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Improving access to credit for smallholder farmers in Mozambique: Lessons from government efforts in developing countries of Africa and Asia

by

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DEDICATION

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Abstract

Despite many decades of experimentation with supplier-led approaches to credit, limited success has been achieved in improving access to credit for smallholder farmers. In Mozambique, previous attempts by government to improve access to credit for smallholder farmers have not been successful; hence the government is looking for other effective strategies to improve access to credit for smallholder farmers. In the search for effective strategies, Mozambique can draw lessons from the experiences of other developing countries that have succeeded in improving access to credit for smallholder farmers. The purpose of this study is to examine the experiences in other developing countries in Africa and Asia. The results of the analysis are used to identify the most appropriate government intervention strategy to improve access to credit for smallholder farmers in Mozambique.

The study addresses the following questions:

What went wrong with government strategies implemented in Mozambique in an attempt to improve access to agricultural credit for smallholder farmers?

What are the positive experiences with government intervention strategies implemented in other developing countries of Africa and Asia that have resulted in the successful improvement of access to agricultural credit for smallholder farmers?

What can Mozambique learn from the countries with good government intervention strategies that have succeeded in resolving or ameliorating the lack of access to agricultural credit for smallholder farmers?

What is the most appropriate intervention strategy for the Government of Mozambique that would effectively lead to improving access to credit for smallholder farmers?

The study examined four case studies were selected from Botswana, Zimbabwe, Thailand and Indonesia. The data set collection method comprised a combination of primary data collected through in-depth interviews with key informants from smallholder farmers' associations and government-funded agricultural financial institutions in Botswana, Mozambique and data from Zimbabwe and secondary data sources.

The results of the study reveal that the first strategy to improve access to credit for smallholder farmers in Mozambique included the establishment of the People's Development Bank (BPD), which was given a mandate to provide agricultural credit to smallholder farmers. However, the BPD did not succeed in fulfilling its mandate due to a variety of factors, including the following: poor macro-economic environment during the first decade of independence (1975–1985); lack of human expertise, poor rural infrastructure, market failure problems and the ongoing civil war. The lack of institutional capacity to enforce mechanisms for timely loan repayments, and political interference by government, and lack of credit culture and discipline on the side of the beneficiaries, also led to high loan default rates. The BPD eventually closed down and was privatised to form the new bank (the Austral Bank). The Austral Bank never concerned itself with lending to the smallholder agricultural sector.

Other alternative strategies by government in Mozambique included the establishment of the *fundos do fomento* (funds for jump-starting activities), particularly the funds for jump-starting agricultural, hydrological and agricultural development activities. However, both government funds also failed to improve access to credit for smallholder farmers. They are currently experiencing management problems and shortage of funds. The main reasons for their poor performance include lack of qualified managers, skilled field staff and specialists in rural financial markets.

The private sector, particularly the concessionary input credit firms, is currently trying to rescue the smallholder farmers by contracting them to engage in cultivating some cash crops. However, many difficulties are experienced, including lack of access to farmer support services (e.g. extension services), due to a complete withdrawal of government support for the concessionary input credit schemes. Thus, smallholder farmers in Mozambique remain marginalised in terms of access to agricultural credit.

The results of the study reveal that strategies to improve access to credit for smallholder farmers in Mozambique did not succeed, mainly due to the lack of institutional capacity to enforce mechanisms for timely loan repayments as well as political interference.

Lessons drawn from these cases shed light on what the most appropriate intervention strategy for the Government of Mozambique could entail if it is to succeed in improving access to credit for smallholder farmers.

The study concludes that lack of access to agricultural credit for smallholder farmers in Mozambique reflects not only market failures in rural financial markets but also inappropriate lending policies. The study concludes that the most appropriate strategy for the Government of Mozambique to succeed in improving access to credit for smallholder farmers should entail the re-establishment of a public rural bank.

The study recommends that rural financial institutions should adopt a demand-driven approach, which enables them to design products that fit the needs of a variety of clients. At the same time, reforms at both the fund for jump-starting agricultural activities and the fund for jump-starting hydrological and agricultural development activities need to be undertaken in order for these agricultural development funds to start operating more professionally, with minimum government interference. Finally, the government needs to extend its role to complement efforts by the private sector, particularly the cash crop input schemes.

Key words: smallholder farmers, access to agricultural credit, government intervention, Mozambique and other developing countries.

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LIST OF ACRONYMS AND ABBREVIATIONS

ACDI/VOCA	Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance
ACGS	Agricultural Credit Guarantee Scheme
ADAF	Agricultural Development Assistantance Fund
ADB	Agricultural Development Bank
AFC	Agricultural Finance Corporation
Agribank	Agricultural Bank of Zimbabwe
ALDEP	Arable Lands Development Programme
Arex	Department of Agricultural Research and Extension
BA	Banco Austral
BAAC	Bank for Agriculture and Agricultural Cooperatives
BCM	Banco Comercial de Moçambique
BCP	Banco Comercial Português
BIM	Banco Internacional de Moçambique
BKK	*Koperasi Kredit Borromeus (KKB)*
BIMAS	BIMAS credit program
BM	Banco de Moçambique
BPD	Banco Popular de Desenvolvimento
BPR	Rural Private Banks
BRAC	Bangladesh Rural Advancement Committee
BRI	Bank Rakyat Indonesia
BSTM	Banco Standard Totta de Moçambique
CCADR	Caixa de Crédito Agrário para o Desenvolvimento Rural
CCGS	CEDA Credit Guarantee Scheme
CEDA	Citizens'Entrepreneurial Development Agency
CEMM	Caixa Económica de Montepio de Moçambique
CIT	Compendium of Investment and Trade
CLUSA	Cooperative League of the United States of America
CSP	Country Strategy Paper
DAHP	Department of Animal Health and Production
DANIDA	Danish International Development Assistance
EAS	Electricity Authority Supplier
ECI	Ebony Consulting International
EDB	Ethylene Dibromide
EMOSE	Empresa Moçambicana de Seguros
FAO	Food and Agriculture Organisation of the United Nations
FARE	Fundo de Apoio para a Reabilitação Económica (Fund for Economic Rehabilitation)
FC	Fundo para a Comercialização (Fund for Jump-starting Commercialisation Activities)
FCD	Foundation for Community Development
FDHA	Fundo do Desenvolvimento Hidráulica Agrícola (Fund for Hydrological and Agricultural Development)
FFA	Fundo do Fomento Agrário (Fund for Jump-starting the Agricultural Sector)
FFADR	Fundo do Fomento Agrário e de Devenvolvimento Rural (Fund for Jump-starting Agriculture and Livestock Activities

	and Rural Development)
FFP	Fundo do Fomento Pesqueiro (Fund for Jump-starting Fishing Activities)
FFPI	Fundo do Fomento de Pequena Industria (Fund for Jump-starting Small Industry)
FFSSA	Forum for Food Security in Southern Africa
GDP	Gross domestic product
GRB	Government Reserve Bank
ICM	Instituto de Crédito de Moçambique
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
INSS	Instituto Nacional de Segurança Social
ISERM	Institutional Structure Evolution and Resources Mobilization
LC/FRD	Library of Congress - Federal Research Division
LMID	Livestock Management and Infrastructure Development
LMIDP	Livestock Management and Infrastructure Development Project
MA	Ministério da Agricultura (Ministry of Agriculture)
MBCI	Moçambique Banco Commercial e de Investimentos
MDTI	Mozambique: Diagnostic Trade Integration
MFI	Micro-finance institutions
MLT	Mozambique Leaf Tobacco
MRFSP	Mozambique Rural Finance Support Programme
MSE	Medium and small enterprises
MSU	Michigan State University
Mt	Metical (Mozambican monetary unit)
NDB	National Development Bank
NGO	Non-governmental Organisation
PHBK	*Project Linking Banks and Self-Help Groups in Indonesia*
P4K	*P4K* Agency for Agricultural Education & Training (A small farmers' development project in Indonesia)
PRE	Programa de Reabilitação Económica (Programme of Economic Rehabilitation)
SMMEs	Small and medium scale enterprises
TIMB	Tobacco Industry Marketing Board
TMB	Tobacco Marketing Board
TPRB	Trade Policy Review Body
TRB	Tobacco Research Board
UD	Unit Desa
UNAC	União Nacional dos Camponeses (National Union of the Peasants)
YFF	Young Farmers Fund
ZTA	Zimbabwe Tobacco Association

CHAPTER ONE
INTRODUCTION

1.1 Background

This chapter provides an overview of Mozambique's agricultural sector, including problems faced by the agricultural sector, rural financial markets and smallholder farmers. The chapter also outlines past and current government strategies for improving access to credit for such farmers. The research problem and study objectives are also presented and key terms defined.

1.1.1 Agricultural sector

The agricultural sector has been the backbone of the economy of Mozambique for many decades. The sector employs the majority of the population and produces the materials for industry and exports. About 80% of the population rely on agriculture for their livelihood (The New Agriculturist, 2004; The World Fact Book, 2005; Collymore, 2005; Brück & Van den Broeck, 2006) and, indeed, it represents about 95% of Mozambique's primary sector (AfDB/OECD, 2006). Between 40% and 60% of export earnings in the country stem from this sector (AAAS/International/Africa, 2000; MRFSP, 2003; The New Agriculturist, 2004; The World Fact Book, 2005; FAO/WFP, 2005). For example, in 2005, the sector had contributed about 22% to the gross domestic product (GDP) (AfDB/OECD, 2006). However, most of the available arable land in the country remains uncultivated, leaving room for considerable growth in this sector (IVL/CSP Mozambique-Flanders, 2006).

Despite agriculture being heavily dominated by food production for Mozambicans' own consumption, it has been failing to produce enough output to feed the country, even to feed those who work on it, on a daily basis. The country's trade balance has been recording large food deficits in recent years (CIT, n.d.; TPRB 2001; Economic Division 2003, Republic of Mozambique, 2005; MA/DANIDA, 2005). Exports have grown, but imports have remained at high levels. The study by the Economic Division (2003) furthermore emphasises that Mozambique not only imports more capital goods, fuel and energy, but also that a huge amount of financial resources is expended on staple foodstuffs. In addition, according to CIT (n.d.) and Trade Policy Review Board (TPRB) (2001), the country has large tracts of land

suitable for livestock, but livestock farming is very underdeveloped, with much of the present requirements for livestock products also having to be imported. As a result, a high proportion of household income is expended on food. For example, between 2002 and 2003 the proportion of household expenditure on food was about 72% (MPF/IFPRI, 2004). Cereal corn, roots and tubers represented the highest share in expenditures. Coping strategies by households to meet the food deficit, in both rural and urban areas, include a reduction in the number of meals. About 99% of households have only one meal per day (Republic of Mozambique, 2005).

Historically, in Mozambique there have been two categories of farmers, namely, smallholder and commercial farmers. The agricultural sector is mostly occupied by smallholder farmers, while mechanised agriculture is still much localised and practiced only by commercial farmers (AAAS/International/Africa, 2000; MRFSP, 2003; The New 2004; The World Fact Book, 2005; FAO/WFP, 2005). For this reason, agriculture's contribution to the country's economy is far below its true potential (UK Trade and Investment, 2006). Agricultural productivity in Mozambique remains well below the African and regional averages (CIT, n.d.; TPRB, 2001). Despite this, agriculture remains the backbone of the economy and, if the agricultural potential were realised, Mozambique would become one of the major food suppliers in Africa (UK Trade and Investment, 2006).

In poor countries like Mozambique, it is not possible to achieve a substantial reduction in poverty without a great expansion in productive capacity. Since the majority of the population depends mostly on agriculture, and the labour force is expanding rapidly in Mozambique, the impact of growth on poverty can be enhanced through policies that promote a) agricultural productivity, particularly for smallholder farmers; b) investments in labour-intensive industries and services to accelerate job creation and expand the demand for labour; and c) better opportunities for income generation in micro and small enterprises (Bolnick, n.d.).

Since the shortage of staple food is more severe in Mozambique's rural areas, and affects mainly poorer smallholder farmers, new strategies need to be identified and adopted in order to improve the productivity of the smallholder farmers. This requires addressing the constraints faced by smallholder farmers.

1.1.2 Commercial farmers

In Mozambique, commercial farmers produce mainly export crops, either for export purposes and consumption needs or as a supplement, and are also engaged in cattle rearing. Most often, the commercial (mechanised) farming sector produces annual and perennial crops, and uses agro-chemicals, machinery and imported inputs. This sector comprises small, medium and large-scale farms and agricultural companies. The commercial farming sector utilises both modern technology such as improved varieties and tractors, and traditional technology (e.g. ox-drawn ploughs). However, the majority of farmers in this sector face some limitations in terms of access to credit. The lack of access to agricultural credit in Mozambique causes commercial farmers to depend more on rainfall than on irrigation and other sources of technology (ECI, 2003; The New Agriculturist, 2004; and MDTI, 2004). Nevertheless, there are about 400 large farms in Mozambique which use modern irrigation methods and enjoy adequate access to inputs, including credit. Foreign investors in farming are from South Africa and Zimbabwe. The commercial sector is important for the production of export crops such as tea, copra, cotton, sisal and citrus (ECI, 2003; The New Agriculturist, 2004; MDTI, 2004; MA/DANIDA, 2005).

Despite some conditions (technological and financial) favouring commercial farmers, the commercial farming sector, as mentioned, is second to the smallholder farm sector in terms of staple food production and creating employment. Smallholder farmers also derive their livelihood from agriculture, of which the major sector produces food.

1.1.3 The smallholder farm sector

In Mozambique, the smallholder farming sector's operations are predominantly dependent on the availability of rain and the use of traditional farming methods, such as low-yield seed varieties and manual cultivation techniques. They are mainly concerned with producing staple food crops, such as maize, groundnuts, beans, millet, rice, cassava, and sweet potato. Smallholder farmers are also involved in producing some cash crops such as cashew nuts, cotton and tobacco, which offers another good indicator of their strength, compared to commercial farmers, who only rely on cash crops and are not responsible for food crop production. However, apart from the use of modern technological inputs, including improved

seeds, fertilisers and pesticides, irrigation systems and access to input markets by the smallholder farm sector remains poor.

The smallholder farm sector involves about three million rural families across the country (MA/DANIDA, 2005; UK Trade and Investment, 2006), of which 37,000 comprises semi-commercial farmers (MA/DANIDA, 2005). The smallholder farm sector occupies about 95% of the currently cultivated area (UK Trade and Investment, 2006). The smallholder farmers are also increasingly producing some export and important cash crops (AAAS/International/Africa, 2000; MA/DANIDA, 2005; UK Trade and Investment, 2006; Bertelsmann Transformation Index, 2006); for example, they contribute about 52% of the national cotton harvest (AAAS/International/Africa, 2000). Almost all the cashew trees and 60% of the coconut palms in Mozambique also belong to the smallholder farmer sector (AAAS/International/Africa, 2000; MA/DANIDA, 2005).

Despite these facts, over 50% of the smallholder farms in Mozambique are less than one hectare in size and average around 1.2 hectares, which is considerably less than the national average (MRFSP, 2003; MA/DANIDA, 2005; FAO/WFP, 2005). In addition, access to markets, inputs, services and security of tenure, is still poor. Smallholder farmers' constraints as regards an increase in agricultural production include low productivity resulting from the lack of appropriate technologies and support services, and their almost exclusive dependence on human labour (MA/DANIDA, 2005; Sitoe, 2005; IFAD, 2007). Furthermore, produce markets in rural areas are distant, unreliable and uncompetitive (AfDB/OECD, 2006; IFAD, 2007).

Although some surpluses of agricultural production have been experienced in some areas, particularly in the central and northern regions of the country, smallholder farmers cannot deliver their excess products to the market, due to poor infrastructure, lack of transport and poor storage capacities in rural areas (FAO/WFP, 2005). In addition to the vulnerability of impoverished rural people to natural calamities (drought and floods), smallholder farmers also face food insecurity during times of food shortages before the harvest (AfDB/OECD, 2006; IFAD, 2007).

Policy constraints, together with the chronic lack of access to improved varieties and crop management techniques, have been preventing smallholder farmers from accessing improved

food crop technologies and markets. Therefore, the low level of output and marketable surplus leads to food insecurity, with adverse consequences for labour productivity. Information is also insufficient to make better decisions regarding crop choice and area allocation. In addition to high levels of poverty, the lack of incentives and weakened policies to facilitate area expansion in rural areas also limit the level of output (ECI, 2003; MSU/MADER, 2004).

It is evident from the above review that developing the agricultural sector remains a challenge for Mozambique. The background of the study also reveals that the effectiveness of strategies to accelerate economic development in Mozambique depends more on the performance of the agricultural sector, where the great majority of the population derives its principal income from agriculture. The increasing economic growth in the country raises concerns when broad-based growth in rural income is lacking, partially due to the lack of remunerative marketing opportunities and growth of productivity in the smallholder farming sector, not only in food crops, but also in cash crops. Addressing the problems of low agricultural productivity, particularly now that the country and the Austral African Region are facing high fuel and food price crises, is much more critical.

The Government of Mozambique recognises that, in order to effectively stimulate development in rural areas, it must invest in agriculture. For this reason, it has decentralised its decision making and empowered the policy and decision makers at district levels and local municipalities with the necessary resources as a strategy to promote agricultural production, fight poverty, and enhance economic growth. This is also reflected in the Millennium Development Goals which it has adopted, in which the focus is on a Poverty Reduction Strategy until 2015. However, the rural areas of Mozambique are characterised by extremely weak or non-existent financial services and lack of market facilities. With isolation from any kind of market facilities and a limited availability of inputs, smallholder farmers can only produce at low average yields for crops. Therefore, little can be achieved if investment in rural financial markets is limited.

1.1.4 Access to agricultural credit

One of the most successful ways to reduce poverty in developing countries is to prioritise the agricultural sector and smallholder farmers, effectively emphasising rural initiatives that would promote productivity, marketing and international trading possibilities (Collymore, 2005; Brück & Van den Broeck, 2006). This can be accomplished, not only through supporting smallholder farmers with input provision packages, research and extension services, but also by improving access to credit. The argument is grounded on the fact that smallholder farmers in poor economies are characterised by higher productivity and intensity of labour, rather than large-scale farmers (Collymore, 2005). Furthermore, smallholder farmers still show the lowest average consumption of food among the rural poor, particularly in the rural central and southern areas of Mozambique (Brück & Van den Broeck, 2006).

Therefore, access to credit should help smallholder farmers to tap financial resources beyond their own (cushioning them against income shocks), as well as enabling farmers in general to not only take advantage of potential profitable investment opportunities, but also to fulfil the social function of enhancing their lives and welfare (Manganhele, 1999; CGAP, 2005). Despite mobilisation of deposits and insurance services being important, rural credit still plays a more significant role in promoting rural development in many developing countries (Besley, 1994).

Experience in many developing countries demonstrates that access to credit could accelerate the adoption of new technology. Such access can stimulate agricultural production through increased farm output and improved rural income distribution (Klein *et al.* 1999; Lapenu, 2000). In Mozambique, however, the financial sector is still underdeveloped with banks operating only in urban areas. Almost no formal credit institutions exist in the rural areas. For this reason, the provision of many of the financial services (deposits, insurance, credit, etc.) in rural areas is limited (MRFSP, 2003). Most commercial banks are wary about lending to smallholder farmers (Bertelsmann Transformation Index, 2006).

1.2 Research problem

Despite many decades of experimentation with supplier-led approaches to credit, limited success has been achieved in improving access to credit and developing countries are still

searching for better ways to improve access to smallholder farmers. A shift in paradigm to a demand-driven approach in rural financial markets seems to be one way forward, if the aim to ameliorate the poverty of smallholder farmers and to promote rural economic development is to be realised in a developing country like Mozambique. Many studies support this statement (Besley, 1994; Gonzalez-Vega & Graham, 1995; Zeller & Sharma, 1998; Klein *et al*., 1999; Meyer & Nagarajan, 2001; Wilson, Kanji & Braathen, 2001; Stiglitz, 2002; Meyer, 2002; Meyer *et al*., 2004; Sacerdoti, 2005; Brück & Van den Broeck, 2006). Recently, there has been a renewal of interest in improving access to agricultural credit.

Therefore, a major challenge exists for developing countries, including Mozambique, to identify sound rural finance institutions to serve smallholder farmers who, most often, have not been served by traditional formal banks and microfinance programmes (Klein *et al.,* 1999; Seibel, 2000; Meyer, 2002; ECI, 2003; Machethe, 2004; RFSP, 2003; Meyer *et al*., 2004; CGAP, 2005; Christen & Douglas, 2005; Carrilho, 2006). Since many of the services required to promote smallholder farming and agricultural development are public goods, one can expect little progress in achieving the objectives of agricultural development without government intervention (Machethe, 2004). Furthermore, in Mozambique, attempts are being made to find more effective government strategies to improve access to credit for smallholder farmers (MRFSP, 2003; ECI, 2003; FFSSA, 2004; Mucavele, 2006; Chirindza, 2006; Carrilho, 2006; Neves, 2006).

Certain researchers in Mozambique have suggested a number of alternative solutions to the said problem. For example, according to Sitoe (2005), Mucavele (2006) and Chirindza (2006), one possible strategy might be to re-establish a rural public bank, partly funded by the *fundos do fomento*, while FFSSA (2004), Carrilho (2006) and Neves (2006), revealed that the government is actually considering the possibility of subsidising some rural credit programmes and that it is currently searching for donor partners in order to fund such programmes. However, it is not clear whether the current proliferation of small donor-financed credit projects, including the *fundos do fomento*, throughout the country, can be transformed into a more comprehensive credit market which is pro-poor, especially since the type of state coordination needed is not yet known.

Conversely, while some key lessons concerning the provision of financial services to the poor, including smallholder farmers, can drawn from a few developing countries with well-

performing programmes, there is still no dominant organisational model that can be successfully replicated everywhere (Gonzalez-Vega & Graham, 1995). Like other developing countries, Mozambique is still searching for more targeted and deliverable strategies that would positively influence on the productivity of smallholder farmers through improved access to credit.

Although it is generally accepted that government should play a major role in improving access to credit to smallholder farmers, in Mozambique, little attention has been given to the issue of what could be the most appropriate approach for the government to improve this situation. Fortunately, there are certain recorded experiences of successful government strategies in other developing countries that could shed some light on how to address this issue.

In view of the poor performance of past and current government strategies implemented in Mozambique in this regard, and the existence of successful government efforts elsewhere, the following research questions arise:

1.3 Research Questions

(1) What went wrong with the government strategies implemented in Mozambique in attempting to improve access to agricultural credit for smallholder farmers?
(2) What are the positive experiences with government intervention strategies that have been implemented in other developing countries of Africa and Asia and that have succeeded in improving access to agricultural credit for smallholder farmers?
(3) What can Mozambique learn from these countries with effective government intervention strategies that have succeeded in resolving or ameliorating the problem of the lack of access to agricultural credit for smallholder farmers?
(4) What is the most appropriate intervention strategy for the Government of Mozambique that would effectively lead to improved access to credit for smallholder farmers?

1.4 Objectives of the study

The general objective of this study is to identify the most appropriate government intervention strategy for improving access to credit for smallholder farmers in Mozambique.

The specific objectives are as follows:

(1) To analyse Mozambique's experience in addressing the issue of lack of access to credit for smallholder farmers;
(2) To analyse the experiences of other developing countries in their efforts to improve access to credit for smallholder farmers;
(3) To identify the specific credit needs of smallholder farmers in Mozambique; and
(4) To identify the requirements that must be met by credit institutions to fully address the credit needs of smallholder farmers in Mozambique.

1.5 Definitions of key terms

1.5.1 Smallholder farmers

Smallholder farmers are defined to include subsistence farmers and semi-commercial farmers. Subsistence farmers comprise the largest group of the rural population, who are still poor, but

actively trying to earn a significant part of their livelihood from farming activities;
whose cultivating system is predominantly traditional (using a long-handled or short- handled African hoe); and
do not actively strive to produce a saleable surplus from their farming activities.

Therefore, they are by far the most challenging potential client segment for the providers of financial services.

Semi-commercial farmers, on the other hand, comprise a minority of the rural population but are the most promising targeting group of smallholder farmers. The majority of smallholder farmers in this subcategory still use traditional farming technologies, like the subsistence farmers. However, they are more oriented to serve the market and have progressed in the scale of their operations or, if not, have at least already demonstrated an ability to manage improved technology. It is likely that a great number of semi-commercial farmers would

combine part-time farming and non-farm activities, such as working in small businesses and/or in towns, including trading in farm products and inputs. Unlike subsistence farmers, many semi-commercial farmers are less risk-averse and more prone to demand financial services.

1.5.2 Access to credit

Access to credit can be defined in many ways. According to (Perderson & Khitarishvili, 1997), access to credit occurs when there is no non-price or credit rationing. Credit rationing can be defined as a restriction of credit availability: the restriction or refusal of the availability of credit, even when the applicant is willing to pay more than existing comparable borrowers, or when he/she cannot obtain the credit required.

In this study, access to credit is defined to include *availability of finance* (when needed/desired, convenience, continuity and flexibility are guaranteed) and *willingness to pay* the price of the loan. Therefore, access to credit can be defined as a situation in which a borrower is able to obtain some amount of capital (in cash or in kind), regardless of his/her willingness to pay a higher price for credit (interest rate at which a loan is granted) from the particular source of capital, though he/she may choose not to borrow.

1.6 Outline of the chapters

The remaining chapters of this study are structured as follows: Chapter two reviews the role of credit in agricultural development, issues of access to credit for smallholder farmers, and factors limiting access to credit. Chapter three addresses government efforts to improve access to credit for smallholder farmers in developing countries. Chapter four explains how the study was conducted, by describing the methods and procedures. Chapters five, to nine, present the results of the study on:

the efforts by the Government of Mozambique to improve access to credit for smallholder farmers, particularly in rural areas;

the specific credit needs of smallholder farmers in Mozambique

successful experiences from other developing countries of Asia and Africa, namely, Thailand, Indonesia, Botswana and Zimbabwe, in addressing the problem of lack of access to credit for smallholder farmers; and

the requirements that need to be met by rural financial institutions to address the specific credit needs of smallholder farmers in Mozambique.

Chapter ten provides a summary and discussion of the research results. Finally, the conclusion and recommendations of the study are provided in chapter eleven.

CHAPTER TWO

THE ROLE OF CREDIT IN AGRICULTURAL DEVELOPMENT, CREDIT ACCESS AND CONSTRAINTS FOR SMALLHOLDER FARMERS

This chapter reviews literature on the role of credit in agricultural development (section one). Section two addresses issues of credit access for smallholder farmers in developing countries. Factors limiting access to credit for smallholder farmers are addressed in section three. The final section of this chapter presents the conclusion.

2.1 The role of credit in agricultural development

There is no general consensus on the extent to which financial service provision, especially credit, can help to reduce poverty in the developing world. This is partly due to the difficulty in measuring the impact of credit on poverty reduction. However, it is generally accepted that rural financial services may benefit poorer people either directly or indirectly. Therefore, there is justification for financial institutions to channel their financial products either in cash or in kind to those who are in need to invest in productive assets, particularly in rural areas.

According to (Zeller and Sharma, 1998), credit facilities may assist smallholder farmers to tap financial resources beyond their own means and take advantage of potentially profitable small business opportunities. Access to credit could also aid landless smallholder farmers to establish or expand family enterprises. Therefore, access to credit can play a crucial role in making the difference between grinding poverty and an economically secure life. Improved access to agricultural credit and savings may help those with limited assets to invest in agricultural technology or land improvements, such as high-yielding seeds and chemical inputs that increase incomes. Short-term savings or borrowing can also help them to maintain consumption of basic necessities, when smallholder farmers experience temporary income shortages between agricultural seasons, or after a bad harvest. Therefore, in the best of cases, credit plays a role in raising the income of the poor. Credit can give smallholder farmers the extra boost they need to pull themselves out of poverty. Well-timed credit may help a poor household to make additional investment (MRFSP, 2003). In addition, credit enables producers to acquire more and efficient productive assets. Hence, credit contributes to the productivity and incomes of rural households, thereby contributing to poverty alleviation (Mohamed, 2003). On diversified farms that practice intensive production systems and where

labour constraints are experienced, greater access to credit may facilitate hiring of additional labour. Conversely, it helps to create employment for less fortunate labourers and may improve the food security status of the household members (Immink and Alarcón, n.d).

According to (Zeller & Sharma, 1998:16), "the provision of financial services is a potent tool for poverty alleviation, and public resources are called for to deliver these services to the poor". The reason for this is that, if the poorest of the smallholder farmers were obliged to pay for services at full market prices, it can be expected that the poorest potential clients would be left out and, therefore, they cannot benefit from the viable economic opportunities that might help them to improve their output (Zeller & Sharma, 1998).

Furthermore, "credit may offer low returns to investment for households that own tiny plots of unirrigated land of low productivity, especially when they are illiterate, in ill health, or lacking experience in high-yielding agro-technology or non-farm microenterprises. For these reasons, in Freedom from Hunger in Ghana, BRAC and the Grameen Bank in Bangladesh, financial services are offered in combination with other complementary services, such as basic literacy programs, training in enterprise management, and education in nutrition, health, and family planning that are likely to increase the productivity of the loans provided" (Zeller & Sharma, 1998:16).

Therefore, if an additional dollar spent on a credit-based programme reduces poverty by a greater amount than a dollar spent on another poverty reduction programme, then there is a case for redirecting resources to rural financing programmes (Zeller & Sharma, 1998). For this reason, the role of governments in many developing countries should be as important as that of the markets in the economy. These two roles complement each other and they should work in partnership. This explains why there is a need to recognise that, while markets are at the centre of the economy, there is an important, if limited, role for the government to play as well (Stiglitz, 2002).

Evidence from a number of studies in Africa, Asia, and American confirms that, positive impacts are derived from improved access to credit for smallholder farmers. For example, according to Zeller and Sharma (1998), such evidence can be highlighted as follows:

> in Bangladesh, access to credit for smallholder farmers has a positive effect on food consumption, school enrolment, smoothed fluctuations in the weights of preschool

children, asset holdings of households, and positive impact on women's contraceptive use and empowerment;

in Peru, credit-constrained parents are likely to withdraw their child(ren) from school in order to smooth consumption, since a child could work for wages;

in Kenya, access to credit contributes to increased expenditure on education;

in Ghana, the combination of credit with education services in women's groups resulted in higher off-farm income from micro-enterprises, improved nutritional status of children, and improved household food security; and

in Bangladesh, China and Pakistan, access to credit had positive effects on total food expenditures.

In Mozambique, the income of the rural poor stems from farming and allied activities, and the majority of the poor face limitations on food consumption, education and basic health care services due to financial constraints and poor output from farming activities. Therefore, it seems reasonable to argue that any strategy to improve incomes should include improving access to credit for smallholder farmers. However, to ensure that appropriate strategies are designed for improving access to credit, it is important to understand why smallholder farmers often lack access to credit for farming purposes, particularly from formal and semi-formal systems (e.g. NGOs).

2.2 Access to credit for smallholder farmers in developing countries

In many developing countries, access to credit for smallholder farmers has been cumbersome for many decades. (Kumar, n.d.), support this view by stating that even before the actual financial crisis, "most of the over one billion smallholder farmers worldwide and many of the rural entrepreneurs of the developing world had little to no access to financial services". However, "a successful input credit system in the smallholder sector for instance, could have an important payoff for poverty alleviation" (Jama and Pizarro, n.d.).et, in many developing countries "banks tend to advance loans only to those who offer lower risk and better security, which implies that only rich and wealthy people receive loans at cheaper rates, leaving the small and poor borrowers to seek loans from the unorganised credit market" (Mohamed, 2003:11). For example, in Ethiopia, a study conducted by Yehuala (2008) on determinants of smallholder farmers' access to formal credit indicates that the majority of the rural

households do not have access to credit from the formal credit institutions. Generally, smallholder farmers rely on informal lenders to fulfill their credit needs. However, they are provided as a very small loan, for short period and especially for consumption. Furthermore, when credit is requested for purchasing farm equipment and other agricultural inputs, including the introduction of modern irrigation system and other technological development, access to it becomes a serious concern for farmers.

