying the grain just after the harvest when the market price is at its lowest. The decision of selling the stored products is made by the beneficiary woman on the basis of the price situation at the market. Past reports on food prices in Burkina Faso show that the trend about evolution of prices of foodstuffs has been maintained that is to say that prices are low during harvest time and keep going up till next harvest, either the rainfall is sufficient or not. The success of this activity is based on the use of appropriate storage techniques and beneficiary farmers at Zoungou have received trainings for that purpose. And for cowpea, there is a big market demand from Nigeria, Ghana and Benin (Ministère de l'Agriculture, 2002).

6.2 Loan and return on investment

The amount of money a man borrows is higher than the amount of money a woman borrows. In the literature, no amount of money to be borrowed is advised. Borrowers can apply for the amount they want but only the financial capacity of the credit providers can determine the final amount of loan. At FINACOM the maximum that can be borrowed is: CFA F 500,000 for men and CFA F 100,000 for women within the group. Both types of borrowers are making profit from their different activities. When considering the return on investment for men and women, it can be said that women are better than men. In reality, beyond the return on investment, the true situation is that men get more money than women. This is because they are investing in activities the loan allows them to. The lowest profit (CFA F 150,000) made by a man is almost similar to the highest profit (CFA F 175,000) a woman is making. The work by Niehof in 2007 cited by Fofana (2010) which found that women are better than men in managing micro-credit has not been proven at Zoungou. However, no relation has been established between the size of the loan and the ROI.

6.3 Use of the profit

At Zoungou, the findings identified 5 main uses of income from micro-credit. There are: education, health, clothes, food diversification and saving.

- Education

Contrary to the study carried out in Lima, in Peru which shows that new borrowers tend to reduce their investment in education in the detriment of their business due to the exigent demands of the credit repayment (Dunn and Arbuckle Jr, 2001), at Zoungou all borrowers do invest in the education of their children. In his study on Micro-finance and its impact on selected districts in Eastern region of Ghana, Nanor (2008) found that micro-finance supports clients (poor) to get their children to school to be educated. As Nai (n.d., p.50) said borrowers do so because "*they recognize the importance of education in helping to break this vicious cycle of poverty*". The situation in Peru might be due to the fact that the return on investment was too low that borrowers did not want to risk any family assets. The research found that both men and women equally invest in their children's education. This is in contradiction with the findings of the study conducted by Desai, Johnson and Tarozzi (2011, cited in Pitt and Khandker, 1998) found that female borrowers were better in investing in the education of their kids compared to male borrowers.

- Health

In this study, no link has been established between micro-credit and health. Health is important in anyone's life and whether one has money or not, s/he has to manage to get treatment. Assessing the Impact of Micro-credit Scheme of National Rural Support Programme (NRSP) on the socio-economic conditions of female community in Rawalakot district, Azad Jamu and Kashmir, Pakistan, Javed, Luqman, Saeed Khan, and Farah (2006) showed that micro-credit has not at all improved the health of micro-credit female beneficiaries. Their research found that on a total of 100 women, 70% reported no change in their health status.

- Clothes

All borrowers spend part of the profit in clothing. Similar findings were also found in Pakistan. The study carried out by Javed, Luqman, Saeed Khan, and Farah (2006) came to the

conclusion that clothing situation of beneficiaries became better after the intervention for 51% of respondents.

- Food diversification (diversity of the diet)

Investigation at Zoungou showed that all borrowers spend their profit to diversify their food intake. The reason given by participating members was that they had food in quantity (rice, sorghum, millet, cowpea and maize) in store (see annexe 5 for storage facility used). What they did before the intervention was that they sold part of their production to purchase meat or fish for the sauce; but that action led to decrease in food availability. With the intervention, part of their profit was used to buy those proteins. In the systematic review of evidence from Sub-Saharan Africa on the impact of microfinance, Stewart (2010) summarized some examples of impact on diversity of the diet from Tanzania, Rwanda and Zimbabwe. In Tanzania and Rwanda it was found that participation in the Village Savings and Credit Association and the Red Cross credit programme respectively is associated with a significant positive increase in meal quality, with an increase in consumption of meat in both countries and fish in Zanzibar. A similar study of the Zambuko Trust in Zimbabwe found that the programme had a positive impact on consumption of nutritious food (meat, chicken or fish, milk) in extremely poor client households compared to non-clients and those who had left the programme. So, micro-credit does impact on the diversity of diet of the borrowers.

- Saving

In their study in Peru, Dunn and Arbuckle Jr (2001, p.7) found that “*There was no evidence that micro-credit had an impact on personal savings*”. The research conducted at Zoungou contradicted that finding. Beneficiary farmers at Zoungou have noticed that their personal savings improved even though they were not able to quantify them because of the different forms of savings they adopted: 14.3% saved in cash, 28.6% saved in livestock and in other forms like ROSCAs. The findings of this research are in line with the conclusion according to which most Burkinabe make use of rotating savings and credit associations ("tontines") to save up money for important purchases or expenditures” (Aeschliman, 2007).

Gobezie found that credit could help increase borrowers' savings. The study referring to the ACSI survey of 600 potential credit/saving clients indicates that some 79.2% actually have some types of savings, which they hold either in cash (57.9%) or in kind (Gobezie, 2004) and Crépon, Devoto, Duflo and Parienté (2011) found that part of the profit was saved in the form of livestock.

6.4 Sustainability

The findings on FINACOM micro-credit scheme have shown some aspects of sustainability for clients and FINACOM. In fact, clients of FINACOM are making profit from their different businesses as shown with the ROI calculation. This is because the activities (cow fattening and purchasing and reselling of agricultural products) they are investing in are profitable. These activities also involve less risk. Beyond all this, beneficiaries use the loans wisely. For the time being, male borrowers can self-finance themselves while women borrowers have to borrow for several years.

The trainings that farmers receive before starting their activities also show the concern of ODE to increase the income of farmers by improving their traditional practices.

Contrary to the findings of Congo (2002) according to which all the MFIs in Burkina Faso, including the largest and the oldest institutions, depend on subsidies, FINACOM does not depend on subsidies. It applies 10% interest rate and for the director of FINACOM, the 10% can sustain the activities of his institution since the Decentralized Financial Systems do not need to employ highly educated staff. He added that if FINACOM faces a difficulty it cannot solve, a consultant can be hired to research on it. However, since the beginning of the activities of FINACOM, the institution has not yet faced a problem it has not been able to solve. In his research Congo (2002) found that 12% interest rate can sustain DFSs. The diversification of the portfolio can help FINACOM complement its gains.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The objective of this research was to assess the contribution of Decentralised Financial Systems in the improvement of farmers' income in Burkina Faso in general and at Zoungou in particular. The case study focused on the strategy elaborated by ODE to increase the income of farmers in order to improve their livelihood. The research found that ODE, through its DFS which is FINACOM, gave loans to farmers who are in groups to invest in Income Generating activities (IGAs). Farmers' main activities that are financed by FINACOM are cow fattening and purchasing and reselling of agricultural products (paddy rice, cowpea, and groundnut). FINACOM finances horticulture production as well. The research found that the money farmers borrow was used in a wise manner and it yielded profit. This was because of the different training sessions organised by ODE to strengthen borrowers' capacities so that they could improve their traditional practices and so succeed in their business. Concerning the amount of money farmers could borrow, the research found that a man borrowed higher amount of money than a woman. A man borrowed between 200,000 and 500,000 while the amount of money a woman borrowed was between 25,000 and 100,000. The reason mentioned by women to justify the very small amount of money they borrowed was that they feared taking too much risk which could put the assets of their respective families at stake.