Many empirical studies held in Africa also support this view. For example, (Adams, cited by Mohamed, 2003:11) found that very few small farmers and rural micro-entrepreneurs have been integrated into formal financial markets and many do not use credit or if they do, they continue to borrow from informal market lenders. Therefore, access to credit by smallholder farmers in many African countries is rather disappointing. The study by Gonzalez-Vega, cited by Mohamed, (2003) also reports that only a small fraction of farmers in developing countries have received formal loans. Statistics estimate that only 15 percent of farmers in Asia and Latin America and just five percent in Africa are financed through formal credit sources (Gonzalez-Vega; Braverman and Huppi; cited by Mohamed, 2003).

In Tanzania, a study by Krain (cited by Mohamed, 2003:11) indicates that credit provided by formal financial sources meets only a small portion of the total credit demand of the agricultural sector. For example, formal financial sources in Zanzibar accounted for only 9.9 percent of the total credit available to the agricultural sector. The remaining 90.1 percent was from informal financial sources. In Kenya, a study by Nguthi (2007) found that, in the study area of *Maragua*, only 16 percent of the smallholder farmers' accessed credit and the majority of the households had no access to credit due to lack of collateral to secure their loans which could be sourced from banks. In Zambia, smallholder farmers also have the lowest access to credit from formal banks, averaging less than 20 percent (Rped Business Knowledge for Development, n.d.).

Therefore, in many developing countries, millions of low-income entrepreneurs still do not have access to formal or semi-formal financial services that would allow them to increase their productivity and alleviate their poverty conditions. The lack of access to a broader set of financial options represents a (potential) constraint on entrepreneurship and on the ability to undertake socially and privately profitable investment projects (Gonzalez-Vega and Graham, 1995).

2.3 Factors limiting access to credit for smallholder farmers in developing countries

This section discusses the various factors limiting smallholder farmers' to access credit in many developing countries, including Mozambique. These factors include market failure problems, credit rationing problems, misleading lending policies and institutional constraints.

2.3.1 Determinants of access to credit

Studies undertaken in Mozambique by Manganhele (1999) and in Tanzania by Mohamed (2003), managed to establish six important common socio-economic factors determining an individual's chances to access credit from semi-formal, and/or formal financial sources. These are terms of credit and conditions, years of formal education, age, gender, income and degree of awareness of available credit services. Particularly for women, the level of power in decision making of an individual within the household was also established as an important factor in influencing an individual's chances to access credit (Manganhele, 1999). This finding was supported by (Mohamed, 2003:29), who found that "although some of micro-credit programmes target women, they do not benefit equally with men from the available credit services". These findings imply the existence of serious weaknesses in the credit system in targeting the right beneficiaries for poverty alleviation, since women are the majority farmers and the most disadvantaged groups in many developing countries, particularly in Africa.

Apart from the problems of institutional constraints imposed by each type of financial institution, lending policies such as terms of payment and credit duration also limit access to smallholder farmers in developing countries. These limiting factors suggest that the current status of access to credit for smallholder farmers in the developing is a major concern to their governments in their efforts to meet the millennium development goals and to fight poverty.

2.3.2 Market failure problems in rural financial markets

According to Besley (1994), market failures occur when a competitive market fails to bring about efficient credit markets. The functioning of the latter is based on supply and demand

forces. The interest rate is the cost of borrowing and, in a market-based approach it is determined by the law of supply and demand.

The reality in the developing world is that there are many mismatches between potential demand and supply of financial services, which makes the exact source of market failures vague when they occur. In addition, "evidence on what is affecting households' and firms' access to financial services across countries is limited" (Claessens, 2005:15). In Mozambique, the situation seems to be more related to market failures than lack of demand. In other cases, the lack of access to credit may be an indication of a country requiring a certain overall level of development before more universal access to credit can be viably defended. When demand exists and the environment is sufficiently competitive, banks can be expected to extend access to credit to include a larger variety of clients, including serving poor smallholder farmers and firms who are currently considered to be high-risk and too high-cost propositions (Claessens, 2005).

Stiglitz (2002) argues that the reality in the developing world is that markets are very often imperfect and when markets are imperfect, both imperfect competition and imperfect information exist. In this case, simplistic models (perfect competition and perfect information) are no longer valid. Instead of the operation of credit markets being based on the supply and demand principle, there is a need for more realistic theories of labour and financial markets that provide explanations for the existence of unemployment and why those most in need of credit, particularly smallholder farmers, often cannot obtain it. Gonzalez-Vega and Graham (1995) add that, in developing countries, information, contract enforcement problems and incentives tend to be particularly acute when an attempt is made to lend to the poor, particularly in the rural areas.

Efforts by governments in many developing countries aiming to partially resolve market failure problems where undertaken. For example, over the past two decades, most African governments have carried out reforms to deregulate agricultural markets and reduce the role of state enterprises. Despite that reforms have had many favorable results; their effect has been "muted by partial implementation and structural constraints". Therefore, with non-well functioning markets, it would be difficult to achieve the goals desired (Jama and Pizarro, n.d.).

This suggests that the failure to address market failure problems results from the fact that financial providers have simply been rationing smallholder farmers. Therefore, credit rationing strategies also are meant to hinder access to credit for the latter.

2.3.3 Credit rationing problems

Information and incentive problems may lead to market imperfections (asymmetric information, moral hazard, and adverse selection) that induce credit rationing (Gonzalez-Vega and Graham, 1995). For example, the problem of high collateral requirements is one form of pure credit rationing which restricts market access to otherwise creditworthy clients, including smallholder farmers (Pederson and Khitarishvili, 1997). On the other hand, market imperfections increase the costs of screening and monitoring borrowers and the costs of enforcing financial contracts, which may lead to credit rationing. They arise when private market participants, acting in self-interest, do not allocate resources efficiently (Gonzalez-Vega and Graham, 1995). According to Zeller and Sharma (1998), owing to imperfect information problems, commercial banks usually shy away from rural clients' altogether, limiting their services to the urban or peri-urban economy. In these areas, information on prospective borrowers is less costly to obtain and transaction volumes are larger. In addition, there is little evidence to date that financial institutions in the private sector are willing to invest resources to devise profitable savings and loan services for smallholder farmers in rural areas.

Therefore, imperfect and costly information, risks (arising from uncertainties about their income that create borrowers' potential to default), lack of effective contract enforcement and market segmentation in rural credit markets, may also emerge as important explanations for credit rationing. In turn, these issues worsen the problem of lack of access to credit for smallholder farmers. In addition to market failure problems and credit-rationing strategies, financial institutions' constraints on lending to rural areas also form part of the problem impacting negatively on access to credit for smallholder farmers.

2.3.4 Institutional constraints

Institutional constraints may also explain the problem of lack of access to financial services for smallholder farmers. They are based on two dimensions, namely financial institution specific constraints and barriers arising from the overall institutional environment.

i. Individual finance institutional constraints

Individual finance institutional constraints occur when appropriate types of financial services are not being provided. For example, many NGOs operating in rural areas of Mozambique are providing credit mainly for trading purposes, but the majority of smallholder farmers demand credit for investment purposes such as mechanised equipment, tractors or trucks, and for consumption purposes (Manganhele, 1999; MRFSP, 2003). This suggests that smallholder farmers' credit needs are possibly not being adequately addressed by these financial institutions.

High transaction costs are associated with the fact that smallholder farmers demand small amounts. Together with high fixed costs of applying, collateral requirements and other non-pecuniary barriers, such as requiring literacy, often lead to high rejection rates (Claessens, 2005; FAO, 1993). According to Atieno (2001), Besley (1994) and Claessens (2005), other barriers to access to credit for smallholder farmers explain why many financial institutions have been failing to provide appropriate financial products and services to smallholder farmers and other segments in rural areas. They include

a) low population density (making it difficult to provide physical infrastructure in rural areas);
b) lack of security in cash transfers and branches (which implies that financial services cannot be operated commercially and in a profitable fashion);
c) high transaction costs for small volumes (smallholder borrowers frequently borrow and repay in small instalments); and
d) smallholder farmers and firms in developing countries may seek financing or insurance for specific purposes (major life events such as marriage, health and specific crop insurance), for which contracts are difficult to design.

The institutional environment is the second dimension of institutional constraints that also hinders access to credit in rural financial markets.

ii. Institutional environment constraints

In designing viable rural finance institution policies, financial technologies are crucial but, in order for them to be appropriately adopted and implemented, organisational design also matters. Access to technology can impact positively on demystifying some unknown dimensions of access to credit for smallholder farmers, but many rural financial institutions lack access to technology. As a result, the product design in many developing countries reflects poor organisational design. For this reason, institutional environment constraints have been hindering access to credit for smallholder farmers (Gonzalez-Vega, 1994). Poor institutional design can be reflected in many ways. For example, financial institutions operating in an environment with an absence of credit information, can find it difficult to assess collateral that can be registered and recovered, if necessary. In addition, difficulties in enforcement and general contract design, or an uncertain repayment capacity arising from volatile income and expenditure, can seriously curb the efforts of financial institutions in attempts to improve access to credit for smallholder farmers.

In the past, the development and spread of financial institutions were suppressed by excessive state interference, such as rigid exchange rate regulations and caps on interest rates. But today, it is widely recognised that the role of establishing macroeconomic stability and of maintenance and enforcing a legal framework that ensures contract compliance, has to be played by the government. This is important to ensure that financial markets are free to respond to economic incentives, while following prudential banking practices. Therefore, while a liberalised financial market is a necessary condition for improving the supply of financial services to the poor, it is not sufficient. Institutional innovation is also necessary (Zeller & Sharma, 1998).

2.3.5 The costs involved in lending to rural areas

Formal financial services are expensive because they are almost a luxury good and require a lot of valuable human and material resources with high opportunity costs. For this reason, formal finance usually implies high fixed costs. Moreover, an efficient evaluation of

creditworthiness is essential to make services less costly, for both the financial intermediary and the society. In serving smallholder farmers, these fixed costs become much higher, particularly because these clients often apply for small loans, they are heterogeneous and are scattered in sparsely populated areas (Gonzalez-Vega, 1994). Borrowing costs include nominal interest payments made to lenders, additional loan transaction costs and changes in the purchasing power of money. In turn, borrowers' transaction costs are affected by time and travelling costs to and from the office to negotiate the loan, application fees, bribes, forced purchases of other services provided by lenders, service fees, compensatory balances and loan-closing costs (Njie, 1983).

According to Klein *et al.* (1999), there are many factors contributing to raising the costs of lending to smallholder farmers, as highlighted below.

a) Dispersed clients

As mentioned, dispersed locations and the low population density of rural clients in many developing countries make the provision of the rural financial services costly for both lenders and borrowers.

Given the spatial dispersion of production and the comparatively high incidence of location-specific factors and exogenous shocks on yields, monitoring of borrowers is very costly. The covariance of farmer incomes from agricultural activities makes it difficult for banks to diversify their portfolios (Gonzalez-Vega and Graham, 1995). From the rural borrower's side, financial transaction costs of institutional credit can also be high as a result of high opportunity costs: a borrower may need to travel several times to the bank branch which requires not only a long time for processing, but also money to cover travelling costs. Since loans demanded are often very small, these costs could significantly increase the effective lending interest rate (Klein, cited by Klein *et al*., 1999).

In undermining the structure of operating costs, many ADBs lacked institutional and financial viability. Consequently, their design placed more emphasis on specialisation, public ownership and the lack of a profit motive. Only an appropriate organisational design and incentive structure would lead to more effective management strategies that would lower the costs of lending to smallholder framers and cause it to be in the interest of decision-makers to secure the viability of their institutions (Gonzalez-Vega and Graham, 1995). Transaction

costs of lending to agriculture could be lowered if innovative ways of providing financial services, such as mobile loan officers and/or branch officers, were adopted. However, although branch networks reduce risks, they are costly to maintain and support; nevertheless the establishment of a rural branch may be preferable, because mobile facilities may be subject to security risks if bank staff are required to transport money (Klein *et al*., 1999).

b) Seasonality and loan term structure

The seasonal nature of agricultural production and the relatively long gestation periods before crops can be harvested and sold, have a direct influence on the financial transaction costs of the lenders. Often, agricultural loans are larger and required for longer periods. As a result, matching assets and liabilities (source of loanable funds) makes lending more difficult than providing loans for non-farming activities. Lending to the agricultural sector also requires one or two larger loan repayments, rather than the regular weekly or monthly instalments common in microlending (Klein *et al*., 1999; Meyer *et al.*, 2004).

Furthermore, lending to smallholder farmers implies that monitoring repayment capacity and willingness to repay the loan is much more difficult, and an uneven distribution of agricultural lending operations over the year increases the fixed costs of personnel. Hence, earnings from lending activities may not be sufficient to cover these costs. The paradox is that, during times of high seasonal loan demand, liquidity requirements raise the price of loanable funds while, during periods of low demand, excess liquidity needs to be invested in low or non-earning assets. This increases the opportunity costs of these funds which causes lenders to face high costs (Klein *et al*., 1999).

As noted, local intermediation is also made difficult by the seasonality of sowing and harvesting cycles which contributes to the covariance of cash flow (Gonzalez-Vega & Graham, 1995).

c) Heterogeneity of farming

Loan officers in rural areas often lack adequate information about the financial household situation of smallholder farmers. Consequently, the diversity of farming and non-farm income-generation activities is more difficult to deal with in rural areas than in urban areas. This may extend the bank staff's time and expenses needed to carry out the appraisal. It is also likely to increase the costs to train agricultural loan officers (Klein *et al*., 1999; Meyer *et*

al., (2004). Consequently, the nature of the costs involved in lending to smallholder farmers is complex and they tend to be high. By implication, smallholder farmers' decision-making when requesting loans from formal banks, will depend more on the proportion of the borrowing costs to the household's income, while financial institutions' willingness to lend to smallholder farmers will depend more on the magnitude of the costs on the institutional side. The making of decisions by these two role players will be reflected in their unwillingness to learn and unwillingness to borrow, rather than by the real demand for agricultural credit.

In addition, lending to smallholder farmers is not only costly but also risky. This may also lead to additional factors to be weighted, as far as lending to agriculture is concerned. The following section concerns the specific risks in this respect.

2.3.6 Specific agricultural lending risks

Agricultural lending institutions face many challenging risks in attempting to service smallholder farmers, particularly in rural areas. According to Klein *et al*. (1999), there are four major types of risks involved in lending to agriculture:

credit or loan default risks – occur when borrowers are unable or unwilling to repay the loan principal and to service the interest rate charges;

liquidity risk – occurs when a bank is not able to meet its cash requirements. Mismatching the term of loan assets and liability, exposes banks to high liquidity risks;

interest rate risk – if interest rate change occurs, a decline in the value of the loan follows; and

foreign exchange risks – determined by the exposure of the banks to changes in exchange rates, which affect international borrowings denominated in foreign currency.

The risks in agriculture impact negatively on both borrowing farmers and operating lending institutions. Although risks and uncertainties are not only pervasive in agricultural production, they are much more serious than in most non-farming activities. Given that production losses are also impossible to predict, this leads to serious consequences for the income generation, and for the loan repayment, capacity of smallholder borrowers. The type

and severity of risks faced by farmers in general, vary with the type of farming system, physical, economic conditions and prevailing policies (Klein *et al*., 1999). The seasonality of farm household income also poses more risks in lending to smallholder farmers. On the one hand, surpluses supply an increased savings capacity and reduce the demand for credit after the harvest while, on the other, deficits cause reduced savings capacity and an increase in demand for credit before planting crops. As a result, lenders face specific challenges when many or all of their borrowers are affected by external factors simultaneously. This condition of covariant risk in agriculture may seriously undermine the quality of loan portfolios. Therefore, the provision of viable, sustainable financial services and the development of a strong rural financial system is contingent on the ability of financial institutions to assess, quantify and appropriately manage various types of risks (Pischke, cited by Klein *et al*., 1999).

Other credit risks in lending to agriculture are also summarised by (Klein *et al*., 1999). These include production and yield risks, market and price risks, risks of loan collateral limitations, moral hazard risks stemming from a distorted credit culture and changes of risk in domestic and international policies, as presented below.

a) Production and yield risks

Risks affect all the categories of farmers, but they severely impact specifically on ambitious farmers, who embark on farming activities that may generate a high potential income at the price of concentrated risks, such as those engaged in high-input monoculture. Subsequent loan defaults may adversely affect the creditworthiness of farmer borrowers and their ability to secure future loans.

b) Market and price risks

The relatively long time period between the decision to plant a crop or to start a livestock enterprise and the realisation of the farming plant's output means that market prices are uncertain at the moment when a loan is granted. This problem becomes more acute if the gap between planting and the first harvest amounts to several years. This is often the case for perennial tree crops, such as coffee, olives, etc. In countries where the formal single crop buyer is a parastatal body, these economic risks are more noticeable. A buying price is announced by these organisations before planting time. Private buyers rarely fix a blanket-

buying price prior to the harvest. Almost always, these arrangements involve the setting of a price or a range of prices, prior to crop planting.

c) Risks of loan collateral limitations

Inadequate loan collateral poses specific problems to rural lenders. Since land is fixed and not easily destroyed, it is the most widely accepted asset for use as collateral. However, smallholder farmers' work on land with a limited value, or those who have it, may only possess usufruct rights of use. This makes them less likely to obtain access to credit from formal institutions. Their moveable assets, such as livestock and equipment, are also regarded as higher risk forms of security by lenders. For example, the owner must provide proof of purchase and carry insurance coverage on these items, which is rarely the case for smallholder farmers. Even when they are able to meet the loan collateral requirements, contract enforcement problems are many. Where sound reform entitlement exists, restrictions on the transfer of land, received through land reform programmes, limit its value as collateral.

d) Moral hazard risks in distorted credit culture

The past unsuccessful government-directed credit programmes raised the potentially serious problems of poor loan repayment discipline. In the case of a natural calamity such as flood or drought, borrowers who have witnessed the crisis and demise of lending institutions were discouraged from repaying their loans. The lack of repayment discipline led to agricultural lenders being exposed to the effect of a distorted credit culture. Since, very often, informal lenders deploy stronger enforcement means than banks, borrowers' accord priority to repaying informal loans. Borrowers also view losing the access to informal credit as being more disadvantageous than foregoing future bank loans.

e) Risks from changes in domestic and international policies

Both policy changes and government interventions can have a damaging impact on lenders and borrowers. Lenders can contribute significantly to covariant risks. Reducing government expenditures, as an essential part of structural adjustment programmes, may also affect employment opportunities in the public sector. If extension services are suddenly discontinued, costs may even reduce agricultural production levels.

f) Risks of high default rates in lending to agriculture

Frequently, government credit programmes for smallholder farmers have been widely reported as being characterised by high default rates. According to Njie (1983), such rates, reported under many government credit programmes in the past decades, have partially resulted from the wrong perception of credit by smallholder farmers, as including: firstly, a way of recouping benefits and rights from government programmes with or without a credit programme; secondly, a payment in return for services already rendered, that is, voting a certain political party into power; or finally, a compensation for hardship suffered as a result of ill-conceived, poorly planned and/or improperly implemented government policies.

Many of the associated high costs and risks to agricultural lending highlighted in this and the previous section, resulted not only in high default rates, but also in a deterioration of the efforts to improve access to credit for smallholder farmers in many developing countries, including Mozambique. Unfortunately, problems of lending to agriculture do not only refer to factors associated with the costs and risks of agricultural loans. There are many other factors involved which are described in the following section. Specific features of lending to agriculture and smallholder farmers are represented in Box 1.

Other factors impacting negatively on lending to agriculture include poverty (liquidation in order to meet vital consumption needs), lack of good sources of information amongst both lenders and borrowers (about the nature of profitable investment opportunities in the markets), deficient markets and infrastructure, low levels of human capital found in agriculture, establishing and operating bank branches in remote areas. There are gaps in donor coordination (Meyer *et al*., 2004), insurance markets in rural areas are often nonexistent in sub-Saharan Africa and few smallholder farmers enjoy freehold rights over land (Dorward *et al.*, 2001).

Therefore, it appears that many of the above factors reinforce the argument that the solution to the problem of lack of access to credit for smallholder farmers lies in addressing all the market factors impacting negatively on the efforts by the rural financial institutions to extend credit to smallholder farmers.

Box 1: Summary of the features of agricultural lending

Unique features of agricultural lending
1. Lending activities in a politically sensitive environment o Agriculture is a politically sensitive sector; o State interventions often occur in rural financial markets.
2. Risks associated with agricultural lending o Similar economic activities of borrowers generate covariant risks due to market and price fluctuations, yield uncertainties, changes in domestic and international policies.
3. High financial transaction costs for lenders and borrowers o Long distances to serve a dispersed rural clientele; o Poorly developed transportation and communication infrastructure; o Little knowledge about heterogeneous farm households; o Expensive management and supervision of rural bank branch networks; o High additional costs for borrowers: opportunity costs (e.g. lost working time), transport costs, bribes, fees.
4. Specific credit demand o The provision of long-term credit can lead to matching problems between assets (loans) and liabilities (funding sources); o Reduced turnover of agricultural loan portfolio over the year; o Seasonality in agricultural credit demand.
5. Lack of required loan collateral o Smallholder farmers have few physical assets (e.g. land); o Farmers and especially poor rural women have difficulties in clearly demonstrating their legal ownership of assets; o Legal contract enforcement problems arise even when collateral is available.
6. Smallholder farm households are integrated production and consumption units o Demand for loans depends on the self-financing potential, access to savings deposit facilities and risks management ability of borrowers; o Due to the fungibility of money, borrowed funds may be used in the farm household for consumption, education, social insurance, and production and investment.

Source: Klein *et al*. (1999)

2.4 Conclusion

Literature reviewed in this chapter has indicated that market failures are an important reason for lack access to credit for smallholder farmers in many developing countries, including

Mozambique. The review as also confirms the existence of positive international experiences of government strategies from other developing countries in Asia and Africa. Hence, using these experiences as case studies could be useful in shedding light on the role that the Government of Mozambique needs to play in improving access to credit for smallholder farmers. The literature review could also give an indication of the requirements that have to be met by rural financial institutions in Mozambique to address smallholder farmers' credit needs. Furthermore, the literature review may assist in identifying appropriate strategies to address the problems poverty, malnutrition and food shortage through improving access to credit for smallholder farmers.

CHAPTER THREE
GOVERNMENT EFFORTS TO IMPROVE ACCESS TO CREDIT FOR SMALLHOLDER FARMERS IN DEVELOPING COUNTRIES

This chapter considers the question of government intervention to correct market failure in rural financial markets in developing countries. This is done by addressing the controversial points of view of some researchers as regards rural financial markets. Government credit policies during the 1960s and early 1980s are highlighted in section one, followed by the reasons for the failures of Agricultural Development Banks (ADBs), in section two. This is followed by a discussion on the policy of liberalisation of rural financial markets in developing countries in section three. Section four examines the strategy of restructuring agricultural development banks. Finally, the conclusion of the chapter is presented in the last section.

3.1 Market failure and government intervention

As it has been argued, the first argument in favour of government intervention in rural financial markets is based on the belief that it can improve upon the efficiency of the market.

Several studies (Gonzalez-Vega, 1994; Besley 1994; ECI, 2003; Claessens, 2005) have been conducted on rural credit market issues in attempts to explain the linkages between market failure and government intervention. Those supporting direct government intervention in rural financial markets justify it on the basis that lending levels in developing countries are low. However, according to Gonzalez-Vega & Graham (1995) and Zeller & Sharma (1998), policy makers, advisers and managers have not reached consensus about how governments should intervene in and regulate the rural financial sector.

In the past three decades, it was argued that direct government intervention was the most appropriate, feasible and viable approach to resolve the market failure problem in rural financial markets. This argument has caused many governments in developing countries to introduce agricultural or development banks, including other targeted programmes in rural financial markets. Following this principle, between the 1960s and 1980s, many governments adopted these strategies to improve access to credit for smallholder farmers and promote agricultural growth. Based on the market failure theory, the argument underlying direct

government intervention in rural financial markets can be explained in four distinct perspectives: monopoly, externalities, imperfect information, and contract enforcement problems.

Since rural financial markets were characterised by asymmetric or imperfect information problems, many analysts advocated the correction of the derived market failures and externalities by calling on governments to directly intervene (ECI, 2003). According to (Gonzalez-Vega & Graham, 1995:5) "the existence of potential market imperfections and of incomplete organisational infrastructures in developing countries suggests that, in principle, it may be possible to find ways of influencing the development and performance of financial markets that would increase both social welfare and the well-being of the rural and urban poor". Information imperfections and contract enforcement costs may also provide some sound theoretical justifications for the government to directly intervene in rural financial markets by, for example, establishing development banks. Conversely, they may also highlight the nature of the difficulties to be encountered and the risks associated with such interventions (Gonzalez-Vega & Graham, 1995).

Currently, there is no consensus among economists on the issue of whether and how governments should intervene in the rural financial markets. Based on research findings, researchers may be divided into three distinct groups. One group defends direct government intervention to correct market failures as one of the most appropriate strategies to improve access to credit for smallholder farmers and, ultimately, to promote higher levels of growth rates and reduce poverty. Then there are those arguing against direct government intervention by arguing that a market approach alone will suffice to deal with market failure problems. Finally, the remaining group of researchers is more cautionary and, to some extent, they become rather ambiguous.

However, in the case of Mozambique, it seems that there are some unfavourable conditions exacerbating the problem of market failures in rural credit markets, including property rights, courts, competition and information technology, are not yet functioning properly and in many rural areas across the country they are absent. If these are the necessary tools for markets to function efficiently, then this is one reason why smallholder farmers have been marginalised by formal credit banks and allied rural financial operators. Therefore, the Government of Mozambique needs to play a key role in searching for alternative strategies that would aim at

improving the provision of rural financial services as public goods, while it continues its efforts to strengthen the sound performance of the institutions. This should effectively address the problems that lead to higher costs of lending to agriculture in rural areas, such as the continuation of improving the conditions of the infrastructures (roads, communications, transport, as well as health, education and water facilities). Conversely, in order for the governments to play an effective role in rural markets, past mistakes need to be corrected. It is consequently important to understand and analyse what led to the failures of the past government direct intervention strategies to complement the role of the markets.

3.1.1 Direct government intervention in rural financial markets

Recently, as noted, there has emerged a sense that direct government intervention could come to the rescue of smallholder farmers. According to (Stiglitz, 2002) the market fundamentalism principle is based on the argument that, if markets work perfectly, then demand must equal supply. This is valid for labour and for all other goods or factors, and there cannot be unemployment since the lack of access to credit cannot lie with markets. However, very often in the developing world, the so-called free market mechanism has not been operating in favour of the poor, which indicates that there is a need to strike a healthy balance between the role of the state and the market (Wilson *et al*, 2001).

For example, Stiglitz (2002) and Meyer *et al*. (2004) argue in favour of direct government intervention in rural markets. They stress that markets are often absent or often work imperfectly although, in principle, there are desirable government interventions which can improve upon the efficiency of the market in developing countries. Information problems are also numerous. Thus, whenever markets are incomplete and information is imperfect, the invisible hand of the market is likely to work most imperfectly. For that reason, government intervention is desirable because it can improve upon the efficiency of the market. Zeller and Sharma (1998) also claim that the arguments for committing public resources to rural financial institutions are made on the grounds of market failure and poverty alleviation.

In addition, “the market system requires clearly established property rights and courts to enforce them; but often these are absent in developing countries. The market system requires competition and perfect information. But competition is limited and information is far from

perfect – and well-functioning competitive markets can't be established overnight. The theory says that an efficient market economy requires that all of the assumptions be satisfied" (Stiglitz, 2002:74).

Furthermore, on one hand, if information were perfect, there would be little role for both financial markets and financial market regulation. On the other hand, if competition were automatically perfect, there would also be no role for antitrust authorities. Consequently, many of the key activities of the government can be understood as responses to the resulting market failures. This is especially true in developing countries where cultural mores may significantly affect economic behaviours (Stiglitz, 2002). The development of appropriate institutional structures to reduce the costs of lending to rural areas has to be pioneered by active government initiatives, coupled with the need to reconsider all elements of monetary and banking policies (Meyer *et al*., 2004).

Although it has been argued that voluntary trade improves the Pareto efficient market, in the real world, markets more often operate inefficiently, mainly due to information, monitoring and enforcement problems dominating the rural credit markets. As a result, lenders tend to lend less than they would on the conditions of perfect information and no monitoring costs. Therefore, allowing markets to function on their own has resulted in competitive markets often failing to bring about efficient credit markets and, consequently, voluntary trade also failing to bring about Pareto improvement. For this reason, government intervention is justified. Thus, governments can intervene in rural credit markets if one of the following conditions occurs:

a) outright government ownership of financial institutions;
b) specific institutions (channel resources to specific sector such as agriculture);
c) lack of independence of central bank (in implementing policy);
d) regulation of reserve requirement;
e) forced investment;
f) directed credit; and
g) interest rates (Besley, 1994).

However, past policies have failed to acknowledge that development encompasses not just resources and capital, but also requires a transformation of society and that social, as well as political context, cannot be ignored. Past credit policies were also based on the wrong

presumption that markets, by themselves, lead to efficient outcomes which failed to allow for desirable government interventions in the agricultural financial market. These policies ignored the fact that appropriate government interventions reflect sound measures which can guide economic growth and cause everyone to be better off (Stiglitz, 2002).

Consequently it is argued that "Improvements in literacy, household incomes, communication infrastructure, and advances in banking technology and telecommunications, and financial sector reform are likely to decrease transaction costs in the future. While it may be best for private banks to wait until conditions for investment are favourable, waiting may not be the optimal government policy. Institutional innovations that reduce the cost of service delivery and improve its usefulness for the poor are essential for enhancing the efficiency and long-run sustainability of rural financial programs. This provides a strong reason for directing public resources toward policies that generate institutional innovations in the rural financial sector" (Zeller & Sharma, 1998:16).

Appropriate instruments for intervention in rural financial markets should be based on "a market perspective that understands the preferences of the client group and designs products to meet them; a recognition that savings can be as important as credit for microenterprises, financial institutions, and the economy; and insistence that financially viable institutions provide only financial services". Therefore, the institutions are required to "break even or turn a profit in [their] financial operations and raise funds from nonsubsidized sources" (Rhyne & Otero, quoted by Gonzalez-Vega & Graham, 1995:6).

Well-run financial institutions should be able to service the poor and maintain adequate financial returns. Banco Sol in Bolivia and the village banks (Unit Desa) of the Bank Rakyat in Indonesia (BRI) are good references in this regard. However, government, policy and decision-makers should be aware that most of the well-known microfinance institutions in the developing world still depend on subsidies from national governments and international donors. These are the most successful experiences in serving the poor, such as the cases of the Bangladesh Rural Advancement Committee (BRAC), the Grameen Bank in Bangladesh, the Bank for Agriculture and Agricultural Cooperatives (BAAC) in Thailand and the Bank Rakyat Indonesia (BRI) (Zeller & Sharma, 1998; Klein *et al*. 1999; Meyer & Nagarajan, 2001; Christen & Douglas, 2005; Meyer, 2002). Positive experiences from other developing countries might serve as catalysts that could not only induce the government to play an

effective role in rural financial markets, but also shed light on how the government can go about improving access to credit for smallholder farmers in Mozambique. This could be one of the strategies to address the problem of poverty.

3.1.2 Indirect government intervention

In the late 1970s, many African countries faced an economic crisis which compromised the economic potential for growth of their countries. The main factors that contributed to the crisis included failing industrial sectors, declining commodity prices and climbing trade deficits. Since agriculture plays an important role in the developing world, agricultural markets reforms were at a central plan in these liberalization efforts."The agricultural reform measures were designed to do four things: (1) eliminate government control over input and output prices; (2) reduce exchange rate overvaluation; (3) eliminate regulatory controls over input and output marketing; and (4) restructure public enterprises and reduce marketing boards' involvement in agricultural pricing and distribution. The expectation was that improving intervention in the agricultural sector would be enough to generate a sizable supply response and allow well-functioning markets to emerge quickly" (Kherallh, *et. al.*, n.d.:1).