The research found that the IGAs farmers are involved in have less risk. Zoungou is located in a geographical area where conditions for cow fattening are fulfilled because the population there have not yet faced epidemics that led to the destruction of animals. The presence of the animal resources district officer is an opportunity for the farmers who are investing in cow fattening to get their animals treated in time if any problem occurs and above all the availability of market for the farmers to sell their cows after 3-4 months. As for women, the purchasing and reselling of the agricultural products they are undertaking also have its advantages. The products are available, the storage technologies are mastered and applied by women and the reselling prices after 6-7 months are higher than the purchase prices.

The research conducted at Zoungou found that though the cows belong to men, they are managed by women and children; but this activity of cow management does not add more burdens on women since the cows are tied up under the shelters and the crop residues available at home. It is a matter of taking the feed and giving it to the cows.

In terms of return on investment, women are better than men; but behind that reality of ROI, men are getting more money than women. For an investment of CFA F 500,000, a man can get on average CFA F 744,000 which corresponds to 48.8% ROI (i.e. CFA F 244,000). For a woman, an investment of CFA F 75,000 yields on average CFA F 167,400 and corresponds to 123.20% ROI (i.e. 92,400).

The profit from the different IGAs is used differently by borrowers. It is spent in education of children, clothing, healthcare, diversity of diet and part of the profit is also saved. Concerning savings, men save more than women and they in the form of cash money, in small ruminants bought to rear or in saving practices (ROSCAs).

At the moment, men borrowers can self-finance their activities (mainly cow fattening) while women have to borrow for more years unless they increase the amount of money they are borrowing.

Concerning the sustainability of FINACOM, the research found that though FINACOM does not receive subsidies, it tries to apply a number of strategies to sustain its financial operations. The 1st strategy applied is the interest rate charged to client borrowers. It is low, does not spoil borrowers and attract clients. The guarantee any borrower should provide before getting the loan is another strategy to reduce the risks of non-repayment and to increase the financial capacities of the institution. The only problem observed was the fact that farmers could not yet save at FINACOM and that deprives FINACOM from increasing its financial capacities which will enable it to expand its activities in terms of opening more branches and satisfying more clients.

7.2 Recommendations

- Considering the fact that cow fattening is a simple and profitable activity,
- Considering the fact that though women have little return on investment they do not want to borrow bigger loans,
- Considering the fact after 3 cycles for cow fattening, men beneficiaries can finance their activities on their own,
- Considering the fact that borrowers eat more proteins than non-borrowers,
- Considering the fact that there are still farmers who are not participating in the credit scheme for limited financial capacities of FINACOM
- Considering the fact that beneficiaries save part of their profit in other DFSs because of the long distance between Zoungou and Ouagadougou,
- Considering the fact that the feed for cows is available at Zoungou,
- Considering the fact that the animal district officer is available and accessible,

The following actions can be recommended:

- ODE should sensitize women so that they can undertake cow fattening activity. To do that, ODE can choose 5-10 women for an experiment in cow fattening like pilot project. The aim of the experiment will be to show to other women (the women who are chosen for the pilot project) that risk involved in cow fattening is minimized. ODE should also sensitize men to assist women in the cow fattening activity by putting their expertise at their disposal.
- ODE should start sensitizing the credit committee and even the beneficiaries that after 3 cycles, they should select new beneficiaries. By doing that, they will give chances to those who have not yet received loans to finance their activities and thereafter increase the quantity of proteins they consume.
- ODE should open a branch of FINACOM at Zorgho so that beneficiaries can save and increase the financial capacities of the institution.

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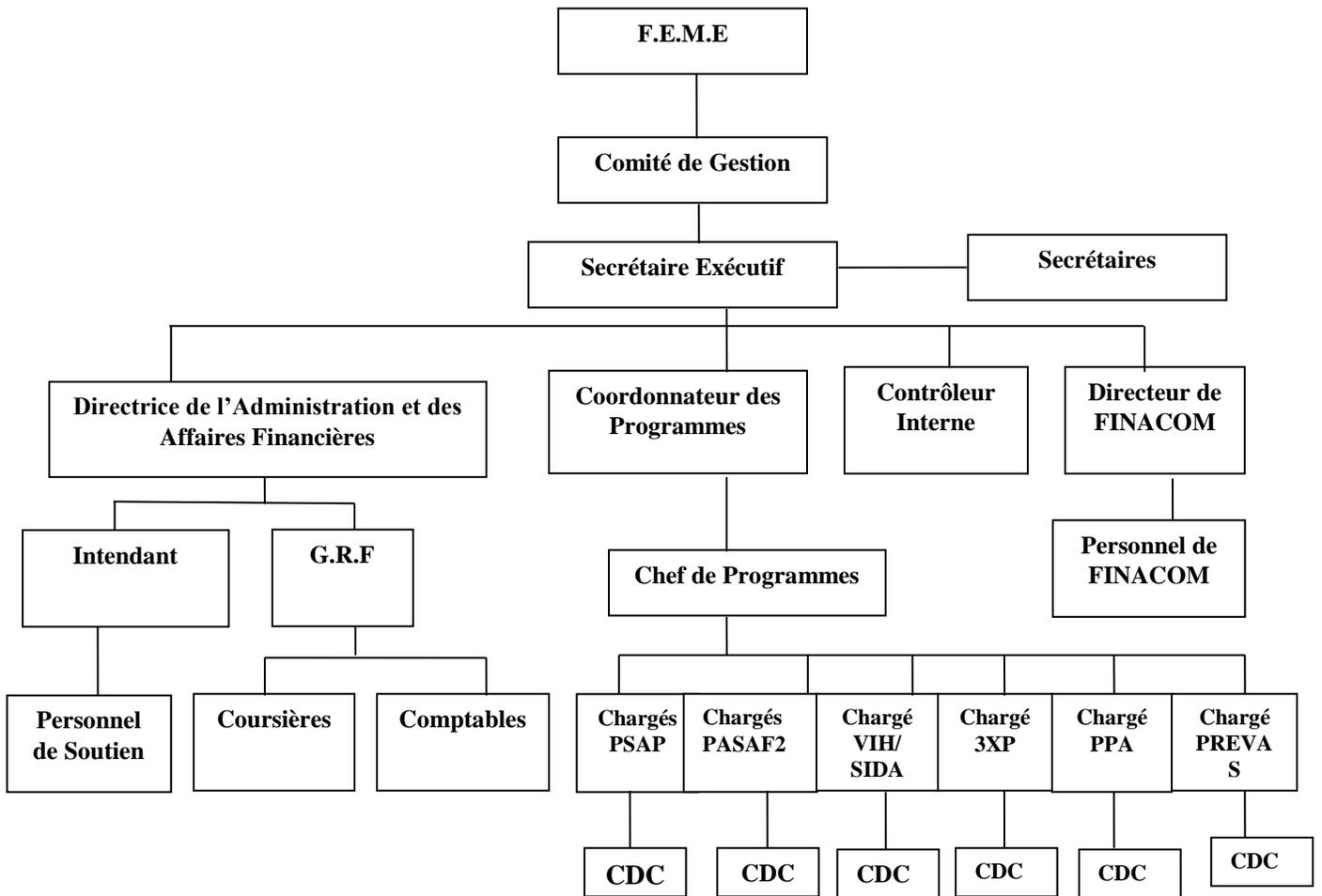
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ANNEXES

Annexe 1: ORGANIGRAMME DE L'ODE



Annexe 2: Evolution in crop production in the Province of Ganzourgou between 2009 and 2012