In fact, in many developing countries, various financial institutions in rural financial markets, including the private sector, are constrained by the current technological and institutional environments (legal, regulatory and other requirements). The argument for the advocators of indirect government intervention in rural financial markets is based on the fact that these constraints contributes to a great deal to finding it unprofitable to provide financial services to certain segments of the markets, such as the smallholder farmers.

According to Claessens (2005), the lack of access to credit may be more a problem of poverty than a one of access. For this reason, broadening access to credit for smallholder farmers may be a further problem considering that it leads to impoverishing indebtedness, as the poor may over-borrow, often on unfavourable terms. Consequently, even if government intervention is justifiable, trying to extend financial services provision to a larger segment can be disappointing when the cost of general, public or public-induced provision outweigh the benefits.

On the other hand, the ECI (2003) adds that, if the reversal of financial market failures can be achieved through a major breakthrough in lending technologies as regards the "best practice" (enhancing monitoring and devising innovative ways around the contract enforcement problem), the core problem of imperfect information can in turn be directly addressed. Hence, according to Meyer and Nagarajan (2001) and ECI (2003), the role of the government in addressing market failure problems should be to focus on the creation and strengthening of the market, instead of direct intervention strategies. The indirect government intervention strategies include the provision of appropriate infrastructure and capacity building, as well as strengthening the expansion of the financial institutions which would lead to improving information flows, legal structures and contract enforcement problems associated with lending to rural clients.

Furthermore, rural financial markets experience high exposure to these systemic risks, such as macro-economic volatility, financial crises, defaults by governments and arbitrary taxation. Consequently, in countries with poor institutions, direct government intervention can aggravate the problem of lack of access. Direct intervention can distort risk-return signals, resulting in difficulties for formal financial institutions to offer attractive products (Claessens, 2005). Hence, if countries are to successfully reform rural areas, specialised financial institutions (e.g. agricultural development banks), must either be closed or effectively rehabilitated. Governments need to avoid negative policies that undermine institutional viability, such as channelling subsidised loans through financial institutions in attempts to solve social problems. They also need to recognise the role that the private sector can play in financial markets (Meyer & Nagarajan, 2001).

"Intervention is not, a panacea, even in the presence of adverse selection and moral hazard, because the government faces very much the same information, agency, and incentive problems as private lenders do" (Gonzalez-Vega & Graham, 1995:13). This means that the solutions for covariance and monitoring problems rely on insurance schemes (e.g., loan rescheduling, partial forgiveness of debt in cases of regional disasters, and crop and credit insurance), rather than on public agricultural banks (Gonzalez-Vega and Graham, 1995).

However, this argument seems to be more intriguing than practical or realistic. The reason for this is that, if government faces exactly the same information, agency and incentive problems as private lenders do, this gives it a strong reason not to be excluded from directly intervening

in rural financial markets or from playing its role of financial service provider as a public good. It can even be argued that, more than any other rural financial role player, the government should be the first to take full responsibility of bearing the higher burden of risks and costs of lending to smallholder farmers. Only the government, not the private sector, commands the public resources to invest in economic sectors, such as agriculture. If the government is the first to desert those who are most in need of services, neither NGOs, nor the private sector can be expected to finance the rural poor client. In Mozambique, the level of technology and institutional environment is still underdeveloped and, therefore, the private sector is still too weak to mobilise resources needed for development in the agricultural sector. This is one of the reasons why the private sector is frequently unwilling to extend its services to agriculture and smallholder farmers. Hence, this may suggest that an indirect government approach may not be the most appropriate approach to improve access to credit for smallholder farmers in Mozambique.

This view is supported by the (Kherallh, *et. al.*, undated) study, which found that, by the late 1990s, it was found that the reform programs in Africa have not met expectations. "Average annual agricultural value-added have been negative thought the 1980s and 1990s" (Kherallh, *et. al.*, n.d.:1).

In fact, the reality in the continent is that reforms that based on the policy of the indirect government intervention in rural financial markets have not properly transferred structural and institutional functions performed by the state to the private sector. In most of the cases, the vacuum left by government withdrawal could not be filled by the private sector in many developing countries. According to (Kherallh, *et. al.*, undated, pg. 2) this can be explained because of "prohibitive risks, high transaction costs, lack of access to information, and absence of contract and property rights laws". Therefore, progress in promoting agricultural development in many developing countries would require further policies in developing well-functioning markets which will mainly require a concerted effort to go beyond the withdrawal of the public sector from agricultural marketing. More importantly, the state is requested to assume a new, supportive role as market facilitator including strengthening investment in public goods such as, not only infrastructure, public market information, research and extension but also it must play role in fostering institutions required for the development of competitive and efficient rural financial markets as a strategy to improving access to credit for smallholder farmers (Kherallh, *et. al.*, undated).

The acknowledgement of this reality by many rural financial marketing planners and decision makers brought us to the third group of researchers advocating a cautionary government intervention approach, instead of favouring direct or indirect intervention in these markets.

3.1.3 Cautionary government intervention

The third group of researchers prefer to be more cautious than arguing against or in favour of direct government intervention in rural financial markets. Despite some ambiguities, their argumentative position tends to overlap with the argument of the previous group of researchers and consequently, they fit well in this category. Their point of view is that, before government intervention to deal with market failure problems can be justified, an assessment of the issue needs to be carefully conducted.

For example, Claessens (2005) contends that, although broader public interventions can nevertheless be useful, in some cases they need to be introduced with caution. Conversely, Gonzalez-Vega (1994) argues that, although the development of the organisational framework is an issue of public good rather than a function of the direct allocation of credit, the distinction between these two alternative situations is not evident, which makes the task of policymakers in choosing the appropriate policy intervention difficult. In addition, government intervention is just a necessary condition, not a sufficient one. Consequently, governments should complement this effort by seeking other complementary instruments for the intervention, of which the benefits would outweigh costs. There are experiences that suggest better results than those from avoiding protectionist interventions that distort financial prices and allocation decisions, and advocate focusing on development of the institutional infrastructure. As a way of cautioning against automatic direct government intervention in rural financial markets, Gonzalez-Vega (1994) suggests four rules for policymakers to follow before a decision for government intervention is taken. These are explained below.

Firstly, a right diagnosis of the nature and magnitude of the problem being addressed in rural financial markets should be identified.

This is followed by the appropriate choice of alternative tools to correct the problem. The identification of the reason for intervention is only a necessary, but not a sufficient, condition for government action. In this regard, the appropriate course of action would be to intervene if the expected costs are lower than the benefits, given the existing technology and market size. Otherwise, there would be no reason for the government to intervene, even if, as a result, some people continue to lack access to formal credit or other financial services.

The third rule is that government should intervene only if the social benefits exceed social costs. Still, the feasibility analysis should also be taken into consideration. It can be accomplished by way of questioning the completeness of the administrative capability. Questions would include: asking if the government possesses sufficient and adequate information about the problem; and whether if the set of institutions required implementing the adopted policies exists.

In the situation of an incomplete infrastructure and/or organisational constraints, the actions of government, as much as they seem to be called for, could perhaps limit the operation of the market even more. Therefore, government intervention is justifiable if sufficient information is available and the institutional infrastructure allows policy enforcement at a reasonable cost. Consequently, the general advice is to follow a parsimonious approach to government intervention in rural financial markets. That is, "intervene only if you really need to and, you expect to be effective" (Gonzalez-Vega, 1994:9). Conversely, if this happens as a result of such organisational deficiencies, then government action may not be better than that of the market on its own (Gonzalez-Vega, 1994).

Finally, it is important to question if the current political economic forces would capture or distort the intervention. Therefore, the fourth rule is: "Do not operate in a political vacuum" (Gonzalez-Vega, 1994:11). Hence, operate only if the political economic environment is favourable to government intervention because, frequently, due to political reasons, interventions adopted with the best of intentions might end up producing undesirable results (Gonzalez-Vega, 1994).

In the case of Mozambique, it appears that the nature and the magnitude of the problem regarding government intervention in rural financial markets, lies in the need to address market failure problems that lead to smallholder farmers being neglected by almost all the

formal and semi-formal rural financial operators (the private sector, NGOs and commercial banks). In addition, informal lenders are trying to rescue the smallholder farmers in terms of credit provision but they seem to not be able to address the credit need for farming purposes, particularly for mechanised and irrigation equipment. It seems that the social benefits that may result from extending access to credit for smallholder farmers could exceed social costs, despite the fact that feasibility analyses have not been considered and given the positive efforts by the government to improve the rural infrastructure conditions and maintain sound macroeconomic environments. Furthermore, food insecurity and hunger in Mozambique is a preoccupying problem for the government which has to rely continuously on imports. Therefore, considering the political stability and the fast pace at which the economy of the country has been growing after the war, it can be expected that political economic forces would capture the intervention. Consequently, the option of direct government intervention is apparently appropriate for the Government of Mozambique in an attempt to improve access to credit for smallholder farmers.

3.2 Channelling credit through agricultural development banks

From the beginning of the 1960s until the early 1980s, agricultural planners were basically concerned with searching for strategies that aimed at increasing food crop production. In many developing countries, smallholder farmers were perceived as being too poor to save and self-finance their required investments into additional farm inputs. As a result, financial resources from governments and donors were only channelled to smallholder farmers in the form of subsidised credit programmes, often for specific production purposes. Agricultural development banks and projects were established to channel funds to smallholder farmers (Njie, 1983; Klein *et al.,* 1999; Seibel, 2000; Sacerdoti, 2005; Teyssier, 2006). The development bank model was a top-bottom conduit of funds from outside sources that included international donor agencies, national or provincial governments, and/or central banks, with the primary goal of improving access to formal credit. Other goals included reaching multiple and "frequently inconsistent" borrowers, in order to promote the growth of agricultural production, regional development, the adoption of new technology and/or agrarian reform. The strategy included the provision of either the longer-term agricultural credit that the commercial banks were not prepared to grant, or the loans "needed" by specific (risky) clientele, including smallholder farmers, who lacked access to the financial services of the traditional banking sector, but who were considered by the governments of the developing

nations to be a priority (Gonzalez-Vega & Graham, 1995). Credit facilities were also provided at low interest rates and without collateral requirements to producers of specific commodities such as rice, cotton and corn (Klein *et al.,* 1999; Lapenu, 2000).

However, agricultural development banks have failed to impact positively on the livelihood of smallholder farmers. Many reasons have been provided by researchers (Njie, 1983; Gonzalez-Vega, 1994; Klein *et al.,* 1999; Seibel, 2000; Lapenu, 2000; Meyer & Nagarajan, 2001; Sacerdoti, 2005; etc.) and these are reviewed in the next section.

3.2.1 Reasons for failure of the agricultural development banks

"Until the 1980s, states in many developing countries operated agricultural development banks to establish formal credit markets in rural areas. However, the strategy failed to meet this primary objective and many of these banks collapsed" (Zeller & Sharma, 1998:7). A major reason for the failure of ADBs was incorrect rural finance policies that have resulted in the following costs:

> costs emerging from the distortion of key price signals, such as interest rate allocation inefficiencies;
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> costs stemming from the waste of resources in the implementation of policy intervention, with a limited capacity to achieve the desired results – leading to operational inefficiencies; and
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> social costs that have resulted from the incomplete diagnosis of the problem, suggesting that it mainly reflected market failure, instead of reflecting an incomplete organisation (Gonzalez-Vega, 1994).

Therefore, these policies repressed or stunted the normal development that the institutions needed to address the rural finance challenge. The results were that: a) many development banks and specialised credit programme banks in many developing countries collapsed; b) organisations specifically created to channel the funds never had a chance, by design, to become viable institutions; and c) the monopolistic powers granted to public lenders, such as nationalised banks or indigenous organisations, would have provided those services as the market size grew and the physical and organisational infrastructure developed. But the market practices of ADBs suppressed the development of these indigenous organisations.

Gonzalez-Vega and Graham (1995) highlight the reasons for the lack of success of state-owned ADBs and their failure to reach the poor as being:

> their specialisation in agricultural credit, with the accompanying instances of market failure and high monitoring costs, as well as the negative impact of policies that penalise agriculture;
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> their development orientation and lack of profit motive;
>
> their possession of a bank charter which authorises deposit mobilisation; and
>
> their state ownership, with the resulting inadequate level of internal control and incentive problems.

Furthermore, government policies during the 1970s and early 1980s came in the form of supervised and directed credit programmes and continued the central theme of agricultural development strategies (Klein *et al.,* 1999 and Lapenu, 2000). As a result, the ADBs have focused on complete specialisation in agricultural lending in the complexities of crop and livestock finance, but lacked the tools (policies and technologies) to overcome the problems that typically hinder financial transactions in agriculture. Moreover, owing to their public sector nature, several ADBs have been in a position to mobilise deposits cheaply by overcoming fears of bankruptcy that constrain mobilisation by other financial intermediaries, and by utilising the sunken costs of their extensive and usually subsidised branch networks (Gonzalez-Vega & Graham, 1995). Therefore, the supported yet failing specialised financial institutions of the ADBs merely consumed scarce resources and represented unfair competition to other institutions that were attempting to expand outreach in a sustainable way (Meyer & Nagarajan, 2001). In addition, the ADBs caused potential serious problems in the past, such as poor loan repayment discipline. For example, since borrowers who have taken out loans owing to natural calamity have been conditioned to expect concessional terms for institutional credit, this led to incidences of high moral hazard and, as a result, the local "credit culture" was distorted among farmers and lenders. Loan repayments were not enforced, which led to borrowers lacking the discipline to meet their loan repayment obligations, while lenders lacked the systems, experience and incentives to enforce loan repayment (Klein *et al*., 1999).

According to Gonzalez-Vega and Graham (1995), particularly in Africa, the history of development banks has indeed been unfortunate and most development banks were closed or recapitalised. For example, in the Francophone West African countries (Niger, the Ivory Coast, Togo and Senegal), the former development banks rapidly became insolvent in the 1980s and most of them were repeatedly recapitalised by outside funds, with little effect.

Reasons for their poor performance included that they were run based "on supply-driven strategy that neglected domestic deposit mobilisation in favour of external funding, emphasised top-down hierarchical control with no decentralisation or staff incentives, and heavily concentrated loan portfolios in a risky agricultural sector, with poor to non-existent support services for a low-productivity farm clientele" (Gonzalez-Vega & Graham 1995:33).

Conversely, in the Anglophone West African countries, such as Ghana and Gambia, although the history of ADBs was similar to that of Francophone West African countries (a supply-lead strategy of credit allocation to targeted farm clientele was followed), some differences could be recorded. They differ from ADBs in the latter countries because they cultivated a more diversified portfolio of rural and urban non-farm enterprises. As a result, a wide spectrum of micro and small business activities, and personal loans to salaried employees, in the public and private sectors were covered by these banks. In addition, most of the smallholder clients were responsible borrowers. Nevertheless, these banks became increasingly unviable, due to the large default volumes from a small number of large holder borrowers with sufficient political influence to engage in "rampant rent-seeking behaviour" (Gonzalez-Vega & Graham, 1995).

The poor performances of the ADBs were due to their banking principles that were based on collateralised lending, an organisational setup without any incentives to do business with the poor, excessive dependence on government funding, and pervasive political patronage. They also neglected the provision of saving services, because they placed more emphasis on the provision of credit at subsidised interest rates and were not concerned with deposit services to the poor. Furthermore, donor finance was available on attractive terms. Due to political objectives, it was also "all too easy for the socially powerful and the wealthy clients to pre-empt most of the benefits of the subsidised distribution of credit" (Zeller & Sharma, 1998:7).

In many developing countries, the main reasons for the failure in almost 90% of the cases of development banks attempting to promote agricultural production in rural areas in the past three decades, were government interference and government directives to management on the day to day operations. This led to their poor performance and eventual failure (Zumbika, 2000). In other words, most of the governments attempted to use these banks as instruments to promote a variety of development, rather than using them as sound financial intermediation; loan allocation and appraisals were based on arbitrary or politicised criteria rather than resource allocation criteria, and this worsened their performance. ADBs concentrated their attention only on agriculture, rather than on both farm and off-farm activities. As a result, they lacked viability and sustainability, since they were borrower-dominated and performed poorly (Gonzalez-Vega & Graham, 1995). Conversely, not everything went wrong with the ADBs. Some positive results from these government banks are still evident. For example, networks of financial branches have been built in the rural areas by former development banks. In some countries, such as Indonesia, agricultural output has increased as a result of improved access to credit for smallholder farmers offered by these formal development banks (Lapenu, 2000).

The next section reviews some of the main intrinsic features of the policies that led to the failures of these banks.

3.2.2 Subsidised credit policies

The past government strategy of subsidised credit policies failed to induce improvements as regards access to agricultural credit for smallholder farmers. The reasons for the failure of these policies to meet this primary objective are addressed in this section.

During the past decades, ADBs relied too heavily on cheap sources of funds. Lower interest rates were not translated into improving access to credit for smallholder farmers. The policy of cheap credit led to excessive demand for agricultural loans and, most often, only the rich and the powerful individuals benefited more from these programmes (Seibel, 2000; Meyer, 2002; CGAP, 2005; Teyssier, 2006). Most importantly, subsidised targeting credit programmes ignored the fact that the poor are bankable, that is, many of them are able to save and bear the full cost of credit and other financial services (Njie, 1983; Seibel, 2000; Lapenu, 2000; Sacerdoti, 2005; Klein *et al.,* 1999). As a result, the fact that financial institutions

might have then transformed these savings into loans for investment, emergency, social or consumption purposes was also neglected (Seibel, 2000b). The old approach of ADBs towards rural financial markets is that agricultural planners failed to recognise the role of the non-farm income sources for smallholder farmers. The effects of diversified income-generating activities on the overall farm household net cash flow were also ignored. Therefore, the capability of smallholder farmers to repay their loans and to self-fund their returning investment requirements was indeed underestimated (Klein *et al.*, 1999). Thus, the true cost of lending to smallholder farmers was not reflected in the lowered interest rate, and this ended up weakening the viability of financial institutions and made them more dependent on subsidised funds from government (Njie, 1983; Klein *et al.,* 1999; Meyer, 2002; CGAP, 2005). Furthermore, many ADBs were created for political purposes and, consequently, the viability of the financial institution was not a concern. As a result, they lacked the market discipline and incentives of commercial banks (Klein *et al.*, 1999). For that reason, the past government policies of agricultural subsidies, targeted credit and interest rate control prevented the growth of the rural financial sector (Seibel, 2000).

The review of the subsidised agricultural credit policies in this section suggests that these policies have failed to improve access to credit for smallholder farmers in many developing countries, mainly because they have undermined the health of the channelling institutions. As a result, they did not meet the growing demand of the rural poor for adequate savings deposit, credit and other financial services. The approach to rural development emphasised the end-user credit lines more, but with no leverage. Adding to the fact that governments were reluctant to use loan funds for institutional capacity, these banks lacked accountability; their management strategies were deficient and risky; they operated deficiently in an environment of technological obsolescence; and they offered a limited investment in human capital: therefore, little positive impact on institutional sustainability and self-reliance was achieved. In addition to misleading subsidised lending policies, lending policies have also worsened the performance of ADBs and failed to improve access to agricultural credit for smallholder farmers.

3.2.3 Lending policies

Lending policies also contribute considerably to the problem of lack of access to credit among formal credit institutions. Lending policies are very often misleading, with reference

to prescribed minimum loan amounts, complicated application procedures and restrictions on credit for specific purposes. This is coupled with the fact that credit duration, terms of payments, required security and provision of supplementary services very often do not fit the needs of target groups. Such misleading policies also contributed greatly towards the banking system regulations doing whatever was possible to hinder access for smallholder clients Atieno (2001). For example, policies of ceilings on the interest rate and targeted programmes led to low repayment rates, together with the absence of savings mobilisation. Among other factors, mismanagement in those government-owned banks contributed to their negative or low financial profitability. This led to higher transaction costs for both borrowers and lenders (Seibel, 2000).

On the one hand, the lack of responsibility among the banks' staff members led to biased selection of borrowers. Arbitrary loan waivers also contributed to decreasing repayment rates. From the borrowers' point of view, due to in-kind loans, the lack of flexibility decreased smallholder farmers' interest in these types of services and also resulted in decreased incentives to repay the loans (Lapenu, 2000). On the other hand, the performance of ADBs was measured in terms of loan disbursements, instead of the actual number of smallholder farmers attended to and the recovery of outstanding loans (Gonzalez-Vega & Graham, 1995 cited by Klein *et al.*, 1999). Therefore, state intervention represented an important part of the explanation of these banks' lack of success in improving access to credit for smallholder farmers. Their public sector nature made them even more vulnerable than other banks to repressive regulation and political intrusion, which further reduced their ability to succeed. Government ownership led to several negative consequences. For example, decisions such as whom to lend to, what to lend for and on what terms and conditions were not autonomously taken by the financial intermediary. Instead, they were imposed from outside by presumed government "owners" and external sources of funds. As a result, managers and staff frequently sought to maximise their own benefits (salaries, fringe benefits and other non-pecuniary perquisites of their jobs) and had few incentives to improve operational efficiency (Gonzalez-Vega & Graham, 1995). In addition, some commercial farmers, who had collateral and were capable of guaranteeing their loans, as well as certain other well-connected farmers, were given preferential treatment. Hence, political interference in the allocation of funds and interest rate controls made it impossible to cover lending and loan costs Njie, 1983; Gonzalez-Vega & Graham, 1995; Klein *et al.,* 1999; Meyer, 2002; CGAP, 2005). In addition to the misleading subsidised credit policies and the skewed lending policies, the macro-

economic environment also contributed negatively to the failure of these agricultural government programmes.

3.2.4 Unfavourable macro-economic policies

In many countries, for decades, financial repression has undermined institutional viability, which led to ADBs frequently being subjected to oppressive financial measures, such as controlled interest rates and exchange rates, the effect of political expediency and vested interests. Interest rate regulation restricted access of the poor to financial services and prevented them from performing in a sustainable manner. These banks also remained largely unsupervised, and exempted from prudential banking regulations, as well as from effective monitoring and supervision of their activities (Seibel, 2000a). ADBs also failed to protect their portfolios from inflation and to effectively collect their loans in order for them to be able to grant new credit. By neglecting the mobilisation of local deposits, they were also unsuccessful in expanding the range of their services. Their poor quality of service and resulting high transaction costs led to them gradually losing the support of their clientele, particularly smallholder farmers (Gonzalez-Vega & Graham, 1995). Hence, as observed, at least in Africa and Latin America, a vast number of ADBs were closed down (Gonzalez-Vega & Graham, 1995; Seibel, 2000a).

In order to fill the ensuing gap, a shift in paradigm, from direct government intervention was necessary to the liberalisation of the rural financial markets. The next section considers this matter.

3.3 Liberalisation of the financial markets

By the 1980s, the disappointing performance of ADBs led to government policies in many developing countries shifting to liberalisation of their financial systems. Policies began to limit government functions in order to enable an environment facilitating the participation of the private sector in the rural financial markets. In countries where ADBs survived, government strategy included adopting a marketed-oriented approach and, therefore, their lending practices also shifted to rely more on the banking sector. They also began charging market-related interest rates. Conversely, many of the ADBs who chose to strive towards improving their performance by embracing new lending policies in rural financial markets

did not completely divorce themselves from the policy of subsidising agriculture by lending to the poor.

For example, a study on rural financial markets in Asia by Meyer and Nagarajan (2001) revealed that, in the reformed ADBs in some Asian countries, subsidising borrowers is still the primary objective while the sustainability of the financial institutions is secondary. Yet, this has led to little progress being made in the past two decades by a large number of countries in this continent. Furthermore, there is little evidence as regards the issue of whether subsidies reach the intended beneficiaries, or if the subsidised loans actually have a positive impact on the technology change and agricultural output. As a result, most of these financial institutions (with few exceptions) still face the same problems as those observed amongst ADBs in the 1970s. Such problems include interest rates which are too low, a non-market-oriented approach to rural finance, non-performing loans, savings mobilisation relatively neglected, rural non-farm activities still neglected and the use of inadequate technology.

In the case of Mozambique, the policy of financial liberalisation led to benefiting commercial banks at the expense of smallholder farmers. Financial liberalisation allowed the banking sector to increase interest rates, discontinue directed credit programmes, as well as emphasize issues of collateral. Furthermore, the policy failed to induce commercial banks and other financial operators in the private sector to effectively extend their financial products to service the agricultural sector and smallholder farmers. This can be deduced from the continuing decrease in production loans granted by formal banks and the continuing deteriorating access to agricultural credit for smallholder farmers (MRFSP, 2003; CGAP, 2005). Thus, despite numerous attempts by governments, including liberalisation of rural financial markets, many developing countries, such as Mozambique, are still struggling to identify appropriate models to improve access to credit for smallholder farmers. One of the strategies to overcome this problem included restructuring ADBs in some countries but, again, with little success.

3.4 Restructuring agricultural development banks

The most difficult challenge for rural banks in a liberalised and competitive market is to overcome the deficiencies arising from state ownership (Gonzalez-Vega & Graham, 1995). In

the cases where a reason for restructuring an ADB exists, the questions of why, where, when and how to restructure still hold. This section addresses these issues.

One reason why ADBs need to be reformed is that, on the one hand, the private commercial banks simply do not lend to smallholder farmers and thereby lose clientele, including commercial farmers. Smallholder farmers are left out because they do not have convenient bankable collateral and the new bank management does not entirely trust past credit records without additional screening, for which it is not well prepared. On the other hand, NGOs do not typically lend for agricultural purposes or ignore some potential clients because they do not constitute the poorest of the poor. Therefore, an important market segment for formal and semi-informal finance is lost (Gonzalez-Vega and Graham, 1995).

Regarding the when and where, the answer should be to restructure, if information (on viable market clientele and existence of human capital) and valuable banking relationships can be saved. The answer with regards to the why and how could be that the bank's information capital, valuable infrastructure and branch network could be instrumental in a restructuring process. Yet, the advice is to restructure "only if there is a critical minimum clientele size that has not been compromised by severe delinquency. Additional portfolio management safeguards would be obtained as the bank is granted sufficient autonomy to operate as a regular financial intermediary" (Gonzalez-Vega and Graham, 1995:24).

In addition, given the deficiencies of organisational design (property rights, incentives and internal control structures) of other microfinance institutions, a few ADBs may offer an interesting complementary alternative in the search for the most appropriate strategy to improve access to credit for smallholder farmers. The ADB banking charter and the application of prudential regulatory rules to them, given that they are able to mobilise savings, are compared to non-deposit-taking organisations such as NGOs and other microfinance providers. The ADB banking charter's national network of branches (that reach beyond provincial capitals and large towns) also provide a greater advantage to better diversify their portfolio and link them to the aggregate financial sector. Consequently, if they are properly restructured, a few of them may be among the most appropriate options for donor intervention, given present knowledge and practice about technologies-cum-organisations for microfinance (Gonzalez-Vega and Graham, 1995:24). However, due to the poor repayment culture imposed by ADBs in their past mismanagement strategies, there is a

need to change the attitudes of bank staff and the poor public image of rural financial institutions. Agricultural lenders are also exposed to another effect of a distorted credit culture, which is the priority that borrowers should accord to strictly repaying informal loans (Klein *et al*., 1999).

3.5 Conclusion

The review of literature has clearly indicated that, in the past decades, most of the government-directed subsidised credit programmes performed poorly and therefore, were neither profitable nor sustainable. Indirect government approaches, although not subsidised, also failed to fill the gap left by the collapsed government-directed credit programmes in many developing countries. Thus, more innovative and cost-effective management strategies need to be not only adopted, but also adjusted over time in order to effectively and continuously meet the credit needs of smallholder farmers.

CHAPTER FOUR

METHODS AND PROCEDURES

This section deals with the methods of the research, namely the data collection techniques and how the analyses were conducted. An explanation of the methods used to collect and analyse the data, as well as their advantages and disadvantages, is presented first. The way in which the analyses were performed, as a way to provide suitable answers to the research questions of the study and to respond to the objectives of the study, follows.

4.1 Research methods

The case study method may be useful for learning more about a little-known, poorly-understood situation. A *case study* is defined as research providing a detailed account and analysis of one or more cases (single or multiple case studies, respectively). A *case* is a "bounded system" (Johnson & Christensen, 2004:376). The records of a detailed context of the case, such as any historical, economic and social factors that have a bearing on the situation, could help to identify the context in which the case is found. Conversely, its major disadvantage is that, when a single case is appropriate, one cannot be sure that its results can be generalised to other situations (Leedy & Ormrod, 2001). For this reason, a multiple case study was decided on, which consisted of selecting and studying four cases and organising the research efforts around the study of these cases.

Such a method was used because a relatively in-depth analysis of each case was required, and broad and comparative information was preferred to depth and detail. Although there was a need to reduce the amount of time spent on each case, the method allowed the researcher to obtain important comparative information on the cases.

4.1.1 Discussion of the main research method

In this study, the *multiple case studies* method was selected because of the need for an extensive examination of the context in which previous government strategies failed in the given situation. The case studies are also suitable for this study because of the need to explore alternative innovative approaches that were adopted by other developing countries to improve

access to credit for smallholder farmers. In addition, multiple cases are most suitable for this research because there is no need to find a representative set of cases. Although access to suitable organisations, such as banks, is often difficult to negotiate, the importance of the context and the need to understand the dynamics of smallholder farmers and financial agricultural institutions have also determined the use of this method. However, the process of research using multiple case studies is time-consuming. It is also difficult to delimitate the area of study in terms of where to place boundaries on the case studies both in terms of the number and geographical areas of the selected cases.

Given that it is impracticable within a short time span to analyse the problem of lack of access to agricultural credit by smallholder farmers in all developing countries, four countries were chosen for this study, namely, Botswana, Indonesia, Thailand and Zimbabwe. These were selected based on the following two criteria: firstly, they are all developing; and secondly, these countries have been reported as examples of successful government intervention in addressing the lack of access to credit for smallholder farmers in their respective countries. For example, Indonesia and Thailand were chosen because of their good financial performance indicators, such as outreach and sustainability of their government-owned formal agricultural banking institutions. In addition, these two Asian case studies provided a clear example of a sufficiently robust model for dealing with the intrinsic risks of lending to agriculture. They are also well-documented and have succeeded in innovating and implementing new strategies to address the risks and lowering the costs of lending to smallholder farmers.

Zimbabwe was included because, in the 1980s and 1990s, the country went through its second agricultural revolution in which it became well known for being one of the leading African countries in smallholder marketing of agricultural produce. Furthermore, Zimbabwe established the AgriBank of Zimbabwe as one of the big banks owned by the government with a mandate to improve access to agricultural credit for smallholder farmers.

Botswana was selected as a suitable case for this study because of its successful experience in reforming a development bank which is continuing to address the issue of lending to agriculture and smallholder farmers. In addition, the Botswana government's strategic interventions in the agricultural sector have rendered the country as a reference point in Africa as a livestock production country, an activity which is mostly undertaken by

smallholder farmers with government credit support. The Botswana experience may be relevant for Mozambique because, although the country has large tracts suitable for livestock, livestock farming is still underdeveloped. Botswana is one of the top exporters of beef in the world. Mozambique can also learn from Botswana regarding how a reformed development bank can succeed in improving access to credit for smallholder farmers.

4.2 Data collection

The data collection method used in this study comprised a combination of secondary and primary data sources. The respective methods of gathering data consisted of a review of written documents and interviews with key informants, complemented by direct observation. The documents were sourced from available publications on national and international cases of government intervention in credit markets. In-depth interviews were conducted with key informants of National Union Farmers' representatives in Mozambique, Zimbabwe and Botswana, as well as with key informants of the two government-funded agricultural financial institutions of Mozambique, namely, the *Fundo do Desenvolvimento Hidráulica Agrícola* (Fund for Hydrological and Agricultural Development) [FDHA], the *Fundo do Fomento Agrário* (Fund for Jump-starting the Agricultural Sector) [FFA] and *Fundo de Apoio para a Reabilitação Económica* (Fund for Economic Rehabilitation) [FARE]. In addition, informal discussions with some officials of the Ministry of Agriculture, and other experts in the area of agricultural credit in Mozambique, were also conducted. Staff members of AgriBank of Zimbabwe and some staff members of government financial institutions in Botswana were also interviewed. These interviews were carried out in the respective countries and detailed notes from the discussions were taken from these African case studies as a way to complement the collected secondary data. For the Asian case studies, data was gathered from secondary sources.