Crops	2009-2010		2010-2011				2011-2012			
	Cultivated areas (ha)	Prod. (t)	Cultivated areas (ha)	Diff. of cultivated areas (ha)	Prod. (t)	Diff. in prod. (t)	Cultivated areas (ha)	Diff. of cultivated areas (ha)	Prod. (t)	Diff. in prod. (t)
Millet	17663	10875	18169	2.86%	14743	35.36%	12544	-30.95%	10164	-31.05%
Maize	7385	9842	13815	46.56%	17609	78.91%	11845	-14.25%	20562	16.76%
Rice	2607	4640	2840	8.93%	8699	87.47%	2792	-1.69%	6225	-28.44%
White sorghum	17236	15663	22577	30.98%	22895	31.58%	23044	2.06%	21312	-6.91%
Red sorghum	41695	38638	41513	-0.43%	44819	15.99%	33195	-20.03%	40513	-9.60%
Cotton	3414	3697	2724	-20.21%	3556	-3.81%	4018	47.50%	5510	54.94%
Groundnut	10041	7798	7420	-26.10%	8315	6.62%	3842	-48.22%	3098	-62.74%
Sesame	916	807	2423	164.51%	3338	313.63%	1095	-54.80	655	-80.37%
Cowpea	5611	25986	9785	74.36%	34071	31.09%	5576	-43.01%	21542	-36.77%
Voandzou	315	280	101	-67.93%	31	-88.92	129	27.72	88	183.87%

Source: MAW, 2010, 2011 and 2012

Annexe 3: Return on investment for beneficiaries

Name	years	Investment	Gain on investment	Return on investment (%)
Men				
1. Kabore Boureima	2010	500,000	655,000	31
	2011	500,000	710,000	42
2. Kabore J. Baptise	2010	500,000	680,000	36
	2011	500,000	650,000	30
3. Kabore Mathias	2010	500,000	800,000	60
	2011	300,000	In his activity, he can earn between 2,500 and 5,000 a day	--
4. Kagambega w. Abel	2010	500,000	740,000	48
	2011	500,000	800,000	60
5. Ganemtore Mouni	2010	250,000	335,000	34
	2011	500,000	820,000	64
6. Ganemtore Seydou	2010	500,000	700,000	40
	2011	500,000	885,000	77
7. Pafadnam Boureima	2010	200,000	350,000	75
	2011	200,000	Not yet sold	--
Women				
8. Ganemtore Adissa	2010	100,000	127,500	27.5
	2011	100,000	180,000	80
9. Ganemtore Bilpoko	2010	35,000	46,000	31.42
	2011	50,000	60,000	20
10. Sawadogo Fati	2010	75,000	110,000	46.6
	2011	100,000	162,000	62
11. Oubda Bibata	2010	75,000	115,000	53.3
	2011	100,000	171,000	71
12. Kagambega Safoura	2010	50,000	136,000	172
	2011	75,000	235,000	213
13. Dembega Awa	2010	75,000	127,500	70
	2011	75,000	250,000	233
14. Kanozore Aisseta	2010	25,000	33,000	32
	2011	35,000	37,500	7.14

Annexe 4: Situation of food prices at Zoungou

- Crop prices in 2009

Crops	Months/2009											
	J	F	M	A	M	J	J	A	S	O	N	D
White sorghum							350	600	350	275	300	350
Red sorghum							325	325	300	275	250	325
Millet							500	600	550	550	450	550
Maize							500	600	500	350	350	400
Cowpea							575	450	400	550	500	700
Groundnut in shell							400	300	300	350	250	350
Dehulled Groundnut							650	550	550	700	600	750
Paddy rice							600	600	550	450	450	450
Dehulled rice							1,000	--	1,150	1,000	750	900

Source: ZAT/Zoungou, 2009

- Crop prices in 2010

Crops	Months/2010											
	J	F	M	A	M	J	J	A	S	O	N	D
White sorghum	400	400	350	375	350	350	375	375	300	300	300	350
Red sorghum	350	350	350	350	350	325	325	350	300	300	275	325
Millet	600	650	600	625	650	800	650	650	500	600	450	500
Maize	500	500	500	500	450	500	500	500	450	350	350	450
Cowpea	750	750	750	600	500	800	850	1,000	1,100	500	650	750
Groundnut in shell	375	400	400	425	400	450	450	450	400	350	375	450
Dehulled Groundnut	750	1,000	775	775	700	950	900	--	--	950	950	750
Paddy rice	500	500	500	600	600	450	500	500	500	400	450	450
Dehulled rice	1,000	1,000	1,000	1,225	1,000	900	1,000	1,000	1,050	900	900	900

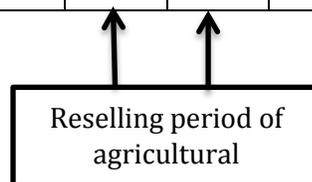
Source: ZAT/Zoungou 2010

Purchasing period of agricultural products

- Crop prices in 2011

Crops	Months /2011											
	J	F	M	A	M	J	J	A	S	O	N	D
White sorghum	400	350	350	350	400	375	425	450	375	350	375	400
Red sorghum	350	350	350	350	350	325	425	450	350	350	375	375
Millet	500	500	550	550	550	550	550	600	550	550	600	600
Maize	500	450	500	500	550	400	600	600	550	450	600	600
Cowpea	850	750	750	850	800	850	750	700	600	1,000	1,000	1,000
Groundnut in shell	500	550	600	600	600	650	700	650	700	650	700	700
Dehulled Groundnut	900	1,000	1,050	1,100	1,200	1,175	1,750	1,850	--	1,800	1,400	1,400
Paddy rice	500	500	550	550	550	550	600	600	600	500	550	550
Dehulled rice	1,000	1,000	1,050	1,100	1,000	1,050	1,200	1,150	1,250	1,100	1,200	1,100

Source: ZAT/Zoungou 2011

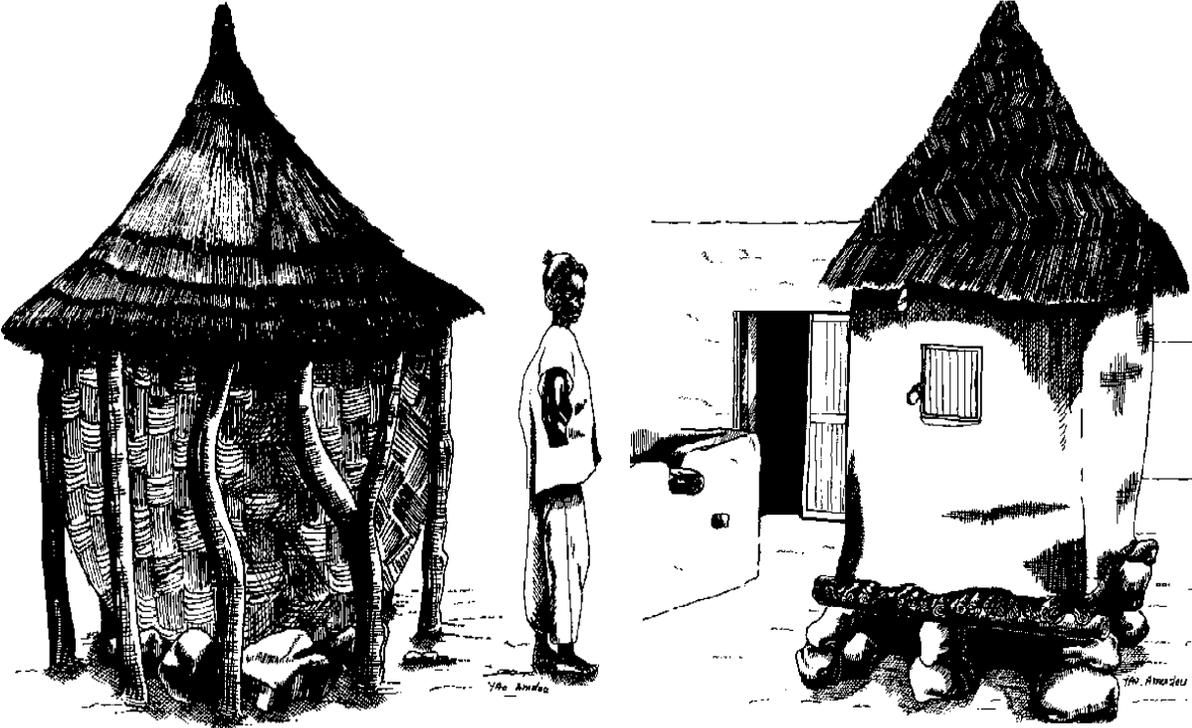


- Crop prices in 2012

Crops	Months /2012											
	J	F	M	A	M	J	J	A	S	O	N	D
White sorghum	600	500	500	500	500	500	500					
Red sorghum	375	400	400	400	400	375	400					
Millet	1,000	1,000	750	750	800	800	850					
Maize	550	550	550	550	600	500	600					
Cowpea	1,100	1,100	1,250	1,250	1,250	1,300	1,350					
Groundnut in shell	700	700	750	750	800	800	850					
Dehulled Groundnut	1,500	1,500	1,500	1,500	1,600	1,800	2,000					
Paddy rice	550	550	600	600	600	550	600					
Dehulled rice	1,100	1,150	1,200	1,200	1,200	1,200	1,200					

Source: ZAT/Zoungou 2012

Annexe 5: Traditional storage facilities



<http://www.google.nl/imgres>

Annexe 6: Checklist for participants and non-participants in FINACOM microcredit scheme

Name:.....

Gender:.....

Type of respondent:.....

Level of education.....

Marital status:.....

Age:.....

Date:.....

I – The situation before FINACOM credit

- 1 – What activities were you doing?
- 2 – How was your production?
- 3 – Where did you get money to pay for expenditures?
- 4 – How was your income?
- 5 – What kind of food were you eating?
- 6 – How diversified was your meal?
- 7 – How were you spending your income?
- 8 – How were you financing your activities?

II – The situation of participants after FINACOM intervention

- 9 – What activities are you doing?
- 10 – How many times have you borrowed from FINACOM?
- 11 – How much money did you borrow?
- 12 – What is the use of the credit? And why?
- 13 – How do you use the income from your activities?
- 14 – How often do you pay back?
- 15 – What other advantages do you get from your activities?