Qualitative methods of data collection were employed, for example, participatory observation where in-depth scheduled interviews were conducted with the farmers. The researcher spent much time on this specific project in order to gain an in-depth understanding of the manner in which the funds (credit and grants) are used by the smallholder farmers. Other data collection methods were also employed, for example, individual in-depth interviews, personal observation, and attendance at a workshop (only in Zimbabwe) on Contracting Smallholder Farmers in Cash Crops Credit Schemes in Zimbabwe, and on field days.

The topics of discussion with the key informants in Mozambique were reflected in the first and the last research questions of the study. These questions concerned the issues of what had gone wrong with the past and current government strategies in improving access to credit for smallholder farmers, and what the most appropriate alternative options could be for the government to succeed. The informal discussions with smallholder farmers' representatives in Zimbabwe and Botswana were centred on the last questions of this study, probing the issue of their satisfaction and/or constraints that they may be facing in taking full advantage of accessing the credit provided by their government financial institutions. On the topic of agricultural credit both in Botswana and Zimbabwe, the core of informal conversations with the staff members and other experts took the form of the kinds of management strategies that have been adopted by these government agricultural financial institutions.

4.2.1 In-depth interviews

In-depth interviews are the most frequently used method of data gathering in qualitative research. Such interviews were conducted with smallholder farmers accessing credit for farming activities on an individual level. A total of ten farmers from each institution (parastatals, financial institutions and development banks) in Botswana and Zimbabwe were interviewed. The questions were very informal and allowed the smallholder farmers to speak freely. The interviews took place at the farmers' or at the institutions from which they access credit. Each interview lasted about 60 minutes and was conducted, recorded and transcribed by the researcher.

4.2.2 Personal interviews

Personal interviews using structured questionnaires are an exceptionally sensitive and well suited means of developing an intimate understanding of experiences best communicated through rich narratives and detailed examples. Personal interviews were conducted with the managers of the development banks of Botswana (NDB), and of Zimbabwe (Agribank), as well as with the managers of the parastatal rural financial institutions of these countries, namely, CEDA and TIMBE respectively. The personal interview was strongly interactive in nature. The researcher was not concerned only with passively collecting the key informants'

statements, but she was much more directly involved as she actively steered and co-ordinated the course and nature of the interview.

The question of what role their governments play, if any, was posed to the officials running those credit rural institutions and banks, as well as enquiring what strategies they implement in order to minimise the risks and the costs associated with lending to smallholder farmers. These formed the major questions in an attempt to derive what could be the most appropriate government intervention strategy for improving access to credit for smallholder farmers in Mozambique. The interviewer ensured that the farmers and the officials of the rural financial institutions kept within the issues to be discussed by probing in order to gain more in-depth data about the perspective of the smallholder farmers regarding how they are being served by the financial institutions from which they are sourcing the credit facilities and what improvements they would like to see in order to improve their productivity and derive more profit from their agricultural projects.

4.2.3 Personal observation

The observation approach was important to the researcher as there was a need to endeavour to gain an in-depth insight into the manifestations of reality in each African case study. The focus was on the everyday and natural experiences of the farmers accessing credit from different sources/institutions and on how the field staff and official of these institutions/banks assist their clients. The researcher's main concern was to gather feelings, impressions, and experiences about the circumstances of the real world of the smallholder farmers by visiting their smallholder farm enterprises alongside them, and by interpreting and sharing their activities.

4.3 Data analysis

Using context analysis, data was analysed by searching for patterns, themes and holistic features, after which their description followed. Then, following all four research questions of the study, the results were summarised in particularistic findings and discussed to provide adequate answers to the research questions of the study. The interpretation of the raw data in each and every specific document, occurrences and other pieces of data, were examined for

any specific meanings in relation to each case, and then scrutinised for underlying themes and other patterns that characterised the cases more broadly.

The analyses of the case studies were undertaken as an attempt to provide answers to the four research questions of the study. The data analysis techniques include content analyses and pattern-matching. The approach to the cases consisted of searching for themes on successful strategies in terms of dealing with costs and risks of lending to agriculture. It also included a holistic description, shedding light on what made these rural financial institutions a reference for a sound government intervention strategy. Detailed descriptions, and analyses based on the context, were undertaken on each case study. Under this holistic perspective, the whole phenomenon of this study was addressed.

During the analysis and writing, each case study was first examined in its singularity and then the different cases were compared in a cross-case analysis for similarities (common patterns that cut across the cases), as well as differences between the four models of credit, followed across and between the four continents. Context sensitivity analysis strategies were also used in the study. These encompass the placement of findings in a social, historical and temporal context, instead of relying only on a carefully-comparative case analyses and extrapolating patterns for possible transferability and adaptation in new settings. The advantage of using context analysis is that it allows one to focus on complex interdependencies and system dynamics that cannot meaningfully be reduced to a few discrete variables and linear, cause-effect relationships.

The search for answers to the research questions of the study was based on addressing each of the five specific objectives of the study, as described below.

4.3.1 Government efforts in attempting to improve access to rural credit

An analysis of the efforts by the Government of Mozambique in this respect was conducted by assessing what went wrong in the previous government strategies, as well as what the Government of Mozambique has been doing so far in order to try and resolve the problems encountered. The question whether credit institutions in Mozambique were still providing loans to smallholder farmers was also examined, as well as the reasons behind the failures of the collapsed financial institutions, if loans were being not granted any longer. The analysis

was also based on positive experiences from each of the four cases, bearing in mind the failed attempts by government interventions in the past decades in many developing countries. This included drawing key lessons on what could be avoided from the current experiences of the four cases.

4.3.2 Experiences of other developing countries in improving access to credit

Based on the context analysis, lessons were drawn from an in-depth assessment of the main factors underlying the success of each and every case with positive results in improving access to agricultural credit for smallholder farmers. Key factors of success were drawn in order to shed light on what the most appropriate intervention strategy for the Government of Mozambique could entail, if it is to succeed in improving access to credit for smallholder farmers.

For example, one issue that was elucidated by the analysis was the high standing of repayment rates reached over a period of years by government financial institutions lending to agriculture and smallholder farmers. Another issue concerned which management strategies and innovative ways have been leading these government's financial institutions to reach or to move nearer to financial sustainability and gain the potential to operate on a large scale, or be replicated.

4.3.3 Specific credit needs of smallholder farmers in Mozambique

The identification of these needs was based on the collected documentary data sources, observation and results from the informal discussions with key informants, both smallholder farmers' representatives and experts in the field of rural credit. These needs were established and compared with those reported by other developing countries, in order to refine them. Comparative analyses were undertaken regarding culture, tailor-made to suit the specific credit needs of rural people in Mozambique. Based on this assessment, the specific credit needs of smallholder farmers in Mozambique were highlighted.

4.3.4 Requirements that have to be met by credit institutions

The requirements that need to be met by financial institutions in Mozambique in an attempt to partially resolve the lack of agricultural credit for smallholder farmers were determined. They were based on the four case studies examined and relevant experiences from other developing countries encountered under the literature review, in addition to the assessments derived from the responses given during the informal interviews.

4.3.5 The most appropriate government intervention strategy for Mozambique

The role that the Government of Mozambique should play in order to improve access to agricultural credit for smallholder farmers was addressed by way of analysing all the key lessons drawn from all four of the cases. It included the failed government strategies attempted in Mozambique in this regard. The positive experiences from the four international experiences in Africa and Asia, as well as the results of the informal interviews from the key informants, were also examined. The description of what seemed to be the most appropriate approach for the Government of Mozambique to intervene in this respect was suggested to the policy and the decision-makers of the country.

An analysis of what could be the most appropriate government intervention strategy was carried out in terms of the performances and major constraints faced by the surviving government funds which are providing agricultural credit for smallholder farmers in Mozambique. This was assessed by re-examining the lessons regarding the positive experiences of the different kinds of financial systems in the four case studies.

CHAPTER FIVE

GOVERNMENT EFFORTS TO IMPROVE ACCESS TO CREDIT FOR SMALLHOLDER FARMERS IN MOZAMBIQUE

This chapter deals with the past and current rural financial situation in Mozambique and the kind of strategies that have been implemented by the Government of Mozambique in attempts to improve access to credit for smallholder farmers. The chapter is organised as follows: it first presents a description of the financial sector. It then presents strategies through direct intervention by the government in attempts to improve access to credit for the less fortunate category of farmers, by way of addressing the different historic and economic contexts that the country has undergone. The Government strategy is presented through an indirect approach, by highlighting the liberalisation of agriculture and financial markets and its impact on efforts to improve access to credit for the said farmers. The approach is addressed through a discussion of commercial banks and concessions to enter the credit schemes of private sector firms. Finally, the conclusion of the chapter is provided.

5.1 The financial sector in Mozambique

The current structure of this sector comprises many types of financial institutions, including formal banks (e.g. commercial banks) and non-bank financial institutions (non-regulated financial institutions, such as joint stock and leasing companies; and financial industries). Non-bank financial institutions include microfinance organisations, such as self-help groups, communitarian banks and credit associations (República de Moçambique, 2007). Other alternative finance institutions include supplier and buyer financing, inventory financing, lease financing and input financing, as well as informal loans, family financing, and remittances (Kula & Farmer, 2004). Financial intermediaries include licensed credit institutions, government funds, credit cooperatives and small informal operators (RFSP, 2003). The financial system is supervised by the central bank, the Banco de Moçambique (República de Moçambique, 2007).

In Mozambique there are ten commercial banks, three credit cooperatives, three financial location societies, two investment societies, 29 foreign exchange agencies and one stock exchange (República de Moçambique, 2004). The biggest branch networks are *Banco*

Internacional de Moçambique (BIM, 91 branches), *Banco Austral* (BA, 52 branches), *Banco Standard Totta de Moçambique* (BSTM, 25 branches) and *Moçambique Banco Commercial e de Investimentos* (MBCI, 23 branches). The remaining commercial banks operate only five or less branch offices. BIM is by far the largest bank in terms of market share, with a 52% share of deposits and a 42% share of credits. In terms of ownership, almost all banks rely on foreign shares and most of them are controlled by foreign parent banks (RFSP, 2003).

In fact, only one bank, BIM, out of the ten commercial banks, has opened a small window and is actually trying to lend to agriculture. BIM was created in 1995 through a joint venture between *Banco Comercial Português* (BCP), the biggest financial group in Portugal, and the local partners, including the Mozambican government, *Empresa Moçambicana de Seguros* (EMOSE), *Instituto Nacional de Segurança Social* (INSS – the National Institute of Social Security) and the Foundation for Community Development (FCD). In 2001, the new BIM became the largest financial institution in the country (República de Moçambique, 2007), but it is concerned with lending to commercial farmers rather than others. Access to agricultural credit in Mozambique, therefore, still remains limited as confirmed by the results in Table 1.

Table 1: Type of financial institutions and the proportion of agricultural credit

Financial institutions	Number of farmers who obtained credit between 2000/2001	Percentage (%)
Formal Banks	328	0.27
NGOs	24,692	20.18
Cooperatives	9,513	7.78
Government	6,460	5.28
Other Rural Operators	81,342	66.49
Total	122,335	100

Source: Adapted from CUSOmozambique, 2003; and FAO/WFP, 2005

Table 1 indicates that between the years 2000 and 2001, formal banks provided credit to only 0.27% of farmers, while government rural credit institutions/ programmes provided credit to about 5% of the total credit. This means that commercial banks remain reluctant to extend their credit services for agricultural production purposes, and also that access to credit for farmers from the direct Government intervention strategies in Mozambique is still poor.

Table 1 also confirms that all the above-mentioned intervention strategies by the Government of Mozambique have failed to promote access to credit for the agricultural sector from the formal financial sector. Although the role of informal and semi-formal lenders, particularly that of the NGOs, is well recognised in terms of implementing sound programmes leading to a positive impact on the lives of the poor in the country, when it comes to extending their credit services for farming purposes, access to such remains limited (about 20%). Other rural operators, including the private sector (contracting farming schemes) and the informal sector, have been trying hard to rescue the agricultural sector in terms of rural credit provision; however, smallholder farmers are not yet benefiting enough from those credit facilities.

In addition, informal sector transactions in many developing countries are characterised by being small, short-term loans taken in order to purchase urgently needed goods for household consumption, especially food or, to a lesser extent, inputs such as seeds and fertiliser. But invariably, when larger projects need to be financed, such as an irrigation pump, the lease or purchase of agricultural land or mechanised equipment, or a new enterprise, people tend to turn to formal lenders (Zeller & Sharma, 1998). Therefore, in Mozambique, access to agricultural credit from formal banks is really a cumbersome issue and smallholder farmers simply cannot rely on commercial banks, not only because they are denied access to credit from these formal institutions, but also because their branches in rural areas are too scarce.

The Bertelsmann Transformation Index (2006) also confirms this by stating that, although the majority of smallholder rural enterprises rely more on other informal/semiformal rural financial operators such as informal lenders, *xitique* (credit and savings rotating clubs) schemes, NGOs, etc. their access to credit for farming activities remains inadequate. For example, at the beginning of 2003, at least 30 credit institutions were registered which attended to approximately 50 000 clients. However, despite the fact that out of 57% credit institutions are currently being located in the informal trading business, only 18% of these institutions are available for agricultural projects.

Therefore, in spite of the apparently impressive number of commercial banks, the financial system in Mozambique remains small and dominated by these private commercial banks. Conversely, the reality is that commercial banks are still discriminating against smallholder farmers in terms of access to credit. The financial sector and the services it provides reflect the under developed and under monetised nature of the national economy of the country, in

comparison with that of the African continent and the developing world as a whole. Hence, the rural areas of Mozambique still remain heavily under-banked, as commercial banks operate almost solely in the larger urban centres, with most of their activities concentrated in and around the capital of the country, Maputo (Kula & Farmer, 2004; RFSP, 2003).

In addition, the formal banking sector in Mozambique has few linkages with the rural economy and, therefore, it is almost non-existent in rural areas of the country. Instead of commercial banks opening up new branch networks in rural areas, they have been closing them down since the banking industry was privatised. For example, of the total of 227 bank branches, 103 are in Maputo while the remaining banks are operating in provincial capitals. The near non-existence of commercial banking facilities in rural districts has a major impact on the way rural finance in Mozambique could be developed. In fact, no rural districts in the country have commercial banking facilities at all. This is an exceptional case, not only in the Southern African region, but also in the Eastern African region (RFSP, 2003). Consequently, instead of more loans being granted to agriculture, they have been decreasing. For example, in 2002, loans to agriculture, livestock, forestry and fisheries totalled less than 20% of the bank's total portfolio, with the entire portion allocated to agriculture having been granted to large-scale producers, large-scale traders and large processors. In other words, none of this exiguous portion of credit allocated to agriculture went to smallholder farmers (MRFSP, 2003).

In addition, the decline of banking industries in rural areas has resulted in a worsened problem of lack of access to credit, particularly by smallholder farmers, because they are perceived as unbankable by formal banks. The real situation in Mozambique is that rural people cannot benefit more from the banking sector simply because commercial branch networks are not operating in rural areas, since they perceive the smallholder farmer sector as being high-risk and existing formal banks prefer to concentrate on urban areas. One major factor limiting agricultural development in Mozambique is the lack of access to financial resources, not only amongst smallholder farmers, but also amongst commercial farmers.

According to MRFSP (2003), the reasons why banks in Mozambique have been excluding smallholder farmers are that:

> the loan products of the banks are mainly designed for large-scale and urban enterprises;

the banks have a strong perception that rural and agricultural operations are risky and involve high transaction costs; and

the collection of savings from the public by commercial banks is poorly developed, even in urban and peri-urban areas, and this happens because formal banks require high minimum capital (equivalent to US$ 208) to open a savings account.

In addition, until more recently, the Government of Mozambique did not take the lead to promote the development of rural finance and furthermore lacked the necessary policy, and the institutional as well as the strategic framework, conducive to the promotion of the development of rural financial institutions. As a result, the absence of commercial banks in rural areas is significant. Therefore, the agricultural financial sector is surviving, largely thanks to some existing trading companies of stature and agro-industries operating in partnership with international companies. In some cases they cooperate in a "joint-venture" with the government which is, apart from the informal system, the major provider of credit in rural areas. Yet their internal capacity to meet the demand of smallholder farmers in terms of access to credit is still very small. For example, about 400,000 smallholder farmers are being provided agricultural credit in kind (inputs) by these rural credit operators' alternatives (MRFSP, 2003).

Despite the growing importance of NGOs in the field of microfinance, they alone cannot alleviate poverty through improving access to credit. They need to work in tandem with larger commercial banks that operate a wide network of branches. Therefore, the government, in many developing countries, needs to start adopting innovative pro-poor reforms in the wider banking sector, or support partnerships commercial banks and microfinance institutions, and between state banks, that would make it less costly to deliver services to the poor. For example, reforming government-owned banks would grant many more impoverished smallholder farmers access to financial services and provide these services with lower transaction costs and greater security (IFPRI, 2002).

However, in the case of Mozambique, semi-formal financial institutions or organisations, including NGOs and the *fundos do fomento*, are not allowed to mobilise savings deposits. Therefore, if a public rural bank were to be established, it could absorb the majority of potential smallholder borrowers, whose credit and savings needs have not yet been met by

any kind of rural financial providers. The fact that the smallholder sector experiences lower levels of agricultural productivity in Mozambique provides the main reason for the considerable potential in developing this sector. However, the lack of access to credit for smallholder farmers in the country has often hindered the farmers' capacity to diversify and/or intensify their farming system and to assist the national economy by producing surplus grain, not only for domestic consumption purposes, but also for export.

Therefore, in order to increase agricultural productivity in Mozambique, it is urgent for the government to implement strategies that would lead to a transformation from the subsistence level of production to a modernised level in the smallholder farmers' system of production. Improving access to credit for smallholder farmers could be one of the ways to achieve this. Nevertheless, the government has been engaged in activities to promote agricultural growth in Mozambique and has been implementing various strategies to improve access to credit for smallholder farmers. The next section addresses these government efforts, proceeding from the era of a centrally planned economy after independence up to the current situation of the decentralised economy, in which market forces are at play.

5.2 Government efforts in the era of a centrally planned economy

In an attempt to improve access to credit for smallholder farmers, a government development bank was established after Mozambique's independence. This section deals with direct intervention, by addressing market failures in the rural financial sector of the economy during the mid-1970s to mid-1980s.

5.2.1 Development bank strategy

Before the independence of Mozambique on 25 June 1975, the *Banco de Moçambique* (BM) was established as the new central bank by transforming the former Portuguese Central Bank, the *Banco National Ultramarino*. Four banks were merged to form the BM. In addition, on 31 December 1977, the government nationalised all the remaining banks. The other two formal colonial banks were merged to form the former agricultural state bank, called *Banco Popular de Desenvolvimento* (BPD – The People's Development Bank). Only the *Banco Standard Totta de Moçambique* (BSTM) remained a private bank. Since 1 September 1978, the BM had become the only bank that could deal in foreign exchange. It was the treasury, central

bank, the controller of the execution of the state plan and that of the commercial banks (Republic of Mozambique, 2004).

Following the establishment of the centrally planned economy in 1977, the state became the owner of the entire economic sector of the country. After independence, the exodus of Portuguese people, including commercial farmers, led to an economic crisis in Mozambique. As a result, agricultural production for commercial purposes decreased drastically between 1974 and 1977. The strategy of the government to reverse the situation in the agricultural sector was to direct credit to state institutions, such as agricultural cooperatives and state enterprises. The *Instituto de Crédito de Moçambique* (ICM) and *Caixa Económica de Montepio de Moçambique* (CEMM) were the formal colonial government financial institutions mentioned above. Their mandate was to provide agricultural credit to colonial farmers. Through Act 6/77 of 31 December 1977, the government used the capital source of these institutions to create the development bank, BPD. The other source of funds of the BPD was the Government itself (Assane, 1999; Matola, 2001). BPD was established with the aim of creating an incentive for capturing savings, as well as of providing investment facilities to agriculture, industrial, housing and other sectors of the economy (Lubrimo, 2000).

However, the majority of the smallholder farmers have never benefited from the credit facilities offered by the BPD. For example, on average, the agricultural cooperatives received 5% to 10% of the total investment allocated by the BPD for the agricultural sector. Since the smallest proportion of the financial resources was allocated to this sector, the majority of the smallholder farmers, including the villagers, received nothing at all between 1977 and 1981 (Assane, 1999; Gaspar, 2000). This was consistent with the policy of centrally planned policies, which were based on the state sector. It resulted in marginalising both the smallholder farmers and commercial farmers, particularly those who were operating as single individuals (Gaspar, 2000). Furthermore, bad banking management, political interference and the ongoing civil war, meant that little impact could be expected to be achieved through this direct government intervention strategy. This led to poor performance by the bank and the majority of the BPD funds were therefore never repaid (Hanlon, 2004; Teyssier, 2006).

As a result, in the 1980s, the BPD of Mozambique faced serious liquidity problems arising from mismanagement and improper loans. By the 1990s, the bank was unable to settle the claims of local depositors and indeed, it was technically insolvent. The bank ended up

collapsing due to many mismanagement problems, including inadequate credit assessment and monitoring procedures. It had also lacked the appropriate technical expertise since, immediately after independence; it faced not only a shortage of qualified human resources but also inadequate technology. Therefore, the bank experienced difficulties in recovering its loans and the collateral provided in many cases was proven to be difficult to release (Hanlon, 2004).

In addition, the heavy hand of a top-down administrative style inherited from a corporate Portuguese colonial tradition, and the centralising style followed in the succeeding era of a centrally planned economy in Mozambique, prevented any meaningful decentralisation or branch level autonomy. In the meantime, the predominant banking practices hampered the decentralisation of the decision-making process and the introduction of innovations in the financial sector. Due to the lack of competition, the BPD was only able to survive in its present truncated form, thus earning no better than a zero net return on its assets (Graham & Francisco, 1993 cited by Gonzalez-Vega & Graham 1995:33). Therefore, no change has occurred in the governance structure of the institution (Gonzalez-Vega and Graham, 1995).

As a result, in 1987, Mozambique was placed under the World Bank Structural Adjustment Program and the first legislation for the privatisation of state-owned enterprises was approved in 1989 (Bertelsmann Transformation Index, 2006). The general economic growth strategy and the Structural Adjustment Program led to the privatisation of the only former state-owned development bank, the BPD, after about a decade of poor performance (FFSSA, 2004; Gaspar, 2000; Matola, 2001; Wuyts, 2001; ISSN, 2002). In addition, the government substantially liberalised agriculture in 1997. Except for the sugar and cashew nut sub-sectors, the government also withdrew from direct involvement in production, processing and marketing activities, and only retained its role in setting policies (TPRB, 2001).

The extensive non performing loans of the past have resulted from a high percentage of loan default largely attributed to loans made to politically well-connected individuals who were then inherently involved with the privatisation in the late 1990s (República de Moçambique, 2004). In addition, although the bank accepted deposits, it avoided paying interest until 1993 when interest-bearing time deposits began to play a more important role among its liabilities. Also due to fiscal limitations, the BPD had not been recapitalised, and defaulters' deposits

had become its principal source of funding. This induced the second-generation banks to lend more carefully (Gonzalez-Vega and Graham, 1995).

The reasons for the BPD's failure to operate its loans properly outlined above, led to the failure of the bank to improve access to credit for smallholder farmers in Mozambique. A shift in the government's approach subsequently marked a new era in the financial sector of the country: the privatisation of the financial markets. Other alternative government strategies in the context of macroeconomic reforms are addressed in the next section.

5.2.2 Privatisation of the banking sector in Mozambique

During the late 1980s and early 1990s, many developing countries engaged in financial liberalisation as a major policy measure to eliminate several policy distortions (such as multilateral reserve requirements, interest rate ceilings, credit allocation quotas, etc.), as a strategic policy to promote greater competition and to strengthen supervisory authorities and prudential norms. Although these macroeconomic policy changes have contributed to financial deepening, they have not led to an improvement in access to formal credit for smallholder farmers. This was the case in many developing countries (Meyer, 2002).

Furthermore, in 1987, the Government of Mozambique undertook the *Programa de Reabilitação Económica* (PRE – Programme of Economic Rehabilitation) to encourage more private initiatives in attempts to enhance economic development. This paradigm shift was meant to alleviate government expenditures by decreasing the liquidity of credit in the economy. This was intended for the government to start concentrating more on paying the deficits of the state enterprises (Assane, 1999; Lubrimo, 2000; Matola, 2001). This policy led to the privatisation of the former BPD.

i. Privatisation of the BPD

Since 1986 in Mozambique, many enterprises, including formal banks, had been experiencing problems of mismanagement simultaneously with the economy of the country performing poorly. After evaluation of the economic situation in the country, the Government of Mozambique had noticed that, between 1986 and 1990, all the sectors of the economy were performing badly. The government came to the conclusion that there was a need to restructure and privatise state enterprises (Lubrimo, 2000). Hence, a financial liberalisation

policy was implemented with the primary objective of transforming the financial system from a state-dominated oligopolistic structure into a more diversified and potentially more competitive market-based economic system (Kula & Farmer, 2004). The shift by the government resulted from its realisation of the need to create a strong and dynamic private banking sector (República de Moçambique, 2004). Therefore, following economic reforms implemented in 1987, and despite the ongoing PRE, the public and banking sectors were liberalised in 1992. This was implemented through law No. 1/92, through which the BM was declared the Central Bank and was separated from its commercial branch which became the Banco Comercial de Moçambique (BCM) (República de Moçambique, 2004).

However, because of the weak state of the economy, the lending risks associated with the ongoing civil war in the country and the burdensome administrative legacy of a 15-year centrally planned economy until the early 1990s, the BPD was afforded little chance for privatisation. As a result, "following attempts at financial liberalization in the late 1980s and early 1990s, the BPD quickly raised interest rates when controls were relaxed, and efforts were made to reduce its risky agricultural portfolio. Attempts were also made to grant loans to newly opened but allegedly less-risky private sector activity in urban commerce and service sectors" (Gonzalez-Vega & Graham, 1995:33).

As a result, in 1996, the BPD was liquidated (ISSN, 2002; ECI, 2003). This occurred five years after the World Bank study had reached the conclusion that the BPD was in such a mess and deeply in debt that it should simply be closed down (ISSN, 2002; ECI, 2003). It followed the Ministers Counselling Decree No. 18, which decided that the BPD had to be transformed into the BPD anonymous and limited society (SARL, 1995). Following Decree No. 21/95 of 16 May, the former BPD bank was proclaimed a commercial bank. This was meant to allow more efficiency in the provision of services to clients and to induce improvements in the performance of the economy. The aim of privatising the BPD was to enable it to operate on a commercial basis and address the limitations faced by the bank regarding its lending capacity in terms of its credit ceiling (Matola, 2001).

The financial liberalisation policy has resulted in banks beginning to be recapitalised, and mechanisms for improving deposit mobilisation and increasing commercial investment in rural areas starting to be created (Kula & Farmer, 2004). It has also allowed the private sector to try and rescue smallholder farmers demanding credit to buy equipment and other inputs for

production purposes (Assane, 1999). However, the attempt failed to achieve its primary objective, since privatisation of the financial system in Mozambique has not led to an improvement in access to agricultural credit for smallholder farmers (Assane, 1999; Kula & Farmer, 2004). Although privatisation of the BPD has led to a concentration of its lending portfolio on less risky and bigger operations, it failed to expand its lending services to smallholder farmers (Matola, 2001).

As a result, under Decree No. 21/97 of 23 September, the bank was further privatised and a new bank which was called the 'Banco Austral' (BA – the Austral Bank, was established. BA is one of the major commercial banks in Mozambique. It accounts for 69 dependencies, 9 branches, and 52 agencies at national level. Its main activities consist of the provision of financial intermediation, property management and the provision of investments in the area of catering, tourism and productive purposes (Matola, 2001). As noted, a formal bank lending to agriculture in Mozambique is not only constrained by high risks in the sector, but also lacks the specialised knowledge required to effectively manage loans to this sector, which negatively contributed to inducing a bad culture of loan repayments in its past approaches (Assane, 1999). For this reason, the BA did not develop any specific strategy to diversify its loan portfolio that would attract smallholder farmers to start using its services, including borrowing for farming purposes.

Nonetheless, the World Bank has been supporting the Government of Mozambique to resolve a number of financial difficulties in the banking sector and reduce the government's role in the financial sector, by persuading it to opening it up to private participation. Among other mechanisms, financial reforms in Mozambique included the adoption of the Credit Institution Law in 1991, the liberalisation of interest rates in 1994, the privatisation of financial institutions (1996-1997) and the beginning of the use of indirect control instruments by the central bank. These reforms were critical to the sophistication and competitiveness of the banking industry and even the modernisation of the payment system. As a result, the financial sector has been growing steadily, although it went through a certain period of crisis during the years 2000-2001 due to the insolvency of the two privatised banks (República de Moçambique, 2004). In spite of this, corruption has increased since the liberalisation programmes, mainly due to the weak capacity of the state to undertake reform opportunities for combating illicit gain through corrupt privatisation and under-regulation, as well as fragmented aid projects (Hanlon, 2004).

The following section illustrates why the formal banking system that is currently operating in Mozambique is not an appropriate strategy to serve smallholder farmers.

5.2.3 Caixa de Crédito Agrário para o Desenvolvimento Rural

In an attempt to fill the gap left by the BPD and improve access to credit for smallholder farmers, the Government of Mozambique established an alternative financial institution in 1988 which was called *Caixa de Crédito Agrário para o Desenvolvimento Rural* (CCADR). This is a developmental agricultural credit institution, whose funds were released from the remaining capital of the collapsed formal government bank, BPD. Other funding sources included donor funds and external government loans. The CCADR was established through the Minister's Counselling Decree No. 25/87 to promote agricultural productivity and the uplifting of rural living standards of smallholder farmers (Assane, 1999; Gaspar, 2000).

According to Assane (1999), the objectives of the CCADR were the following:

to promote rural development by building basic infrastructure for irrigation, storage, etc.;

to provide credit for investment purposes in the areas of agriculture and livestock processing to cooperatives, small and medium producers;

to provide credit to encourage the adoption of new technology in order to raise agricultural productivity and to improve the levels of standard of smallholder farmers;

too provide credit to encourage the introduction and development of rural transport and the commercialisation of agriculture and livestock;

to provide credit for agricultural purposes to settle the demobilised Mozambican army forces and some political powerful individuals into the economic activities after the civil war in 1992, and to support the victims of natural calamities; and

to subsidise interest rates on agricultural loans provided by the state, through government banks such as the BPD and the central bank (BM).

Basically, CCADR provided credit primarily for farming and livestock activities, as well as transport and commercialisation. According to Assane (1999), the conditions to access credit from the CCADR by collective and individual peasants were the following:

the financial and economic feasibility of the project;

authorisation of the underlined institution to develop a projected activity;

pursuing financial control according to the respective dimensions of the projected activity;

co-participation with 1% of the value of the funds required;

provision of physical guarantees;

submission of the application form to access credit; and

provision of the production plan approved by the legal institution in the case of a formal enterprise.

The credit operator's staff members, who were formerly employed by the BPD, would analyse the submitted documentation, evaluate it and approve or reject the requested loan application. If the application for the loan had been approved, credit was provided and a contract form was signed by both the borrower and the lender. Then a plan for repayment of the credit, including interest, was established. Repayment was scheduled partially or totally and adjustments of payment were allowed. In general, the interest rate was 6% per year; 3% for the FDHA (Fund of Hydraulic and Agricultural Development) and the state seed production project. In the case of delays in the repayment of credit, an additional interest rate of 2% per year was applied, but no commission was charged (Assane, 1999). However, despite the fact that CCADR subsidised loans, the strategy by means of CCADR also did not succeed in achieving its primary objectives. The reasons for the failures cited by researchers vary. For example, Matsule *et al.* (1987) adduce, firstly, the ongoing civil war in the 1980s and secondly, the bad management by the BPD had contributed greatly to the poor performance of the CCADR.