- 16 – Since you have received the loans from FINACOM, have you received any training about how to manage it? If yes, examples?
- 17 – Have you finished paying back the loan?
- 18 – Do you save money? And where?

III – situation of non-borrowers for the past two years

19 – What activities are you doing?

20 – What do you get from your activities?

21 – How do you use the income you get from your activity?

22 – Are you happy with your current situation? And why?

23 – Will you apply for credit for the next credit session?

Annexe 7: Checklist for ODE Programme Officer and Director of FINACOM

- How do you implement the microcredit scheme?
- What are the activities that you finance?
- What are the preconditions before the beneficiaries are selected?
- What other services do you provide to beneficiaries apart from giving loans?
- What is the interest rate you charge to beneficiaries?
- Do you have plan for beneficiaries' autonomy? If yes, which ones? If no, why not?
- Do you allow or encourage beneficiaries to save money?
- Is there any risk of non-repayment?
- Do you make profit which can cover all the administrative costs (monitoring cost, salaries, renting)?
- Do you monitor your beneficiaries? If yes, what do you monitor? And if no, why not?
- Have you trained your beneficiaries to manage the loans efficiently?
- In which form do you give the loans to the beneficiaries? In cash or kind?
- When giving the loans to the beneficiaries, when do you expect them to pay back?
- Do you have partners? If yes, which ones?
- Do you receive subsidies?

Annexe 8: Check list for ODE field worker

- How was the situation of food security at Zoungou 4 years ago?
- How is the situation now?
- How have the prices of foodstuff evolved in the district?
- What do you monitor in the work of beneficiaries
- What was your objective?
- Which other service do you provide?

Annexe 9: Check list for focus group discussion

- How much money do you borrow?
- How much do you pay back?
- What do you receive from ODE? In cash or in kind?
- What is the purpose of the loans?
- How do you share the loans?
- How much profit do you make?
- How do you pay back?
- Do you borrow every year? If yes why? And if no, why not?
- Do you know that the ODE cannot assist you for ever? If yes, what are your plans to continue having access to farm inputs?
- Why did you decide to borrow money?
- Do you discuss in group about the way to be autonomous?