The next section deals with the clients' side of the story, by presenting what had prevented smallholder farmer cooperatives from fully taking advantage of access to credit.

5.3 Smallholder farmer credit cooperatives

This section is based on the results of informal conversations with smallholder farmers' representatives in Mozambique.

According to Chirindza (2006), the National Union of the Peasants (*União Nacional dos Camponeses* – UNAC) is the major and the oldest large organisation among the smallholder farmer associations in Mozambique. UNAC was established after the independence of the country; with the objective of empowering smallholder farmers to negotiate and participate actively in the decision-making process, hand in hand with creditor institutions, policy-makers, marketing boards, the Government, etcetera. UNAC had undergone many transformations in order to adjust to the evolution of the economic structure of the country during each period. For example, during the era of the centrally planned economy, in the 1970s, farmers' associations were first denominated *Machambas do Povo* (peoples' farmers). During the decentralised economy in the 1980s, associations were transformed into *machambas estatal* (state farmers) and after the period of privatisation in the 1990s, they were denominated *co-operativas agrícolas* (agricultural cooperatives). In the current socio-economic and political context, in the 2000s, smallholder farmers' organisations are simply called by this term.

The main reason for the transformation was the realisation of smallholder farmers themselves that, from their establishment in the middle of the 1970s until the 1990s, they were working for the leaders of the *groupo dinamizadores* and the agricultural production cooperatives, instead of working to improve their own poverty conditions. Today, they have realised that there is a need for a paradigm shift as they are currently focusing their efforts in the first place to benefit themselves and their families. In this regard, they have adopted the name of agricultural peasants' associations as a way to respond to the dynamic of the whole economy and the democratic principles that are actually prevailing in Mozambique. As a result, leaders of these associations are being appointed democratically, instead of being given the position based on connection ties, and owning the leadership position forever (Chirindza, 2006). Since the agricultural cooperatives were established in the post independence period, when there was an acute shortage of skilled manpower to manage their operations, their activities were limited to the extension of subsistence and seed production loans and the marketing of members' produce.

For example, in the colonial period, smallholder farmers accessed credit in kind through the *cantineiros* (small shop traders), who provided input, and after the harvest the farmers would sell their produce to their moneylenders. After independence, the BPD had tried hard to improve access to credit for farmers but peasants did not benefit much from this formal development bank. One reason was that some of them obtained money as individuals from bank credit facilities to buy tractors and agricultural trucks without even pursuing a single square meter of land. Therefore, the criteria for client selection were never fair. In addition, the strategy of government development funds, such as the Fundo de Apoio para a Reabilitação Económica (FARE – Fund of Support to Economic Entrepreneurs) excluded smallholder farmers during the period of civil war, by preferring to provide financial support to a few *cantineiros* in rural areas, rather than to farmers. Today there are more NGOs providing credit for smallholders but access to it for agricultural production purposes is still lacking (Chirindza, 2006). However, considering that Mozambique relies on imports to supply domestic markets with staple foodstuffs, the Government needs to redefine its role and implement strategies that will lead to improvement of access to credit for smallholder farmers, who are the most affected by lower productivity, hunger and food security.

Therefore, for the Government of Mozambique to succeed, it should implement strategies and policies that would lead to the promotion of agricultural productivity amongst smallholders. A country cannot produce a surplus if there is no financial government support for the agricultural sector to be modernised. The commercialisation of the agricultural foodstuff sector would not take place either if there were alternative strategies to increase farm output and yields which would lead to an increase in the availability of food, not only to those who produce it, but also to meet the domestic and export demand. Hence there is a need for the Government of Mozambique to rethink the establishment of a specialised formal rural bank that would be concerned with improving the conditions for the production of agricultural goods. This can only be possible if there is the political will from the government to do so (Chirindza, 2006).

With the privatisation of state-owned financial institutions and agriculture, the government shifted its approach in an attempt to improve access to credit for smallholder farmers from direct to indirect intervention strategies. The strategies implemented through the government's indirect approaches are addressed in the next section.

5.4 Indirect approach to rural financial markets by the government

The indirect approach consists of softening the role played by the government in rural financial markets and letting the commercial banks take the lead. The following section highlights the market approach era and the role played by the private sector in financial markets through the commercial banks. The case of the Austral Bank was chosen to illustrate how the private sector and the market approach function in the financial markets of Mozambique.

5.4.1 Banco Austral

As mentioned, the *Banco Austral* (BA) is a private bank that has resulted from the privatisation of the BPD. According to Assane (1999), the managers of the BA have removed the special conditions offered to the agricultural sector by the former government development bank BPD. As a result, new general conditions of access to credit are currently being applied to any borrowers from business, industry or tourism, under the rules of market conditions. Actually, 35% of the interest rate is applied in addition to the following conditions of accessing agricultural credit through the BA. The applicant has to

provide evidence of a savings account at the BA, otherwise he/she has to compromise by opening one;

provide an official letter of permission to use the land, or provide an official authorisation to access the land which would allow him/her to engage in agricultural activity;

present a sound economic and financial viability study of his/her project production cash flow plan;

provide pro-forma invoices of his/her durable goods;

provide documents of the production unities and the balance of income cash flows over the last three (3) months;

present accurate proof of status of tax payments;

present a letter of application requiring the loan provision;

provide the bank with an official letter describing physical goods that might be confiscated by the bank as a form of guarantee (physical collateral); and

contribute a minimum of 10% to 15% of the total amount applied for, in addition to the real and physical proof of possessions required for commission fees.

As can be seen from the above required conditions imposed by the BA, accessing agricultural credit at the commercial banks in Mozambique remains challenging for smallholder farmers because the required conditions cannot be met by the majority of them.

On the other hand, according to CGAP (2005), formal institutions continue to view smallholder farmers as credit risks because, most often, they are not members of associations, they have no solid track records and they have no ability to undertake viable projects. The weakly-developed cash economy that characterises the rural areas of Mozambique does not support the operations of formal financial institutions (RFSP, 2003). The fact that the majority of smallholder farmers do not belong to associations, makes it difficult for them to gain much benefit from the limited facilities and services, such as extension, or other marketing facilities (FAO/WFP, 2005). For example, the census conducted in 1999/2000 found that 96.9% of smallholder farmers have no land title (MRFSP, 2003). The situation has currently improved slightly, since, out of over three million of the smallholder farmers' households, about 67,271 have become members of some agricultural association (FAO/WFP, 2005). However, this is still an extremely low level of organisation, since only 2.24% of smallholder farmers are members of farmers' associations.

In addition, although inflation has declined to single digit figures, the interest rates on bank loans have remained artificially high. For example; in May 2003, the average cost of mobilising funds in the commercial bank sector was estimated to be 7%, but the lending rate fluctuated between 27% and 33%, leaving a very substantial margin for the banks (RFSP, 2003). In addition, interest rates are too high to encourage investment. For example, in a commercial bank, interest rates range between 29% and 31% in Mts (Meticals) at BA and 42% at Standard Bank (Kula & Farmer, 2004). However, the high interest rate in agricultural lending is also another strategy for the banks to discourage clients' access to credit for farming purposes. Other reasons adduced by commercial banks to hinder agricultural credit for smallholder farmers in Mozambique, are highlighted in the next section.

5.4.2 Reasons why commercial banks are reluctant to lend to smallholder farmers

According to Kula and Farmer (2004), the reasons why formal banks refuse to extend their lending services to agriculture and smallholder farmers in Mozambique are that:

Commercial banks lack the necessary human capital to develop products and assess agricultural risk loans of which the repayment cycles can accommodate smallholder farmers, including the agribusiness sector borrower's cash flow.

In Mozambique, most commercial banks continue to carry high levels of non-performing assets on their books due to the lack of profitable credit projects and a weak repayment culture resulting from a series of non-performing loans, particularly to the politically well-connected. Furthermore, there are high costs associated with lending, not only in respect of farming activities and smallholder farmers in particular, but also to the agribusiness sector. The lower degree of lending to agriculture in Mozambique is pervasive because of the lack of a formal agricultural bank in the country (hence a lack of competition).

The lending schemes offered by the commercial banks do not suit conditions that can be met by smallholder farmers, not even by medium and small enterprises (MSEs). For example, the minimum loan size required at the BA is about 30 million Mts (US$ 1,250).

Institutional problems, such as a lack of human capital expertise which led to poor lending decision-making, have also been contributing negatively to lending appraisals. This has resulted in non-performing loans as well.

"Current regulations on the purchase of government securities in particular, are the single greatest constraint to increasing private sector investment. With their high return rates and low risk factor, these T-Bills (treasurers bills) are a much more attractive option to banks than the risky business of lending. As a result, banks have made no effort to expand or promote their lending services" (Kula & Farmer, 2004:25).

The land tenure system in Mozambican law does not allow the land to be used as collateral. The reason for this being that the state owns the land. Therefore, the law does not recognise the ownership of land of the private individual or firms.

"Banks have very little experience with commercial and especially agricultural lending, and there are no specialised agricultural lending institutions. As a result there is minimal institutional and human resource capacity to assess activity, firm,

> management and character risk of rural and agricultural enterprises, and to package loans with the terms and conditions that are applicable to rural enterprise needs" (Kula & Farmer (2004:36).

Consequently, all these unfavourable requirements lead to few people having any experience in banking, even as savers. This situation makes the graduation from micro-financial institutions (MFIs) to banks complicated.

On the other hand, FAO (1993) highlights the following as reasons for the low level of lending to smallholder farmers in the banking sector:

> the high level of demand for credit in the economy, relative to supply;
>
> the lack of acceptable collateral as a loan guarantee;
>
> the high transaction costs incurred by the lending agency relative to the size of the loan;
>
> the higher level of default; and
>
> the lack of capacity within the Ministry of Agriculture to identify and address credit-related issues, particularly with regard to smallholder farmers.

In addition, the restrictive monetary policy adopted by the government in the financial system, according to ECI (2003), did not prioritise the agricultural sector, characterised as a risky activity and one with delayed returns. Furthermore, the civilian war of the past two decades destroyed the major part of the infrastructure, while agricultural equipment, including vehicles, did not receive the required maintenance, which caused the equipment to become unreliable and obsolete (Assane, 1999; Gaspar, 2000). As a result, there is no agricultural credit for smallholder farmers in Mozambique at all, apart from the *fundos do fomento* (government development funds). The reason for this is that many financial institutions, particularly NGOs or other private institutions, prefer short term credit (up to four months) with at least weekly reimbursement schedules and low return projects and are more frequently based in urban and peri-urban areas (Teyssier, 2006).

Therefore, "no banks have a special window to target progressive smallholders in Mozambique through wholesale lending arrangements. In many banks, lending is very concentrated among the well-known urban clients" (RFSP, 2003). For example, in June 2002,

the loans to agriculture, livestock, forestry and fisheries represented 19.5% of the banks' total portfolio, but loans to agriculture comprised only 16.9% of the total, which illustrates a clear decline from 22% in 1999. Furthermore, all those loans to the rural sectors were allocated only to large-scale producers, large traders and processors and none to smallholder farmers. Some 80% of agricultural loans were allocated to large companies in the cotton, sisal and sugar industries. Thus, while lending to sectors outside of commerce is in general very limited in Mozambique, few loans to those in rural areas are granted. In practice, agricultural loans are always meant to target large corporate borrowers (RFSP, 2003).

As a result, since formal banks are lacking in the rural areas of Mozambique, smallholder farmers also lack facilities through which they can mobilise their savings to investment capital for inputs, for improved and appropriate irrigation equipment, and for cold storage facilities, and/or borrow working capital for production needs.

5.5 Non-bank institutions' approach during the middle 1990s and earlier 2000s

To fill the gap created by the absence of commercial banks in rural areas, the Government of Mozambique has implemented measures to expand the provision of basic financial services to rural areas, including access to credit for smallholder farmers through the establishment of state-owned development funds and specialised credit institutions.

5.5.1 Government development funds

In spite of the paradigm shift by state banks to liberalise the financial system in Mozambique, the objective of extending financial intermediaries to rural areas, and to improve access to credit for smallholder farmers, still remains a challenge. State-owned development funds such as *fundos do fomento* were established and given a special mandate to promote economic development activities in rural areas. However, these initiatives seems to done little to improve access to credit for smallholder farmers.

The types of development funds established in Mozambique include: *Fundo do Fomento Agrário e de Devenvolvimento Rural* (FFADR – Fund for Jump-starting Agriculture and Livestock Activities and Rural Development), FFA, FDHA – Fund for Hydraulic and Agricultural Development), *Fundo de Reabilitação Económica* (FRE – the Economic

Rehabilitation Support Fund, *Fundo do Fomento de Pequena industria* (FFPI – Fund for Jump-starting Small Industry), *Fundo do Fomento Pesqueiro*, (FFP – Fund for Jump-starting Fishing Activities) and *Fundo para a Comercialização* (FC – Fund for Jump-starting Commercialisation Activities). The money to support these state development funds comes from the government through levies and taxes and from donor sources. There are indications that the financial support has been diminishing in recent years. Some of these development funds, such as the FFA, FFADR, FARE and FC, were specifically established to deal with financing the development of the rural economy (MRFSP, 2003). This study focuses only on the FFA and FDHA, which deal directly with lending for farming purposes.

According to Assane (1999), the objectives of creating these government funds were to: motivate the expansion of agricultural credit and rural development; stimulate the extension of rural credit programmes; and promote the securing of more funds to build agricultural infrastructure, such as irrigation pumping systems. Although some progress has been achieved through these government funds, the volumes of operations have generally been extremely small on the national scale and, since these *fundos do fomento* have depended more on continuous donor support, the sustainability of their activities was not guaranteed (MRFSP, 2003).

The current reality of these development funds is that, in general, most of them have failed to fully meet their objectives of providing financial resources to the rural sector, except for FARE and FFPI (MRFSP, 2003; ECI, 2003; FAO, 1993). Since the formal agricultural financial system is not only weak but also almost non-existent in the rural areas of Mozambique, the FFA and FDHA became meaningless in terms of satisfying the needs of farmers and rural financial markets in general. Crop and livestock production, as well as the commercialisation of farm produce initiatives, did not improve in rural areas (Assane, 1999).

In addition, both FFA and FDHA are actually running out of funds and, therefore, they are practically inactive. In the meantime, the Government of Mozambique is currently reviewing the role of the funds in rural development and a proposal for restructuring them may be on the agenda (MRFSP, 2003). There are a variety of reasons that led to the failure of development funds to meet their primary objectives. A major reason is that they have been engaged in many types of activities and have largely ineffective managerial strategies to participate in wholesale or retail credit operations (MRFSP, 2003). ECI (2003) mentions the

lack of saving facilities as the key reason for the failure. This is an important gap in the financial services offered in rural areas. Another criticism of the *fundos do fomento* approach is that, more often, direct government lending schemes carry the risk of increased moral hazards, especially in developing countries where contract enforcement mechanisms are the weakest point.

As regards the FFA and FDHA, the specific factors that have been contributing to their failure are outlined below.

Reasons for the failure of FFA include the following:

The FFA has not defined specific areas of intervention (crops, geographic area, types of projects).

Financial support has not always been provided in terms of credit. For example, in 1999, 90% of the money allocated to FFA went into covering its operating costs.

Provision of assistance to a wide variety of activities in agriculture.

Extremely low repayment rates.

The FFA spent most of its remaining resources on salaries and other internal administration costs.

Low income return (MRFSP, 2003) and inefficient collection of funds.

The failure of FDHA is attributed to the following:

FDHA provided credit, predominantly in kind.

FDHA provided interest free loans (MRFSP, 2003).

As FDHA dealt mainly with irrigation schemes which were unprofitable, this had a negative impact on its performance.

As with commercial banks, the operations of the *fundos do fomento* are limited and concentrated more in urban than in rural areas. Furthermore, the funding institutions operated on an unsustainable basis, since they depended on external sources of funds from donors (MRFSP, 2003).

5.6 Enabling a conducive business environment for private sector efforts

This section highlights indirect government intervention strategies to address market failure in rural financial markets. This was done through enabling a conducive business environment for private sector efforts to fill the gap left by commercial banks. Other strategies involved the implementation of polices intended to attract the private sector to invest in rural financial markets. Many NGOs and the private sector started to operate in rural financial markets, but these partners also failed to improve access to credit for farming purposes (Manganhele, 1999).

The next section support this finding by addressing the experience of contracting farming schemes with smallholder farmers engaged in cash crops in rural areas of Mozambique along the Valley Zambezi. Specifically, the next section presented the experience of tobacco firms used as a strategy to promote tobacco farming activities by improving access to credit for smallholder farmers.

5.6.1 Tobacco contracting farming schemes in Mozambique

Other initiatives from the private sector include companies producing for export markets, such as the agribusiness industries that have been supporting smallholder farmers involved in cash crops (e.g. cotton, tobacco and paprika). In this section, the case of tobacco contracting farming schemes in the Zambezi Valley in Mozambique is presented.

In Mozambique, contract farming schemes employ institutional arrangements pervasive in cash crops (e.g. tobacco and cotton) in the rural economies of the Zambezi Valley, as a strategy to fill the vacuum left as a result of the market failures in the credit inputs and output suppliers. The problem is exacerbated by the absence of a functional public and market-based service provision network. Given that smallholder farmers lack access to modern inputs, they rely heavily on contract farming as the dominant mode of the sub-sector's organisation. Tobacco is mainly grown by the smallholder farmer sector and mostly demanded by large-scale processing companies. Tobacco and cotton concessions in the Zambezi Valley have provided a secure source of cash income to smallholder farmers in rural areas where

alternative income-generating activities are limited. However, tobacco is one of the most important cash crops (Benfica, 2006).

Mozambique Leaf Tobacco (MLT) and DIMON are the two marketing firms promoting the production and marketing of raw tobacco in Manica and Tete Provinces, in the central region of Mozambique, with smallholder farmers representing the largest number of participants in these contracting farm scheme arrangements. These marketing firms provide production support for tobacco crops, by means of inputs and provision of technical advice to farmers. Both MLT and DIMON deliver tobacco inputs and are responsible for buying tobacco output from borrowers. The basis of such an arrangement is a commitment on the part of the farmer to provide his/her tobacco produce in the quantities and at the quality standards determined by MLT and DIMON, and a commitment by credit firms to support farmers' production under forward agreements and at pre-determined prices (Manganhele, 2007).

Tobacco cropping was introduced in Mozambique (in the mid-1990s by the private sector) through contracting input schemes with smallholder farmers, being the major participants rather than large-scale commercial farmers. The experience produced positive results between the 1996/97-2003/04 cropping season, both in terms of the number of smallholder farmers adopting the crop (6,000 to 120,000), and also in terms of the yields that have been increasing each year since it was introduced, up to 2003/04 (Benfica et al., 2004). Tobacco became the fourth major export crop after sugar cane, cotton and cashew nuts (Ministério da Agricultura, 2007).

Tobacco cropping has positive effects on poverty reduction in tobacco areas where economic linkages are stronger, particularly with better maize prices. For example, the contract farming schemes in the tobacco sector include the provision of improved maize seeds and productivity-enhancing technologies to increase maize yields and maximise the potential impacts, which have important implications for household food security in the tobacco growing areas.

However, farm endowments and technology, as well as land, have no effect on the net tobacco income until the net fourth land area quartile, when it evidences a large and highly significant effect on the average profits of the land-enriched households. Therefore, the majority of smallholder farmers earn negative profits from tobacco, while larger farmers tend

to earn bigger positive profits. About 30% of smallholder tobacco farmers lost money (Manganhele, 2007, Benfica, 2006), of which almost 36% are engaged with MLT while 23% are smallholder farmers accessing credit from DIMON-Mozambique (Benfica, 2006).

5.6.2 Constraints faced by smallholder farmers in the tobacco contracting schemes

There are many factors contributing to a decrease in the productivity and profitability of tobacco input schemes, with smallholder farmers being the most affected by the heavy losses in tobacco crop production in Mozambique. These include inappropriate seed rates and poor management and application of fertilisers. For most of the smallholder farmers tobacco crop yields remain low, mainly due to a lack of knowledge concerning better farming methods, leaching and disease. For example, the main reason for the higher proportion of lower stalk grades in the Manica and Tete Provinces is the late application of fertilisers and leaching. This leads to the predominant production of underdeveloped leaves, poor quality and low profit, since farmers can only obtain low prices for poor quality produce. On the one hand, the tobacco companies usually take advantage of smallholder farmers who have not been sufficiently schooled in a credit culture. The majority of them (12.14% are illiterate and 30.71% only have three years of schooling), are too poorly educated to detect unfair grading. On the other hand, smallholder farmers lack bargaining power to lobby for better prices because they are not connected to tobacco producers and marketing associations. But also in addition, the side marketing effect has also been negatively affecting the profit of the tobacco credit institutions (Manganhele, 2007). As a result, smallholder tobacco growers tend to engage in unfair marketing schemes outside the contracting scheme arrangements, as a way to receive better prices than those stemming from the unfair grades allocated by the tobacco input scheme contracting firms.

Furthermore, planting and reaping are the most crucial tobacco farming activities, demanding more labour and more cash (more food to feed the labour force and more cash to hire more skilful and experienced people). It is necessary to employ skilled and experienced labour in tobacco in order to ensure proper input, since poor management of fertiliser application and curing result in significant losses in tobacco production and marketing. The low repayment rates in input credit schemes, including the tobacco sector, are associated with the fact that crop expenses are incurred for land preparation and planting. The expenses continue through the cultivation, harvesting, storage and marketing stages, while income revenues generally

occur only at the time of selling the crop and are often received in one lump sum. Factors that exert a reversing effect on the potential gains that smallholder farmers could achieve if such constraints were resolved are:

high production costs and unavailability or limited use of technical inputs owing to difficult terrain and poor road systems. Poor infrastructure make accessibility difficult, and high input costs, including high labour force costs;

poor field practice management as a result of inadequate provision of extension back-up and farmer training (tobacco farmers rely only on the extension advice and services provided by contracting companies); and

the lack of competition amongst contracting firms (e.g. in the Tete and Manica provinces, only one company, MLT, operates).

In addition, the vagaries of the weather (drought, hail and floods) result in lower prices and lower profit which also limit the benefits that farmers could reap from diversifying from food crops to cash crops such as tobacco (Manganhele, 2007).

According to Benfica (2006), other constraints faced by contract farming schemes in Mozambique, include:

the fact that smallholder farmers in tobacco concession areas are quite responsive to a variety of exogenous shocks, including trade issues such as increases in prices of imported seeds and chemicals; changes in export prices of maize, cotton and tobacco; technology shifts, and government export taxes; including reductions in export prices of tobacco;

the experience of poor access to cash and inputs, and other credit constraints by smallholder farmers due to high demand from buyers to meet volume requirements and high quality standards; and

unbalanced bargaining power over issues such as grading and prices coupled with asymmetric information, have emerged as barriers to the development of tobacco contract farming schemes, partially as consequences of a wide range of market, weakness in the concession system, and coordination failures.

These constraints retard the effects of otherwise successful expansion efforts and to some extent, slow down income growth in rural areas, particularly among smallholder growers.

However, a more balanced growth in income, of the tobacco growers and non-growers, is obtained when productivity among growers increases. With higher tobacco prices, the benefit of expansion results in a significant impact on the levels of poverty reduction, particularly among smallholder farmers cash crop growers, even when productivity is assumed to remain constant. Therefore, to compensate for losses resulting from exogenous factors, a productivity increase effort is worth pursuing in the tobacco farming areas of Mozambique.

5.7 Conclusion

Despite smallholder farmers' critical importance to the economy of Mozambique, they are still limited in terms of access to agricultural credit from any type of financial system. With regards to contracting input schemes, the results in this chapter suggest that, if proper strategies to address the factors limiting their growth and development are not implemented, these schemes will soon fail. As has occurred with previous government strategies, the current efforts by the private sector in promoting cash crops in the country may also be condemned to failure. Therefore, in order to mitigate the given problem, this study argues that it is a matter of urgency to find an alternative strategic approach.

Furthermore, although certain researchers in Mozambique have been suggesting a number of alternative models to improve access to credit for smallholder farmers, they still lack specific guidelines as to how these could be effectively served. The suggested models lack any kind of cost-effective strategic management to adequately deal with the poor debt repayment culture which is one of the main roots of the problem. It has been hampering the success of all the above, past and current intervention strategies, both directly and indirectly adopted and implemented by the Government of Mozambique.

The provision of viable and sustainable financial services and the development of a strong rural financial system are depend more on the ability of financial institutions to not only appropriately manage various types of costs and risks, but also to adequately assess and quantify them. Therefore it follows that, in designing a model of institutional financing, a strategy is necessary to deal with these major milestones for rural financial institutions. Thus, more still remains to be done.

CHAPTER SIX
CREDIT NEEDS OF SMALLHOLDER FARMERS IN MOZAMBIQUE

Government strategies to improve access to credit for smallholder farmers have failed in many developing countries, including Mozambique. One of the reasons for the failure was that many of the state formal banks have ignored the credit needs of smallholder farmers. In addition, some of the current innovative strategies adopted and implemented by many rural financial institutions have also failed to design a model to accommodate the specific credit needs of smallholder farmers.

This chapter describes the credit needs of smallholder farmers in developing countries, based on the literature review. This is followed by a discussion of what previous studies have identified as being the credit needs of smallholder farmers in Mozambique.

6.1 Credit needs of smallholder farmers in developing countries

It has been argued that any financial institution that aims to improve the standard of living of smallholder farmers in developing countries should seek for some kind of innovative strategy that will increasingly focus on ways to raise agricultural output and increase the productivity of both land and labour. Since a great proportion of the population in developing countries relies on agriculture as its main source of livelihood, additional attention would have to be accorded to such programmes, so that these people can produce a surplus, commercialise their produce, diversify their income and improve food security.

Many farmers in developing countries need credit to purchase seeds and other inputs, as well as to harvest, process, market and transport their crops. Credit may also be needed for personal purposes such as consumption, emergencies and education. Sometimes, because of extreme poverty, loans intended for production purposes are spent on basic needs such as food, medical care and education (CGAP, 2005).

For example, Njie (1983) and Seleka (1998) have highlighted that smallholder farmers in Gambia and Botswana need credit:

> to hire a labour force – for row planting and weeding on crop yields, and food production;
>
> for procurement of an input package – provision of improved seeds and fertiliser to farmers;
>
> to fulfil basic food necessities – to generate reserves for unpredictable occasions when cash is required;
>
> to assist farmers with draught animal power (donkeys, mules and oxen) and animal drawn implements (ploughs, cultivators and harrows), or tractor service rent; and
>
> to assist smallholder farmers with other household requirements demanding liquidity. This may include funerals, weddings and initiations ceremonies, for example circumcision ceremonies or the payment of taxes and applying risk management techniques.

Insurance markets in sub-Saharan Africa are usually non-existent in rural areas, while few smallholders have freehold rights over land and they lack records and valuations of past income and future income estimates as well as durable and valuable assets which would be used for collateral purposes. This causes low levels of lending to agriculture for production purposes in many developing countries (Dorward *et al.,* 2001). However, changing villagers' attitudes towards commercial farming cannot simply be achieved by suddenly making farming loans, or even grants, available to them. The majority of villagers indeed exhibit an effective demand for savings deposits and money transfer services. Financial intermediaries might be able to offer these services on a cost-covering basis as an important part of their product range at grassroots level (Meyer *et al*. 2004).

Njie (1983) and Teyssier (2006) provide some explanations of the use of credit by smallholder farmers and the importance of matching their needs for credit. Purposes include:

> *Hiring of a labour force* to resolve cash flow problems;
>
> *Fulfilling food necessities;*
>
> *Hiring a pair of cows* and the *implements* or even a *tractor* for field operations, mainly to cultivate land;
>
> Seeing to *other family liquidity requirements:* and

Mechanising of farm operations, for both powered and animal-drawn equipment to aid in seedbed preparation, planting and harvesting operations or small diesel pumps, threshers and diesel-powered cultivators.

In summary, smallholder farmers' credit needs in many developing countries are directly related to consumption requirements of the farm household. Credit is also needed for agricultural production purposes. Smallholder farmers also require credit for investment purposes, including investing in a small business, refurbishing their houses, or investing in education for their children (Njie, 1983; Manganhele, 1999; CGAP, 2005; Teyssier, 2006).

Therefore, flexibility in the form credit (in kind or in cash) and the purpose for which it is granted desirable. A commitment to repay the loan, without the possibility of negotiation, is what is important. Thus, the smallholder farmer can always choose how, when and where to apply the money and he/she would diversify his/her production system (agriculture, livestock, poultry, commercialisation, etc.). Hence, other sources of income would be used as the last resort in case a crop failure occurs. In this way, loan repayment will be assured (Teyssier's 2006). In order to address the need for flexible use of loans, credit operators should bear in mind that both rural households' consumption and production decisions tend to be intricately related to avoid misapplication of credit. Therefore, when dealing in decision-making about the kind of products for which smallholder farmers should be financed; rural credit providers need to focus on the entire activity of the household in determining cash flow constraints. In addition, the issue of which source the cash flow problems derive from is immaterial due to the fungibility of credit (Njie, 1983).

Furthermore, aggravation of the producer's position may be experienced, owing to the facts that on the one hand, households more often experience food shortages a few months before the following harvest, and on the other, the intra-seasonal price variations of maize are high. Thus, these contrasting scenarios represent an opportunity for inventory credit type schemes to offer consumption credit at harvest time, against the guarantee of the stored crop, reimbursable during the peak season of maize prices (MRFSP, 2003). For example, one reason why successful financial institutions, such as BAAC in Thailand and Bank Rakyat in Indonesia, have improved access to credit for smallholder farmers is that they have used market research and pilot projects to test and adapt their products to meet smallholder credit needs. Unlike most credit projects, these successful institutions recognised that borrowers

were usually the best judges of how to use loans and, for this reason, these financial institutions have developed attractive savings products, and lend for a variety of purposes. However, they are strict in expecting repayment, regardless of how borrowers use the loan proceeds (Meyer & Nagarajan, 2001).

6.2 Credit needs of smallholder farmers in Mozambique

As may be expected, smallholder farmers' credit needs in Mozambique vary; some are expressed, others revealed. However, the credit needs do not vary according to the gender of the smallholder farmer (Manganhele, 1999). The study by Njie (1983) which confirms that both rural households' consumption and production decisions tend to be intricately related also supports this.

In Mozambique, the smallholder farmers' main credit needs are for both production and consumption purposes. In addition, there is some evidence that smallholder farmers do save (in cash or in kind, particularly in livestock), mainly for future investment in agricultural activities, but firstly to fulfil their basic food needs. Only if basic consumption needs are fully addressed, will they seek to obtain cash to meet other consumption needs, such as education and health expenses. The remaining amount of savings will then be used to rehabilitate houses, etc. (Manganhele, 1999).

Based on what researchers in Mozambique have found as being the credit needed by the smallholder farmers, we can distinguish four main types of loans, according to their final utilisation: consumption, investment, working capital and trade. For example, MRFSP (2003) identifies the following types of credit:

> Consumption credit to finance basic needs in terms of food products and social expenses (school fees, marriages, health care, etc.) that is usually short-term, from two to three months to a maximum of six to eight months;
>
> Working capital credit needed each year to finance annual inputs for economic activities, such as fertilisers, pesticides and labour in agriculture, raw materials in agro-processing and the purchase of goods in trading. It is also short-term (six to eight months up to a maximum of 12 months).

Investment credit needed for capital equipment for economic activities that is by nature reimbursed in the long run (e.g., some years), depending on the type of activity and the overall amount of investment.

Credit for trading activities is also needed for smallholder farmers, who use the money to buy agricultural and non-agricultural goods, with the purpose of selling them and earning income in a short period of time as a strategy to obtain finance for other production and consumption activities. Manganhele (1999) adds that, with the entrance of many NGOs into the rural credit markets providing credit for trading activities, credit for commercial purposes by the smallholder farmers is becoming even more important.

In addition, it is critical that the credit needs of smallholder farmers are met by financial institutions. Effective demand depends not only on the prices and conditions of supply for the different market segments, but also on other related conditions at which the service is offered (MRFSP, 2003). In the following section the credit needs of smallholder farmers, and how they are related to the demands by this particular segment of clients, are addressed.

6.2.1 Consumption credit

The demand for consumption loans is difficult to estimate. For example, in the case of Mozambique, as noted, there are virtually no financial service providers offering such services in rural areas. Furthermore, it is increasingly observed in maize production areas that smallholder farmers tend to oversell their household stock at harvest time. This is a clear indication of a need for cash for consumption purposes at this time and, as a result, they are forced to sell more than their surplus of maize (MRFSP, 2003). Conversely, during the peak of the cultivation season, smallholder farmer households may experience food shortages which would further increase their demand for consumption credit, and often this could lead them to experience food insecurity. In addition, frequently the credit needed for one type of activity overlaps with the credit needed for other purposes. For example, one can apply for credit to purchase livestock for fattening, which is a clear indication of a revealed credit need for working capital. If an emergency occurs, the animal can be sold to obtain cash to fulfil the basic needs such as school fees, which turn out to be an expressed consumption credit need.

Therefore, a pair of cows may be strongly demanded as working capital (for land preparation and planting operations, etc.); however at some point, the animal may be sacrificed to fulfil other credit needs.

Consumption credit to finance basic needs in terms of food products and social expenses is almost completely unknown in the rural area of Mozambique. However, some families are able to access credit for consumption purposes through some traditional informal ways, such as the *xitiques* and similar community-based rotating systems. These families include the category of smallholder subsistence farmers and members of associations, as well as cash crop irrigation farmers and itinerary traders' smallholder farmers. Consumption credit is in demand by groups more prone to seasonal fluctuations of income and to risks of temporary food and/or cash shortages, such as smallholder farmers.

6.2.2 Working capital credit

Smallholder farmers need credit for farming purposes, particularly in the northern and central regions of Mozambique, where the potential for agriculture is greater. This type of loan is demanded to finance intermediate inputs such as improved seeds, fertilisers and pesticides, if and when needed, and justified by the financial returns on the crops to which they have been applied. Such loans can also be used to hire labour. Improved technology is particularly needed for cash crops targeted for export markets in Mozambique. For example, large agro-processing/exporting companies already offer in-kind production credit to smallholder farmers as part of contract farming agreements to control the quality and reliability of farmers' produce and to maximise production from one concentrated area (MRFSP, 2003).

The need for working capital is expressed as being important for purchasing labour-saving technology, such as mechanised equipment, animal draft power, and animal-drawn implements (ploughs, cultivators, harrows). There is an enormous need for working capital by smallholder farmers in Mozambique, particularly in the southern region, and was ranked highest among all types of credit (Manganhele, 1999). In addition, according to MRFSP (2003), labour for agricultural production is scarce in the south of the country because of the competition with alternative income-earning opportunities, such as wage labour in Maputo city and/or in the neighbouring South Africa. Although fewer alternatives to agricultural

production exist for smallholder farmers in the northern and central regions of the country, labour scarcity during peak demand times (planting, weeding and harvesting) arises because of competition among different crops. This occurs particularly with the increasing commercialisation of agriculture and the emergence of highly profitable cash crops.

Working capital credit with short maturities is in demand by all those running a more or less profitable economic activity, from cash crop/irrigation farmers to agribusiness. Credit needed for purchasing of inputs and working capital is also demanded to finance the hiring of labour (the main constraining factor to *smallholder agriculture)*. Yet, this segment of demand is largely unmet. Any alternative rural financial institution that aims at improving access to credit for smallholder farmers would create an innovative potential market for services in this segment of demand.

6.2.3 Trade credit

Trade is probably the most dynamic and rapidly growing economic activity in the rural areas of Mozambique. The commercialisation of agricultural products has been growing constantly, both in value and outreach, gradually reaching even the most marginalised and remote rural areas. Few categories of rural traders can be characterised by their distinct forms of operating in the market and their different business volumes. For this reason, different credit needs can also be distinguished (MRFSP, 2003). This is consistent with the study by Manganhele (1999). The results of the study indicate that credit for trading activities in the southern region of Mozambique is ranked second by smallholder farmers. Most of them have indicated that they had applied for or demanded credit for trade purposes, such as the commercialisation of both agriculture and non-agricultural goods.

6.2.4 Investment credit

Credit for investment purposes is also demanded in the rural areas of the southern region of Mozambique. For example, the expansion of storage capacity for agricultural products or greengrocer storage capacity, or credit for construction such as building a small shop, were expressed as credit needs and were ranked as respondents' third priority (Manganhele, 1999). However, it is hard to find any evidence of investment credit being extended to smallholders

for agricultural production purposes in Mozambique. MRFSP (2003:13) has identified the difficulties in obtaining credit, as mentioned earlier. However, agro-processing units are promising and are the most viable credit for potential clients such as small and medium agro-processing enterprises in the rural areas of Mozambique. There are a few financial models for this type of investment, including cashew processing factories, vegetable oil production units and maize mills (MRFSP, 2003).

The viability of investment credit for crop production by smallholder farmers is doubtful under current market conditions. The demand for effective investment credit is more limited than in the case of working capital and it is hardly financially viable under present market conditions, while post-harvest activities are generally more profitable. Conversely, the demand for credit is so huge that it is only marginally met by existing service providers with limited financial capacity and not by formal banks. Loans for investment in boats and gear are in high demand by fishermen.

6.3 Conclusion

The results in this chapter suggest that there is a great need to pay more attention to the provision of savings services and credit for trading activities and investment purposes. The fulfilling of the diverse needs for financial services is necessary for any financial institution, including those operating in rural areas, to efficiently serve its clients. Therefore, financial institutions could efficiently diversify their lending portfolio to satisfy both the expressed and revealed demands of smallholder farmers. The diversification of products and services offered by lenders would lead to an increase in the outreach, financial sustainability and growth of the financial institution.

Thus, if rural financial institutions are to succeed in improving access to credit for smallholder farmers in Mozambique, they should adopt appropriate lending strategies to accommodate the whole range of needs for financial services of all types of clients. This is important if lowering of costs and risks, as well as ensuring the sustainability of the financial institution for both lenders and borrowers, is to be properly addressed. However, proper research and viability studies should first be undertaken with emphasis on areas such as investment credit, agro-processing enterprises and payment services. Financial institutions must be cautious before entering these rural financial markets involving smallholder farmers.

CHAPTER SEVEN
IMPROVING ACCESS TO CREDIT FOR SMALLHOLDER FARMERS BY GOVERNMENT: ASIAN EXPERIENCE

This chapter presents positive experiences from two case studies concerning government owned banks in two developing Asian countries, namely the Bank for Agriculture and Agricultural Cooperatives (BAAC) of Thailand and Bank Rakyat Indonesia (BRI).

The chapter is structured as follows: the first section addresses cases of successful financial reform implemented by the agricultural government bank, BAAC, followed by a section addressing the strategy by the Indonesian government, through the BRI. The main features of success in these two case studies are then presented, as well as the problems faced by the government banks. Strategies in dealing with the costs and risks of lending to agriculture are also presented. Finally, the conclusion of the chapter is drawn from the two cases.

7.1 The Thailand case study

This case study illustrates the reform policies undertaken at the BAAC which led to new methods of lending technology that suit smallholder farmers.

Thailand is one of the few Asian countries with strong financial institutions that are capable of serving a large number of smallholder farmers, including those who are engaged in non-farming activities. Thailand has succeeded in improving access to credit for smallholder farmers by expanding rural finance services through establishing the government-owned BAAC as well as adopting and implementing agricultural credit policies that encouraged commercial banks to extend their financial products to farmers. The BAAC was established in 1966 by an Act of Parliament, with a specific mandate to serve agriculture and smallholder farmers in support of agricultural development. This was in line with the core of targeted programmes and subsidised credit programmes implemented in many developing countries. Only by the end of the 1990s was the BAAC allowed to serve non-farming clients in rural areas (Klein *et al*., 1999; Meyer & Nagarajan, 2001; Meyer, 2002; Christen & Douglas, 2005). This means that the BAAC has evolved from a specialised agricultural lending institution into a more diversified public bank providing a variety of financial products and

services. Its impressive scale and coverage have also rendered the BAAC a unique bank among rural finance institutions in the developing world (Christen & Douglas, 2005).

7.1.1 The BAAC reform policies

During the 1960s, the commercial banks in Thailand tended to serve large-scale farmers and the agribusiness sector. Initially, the BAAC depended almost exclusively on funds from the state for operating capital. However, frequently the allocation of funds arrived late and the inflow of funds was also often difficult to synchronise with farmers' seasonal credit needs. This resulted in a chronic deficit of funds and in poor performance by the bank. For example, in the early 1970s, the loan recovery rates dropped to as low as 51% and by 1974 the administrative expenses had risen to more than 8%. As a result, the BAAC's financial viability was compromised. In 1975, the central bank of Thailand stipulated that formal non-government banks would initially have to lend 5% and subsequently 20% of their portfolios to the farm sector. Under this agricultural credit policy, the banks could either deposit any percentage of the quota that they could not directly provide for loan purposes or assist farmers in accessing loan facilities with the BAAC (Seibel, 2000a).

Successfully implemented financial policy reforms led to an increasing availability of commercial bank deposits. This marked a turning point in the BAAC's operations, by making up for its shortage of funds. Innovations in the lending approach included shifting from wholesale lending through agricultural cooperatives, towards retail lending to individual farmers organised into joint-liability groups of smallholder farmers and the poor. These measures resulted in an improvement in the outreach of the bank. For example, by 1987, the BAAC had formed about 100,000 joint-liability groups with 1.5 million members, as against 821 agricultural cooperatives (Seibel, 2000a), and the BAAC began to mobilise savings in an aggressive manner (Christen & Douglas, 2005). The BAAC's reforms were actually staggered over more than three decades. By 1997, 43% of smallholder farmers in Thailand were being served at the bank. In October 1998, for the first time in its 34-year history, the number of clients served by the BAAC increased to 4.8 million, which represented about 86% of all smallholder farmers in Thailand who had come under the supervision of the BAAC (Seibel, 2000a). In addition, instead of continuing the past policies of cheap credit in

agricultural loans, the market based interest rates charged at the BAAC also formed part of the reforms.

Between 1988 and 1996, the government of Thailand undertook gradual financial reforms that led to the elimination of interest rate ceilings on the fixed deposits of private formal banks and, all interest rates were eventually liberalised. Commercial banks were allowed to offer a wide range of financial products and services in rural areas while restrictions on opening branches were effectively removed (Seibel, 2000a). Reforms also included higher interest rates being charged on larger loans to the middle and higher income farmers who applied for BAAC loans. This policy had a major impact, due to the lack of ready access to any other institutional source of agricultural credit in Thailand. The policy led to about 55% of the total portfolio being comprised of loans larger than US$ 4,000, moving to medium-scale farmers who were able to use new farm technologies and collateralise their loans. Interest earnings on these loans served to cross-subsidise the higher costs of serving low-income farm households who required small loans. This enabled the BAAC to provide loans to poor farm households at concessional terms in special government programmes. In the beginning (1996), few loans reached the very poor households, since most of the BAAC clients were relatively stable farmers (Klein *et al*., 1999). The BAAC had also increased the number of its branches from 85 to 535 by 1998 and increased its outreach and saving mobilisation services to the extent that rural deposits became its main sources of financial capital. Simultaneously, commercial banks reduced their deposits while expanding their lending portfolios (Seibel, 2000a).

In 2000, the bank was subjected to further prudential regulation, that is, capital-adequacy requirements and loan-loss provisioning. Most performance standards and stringent rules seemed to be harsh in the short term, but aimed to assist the BAAC in its efforts to strive for financial viability and self-sustainability in the long term (Seibel, 2000a). The success of the reforms implemented led to 80% of the country's farmers actually being served by the BAAC. The bank is currently being reported as the agricultural government bank with the most significant outreach of any country in the Asian continent (Klein et al., 1999; Meyer & Nagarajan, 2001; Meyer, 2002). As a result, the BAAC achieved efficient loan administration and high quality services (Klein *et al*., 1999).

In order to mitigate any negative effects on its sustainability, the BAAC attempts to ensure that it is fully compensated for the costs derived from lending to the poor at subsidised costs (Meyer & Nagarajan, 2001). Additional strategies to cope with the risks and costs of lending to smallholder farmers and the poorest include the fact that, since the bank was established, it has benefited from a number of government privileges and subsidies. The BAAC is also accorded access to the rediscounting facilities of the Bank of Thailand, as well as exemption from paying taxes and holding minimum reserve requirements. The bank also enjoys privileged access to mandatory saving deposits from commercial banks. In spite of the fact that these preferential treatments have now diminished, the BAAC still has access to certain loanable resources at concessional terms, although these are kept at lower levels. The bank's main source of funds actually stems from earnings on its loan portfolio, which is a good example of effective cost control and good loan portfolio performance. Bad debt provisions of the BAAC are also lower compared to those of commercial banks (Klein *et al*., 1999).

For that reason, the BAAC has gradually undertaken many institutional financial reforms that led to the bank succeeding not only in improving access to credit for smallholder farmers in Thailand, but also in ensuring its financial stability. Essential phases and elements of the reforms are presented in Box 2 below.

Information in Box 2 demonstrates that although reforms at the BAAC have undergone a 30-year implementation process, the result has been a viable, highly efficient government-owned Agricultural Development Bank with a strong level of growth in total agricultural credit, which mobilised most of its resources through savings and lent to 86% of farm households in Indonesia (Seibel, 2000b). Therefore, financial reforms matter to the success of financial institutions, but an appropriate lending approach is also crucial for improving access to credit for smallholder farmers. The BAAC has also succeeded in servicing smallholder farmers engaged in crop farming activities. Hence, it is important to consider the reasons for the bank being reported as the most successful case of agricultural government banking in the developing world. The following section discusses the bank's lending technology.

Box 2: The fundamental elements of the reform process by the BAAC

The BAAC's reform has been a perennial process guided by two objectives: outreach to all smallholder farm households as its political mandate; and financial viability.

The BAAC went through four major phases of reform:

1966-74, laying the foundation for individual lending with joint liability;

1975-87, expanding its lending operations through access to commercial bank and donor funds, while greatly reducing loan channelling through co-operatives;

1988-96, striving for viability and self-reliance, under conditions of controlled interest rates, through saving mobilisation, improved loan recovered and increased staff productivity;

Since 1997, adjusting to prudential regulation by the central bank and diversifying into non-agricultural lending.

The important elements in the reform process were:

Respect by the government for bank's operational autonomy;

A corporate culture emphasising cost-effectiveness, productivity and efficiency;

Decentralisation and expansion of branch network operating as profit centres, reducing saver and borrower transaction costs and permitting cost-effective microsavings and microcredit transactions;

Individual lending through joint groups as a financial technology attuned to Thai culture;

Substantial improvements in portfolio quality, which created depositor confidence;

A radical shift in the financial resource base to rural savings mobilisation;

Most recently, a diversification of its portfolio to include microenterprise lending.

Outreach and performance are impressive: as of end-1998, the BAAC served 4.8 million borrowers (68% of rural households) with US$ 5.2 billion in loans outstanding and mobilised US$ 4.1 billion savings on US$ 7.6 m deposit accounts. Capital adequacy was 9.3%; operational self-sufficiency 228%; financial self-sufficiency 98%; self-reliance, as measured by the loan-to-deposit ratio, 83%. Administrative costs were 3.1% of loans outstanding.

BAAC demonstrated how gradual reform can be carried through under a repressive financial policy regime with ceilings on lending rates, direct credit and mandated agricultural lending quotas. These restrictions enabled BAAC to expand, forced cost-efficiency upon its staff and prepared the ground for deposit mobilisation at a later stage. The reform agenda is still unfinished:

With the emergence of private depositors as major stakeholders, ownership of BAAC stock needs to be diversified, with adequate representation of the new shareholders on the Board of the BAAC;

Lending rates need to be liberalised and re-aligned to reflect true costs;

The BAAC needs a new, performance-related management information system (MIS) which also enables field-level managers to track the performance of both savings and loans of a particular client;

Performance-related staff incentives, presently under pilot-testing, need to be implemented.

Source: Seibel (2000a)

7.1.2 The BAAC's lending technology

One reason that led to the BAAC's rapid expansion was the granting of wholesale loans to cooperatives and farmer associations. The BAAC's lending technology also consists of on-lending to farmers and making retail loans mostly to smallholder farmers in groups, and to some extent, individuals. This led the bank to continuously expand its outreach (Meyer, 2002). In addition to credit facilities, the BAAC provides other financial products and a range of complementary services such as savings deposit facilities and marketing facilities that are available to both borrowers and non-borrowers. About 75% of the borrowers access loans through joint liability groups. The size of the groups ranges from 5-30 members, averaging 15. Direct access to individual loans is provided to higher income borrowers who can comply with conventional loan collateral requirements. Although the BAAC targets smallholder farmers (low and middle income farmers) it also lends to higher income farmers (Klein *et al*., 1999). Consequently, well implemented and gradually-performed financial reforms, coupled with adequate lending technology that suits the credit needs of the whole range of clients, rendered the BAAC a successful case of improving access to credit for smallholder farmers in the developing world.

7.1.3 The BAAC's indicators of success

The BAAC's indicators of success have been well-documented by many researchers, as indicated below by the growth in total agricultural credit as already reported.

The limited extent to which the BAAC can finance non-farming activities in rural areas still applies (Meyer, 2002). The BAAC is ranked amongst the world's leading rural government development banks in terms of indicators of outreach and degree of self-sustainability. By the late 1990s, the BAAC served its clients with a network of 657 branches and sub-branches with 850 field offices across the country (Klein *et al*., 1999). In March 2003, the BAAC operated more than 600 offices countrywide, serving over 5 million clients, with outstanding loans of US$ 5.8 billion and saving deposits of US$ 6.2 billion. The BAAC is largely self-sufficient as it funds 80% of its loans through savings, while the government remains BAAC's dominant shareholder. In 2003, the bank provided credit services to more than 90% of smallholder farmers across Thailand (Christen & Douglas, 2005). Other indicators of the bank's success include that, for example, the ratio of agricultural credit to agricultural GDP

by the BAAC in Thailand grew by 0.64 between 1970 to nearly 0.7 by 1996. The BAAC has a large loan portfolio and a large average loan size, and also succeeds in servicing smallholder farmers engaged in crop farming activities (Meyer & Nagarajan, 1997; Meyer, 2002).

Furthermore, to compensate for the negative impact of commodity price controls, policy makers imposed interest controls on loans for farming purposes. For example, the policy of the BAAC, to set two or three percentage points interest rates on agricultural loans lower than on non-agricultural loans, impacts positively on enabling the bank to serve smallholder farmers, particularly the poor. Although the BAAC has some loan arrears, particularly for loans made to farmer associations and cooperatives (which has resulted in its profits and return on assets being low), it operates on a sustainable base (3.5% operating costs) (Meyer & Nagarajan, 1997; Meyer, 2002).

Indicators of good performance and sustainability (indicated by its outreach) of the BAAC can also be seen in Table 2.

Table 2: The BAAC indicators of good performance

OUTREACH	**BAAC indicators**
No. of branches involved in agricultural lending (1996)	650 (850 field offices)
No. of rural borrowers (1996)	2 435 836
Outstanding loan portfolio to individual farmers (US$)	5 589
Average agricultural outstanding loan size per borrower (US$)	2 286
GDP per capita (US$)	3 024
Average agricultural outstanding loan size as % of GDP per capita	76%
SUSTAINABILITY	
Outstanding rural loans per loan officer (1996)	400-500
Loan arrears in agricultural/rural lending (1996)	12.0% (>1day)
Loan administration expenses as % of average outstanding loan portfolio (1996)	3.3%
Financial expenses as % of average loan portfolio (1996)	7.1%
Financial income as % of average outstanding loan portfolio (1996)	10.4%

Source: Klein et al., 1999

As indicated in Table 2, the BAAC performed successfully in servicing the agricultural sector during 1996. This is clear, for example, from its contribution to the GDP amounting to US$ 3 024 and from the lower rates of loan administration expenses as a percentage of average loan portfolios.

Since the government-mandated specific programmes still grant subsidised agricultural credit to targeted smallholder farmers and poor beneficiaries, the main challenge to the efficient performance of the BAAC still remains. These programmes have been impacting negatively on the performance of the BAAC and led to a gradual reduction of its share of the overall loan portfolio (Klein *et al*., 1999). In fact, there is no doubt that such programmes have the disadvantage of impacting negatively on the performance of any bank, including the BAAC. However, the great advantage of lending to some of the farmers at subsidised rates is that it improves access to credit for smallholder farmers, particularly for the poor to whom it would not be possible without these targeting programmes. It also applies to the BAAC whose primary objective of serving low-income clients still remains the same.

The continuous development of new credit technologies and adjustments has also been critical in lowering loan administration expenses while improving loan repayment performance at the BAAC of Thailand (Klein *et al*., 1999). In addition, the success of the BAAC in lowering loan administration costs may be partly attributed to the long-term investment efforts by the Government of Thailand in extending the branch network. Lending technology such as group loans and large loan size approaches has also contributed to the remarkable success of the BAAC in serving smallholder farmers. However, it is also crucial to note that these remarkable stories tend to operate in a favourable environment. According to Dorward *et al*. (2001) the conditions include that:

> there is a higher population density and often agricultural modern technology is already underway, with a consequent diversified non-farm economy. Therefore such successes are not located in poorer areas;
>
> these financial institutions tend to provide loans for smallholder farmers, which are often not structured in ways that allow them to be used for financing seasonal crop inputs in which short term repayment schedules, including regular monthly repayment instalments need to be done; and

evidence is seldom provided that loans are in fact financing seasonal crop inputs or that lenders are not only directly engaged in rural credit services provision in often higher population density areas, but more importantly, they also work with better-off farmers.

The Thailand case has shown that, in spite of the shortcomings that have trapped agricultural development banks in many developing countries, lessons can be learnt from the BAAC. These lessons suggest that it may be feasible to reform agricultural development banks and also greatly improve their banking operations and outreach. This can only be accomplished if certain critical preconditions to facilitate their rehabilitation are in place. These include a favourable financial system environment, a real commitment to the profitability and sustainability of the rural bank operations, and an effective demand for rural financial services.

7.2 The Indonesian case study

This section presents the successful case of reforming a government-owned bank under the deregulated policy environment in Indonesia. The section reports on how reforms were implemented in the government-owned bank of Indonesia to improve access to agricultural credit for the poor. The Bank Rakyat Indonesia (BRI) case illustrates what can be achieved in terms of improving access to the poor under deregulation.

7.2.1 The successful case of reforming a government-owned bank

The BRI is one of a few notable examples of banks that have reformed successfully and achieved the goal of improving access to credit for smallholder farmers. It remains a unique profitable agricultural government-owned bank in Indonesia. The BRI implemented sound policies that included a massive staff retraining programme, which turned its microfinancing unit to become a “tremendous” success. The case of the BRI has shown that if a bank is to succeed in implementing reforms, it requires setting up an appropriate legal and regulatory framework including setting prudential norms and effective internal controls and external supervision, and should entail operational autonomy and freedom from political interference in its daily basis operations (Seibel, 2000a).

The case of the BRI is one of the few unique experiences indicating how innovation in a public bank, with village units, can be successfully restructured. Innovations in rural credit and saving services were successfully implemented and disseminated in Indonesia. Therefore, the Indonesian government first supported innovation, then provided it as a public good for the rest of the financial system. The BRI village units represent a clear example of a public financial institution that has adopted a large range of innovations in order to resolve the problem of market failures**.** These innovations include an information system operated through local supervision and responsibilities, incentives for employees, borrowers and savers, market rules and cost management.

Since the late 1960s, the agricultural credit system in Indonesia has been dominated by the integrated BIMAS project implemented through the BRI. But poor performance led to its collapse in the early 1980s. In the cycle of its weak performance, major reforms were implemented by the Unit Desa (UD) system which led to the BRI being converted into one of the most profitable and viable rural banks in Asia (Meyer & Nagarajan, 2001). Since 1984, the BRI has been well known as being the major provider of microfinance, offering small and microloans to individuals and groups at village level and mobilising microsavings (Seibel, 2000; Christen & Douglas, 2005). By 1989, the BRI was capable of fully providing for its villages' agricultural credit activities from capital savings locally mobilised. Since then there has been an increasing demand by the rural poor for deposit services and growth of savings has outpaced that of loans (e.g. by 1999, there were 2.5 million active borrowers against some 20 million savings accounts). The BRI's rural 3,700 sub-branches account for 78% of savings accounts deposits and 52.2% of all loan accounts among the three leading rural financial institutions in Indonesia (Seibel, 2000a). Millions of clients, from both farming and non-farming enterprises, are borrowing non-targeted loans from this institute. The BRI has also become a successful example of mobilising rural savings which are also used to finance corporate activities in urban areas (Meyer & Nagarajan, 2001).

During the peak of the financial crisis in Indonesia, stagnation occurred in the demand for loans. This happened as a consequence of a general lack of confidence in the market particularly, between June-August 1998. In spite of this, the BRI managed to improve its portfolio, having mobilised 1.29 million additional savers, which led to an increase in the volume of saving deposits in both nominal and real terms. The bank's recognition of the need to reach out to the rural smallholder farmers, including the poor, as well as to wealthier

clients, has partially contributed to its success. The credit policy of interest rate deregulation and a management initiative rendered the BRI to commercialise operations. This was made possible because of the bank having succeeded in transforming its sub-branches into self-viable and sustaining profit centres. In addition, the BRI offered its staff profit-sharing incentives covered its operating costs from the interest rate margin and expanded its lending portfolios to smallholder and poor people from its profits. One major indicators of success can be measured by its lower long-term loss ratio which was only 2.1% (Seibel, 2000b). The BRI is a good reference in the world with its most impressive approach to good practice microfinance by a commercial bank (Christen & Douglas, 2005).

The main features of the reforms implemented at the BRI under deregulated policy environment are highlighted in Box 3.

Box 3: Reforms at the agricultural development bank of Indonesia

Bank Rakyat Indonesia: The Agricultural Development Bank that revolutionised rural finance
The ultimate test came with the Asian financial crisis. When the Indonesian banking system collapsed, the BRI's Microbanking Division remained profitable. At the peak of the three-month crisis, between June and August 1998, local units attracted 1.29 million new savers. At the same time, demand for credit stagnated because of a lack of confidence in the future. By June 1999, the division's 12 month ratio had dropped to 1.5%, substantially below its already low, long-term loss ratio (1984-99) of 2.1%. Savings balances in the units have exceeded loans outstanding by US$ 1.8 billion, requiring new strategies to recycle them within the rural economy.
Many lessons derived from the BRI's experience: Financial sector policies work successfully and create an environment conducive to financial innovations. With attractive savings and credit products, appropriate staff incentives and an effective system of internal regulation and supervision, rural microfinance could be profitable. The poor can save and rural institutions can mobilise their savings cost-effectively. Without credit-biased incentives, the demand for savings deposit services exceeds the demand for credit by a wide margin. Incentives for timely repayment are successful. Transaction costs can be lowered and outreach to the poor can be increased by catering for both the poor and the non-poor with their widely differing loan size demands. Outreach to a vast number of low-income people and financial self-sufficiency are compatible. Agricultural development banks can be transformed into sustainable providers of microsavings and microcredit services.

Source: Seibel (2000b)

The next section highlights the regulation and the supervision which also constituted part of the reforms at the BRI.

7.2.2 Regulation and supervision

According to Seibel (2000b), a sound conducive macro-economic environment ideally comprises: (i) macroeconomic stability with budgets under restraint and inflation under control; (ii) foreign exchange rate deregulation; and (iii) the liberalisation of external and internal trade, resulting in free exchange of goods and services.

As a result, producers, including smallholder farmers, have the opportunity to receive adequate prices for what they offer on the market without unfair competition from artificially low imports prices. This will also enable them to accumulate assets that can be used as collateral, as well as to pay market interest rates on their loans. The BRI has turned into the largest and most successful provider of financial services to the poor and non-poor in the developing world, due to the sound policy framework adopted, of financial deregulation, the granting of management autonomy and carefully crafted financial products. This has set new standards, for both agricultural development banks, and for the whole microfinance industry: the compatibility of sustainability and massive outreach to the poor (Seibel, 2000a). In addition to interest rate deregulation and a management initiative to commercialise operations and supervision, innovative methods of lending to rural clients were also part of the core of the success of the BRI. The BRI's lending technology is addressed in the following section.

7.2.3 The BRI lending technology

The BRI operated 350 subsidised credit programmes for food crops, cattle and poultry production, fisheries, tree crops and the like – with an average repayment rate of 57%. For each production loan, experts had carefully worked out the exact nature of the production cycle, including required inputs, date inputs application, harvesting dates, yields, processes, as well as the marketing channels and sales prices. Loan terms and conditions were strictly designed to fit the features of each productive activity. This approach continues to prevail in many agricultural finance programmes in many countries (Christen & Douglas, 2005). The

methods of P4K (Agency for Agricultural Education & Training) in Indonesia that have helped the poor to form their own financial institutions are reported in Box 4.

Box 4: Transition from self-initiated transition to self-reliance

Self-initiated transition to self-reliance in P4K in Indonesia
Since 1989, the International Fund for Agricultural Development (IFAD) has supported P4K, a credit project which effectively targets the very poor. Field extension workers in the Ministry of Agriculture received special training incentives to identify the poor, organised them into solidarity groups of ten, and helped them to prepare business plans. Through standardised repetitive loans of increasing size, credit was channelled by government-owned Bank Rakyat Indonesia (BRI) through its district-level branch network. BRI enforced timely repayment by cutting off the supply of credit to villages and sub-districts when arrears exceeded 5%. By mid-1998, two risks, diagnosed five years earlier, had materialised. One risk derived from incentives to extension workers geared to group establishment rather than group quality. The other risk stemmed from BRI's limited interest in government credit projects which it found riskier, more restricted in outreach and less profitable than its own savings and credit scheme at village unit level. Of the 49,917 small groups formed, only 70% deposited compulsory group savings, and only 32% had outstanding loans. Of the latter, 42.5% had arrears amounting to 23.4% of the outstanding portfolio. Almost from the onset, many of the participants in various parts of the country found the project's terms of standardised group size and financial contacts too limiting, credit application procedures too cumbersome and actual access to credit unpredictable. By mid-1998, some 9,000 groups had carried the group formation approach a step further and established a total of 1,805 informal associations. Membership size ranged from about 30 to 300 per association, which was more in line with the traditional practices of group formation than a standard size of ten. Women were among the prime movers. Associations mobilised voluntary savings, granted short-term loans without delay and at conditions set by the participants, and charged interest rates geared to the rapid growth of their loan fund. Their resources were entirely internal. Saver and borrower transaction costs were minimal. Rescheduling was frequent, but defaulting was a rare event. The project's well-functioning monthly monitoring system now records the number of associations that are registering as savings and credit cooperatives. This makes them officially-recognised financial institutions and opens up new opportunities for institutional enhancement, financial deepening and increasing outreach to the poor.
<u>In this project, two important conclusions were drawn by users:</u> Only self-reliance guarantees sustained and timely access to financial services; and Formal cooperative status is stifling and therefore avoided under a repressive regular regime in which the government uses cooperatives for purposes of its own. Under a more liberal regime, though, the protection of the law may be useful and provide new avenues for the growth of self-organised financial services.

Source: Seibel (2000a)

7.3 Key characteristics and indicators of success from the BAAC and the BRI

A summary of the key characteristics and indicators of success of the BAAC and the BRI is contained in Table 3.

Table 3: Selected characteristics and performance indicators of the BAAC and the BRI

Item	BAAC	BRI
Year established/reorganised	1966	1983/84
Clientele	Farmers, cooperatives, farmers' associations	Rural low and middle-income households
Financial services	Loans and savings deposits	Loans and savings deposits
Lending technology	Group and individual	Individual
Approximate number of loans outstanding	3.1 million	2.3 million
Volume of loans outstanding	US$ 1,285 billion	US$ 1.2 billion
Average outstanding loan as a percentage of GDP per capita	42	54
Average annual volume of savings	US$ 2.8 billion	US$ 2.6 billion
Average annual volume of savings as a percent of average annual outstanding loans	66.5	199
Number of savers	4.4 million	14.5 million
Approximate nominal effective annual interest rate	8.3 to 15.5	32.7
Interest rate spread	1995:4.1	1994:21.7
Total operating costs as percentage of Annual average outstanding loans	1995:3.5	1994:13.5
Return on assets	1995:0.55	1994:4.8
Percentage of outstanding loans in arrears	8.3	6.5
Subsidy dependence index	1995:35.4	1995: negative

Source: Adapted from Meyer and Nagarajan (2001); Meyer (2002)

Women enjoy a reputation for being good savers and prudent investors. In some cultures, they are the holders of the family purse. As users and user-owners of microfinance

institutions, women involved in the participatory process can make an important contribution to the effectiveness of rural finance projects and, in return, benefit greatly from effective projects. The self-initiated transition to self-reliance in P4K is a very good example of a credit project which effectively targets the very poor in Indonesia. In P4K, a smallholder farmer's development project, the poor have formed their own financial institutions, thereby initiating the transition from a top-down credit project to a genuine self-help movement. Women have been among the first to transform small credit-channelling groups into self-reliant savings and credit associations (Seibel, 2000a).

The major systematic factors that determined the success of the BAAC and the BRI are highlighted by Meyer and Nagarajan (2001). These factors include institutional development, financial infrastructure and policy environment, considered in the next section.

7.3.1 Institutional development

Many factors are important to the success of rural financial institutions in developing countries. These include: a reasonably good policy environment, a long and careful process of institutional development and financial infrastructure. The institutional development factors were highlighted by Meyer and Nagarajan (2001) as follows:

Design of products and services – Financial institutions must design specific products and services to meet two objectives. Firstly, expected demand from prospective clients should consider competition between formal and informal sources. Secondly, the ability of an institution to cover costs and generate profits either as a single transaction or over the expected life of a relationship with a client. The BAAC, for example, has successfully designed products (e.g. to offer very small emergency loans) and technology for short-term working capital loans, without a formal collateral requirement, that formal banks failed to do.

The BAAC and BRI succeeded in developing a product design that meets the credit needs of their clients, particularly the poor, but also enforces the borrowers' ability to repay loans. The strategies to increase borrowers' willingness to repay included peer pressure among group members. In addition, the BAAC imposes penalties on late payments, while the BRI uses positive incentives of interest to stimulate on-time payments. The BAAC and BRI both operate good internal information systems, which enable loan officers to know exactly

when loans become overdue. This allows the loan officers to follow up on clients and arrange for delayed repayment.

Management and governance – Both successful rural banks, the BAAC and BRI, enjoy reputations for possessing a considerable autonomy in day-to-day operations and for being professionally managed. For example, the government of Thailand has consistently appointed effective managers for the BAAC. This was made possible because its governance, rather than political expediency, demanded good management and efficiency, while the founders of BRI have done well with its vision and commitment, and have installed these traits in its subordinates.

Staff incentive system – the BAAC and BRI both use bonus payments and also higher basic salary levels to promote high levels of staff efficiency. Staff salaries are higher than in equivalent jobs in not only public entities but also in the private sector.

Human capital development – The BAAC sets higher educational requirements for potential loan officers, while the BRI prefers to hire staff with lower education levels that better know the local environment in which they work. However, the two case studies use intensive training programmes to pass on particular kinds of skills and to instil the mission of the institution. Expanding credit to new customers in non-farm enterprises and increasing loan sizes for existing farmers require more expertise. Hence, the BAAC runs an Agricultural Development Bank (ADB) technical assistance project to upgrade its operations and staff training. New staffs in both the BAAC and BRI are designated as trainees or apprentices before being hired as regular staff. Furthermore, decentralisation of decision-making is possible in BRI because of investment in human capital development. Their loan officers earn higher levels of loan approval authority as they gain experience.

The factors responsible for the success of the BAAC and BRI and for the two institutions to be regarded as the best examples of rural public banks that have improved access to credit for smallholder farmers in Asia are outlined above. The following section outlines two issues that have negatively impacted on the performance of the BAAC and BRI, namely, and presents alternative ways in which these problems were dealt with and deduces lessons for other developing countries.

7.4 Problems experienced by the BAAC and BRI in implementing financial reforms

According to Meyer and Nagarajan (2001), there are two problems that have been impacting negatively on the performance of both the BAAC and the BRI. The first refers to the interest rate policy and the second to client selection criteria.

Firstly, in some developing countries interest rates for agricultural loans are still being controlled. However, in other countries, even when rural banks have been deregulated, they remain reluctant to raise interest rates. For example, the low interest rate policy of the BAAC in Thailand, though intended to assist borrowers, ended up forcing rural financial institutions to rely on government and donors for continuous subsidies. The dependence of financial institutions on external sources of funds, results in uncertainties and the possibility of political intervention also arises.

In order to mitigate the negative impacts of the financial crisis caused by the policy of low interest rates, governments and donors have been subsidising rural financial institutions. However, this is also becoming a serious problem in the financial industry, because market-oriented financial institutions have to compete with subsidised financial institutions and this hurts the former. Another disadvantage of subsidised financial institutions is that, since loans are treated as grants, the weak enforcement procedures and soft conditions associated with subsidised projects may undermine the repayment culture. An alternative solution to this problem could be that, instead of channelling emergency assistance through financial institutions, networks should be advocated (Meyer & Nagarajan, 2001).

Finally, the issue of client selection needs to be properly addressed. In the event of subsidised credit programmes, client selection usually carries restrictions on the target group (smallholder cotton farmers, smallholder rice farmers, etc). The more narrowly specified the target group, the greater the risk for the lender, due to the non-diversified portfolio. Conversely, the greater the subsidy, the greater the risk for political intrusion over credit allocation processes. Instead of targeting groups, it is argued that rural banks should be able to design and market financial products and services that meet the demands of a variety of their clients, including farmers. Particularly in rural areas, this kind of programmes would inhibit portfolio diversification which is a way of protecting borrowers against systemic risks. Instead, borrowers are argued to select the use of products offered by specific rural financial

institutions on their own. Freedom of choice by client and financial institution enables the development of solid lending relationships whereby clients realise that credit and other financial products are being provided to them because they are perceived as valued clients. Rural lending institutions could choose to assist their specific clients with specific products of interest to them. Products could include group lending (with groups holding weekly meetings). Alternatively, to avoid losses, institutions may require that before seeking a loan, clients should operate a business for several months.

7.5 Conclusion

The experiences of the BAAC of Thailand and the BRI of Indonesia have shown that reforms are crucial to improve the performance of any government bank servicing the agricultural sector. The two cases have shown that, despite the difficulties that have beset agricultural development banks in the past decades, lessons can be learnt from the BAAC and BRI. These suggest that it would be feasible to reform agricultural development banks in other developing countries where governments still seek strategies to improve access to credit for smallholder farmers. Reforming these government development banks/institutions could enhance their financial performance and outreach. This might, however, require careful and progressive processes of institutional development.

In addition, an effective demand for rural financial services, a sound financial sector environment, as well as a real commitment to profitability and sustainability of the operations are crucial in reforming an agricultural development bank. Sound bank management strategies and a considerable autonomy might outweigh the negative impact of the government ownership structure of a formal government development bank. In addition, the adoption of adequate and effective innovative strategies to cope with the costs and risks of lending to agriculture could be effective in extending financial products and services to smallholder farmers.

The most appropriate strategy to address the problem of market failures in developing countries, such as Mozambique, seems to be feasible through re-establishing a rural public bank. Thus, the two case studies (the BAAC and BRI) present promising options for the Government of Mozambique to improve access to credit for smallholder farmers.

CHAPTER EIGHTIMPROVING ACCESS TO CREDIT FOR SMALLHOLDER FARMERS BY GOVERNMENT: AFRICAN EXPERIENCE

This chapter presents the cases of Botswana and Zimbabwe which record certain successful experiences in improving access to credit for smallholder farmers in Africa. The positive experiences from these two cases demonstrate various strategic interventions for dealing with market failures in rural areas with the government playing an active key role.

8.1 The Botswana Case Study

In Africa, Botswana is a good example of how a reformed Government Development Bank can succeed in improving access to agricultural credit for smallholder farmers. This section first indicates how the National Development Bank of Botswana (NDB) was restructured in order to meet the challenges of lending to agriculture and smallholder farmers in a more sustainable manner. Thereafter, other strategic government efforts which include the establishment of parastatal financial institutions through the Citizen's Entrepreneurial Development Agency (CEDA) are presented.

8.1.1 The National Development Bank of Botswana

In order to promote the economic development of the country, the Government of Botswana established a government development bank in 1963, namely the NDB. The NDB is a state bank that operates under the control of a Board of Directors, appointed by the Minister of Finance and Development Planning, and has a mandate to provide loans to finance products and services to entrepreneurs and businesses, including all agricultural projects and game farming. It does not provide other financial products or services such as deposit-taking, overdrafts and foreign exchange facilities (NDB 2006). The NDB initially accomplished its objectives reasonably well during the 1960s and 1970s, but experienced difficulties in the 1980s. By the end of the 1980s, it was evident that the bank required major reforms if it was to fulfil its objectives. Consequently, the bank was restructured in 1993 (NDB, 2000).

Although the literature pays no attention to what led to the NDB of Botswana being reformed, it was clear from the review of literature in chapter three, that the period between

the 1960s and the early 1980s was marked in many developing countries by agricultural planners basically being concerned with searching for strategies that aimed to increase food crop production. For this reason, funds from governments and donors were channelled into these agricultural development banks in order to service smallholder farmers in the form of subsidised rural and agricultural credit programmes, often for specific production purposes. Consequently, the model of the development bank was a top-down conduit of external resources of funds from international donor agencies, central banks or national and/or provincial governments. Thus, it is reasonable to speculate that the former Agricultural Development Bank (NDB) of Botswana could not have been the exception to the rule. Therefore, one can surmise that the NDB also emphasised a top-down hierarchical control, with neither decentralisation nor staff incentives. Yet, it might also have concentrated its credit service provision heavily in a risky farm sector, with poor to non-existent complementary support services for a smallholder farm sector clientele.

This suggests that since the former ADB of Botswana had experienced poor performance during the two decades after its establishment, inappropriate rural finance policies might have resulted in high administrative and operating costs. Consequently, this might have resulted in creating potentially serious problems such as poor loan repayment discipline and bankruptcy. Previously, as in many development banks, the NDB might never have had a chance to become a viable development bank or possess a specialised agricultural credit programme. Therefore, the former development bank of Botswana might also have experienced many of those challenges which led to the government reaching an understanding that there was a need to restructure the bank. Reforms at the NDB were important for the bank to be better positioned to respond to the new situation; the era of economic reforms.

Hence, this might explain the fact that in 1991, the Government of Botswana indicated its intention to restructure the NDB and indeed, an experienced international firm was contracted to carry out the strategy of reviewing the bank. A firm, International Development Ireland Ltd., a banking consultancy specialist, conducted a study. The study consisted of possible ways to implement programmes to restructure the NDB which would rebuild the bank, implementing policies and strategies that would lead to it becoming an effective and efficient tool of government policy in the future (NDB, 2000).

8.1.2 The main feature of the restructuring plan for the NDB

According to the NDB (1995), the main features of the restructuring plan for the NDB included the following:

the staffing levels in the NDB had to be reduced;

the branch office network operated by NDB was too large for the bank's requirements and had to be rationalised, involving the closure of district offices while leaving regional offices largely unaffected;

the bank had to continue exercising its role to serve the entire country, practising the administration of the Financial Assistance Policy which is one of the government's principal tools for economic support and development;

government had to diversify the bank's lending activities since the over-reliance on agriculture (arable and livestock) placed it in a position where it could not avoid the disastrous effects of the prolonged drought that had affected customers in previous years; and

consultants held the view that the bank could not engage in significant volumes of future small-scale lending as these contributed to the breakdowns referred to earlier and that the NDB did not possess the physical capacity to cope with the situation.

One of the reasons mentioned in chapter three with regards to why many development banks of the past did not succeed in their primary objective to improve access to credit for smallholder farmers, was the fact that they had neglected certain key strategies to deal with the risks of lending to agricultural and smallholder farmers. Such strategies for managing the risks and costs of lending to agriculture include diversifying a bank's loan portfolio in terms of lending purposes, loan maturities and market segments. Yet, as discussed in chapter seven, this is the manner in which certain successful financial institutions in the developing countries of Asia, such as the BAAC in Thailand and BRI in Indonesia, rose to the status of an international benchmark in their success in improving access to smallholder farmers.

8.1.3 Lending diversification

Lending diversification formed an important part of the restructuring programme of the NDB. The Government of Botswana approved a process whereby the loan portfolio would be

rebalanced over time in order for the bank to reduce its dependence on the high risk agricultural sector and develop the necessary loan products for other sectors of the economy. The bank's efforts were concentrated mainly on arrear collections. The volume of new lending which started in November 1994, was relatively small, accounting for the decrease in the gross portfolio from P7.87 million to P7.1 million (NDB, 1995). The current major objective of the NDB is to provide a diversified type of financial products and services to the various economic sectors of Botswana, while making profit on shareholders' funds. Target markets that qualify for financing from the NDB of Botswana include: (a) commercial/service industries and tourism; (b) industrial, manufacturing, processing and mining; (c) property purchase and property developments (commercial); and (d) agricultural projects, including game farming (NDB, 2000).

Furthermore, the NDB manages various government projects on an agency basis to support the development of the economy of Botswana. Strategies to reduce the risk of lending to smallholders include reducing dependence on a few sectors by diversifying the bank's portfolio evenly within the agricultural sector itself. The portfolio diversification of the NDB includes the Pandamatenga Commercial Crop Farming, the Botswana Meat Commission Prices and participation in government empowerment schemes such as the Agricultural Credit Guarantee Scheme (ACGS) and the CEDA Credit Guarantee Scheme (NDB, 2006).

The reformed NDB is now a viable, profitable and self-sustaining development financial institution (NDB, 2000, 2006, 2007). As a result, the bank is contributing to the economic development of Botswana by providing opportunities for job creation. The difference between the NDB and the commercial banks in Botswana is that the bank's business is unique in terms of serving the community, especially small, medium and large-scale enterprises and projects. For example, during 2000, P120 million was disbursed, of which P38 million was allocated to small-scale entrepreneurs and P37 million to medium and large-scale projects among other services (NDB, 2000). As a result, in 1998, it became the first bank in Africa to be certified under the International Quality Standards (ISO). Its level of profitability in 2006, for example, translates into an increased return on equity of 10.17 % compared to 8.25 % in 2005. The NDB's total assets grew by 31%, which was mainly attributed to borrowings that increased as a result of the loan sourced from the African Development Bank (ADB), and the profits generated during 2006 (NDB, 2006, 2007).

8.1.4 General lending parameters

According to the NDB (2006), the lending parameters are general but may be reconsidered on a case-by-case basis. These parameters include:

interest rates – the NDB charges fixed and floating rates. Depending on the risk profile, interest rates are negotiable.

repayment frequency – loans are payable monthly, quarterly, annually or bi-annually, depending on the project's or client's repayment capacity.

early repayment penalty interest charge – loans cleared after the scheduled repayment period are subject to penalty fees, calculated based on the amount repaid earlier, in terms of interest charges over six to 12 months. Loans being terminated for the purpose of replacement by high value facilities can negotiate a better termination charge.

owner's contribution/equity – a minimum contribution of 25 % of the total project cost to be spent on the project, either in cash or in kind, is required.

loan repayment period – depending on the purpose and magnitude of the loan and the project's repayment/cash generation capacity, the loan repayment period is from one to 15 years.

grace period – term loans (medium and long term), are given a certain grace period before the loan starts to be repaid but must be justified by the project. Interest may not be capitalised.

The current parameters of lending differ from those of past decades (1960s to 1980s) as they are based on diversifying the bank's portfolios. The NDB became a viable and self-sustaining developmental bank that is capable of lending to both farm and non-farm projects, including lending to smallholder farmers.

8.1.5 Agricultural loans

Despite a decline in the contribution of the agricultural sector to the economy of Botswana from 12% of the GDP at independence to about 2% in 2005, agriculture continues to be an important source of livelihood for many rural smallholder farmers countrywide. Therefore, the government continues to make efforts to revive agricultural production (CEDA, 2006). To

ensure that the agricultural sector is serviced by the NDB, there are two guarantee schemes with a mandate to provide loans for farmers, as mentioned above. The projects under agriculture include: livestock (small and large), crop production, horticulture, agricultural machinery and equipment, agricultural inputs (fertilisers, chemicals, seeds, feed, labour, contract ploughing, land development, etc.), water development projects (borehole drilling and equipment, water reticulation, purchase of existing borehole, other irrigation equipment, etc.), and farm development (purchase of farms and ranches, farm fencing, kraals, farm house, farm machinery, equipment and storage facilities, etc.) NDB (2006).

Agriculture is financed in terms of project viability just as any other business enterprise. However, the government compensates farmers to pay for insurance in case of drought. The government assists farmers through the Agricultural Credit Guarantee Scheme (ACGS) to reduce risks to farmers by paying a premium of 5 % to farmers (NDB, 2007).

8.1.6 Agricultural credit guarantee scheme

In an attempt to improve access to credit for smallholder farmers in Botswana, the government not only reformed its NDB to make it a more viable financial institution, but also implemented other strategies that would impact on improving food security and alleviating the poverty of the Botswana smallholder farmers. For example, in the early 2000s, the Government of Botswana reformulated these programmes, and suspended agricultural subsidy schemes. The government as also agreed to partner with farmers in managing and financing such schemes by means of the Arable Lands Development Programme (ALDEP) and the Livestock Management and Infrastructure Development Project (LMIDP) (Ministry of Agriculture, 2006).

8.1.7 The livestock management and infrastructure development project

The LMID programme was established with these primary objectives: to promote food security by means of improved productivity of cattle and small stock, improve livestock management, and range resource utilisation and conservation. The programme was also aimed to eliminate destitution by providing resources to the poor, including infrastructure for hygienic and safe processing of poultry products. The LMID comprises cooperative poultry

abattoirs, a small stock (sheep and goats), Tswana chickens and guinea production; animal husbandry and fodder support; borehole for animal husbandry and fodder support; borehole/well equipping support; borehole drilling, purchase of borehole/well support and reticulation support programme (Ministry of Agriculture, 2006).

8.1.8 Livestock production loans in Botswana

The vast majority of suitable land in Botswana is natural rangeland, appropriate for the extensive grazing of ruminant livestock, particularly for cattle, rather than for arable production. Despite the persistent droughts that have been hampering the performance of livestock production, cattle, sheep and goats are the major income earners in the agricultural sector in Botswana (Nhori, 2004).

a) Small stock support programme

The small stock support scheme is aimed at assisting poorly resourced smallholder farmers to purchase small stock such goats and sheep. There are two categories of smallholder farmers eligible to access credit from this scheme. The first category includes those who own a maximum of ten goats/sheep while the second category consists of those with 11 to 20 goats/sheep. The criteria for obtaining financial support include that smallholder farmers can access a maximum grant of P12,000 (R9,600 or US$ 1,163.64) in order to purchase a minimum of 30 goats or sheep. The Government of Botswana provides a 100% grant for the first category, while the second category should be able to contribute 10% of the maximum grant in order to be assisted with the remaining 90% of the grant (Ministry of Agriculture, 2006).

b) Loan application procedure

Cattle owners should possess proof of ownership from the local extension agents and headman and a registered cattle brand. Couples married in community of property are regarded as one individual for the purpose of application or group membership. Family groups' memberships are allowed, provided that each individual has his/her own cattle and brand. Groups formed for the purpose of acquiring grants from the LMIDP are all required to draw up a constitution, which would then be approved by the Division of Agricultural Cooperatives. The destitute are assisted in accordance with the criteria of the Ministry of

Local Government. Standard application forms are formulated and made available to applicants through district and local extension agents. Applicants have to state the current numbers of livestock owned, and verified by the local extension agent, while goats and sheep supplied should not be sold within three years. Only the offspring may be sold. Ten years is regarded as the lifespan of each project and during that period farmers should submit returns on the number of their cattle to the extension agent every year. Applications should be submitted to one of the DAHP district offices across the country, for the district officer to verify that the necessary information has been provided. If the application complies with the selection criteria, it is submitted to headquarters for approval. A desk office is established within the Department of Animal Production to receive and process applications and a committee is established to receive and process applications. Applicants are informed in writing whether their applications have been approved or rejected and a copy of this letter is sent to the district office (Ministry of Agriculture, 2006).

c) Monitoring and evaluation

Theoretically, accessing credit or grants is one thing, but using these efficiently to achieve the primary objectives, is a different story. For this reason, monitoring and evaluation of projects are two of the critical requirements for any project to succeed. In the LMIDP, there are three entities involved in the process of monitoring and evaluation of a project, that is, the district office, extension staff and the farmer. According to the Ministry of Agriculture (2006), the manner in which each role player participates in the process of monitoring and evaluation can be highlighted as indicated below.

i. District office

All approved projects are registered and kept by the district office and should reflect updates on project completion. After the approval of the project, the beneficiary is expected to complete the project within six months. The register should also bear a date of approval and date of completion.

ii. Extension staff

To record facility utilisation, the number of births, mortality and sales, monthly visits is undertaken by the local extension agents and this information is presented to the district office quarterly. In line with animal disease control measures recommended by the DAHP, the officers monitor regular vaccinations and tick control procedures followed by farmers.

The beneficiaries are trained by extension officers about management of small stock practices. On a monthly basis, the extension workers visit the flock and produce progress reports. On a quarterly basis, the district officer presents a report to the region and headquarters on livestock performance indicators. Yearly summaries on the reproductive rate, as well as the mortality and off-take rates are provided by the Director's Office in Gaborone.

As is evident from the small stock support programme described above, the case of Botswana is another good example illustrating how a committed government can develop its country and implement rural projects aimed at alleviating the poverty of the people in the villages through developing and implementing strategies to enhance food security. Government efforts in improving access to credit and grants for smallholder farmers were at the core of many of the deliverable government interventionist strategies.

The following section addresses other government guarantee schemes currently accessing loans from the NDB.

8.1.9 The CEDA credit guarantee scheme

According to Zumbika (2000), a programme meant for agricultural development and economic enhancement of smallholder farmers, should no longer be viewed as a programme that would impact on alleviating the smallholder farmers' rural poverty and food security, but should be considered as being more of a business development venture. Therefore, to encourage smallholder farmers to adopt certain required farming technologies, they may be given subsidised credit facilities. Such facilities should be aimed at beneficiaries and possibly for specific commodities, depending on the government's objectives.

Also, in the case of Botswana, the government believes that the agricultural sector has the potential to provide a number of solutions to the problems of unemployment, particularly if agriculture is undertaken in a commercial fashion. However, the sector is dominated by elderly people while the youth, including those with the requisite training, are unemployed or have found jobs in other occupations. It is against this background that CEDA was established by the Government of Botswana with a mandate to promote the development of citizens' entrepreneurship, which was lacking among the majority of Botswana citizens. The

citizens' empowering schemes are provided as subsidised loans, instead of outright grants. They specifically focus on the development of viable, sustainable citizen-owned business enterprises, through development and access to entrepreneurial and management skills training, and the provision of finance, monitoring and mentoring and sharing of risks (CEDA, 2007).

CEDA Credit Guarantee Scheme (CCGS) is the programme launched by the Government of Botswana in an attempt to address the lack of access to credit and the inability of the small and medium scale enterprises (SMMEs) to fulfil the security requirements of financial institutions. The CCGS was created as an effort to motivate and encourage both the commercial banks and other private sector financial institutions to embark on the development of the SMMEs. Through this programme, in 2005, the Government of Botswana decided to create the Young Farmers Fund (YFF) as a fund under the umbrella of CEDA to provide agricultural loans to young people aged between 18 and 35 years. Young farmers can obtain access to credit and entrepreneurial training, so that they could engage in sustainable agricultural activities after having been better equipped with the required skills for running a farming business (CEDA, 2006).

The YYF aims to assist the youth with viable, sustainable-owned agricultural projects by means of improving access to credit to this particular sector of the population for entrepreneurial development. Funds may be used for infrastructure development projects to cover working capital or both. The promoter bears the responsibility to acquire available and suitable land for development of the project. The prerequisite for the success of the project is training, which is provided prior to the disbursement of the loan. Insurance to cover drought and natural calamities is critical and is provided under the ACGS managed by the NDB (CEDA, 2007).

According to CEDA (2006), the main objectives of the Young Farmers Fund include: (a) to foster youth enterprises in agriculture through effective pursuit of opportunities in the agricultural sector; (b) to create sustainable employment opportunities for young people through the development of sustainable agricultural projects; and (c) to promote the development of both vertical integration and horizontal linkages between enterprises and primary industries in the farm sector.

Under the operational and institutional structures of the CEDA, the Board of CEDA appointed a Young Farmers Fund Investment Committee, which in turn, would appoint one of the members, other than the CEDA representative, as chairperson. The Committee would consist of (but not be limited to) representatives from the Local Enterprise Authority, Ministry of Agriculture, and the Botswana National Youth Council. The major function of the Investment Committee is to make investment decisions for, and on behalf of the Young Farmers Fund. The Young Farmers Fund utilises the CEDA infrastructure, an information technology platform, etcetera. A YFF Manager is responsible for the implementation and management of projects approved in terms of it. Youth officers are responsible for projects at the application, evaluation, monitoring and mentoring stages, while the accounts of the YFF must be prepared and reported separately from the main CEDA accounts (CEDA, 2006).

According to CEDA (2007), the specific conditions for accessing credit from the CEDA scheme include the following:

business proposals and projects need to demonstrate viability;

project evaluation (projects need to be evaluated to determine viability and sustainability);

security (promoters are required to pledge assets financed by the CEDA);

agreements (once projects are approved, promoters are required to sign the CEDA's binding projects);

regular reports by the beneficiaries concerning the performance of the project;

willingness to be guided (promoters must demonstrate willingness to be developed as entrepreneurs),

number of loans (at a time, applicants cannot be granted more than one loan and eligibility for further loans is dependent on the performance of the funded project and successful retirement of the initial loan);

management (full-time owned-managed project); and

project location (the location of the project must be approved with the assistance of the Ministry of Agriculture extension services).

Other conditions, according to the CEDA (2007), are that the maximum loan size for a project is P500 000 at a 5% interest rate. The grace period for loans does not exceed 24

months, the interest accrued during the grace period is recapitalised and the repayment period is:

up to P100 000 (about R80 000) would not exceed 60 months;

from P100 001 to P250 000 (R80 000 to R200 000) would not exceed 84 months; and

above P250 000 would not exceed 120 months.

The various strategies implemented by the Government of Botswana have succeeded in achieving the objective of improving access to credit for smallholder farmers across the country and, as a result, the agricultural sector is recorded to have achieved the highest growth in the country. For example, according to (CEDA, 2005; 2006), since 2001, the number of applications in the agriculture and manufacturing sectors in the CEDA guaranteed scheme has been increasing. The growth in the agricultural sector was boosted by pre-appraisal mentoring since most of the requests were technical and were therefore assisted through this approach.

8.1.10 Conclusion

Despite the fact that the documentation sources of the case of Botswana could not provide any performance indicators of the NDB, it was to some extent, useful in showing the role governments need to play if improving access to credit for smallholder farmers is to materialise as a strategy to boost the agricultural sector of the country. This can be achieved through an effort to motivate and encourage both commercial banks and other private sector financial institutions to embark on the development of the economy and agriculture. This could also be made possible by implementing some concrete and tangible strategic programmes, such as establishing an agricultural development bank, and certain parastatal financial institutions such as CEDA and projects such as the YFF Fund. The credit schemes under CEDA have achieved considerable gains in terms of improving access to credit for smallholder farmers. These improvements can particularly be attributed to their special focus on the development of viable and sustainable citizen-owned business enterprises. Other government strategies that led to improved access to credit, particularly as regards the poor, included the provision of grants to the poorest and the provision of agricultural loans to non-poor smallholders at subsidised costs.

Thus, while all the forms of intervention (government, parastatal, and private sector) are crucial for boosting the agricultural sector, it is also important to note that, the role of the government in this process can neither be undermined nor substituted.

8.2 The case study of Zimbabwe

After the independence of Zimbabwe in 1980, the government faced similar challenges to those of the Government of Mozambique, including the shift from the policies designed during the colonial era that favoured white commercial farmers to new and inclusive policies towards developing the smallholder farming sector. Therefore, the government had to design and implement policies to encourage smallholder farmers to adopt modern technology. These policies were meant to enable smallholder farmers to produce reasonable volumes of marketable food and cash crops. Strategies to achieve this goal included the launch by the Government of Zimbabwe of agricultural credit delivery schemes targeted at the smallholder farmers. The aim was to improve access to credit for those who had never before been provided with any agricultural credit facilities.

This section begins by addressing the government strategies that led to the improvement of access to credit for the white commercial farmers in the colonial era. It then presents the shift in paradigm by government in the post-independence era to strategies that led to success in improving access to credit for smallholder farmers. Thereafter, the actual efforts by the government in an attempt to recapture the gains that are currently being threatened by the socio-economic crises facing the country in the current decade are addressed. The final part of this section presents a conclusion.

8.2.1 Government efforts to improve access to credit for farmers in the colonial era

The period of 1945 to 1965 marked the first agricultural revolution in Zimbabwe which was dominated by tobacco and maize, with large-scale commercial farmers producing 80% of the total output (Muir & Blackie, 2006). This achievement was attained in the colonial era and was made possible because of the efforts by the colonial government to finance the agricultural sector by increasing the availability of credit to white farmers. At that time,

technological development consisted of hybrid maize development, cotton insect and disease control, as well as tobacco development (Rukuni, 2006). Among those strategic crops, tobacco production was mainly accelerated by the aid of generous loans and grants offered to British ex-servicemen (Muir & Blackie, 2006).

To improve access to credit for white commercial farmers in Zimbabwe, in 1924 the colonial government established a formal agricultural bank, the Land Bank, with a specific mandate to improve access to credit for large-scale commercial farmers as a strategy to boost the country's crop and livestock production. The Land Bank did well in servicing the white farmers since its establishment until 1971. Black smallholder farmers were not in the group targeted by government and access to credit for them was only possible after the Land Bank was transformed into a parastatal financial institution which was renamed the Agricultural Finance Corporation (AFC). Although the specific mandate of the AFC was to improve access to credit for smallholder farmers, only a few black farmers benefited from this public rural credit institution (Zumbika, 2000).

According to Zumbika (2000), black farmers had to comply with certain conditions of the AFC to access loans. One of those conditions required that they had to be resettled into the so-called small-scale commercial areas (*Matengabyika*). These areas could be leased from the government and were used by the colonial government as a buffer between the ecologically rich large-scale commercial farms and the very poor marginal commercial areas, the former so-called Tribal Trust Lands. An additional condition stipulated that they first had to be trained in farming activities and attain a "Master Farmer" Certificate as a pre-condition for resettlement. However, even after these conditions were met, only a small number of small-scale farmers benefited from AFC loan schemes.

The colonial government succeeded in its strategy to improve access to credit for white commercial farmers. For example, the domestic tobacco statistics indicated that, in general, efforts by the Government of Zimbabwe to improve access to credit for commercial farmers in the colonial era led to an increase in the total area planted to tobacco, yields, and gross value of output between 1968 and 1990. According to TIMB (1998), flue-cured tobacco yields increased from 1,278 to 1,906 kg/ha, while the gross values increased from ZW$ 28,875,964 to ZW$ 97,436,871. This occurred despite the nature of the tobacco industry

which invariably faces a volatile market because the prices are determined internationally and despite the adverse trading position during the trade sanctions imposed on Zimbabwe.

Therefore, at independence in 1980, which coincided with the beginning of the second agricultural revolution in Zimbabwe, the tobacco sector had recorded remarkable increases in the level of output. Tobacco production was higher than the 1965 levels obtained during the first agricultural revolution era (Muir & Blackie, 2006). Hence, it was the responsibility of the government to maintain this position and the strategy during the post-independence era. This required improving access to credit for smallholder farmers. As a result, after the independence of Zimbabwe, there was a shift in paradigm towards favouring smallholder farmers. The next section indicates how smallholder farmers started to benefit from accessing credit from formal financial institutions owned by the government.

8.2.2 Government efforts to improve access to credit for smallholder farmers in the post-independence era

Since independence, the Government of Zimbabwe has always played an active role in extending agricultural credit to smallholder farmers for crop and livestock production. In 1980 and 1981, the government declared that loans would be granted to smallholder farmers in an attempt to redirect institutionalised agricultural credit. The smallholder farm credit scheme was thus established through two statutory financial instruments. This led to the establishment of the AFC which granted credit to smallholder farmers (Zumbika, 2000). Access to credit for smallholder farmers improved while long-term loans were granted to large-scale commercial farmers for infrastructural development projects (Rukuni, 2006).

Immediately after the independence of Zimbabwe in 1980, the AFC was given a new mandate to shift its focus from lending to white commercial farmers to smallholder farmers. From 1980, all loans at the AFC were extended to smallholder farmers. In order for the AFC to successfully perform this role, the government guaranteed all loans to smallholder farmers. The AFC indeed continued to perform this role for almost two further decades from 1980 until 1999 (Zumbika, 2000).

Credit facilities were provided in cash for the purchase of agricultural inputs, farm equipment, machinery and livestock, as well as for the purchase of a farm and working

capital. From 1982 up to 1997, the government ensured that the AFC was well-funded to meet the primary objectives of extending and improving access to credit for smallholder farmers. The source of money channelled by the government through the AFC was made available through various sources, starting with the government itself (e.g. yearly national budget). Other sources included a number of international financial institutions, foreign governments and donor agents, through bilateral agreements. From 1983 to 1994, international development institutions made soft loans available to the government, as well as outright grants for smallholder agricultural lending purposes and institutional strengthening of the AFC to enable it to cope adequately with the increasing demand for agricultural credit. The government also implemented policies that encouraged smallholder farmers to practise more advanced farming methods to enable them to produce a surplus of marketable cash crops such as tobacco, maize, cotton, sugarcane, coffee and tea (Zumbika, 2000).

Through this institutional lending approach, the government has, to some extent, succeeded in its efforts to improve access to credit for smallholder farmers. The figures in Table 4 illustrate this achievement.

Table 4: Loans granted by AFC to smallholder farmers in 1982-1999

Year	Number of loans		Value of loans	
	Number	Percentage change	Value ($Million)	Percentage change
1982	34 710	-	15, 200	-
1983	46019	33	19,200	26
1984	92962	102	42,100	119
1985	88463	(5)	51,400	22
1986	93061	6	58,900	15
1987	91094	(3)	78,200	33
1988	82644	(9)	65,200	(17)
1989	65841	(20)	52,500	(19)
1990	49883	(24)	43,800	(17)
1991	35609	(29)	34,700	(21)
1992	34378	(3)	47,03	36
1993	20979	(39)	56,350	20
1994	17844	(15)	83,790	48
1995	13190	(26)	114,855	37
1996	12736	(3)	116,870	2
1997	22077	73	215,414	84
1997*	5869	(73)	121,305	(44)
1998	353	(94)	30,696	(75)
1999	496	40	35,000	14

Source: AFC (2000)

It is evident from Table 4 that the number and value of loans have decreased since 1997. This was attributed to the withdrawal of donor funding. Nevertheless, it can be concluded that the AFC succeeded in its mandate to improve access to credit for smallholder farmers. This may be attributed to the direct government intervention in the rural financial markets by establishing a financial institution and mobilising funds to be used for lending activities. For example, from 1982 to 1997, there was a noticeable and steady increase in the number of loans granted. In addition, according to Zumbika (2000), the exponential increase in demand for loans by smallholder farmers occurred in response to the shift in paradigm undertaken by the AFC. Smallholder farmers became aware of the advantages of obtaining loans from the AFC that enabled them to adopt modern methods of farming. These farmers also began to realise that the use of modern technology made possible by access to credit from the AFC would enable them to increase their crop production and income. The increasing demand for loans from the AFC occurred in tandem with the government's financial support for the smallholder farmers.

Another reason for AFC's success in improving access to credit for smallholder was that, from 1983 to 1994, it was well funded by international development institutions and donor agencies (DANIDA, Agriculture Development Bank, European Union, The World Bank, etc.). Owing to the level of resource injection into the AFC, it was never constrained in terms of availability of funds in the first decade of its establishment from 1981 to 1990. The amount of funds from international development institutions and donor support was so large that, in 1985 and 1986, the AFC was not able to utilise all the available funds, resulting in a surplus. In fact from 1980 to 1999, AFC accessed funds from not only donors and international development agencies but also from the government of Zimbabwe. This flow of funds enabled AFC to provide agricultural credit for smallholder farmers at subsidised rates, while funds were also used for technical support and the AFC's own institutional development. For example, some of these funds were used to increase the number of its branch and district offices from five in 1980 to 62 in 1999 (Zumbika, 2000). The strategy by the Government of Zimbabwe to improve access to credit for smallholder farmers by promoting cash crops such as tobacco, led to the diversification from flue-cured tobacco, only grown by white commercial farmers, to other types of tobacco (air-cured and oriental) which mainly smallholder farmers mainly began to grow.

The next section is devoted to a discussion of the areas of investment that contributed to the improvement of access to credit for farmers, resulting in an increase in tobacco production and exports in Zimbabwe. These include research and extension, information dissemination, market opportunities and human capital.

8.2.3 Supportive services that contributed to the success of the Government of Zimbabwe to improve access to credit for smallholder farmers

Initially, the contribution of the tobacco sector to agriculture was made possible by white large-scale farmers who were fully supported by the colonial government through various financial institutions, such as the Tobacco Research Board, the auction sale, the Tobacco Marketing Board and production control institutions. Furthermore, farmers supported themselves by playing an active role, organising themselves into the Zimbabwe Tobacco Farmers Association, the Air-Cured Tobacco Association and the Tobacco Research Board (TIMB, 1998). Other government interventions along with the efforts to improve access to credit by the Government of Zimbabwe included the establishment of central marketing agents as a strategy to promote marketing discipline amongst farmers. For example, the marketing of most of the commodities, including grain crops, cotton and livestock, particularly pork and cattle, was secured for farmers through the establishment of the Grain Marketing Board, Cotton Marketing Board, Colcom and Cold Storage Commission. The ultimate objective of establishing the marketing boards was to facilitate AFC's collection of repayments from farmers through placing stop orders with these marketing agents (Zumbika, 2000).

The success of government to promote smallholder tobacco production materialised not only through financing, but also through providing support services such as extension and supervision. This was complemented by the efforts of farmers' associations which played an active role in managing the training centre, as well as allowing the farmers to monitor their own farming activities so as to better apply the new technology of introducing tobacco in their cropping production system. More importantly, smallholder farmers were able to benefit from central facilities and also to share risks and reduce costs of inputs (water and barn facilities and seedbeds), including labour (tobacco harvesting and curing) by working

collectively. Collaborative work also afforded them the opportunity to share their experiences regarding how they could improve their yields and generate greater profit from the tobacco cropping. This is particularly important considering that some technical practices such as curing, especially of flue-cured tobacco, require specialised skills.

However, it is evident from Table 4 that, in terms of the experience of the AFC, the goal to improve access to credit for smallholder farmers was in fact achieved in the first decade but was not maintained in the second decade. Between 1988 and 1991, the AFC did not perform well and this can be explained by the value of the loans which began to decline slightly. Later on, between 1997 and 1999, the AFC did not perform well at all, which can be seen from the further sharp decline in the supply of funds. This indicates that, between 1988 and 1991, AFC's performance started to be threatened by the mismatching of the demand for loans by smallholder farmers and the supply of loans granted by this institution. The reasons that led to the disappointing performance of the AFC are addressed in the next section.

8.2.4 Problems with AFC in the mid-eighties

The AFC encountered six problems as follows:
First, the AFC began to experience high levels of loan default rates in the smallholder sector portfolios. These high rates were partly owing to the drought or below average agricultural season in Zimbabwe during the 1980s, which led to most smallholder farmers producing only a marginal agricultural output. In addition to this, they lacked sufficient knowledge to take advantage of the new farming technology. This also affected the AFC lending portfolio, since certain delinquent smallholder farmers simply did not take credit seriously and did not make any effort to repay the loans.

Second, the impact of political interference also could not be ruled out. For example, certain politicians restrained the AFC officials from taking the necessary steps to recover the loans. As a result, by 1987, the level of loan default among smallholder farmers had reached almost 50 percent. Political interference in the management operations of the AFC also resulted in a culture of bad discipline with regards to credit.

Third, since the government guaranteed all loans by the AFC to the smallholder farmers, it was expected that the AFC would be reimbursed for the loans it failed to recover. However, when the government began to experience a deficit in its national budget, particularly, when this increased every year, it did not honour its obligations to the AFC. These problems continued and even worsened when international donor agencies, including the World Bank and the International Monetary Fund, pressurised the government to reduce its budget deficit. The high level of loan default probably contributed to funding agencies to reduce their support to the AFC.

The AFC experienced the worst trend regarding the decline in the number of loans granted to smallholder farmers (from 13 190 to just 469) for the period 1995 to 1999 (see Table 4). According to Zumbika (2000), this occurred as a result of the recommendation by the government to reduce subsidies to parastatals as part of the Economic Adjustment Programmes.

Fourth, the unfavourable macro-economic environment that prevailed from the end of the 1980s through the 1990s had a negative impact on businesses. Therefore, the efforts of the farmers were not adequately rewarded and this discouraged them from adopting new farming methods. Furthermore, the markets also failed to reward them not only in terms of the prices but also failed to motivate them to continue to produce crops profitably (Zumbika, 2000).

Fifth, market failures derived from the fact that the use of AFC credit facilities and adoption of modern technologies remained supply-driven. Even when there was no longer any compelling demand by the beneficiaries for credit, politicians continued to persuading smallholder farmers to apply for credit with even more attractive soft credit arrangements (Zumbika, 2000).

Finally, the disruption of the marketing boards in the 1990s resulting from the Economic Structural Adjustment Programme forced them to commercialise to survive the economic crises that were beginning to affect most of the institutions that depended heavily on the government subsidies. Therefore, with the commercialisation of the marketing boards, the AFC was left with only the poor credit discipline and the high incidence of moral hazards that had been cultivated at least during the last decade of its existence. This led to a further

decrease in the loan repayment rates of the farmers. In addition, the majority of the smallholder farmers were not sufficiently educated in matters of credit (Zumbika, 2000).

The AFC realised that the smallholder farmer's credit system would no longer be viable and sustainable, particularly because government no longer guaranteed the loans after 1985. Therefore, the AFC had to revisit its credit delivery system and the overall management of the smallholder agricultural lending portfolios. In addition, the undue interference by politicians had to be addressed. The next section addresses the reforms implemented by the AFC.

8.2.5 Reforms of the AFC

According to Zumbika (2000), a pilot project was introduced between 1988 and 1990 to continue addressing credit needs of the smallholder farmers. The World Bank and IFAD funded this pilot project. Reforms included the following:

The management adopted a policy whereby the AFC would not make available further credit facilities to any client with loan arrears in its portfolio.

One of the remedies to reduce the incidence of loan defaults was a shift in lending technology from an individual to a group approach. A number of ten to 30 farmers would have to come together as a group in order to apply for and repay the agricultural loan.

The lending operations were also restructured: it was segmented into two divisions, namely the Commercial Operations Division and the Development Operations Division. The former division was charged with extending credit facilities to large-scale commercial farmers while the latter dealt with the provision of loans for smallholder farmers.

a) Group lending methodology

In order to render the smallholder credit system more sustainable, a group lending methodology was introduced as a new requirement for the smallholder farmers. The group would be structured to elect a group committee composed of a chairman, secretary, and treasurer. The responsibility of this committee would be to mobilise loan repayments by the

group members in order to repay the AFC, while the treasurer would be responsible to liaise with the AFC official to negotiate a group loan. The advantages of the group lending methodology include: (i) a reduction of the incidence of loan defaults since the joint liability of all group members to the several group loans from the AFC was expected to exert peer pressure on the members and encourage them to meet their portion of the group loan; and (ii) a lessening of transaction costs since, instead of lending to a single individual client, the AFC would now be lending to a group of ten to 30 smallholder farmers. Consequently, this would reduce the number of staff required to handle the loans (Zumbika, 2000).

b) Interest rate policy

The policy of interest rate differentials was adopted, meaning that the loans granted by the Commercial Operation Division scheme would be charged at market rates while those from the Development Operation Division, for the smallholder farmers, would be charged at subsidised interest rates. The differences in interest rate charges by these two divisions became quite large, to the extent that by 1999 when the AFC was preparing for its transformation into a commercial bank, then Agribank, the difference in the interest rates had reached about 20 percent (Zumbika, 2000).

c) The AFC's linkage programme

In order to fill the gap left by the government as a guarantor of the loans for the smallholder farmers, the AFC also introduced the Linkage Programme. According to Zumbika (2000), the AFC was the first credit institution in Zimbabwe to introduce this system of credit delivery to smallholder farmers which was made possible by the support funds provided by AFRACA. By means of this financial support and the technical support of the GTZ, the deputy general manager was sent abroad to visit similar financial institutions well known for their success in implementing such a credit system amongst smallholder farmers in the developing countries of the Far East, namely, Thailand, Indonesia and the Philippines. The financial institutions visited had also started out as public rural financial institutions mandated to service the smallholder farmers during their transaction phase towards being transformed into viable agricultural commercial banks. The advantages of introducing the Linkage Programme at the AFC are: Firstly, the corporation would be giving one lump sum to the third party representing a group of farmers, while the AFC's administrative costs were also reduced as

well. Secondly, the loans granted through this programme would be fully secured by the guarantee entered into by the NGO which would therefore be the actual loan applicant according to the AFC books. This was a strategy to reduce the incidence of the high rate of loan defaults.

The need to reform the AFC, thus transforming it into a viable and sustainable public rural institution, occurred during the time of the Economic Structuring Adjustment Programmes in Zimbabwe. These programmes were adopted as a way of re-aligning the national economy, particularly with a view to reducing the huge national budget deficit, then at unacceptable levels. One of the measures adopted by the Government of Zimbabwe under these programmes was to reduce the subsidies to parastatal institutions such as public companies. Without the much needed government support in the form of annual subsidies, in order for the parastatals to survive, almost all of them had to engage in a commercialisation programme on their own under the harsh economic environment which prevailed in Zimbabwe in the 1990s. Therefore, since the AFC was one of the major parastatals, it was required to embrace this shift in paradigm by engaging in transforming itself into a fully fledged commercial bank which was supposed to provide a diversified range of financial products and services to the public at large rather than continuing restricting itself to only lending to clients engaged in farming activities. It was on the grounds of the new macro-economic government policy that on 31st December 1999, the AFC ceased to exist. The closure of the AFC gave rise to the emergence of the Agricultural Bank of Zimbabwe (Agribank). Agribank was established as a commercial bank on the 1st January 2000 and it had to assume all the previous AFC assets (Zumbika 2000).

8.2.6 The government intervention strategy since 2000

The government financial institutions supporting smallholder farmers include the Reserve Bank of Zimbabwe, Agribank and the Ministry of Agriculture. The Government Extension Department (Department of Agricultural Research and Extension – Arex) works out packages of production costs in order to estimate what is required in terms of standard requirements of inputs, labour and infrastructure development. Agribank then allocates the required funds for the crops (Vela, 2007).

a) Agricultural Development Bank approach in the 2000s

In 2000, the Government of Zimbabwe established an agricultural development bank, Agribank, as one of the major strategies to recapture the past gains of the government in its efforts to improve access to credit for smallholder farmers after the AFC had started performing poorly in the mid 1990s until it finally collapsed. To fill the vacuum that had been left by the AFC, the government created the Agricultural Development Assistance Fund (ADAF) under the umbrella of Agribank (Zumbika, 2000).

b) Conditions of access to agricultural credit at Agribank

According to Vela (2007), the following are the conditions for farmers, including smallholder farmers, to access credit from Agribank of Zimbabwe:

proof of legal age to borrow and identification of particulars;

proof of land ownership: communal land holders and rural resettlements;

programme of action: the farmer indicates the size of land, what crops he/she wants to grow and other relevant information on the application form; and

a credit track record: the farmer has to explain how he/she has been performing in terms of credit repayment.

In Zimbabwe, the prices of inputs are continually increasing. Measures to cope with inflation at Agribank include the policy that the bank actually prefers to provide loans in kind rather than in cash. According to Vela (2007), strategies to promote small-scale agricultural production include the fact that smallholder farmers, working on one to six hectares of land, can access credit from Agribank in the form of inputs (e.g. fertilizer, chemicals, etc.).

8.2.7 Conclusion

The case of Zimbabwe has demonstrated that direct government intervention in rural financial markets through establishing both the Land Bank (agricultural government bank) and the AFC (a rural parastatal institution) has succeeded in its specific mandate of improving access to credit for smallholder farmers. Despite the fact that in the past, the colonial powers were only concerned with assisting white commercial farmers, it can be

concluded that when appropriate strategies are implemented and the government takes the lead in the process, improved access to credit for farmers can be achieved.

The success of AFC in improving access to credit for smallholder farmers can be attributed to the Government of Zimbabwe having succeeded in the design and implementation of policies which encouraged smallholder farmers to adopt modern technology and the launch of agricultural credit delivery schemes targeted at the smallholder farmers. This was made possible through two statutory instruments which allowed government to guarantee loans to smallholder farmers. The government also ensured that the AFC was well-funded by government and donor agencies. International development institutions made soft loans available to the government and outright grants for smallholder agricultural lending and institutional strengthening of the AFC.

Thus, the success of the AFC in improving access to credit for smallholder farmers may be attributed to the role played by the government of directly intervening in the rural credit markets through establishing the credit institution, mobilising funds and financing it to enable it to fulfil its mandate. In addition, the government also established and invested in other appropriate institutions which complemented the role of AFC and ensured that practical farm problems were addressed and marketable crops were produced. All this was made possible through government investment in human and physical capital.

Unlike in Mozambique, where farmers have to sell their tobacco to creditor firms, which generally cause many problems for farmers due to unfair grading practices, positive lessons can be drawn from the case of Zimbabwe. These include research into market opportunities which led to improving not only tobacco yields but also quality standards and, more importantly, increased the profit margins for farmers, marketing boards and tobacco firms.

However, the AFC indicates that the goal to improve access to credit for smallholder farmers achieved in the first decade of its establishment was not maintained in the second decade because of problems with regards to both demand and supply sides. The problems on the demand side included poor credit discipline, the high incidence of moral hazards, while smallholder farmers also lacked sufficient knowledge to take advantage of the new farming technology. The problems on the supply side included political interference in the management operations of the AFC. This has resulted in high levels of loan default rates in

the smallholder loans portfolios, followed by a shortage of funds. Mismanagement problems have also contributed to the withdrawal of donor funding support. This has led to a decrease in government support with respect to loan guarantees for the smallholder farmers, while unfavourable macro-economic conditions and the disruption of the marketing boards, have also contributed to the collapse of the AFC.

As a result, AFC had to be reformed and consequently the Agricultural Development Bank of Zimbabwe was established. Thus, the establishment of an agricultural development bank by the government also demonstrates that improving access to credit for smallholder farmers can be achieved if the government plays its role yet without interfering politically in the operations of the bank. Furthermore, proper lending conditions should be designed and implemented. In the case of the Agricultural Development Bank of Zimbabwe, the creation of an agricultural development assistant fund under its umbrella was a positive initiative. However, strategies to improve access to credit for smallholder farmers in Zimbabwe would not have been successful without the provision of other supportive services by government.
In short, the following lessons may be drawn from the case of Zimbabwe:

a) It takes many decades for research investments to start producing tangible results in a country before it can impact positively on farming operations Positive results require improvements in the know-how of farmers and experienced professional staff that work with farmers; and

b) Strategies to promote marketing discipline amongst farmers and to facilitate a formal financial institution's collection of repayments from farmers should involve guarantees for loans to smallholder farmers. In addition, funds need to be allocated not only to for operating costs and lending activities, but also technical support and the rural financial own institutional development.

CHAPTER NINE

REQUIREMENTS TO BE MET BY RURAL FINANCIAL INSTITUTIONS TO ADDRESS THE NEEDS OF SMALLHOLDER FARMERS

This chapter presents guidelines for Mozambique to devise appropriate government strategies to address the credit needs of smallholder farmers. This was accomplished by emphasising the requirements that formal rural financial institutions should meet in order to address the needs of smallholder farmers.

This chapter first discusses the institutional structure and specific financial products that were developed by BAAC, BRI, NDB and Agribank. In addition, it considers the approaches adopted by parastatal and private rural financial institutions such as CEDA, and input credit schemes like TIMB, to minimise the costs and risks of lending for smallholder farmers. This is followed by a discussion of strategies implemented by each of these financial institutions to deal with the problem of high default rates and to determine their respective institutional viability and sustainability. To address the problems faced by the Government of Mozambique in attempts to improve access to credit for smallholder farmers, the type of financial products that need to be provided by an agricultural government financial institution is outlined. Recommended solutions are based on lessons drawn from international experiences and an analysis of smallholder farmers' credit needs in Mozambique. Finally, the conclusion of this chapter is presented.

9.1 Institutional arrangements and specific financial products

This section addresses the main institutional arrangements and specific financial products that need to be adopted and/or adapted by innovative rural financial institutions.

The results from previous chapters in this study have shown that, in a financial institution, the choice of appropriate lending technology is critical. It would reduce the costs of lending that are excessively high in rural areas, not only for lenders, but also for borrowers. Therefore, rural financial institutions should search for an appropriate intervention strategy in rural markets that ensures that the size of the market is compatible with the nature of their clientele. Contrary to the traditional banking model, which is a typical example of a prohibitively expensive financial institution for the rural poor, the challenge that needs to be

faced by government rural banks is to design financial products that meet the expectations of clients in terms of their credit needs. These financial institutions need to develop various strategies, including the following.

9.2 Institutional design and innovation

The lack of access to technology in rural financial markets is often a constraint in organisational design and leads to inappropriate product design, which often does not fit the credit needs of smallholder farmers. The absence of credit information, poor enforcement, general contract design and uncertain repayment capacity that usually characterise the rural areas of many developing countries, including Mozambique, lead to poor institutional design**.** Lessons drawn from the four cases reviewed in this study reveal ways to address these challenges for rural financial institutions in Mozambique. Enforcing mechanisms are critical in rural financial markets, since these would lead to better maintenance and enforcement of a legal framework as well as prudential banking practices. In turn, this would help to reduce the transaction costs of lending to smallholder farmers in rural areas and corruption.

The appropriate product design by rural banks should seek to broadly define, not only the development objectives but, more importantly, profitability (through revenue-enhancing pricing policies and efforts to reduce costs). The financial viability of these institutions would always remain a concern and, therefore, it needs to be equally addressed. Thus, the improvement of financial intermediation, *per se*, has to be included among these goals. In addition, the management autonomy of rural banks should be as important as their non-financial objectives. The sound growth and strength of financial institutions must, therefore, be a design priority.

Loan recovery is the best indicator of the success or failure of financial institutions. This was confirmed by the two successful financial institutions, BBA and BRI, who reported arrear rates of less than 10% and much lower actual loss rates. These two Asian cases demonstrated that several factors determine repayment rates. The first factor determining the success of a financial institution is its product design, as it improves the borrower's ability to repay. Micro-loans and the setting of repayment schedules consistent with a borrower's cash flow can be very effective in achieving high rates of repayment. On the other hand, high dropout rates might be an indication that technologies and loan products need to be altered.

The second factor to be considered in improving the performance of a financial institution is to increase the borrower's willingness to repay. This can be encouraged in the following three ways:

peer pressure among group members may encourage the expectation of future loans with superior terms and conditions which induce good repayment culture on joint-liability loans schemes;

use of incentives -- for example, BAAC imposes late payment penalties, while BRI uses positive incentives of interest to stimulate on-time payments; and

timely information -- ,financial institutions must improve their ability to obtain timely information about clients.

Therefore, financial institutions must improve their ability to obtain timely information about clients. All the cases of BAAC, BRI, NDB, CEDA, TIMB, and Agribank possess good internal information systems. This enables the credit officer to be informed timely about when loans become overdue and makes it easier to follow up with the clientele and effectively arrange for repayment.

i. **Information on the credit worthiness of prospective borrowers** – This is extremely important in the process of loan appraisal. The ability of the prospective borrower to present a realistic investment plan and loan application and transparency in client affairs decision making process, are critical for the lender. The collection of detailed market and client information that are required for the loan appraisal process represents a costly up-front investment for rural development financial institutions. It also provides vital baseline information on first-time clients (Klein *et al*., 1999). For example, the Government of Thailand provides special credit lines for emergency operations. This reflect the responsiveness of BAAC to its commitment in dealing with the risks of lending to smallholder farmers particularly, in the event of not only external price and market shocks but more importantly, in the case of natural disasters. Special credit lines for emergency operations are also in place at the NDB, while Agribank relies more on insurance schemes. The critical point here is that rural financial institutions need to address the risks of lending to agriculture provoked by external forces such as vagaries of weather.

ii. **Collaboration with organisations** – Rural lenders can reduce the credit risks associated with lending to smallholder farmers by collaborating with organisations (e.g. NGOs, non-financial support service organisations, and local extension staff), which have a long-standing culture of working with prospective farmer-borrowers. Collaboration with such organisations has the advantage of providing the agricultural lenders with useful information on the conditions of farming, the credit worthiness and the management skills of their borrowers (Klein *et al*., 1999). The cases of the BACC, Agribank, the CEDA and the NDB have also confirmed the power of partnerships with government extension agents, local authorities, NGOs and the private sector.

iii. **Political interference** – One way for state rural banks to avoid political interference is to appoint managers and give them the power to make lending decisions, including the terms and conditions for loans. The decisions need to be autonomously taken by the financial intermediary instead of being externally imposed by presumed international donors and government. Therefore, the operational structure of rural banks needs to be decentralised by means of accountability, adequate risk management strategies, using appropriate technology, and appropriate investment in human capital that would be capable of operating these banks efficiently.

iv. **Management and governance** – The lessons from the BAAC of Thailand, NDB of Botswana, and the BRI of Indonesia have demonstrated that successful financial institutions require governance rather than political expediency, which demands good management and efficiency. Hence, if a rural public bank is to be established in Mozambique, the government needs to consistently choose good managers that will effectively run the bank in a profitable and sustainable manner. Alternatively, based on the experience of Indonesia and Botswana through the BRI and CEDA respectively, the vision and commitment of the bank has to instil these traits in its subordinates.

v. **Human capital development** – Experiences in the four cases reviewed in this study suggest that recruiting and hiring policies are crucial to appointing high quality employees. To improve access to credit for smallholder farmers engaged in non-

farming projects and increase loan sizes for existing farming projects, greater expertise and technical assistance, as well as staff training are required. As evident in the case of the BRI, before new staffs were hired as regular staff, they can be assigned as trainees or apprentices. Therefore, investing in human capital development may make decentralised decision-making possible.

vi. **Incentives** – To improve the operational efficiency of managers and bank staff, incentive schemes need to be in place. Most successful institutions are well-known for employing performance-based incentive systems for staff and management. For example, to encourage high levels of staff efficiency both the BAAC and the BRI use bonus payments. They also use higher base salaries to stimulate employees' desire to retain their employment. These kind of performance-based incentives encourage each loan officer to improve his/her performance. Incentives for borrowers also need to be introduced to promote timely loan repayments.

vii. **Client selection** - Subsidised credit programmes are usually restricted to the specific target group (smallholder cotton farmers, rice farmers, etc). The narrower a specified target group, the greater the risk for the lender due to an undiversified portfolio. In addition, whenever credit allocation is concerned, the greater the subsidy, the greater the potential for political intrusion. Rural financial institutions need to design and provide the market with products that meet the demands of their clients, including smallholder farmers and the poor. In addition, instead of clients being targeted by a specific programme, they should be able to choose products offered by particular rural financial institutions. Therefore, freedom of choice should be exercised by both client and lenders. This enables the development of a solid lending relationship whereby borrowers realise that efforts to improve access to agricultural credit by the government are being made because they are perceived as valued clients. Rural credit institutions can choose to market specific products of interest to specific smallholder farmer clients.

9.3 Institutional and financial viability

The main problem of government agricultural development banks has been the lack of institutional and financial viability. However, according to (Gonzalez-Vega & Graham

1995:18), "only the appropriate organizational design and proper incentive structure will make it in the interest of decision-makers to secure viability".

The protectionist solutions followed during the previous decades to address rural financial problems were reflected by the lack of viability of the organisations involved. Financial viability is fiscally feasible and, most importantly, it entitles the adequate incentives schemes among both lenders and borrowers involved to improve repayment discipline in financial intermediaries. For example, in their efforts to reduce losses owing to adverse selection, institutional lenders provide subsidised credit programmes which led to interest rates being too low, while liberalisation of interest may lead to interest rates being too high and to credit rationing. In attempts to address these problems, some researchers recommend interest rate ceilings. However, interest rate constraints also lead to credit rationing and the interest rate ceilings imposed previously failed to increase access to credit (Gonzalez-Vega, 1994). Therefore, a balance needs to be established in order to achieve both outreach and institutional sustainability. Experience gained from the four cases researched in this study indicates that the needed balance can be achieved by the strategy of rural financial institutions seeking to continuously diversify their lending portfolios, and charging differentiated interest rates according to the type of clients, type of loans, and lending methodology.

a) **Loan collateral –** In order to overcome the problem of the lack of physical assets amongst smallholder farmers, required by banks as conventional collateral, rural lenders have developed innovative approaches for collateral substitutes. These replace more conventional types of loan guarantees and may be effective tools to improve the smallholder farmers' loan repayment incentives (Klein *et al*., 1999). The cases of BAAC, NDB and Agribank also emphasise collateral substitutions in their lending criteria.

b) **Interest rates** – interest rates must be set reasonably high, to enable rural lending institutions to earn income that would cover operating costs and losses. Interest rates must be positive in real terms not only to stimulate savings mobilisation for lending, but also to enable owners to make enough profit. That is, rural financial institutions should be free to determine the price of their loans and other services to cover costs and risks. The policy of fixing rate structures for certain sectors or groups of clients, such as the poor or smallholder farmers, undermines sustainability (Meyer &

Nagarajan, 2001). Lessons from the four cases reviewed in this study indicate that improving access to credit for smallholder farmers and the poor can be achieved without subsidising certain loans. What is important is portfolio diversification and charging differentiated interest rates, depending on the size and type of loan and borrower.

In addition, in order for innovative development banks to improve their lending performance, they need to protect their portfolios from inflation, as well as effectively collect their loans to be able to grant new credit. Rural financial institutions or banks need to aggressively mobilise local resources (local savings, money transfers, and insurance schemes) to enable the expansion of the variety of their services, improve the quality of these, reduce the transaction costs of lending to smallholder farmers and better support their clientele, thereby increasing their outreach.

9.3.1 Demand-driven approach and institutional viability

In the past, the "operations of state-owned agricultural development banks were characterized by borrower domination" (Gonzalez-Vega & Graham 1995:19). However, in terms of the current advocated rural bank models, all practices and procedures need to be designed along with demand-driven interest, for the sake of depositors and of the institution's viability. While subsidised credit programmes may be needed to extend financial products for the poorest smallholder farmers, they have to be kept at a lower level. Simultaneously, strategies are needed to uplift the skills of clients in order for targeted clientele to graduate from beneficiaries to business partners (clients). Therefore, lending activities should be complemented by training activities, encompassing business management perspectives. In all four cases of this study, training for both farmers and staff members, which led to improving repayment capacity of clients, was emphasised. Consequently, reasonable guarantees of loan recovery also need to be properly addressed according to the various classes of clients (smallholder vs. large farmers, and poor vs. rich clients). Innovative rural institutions also need to build a solid relationship with their clients by trusting their borrowers' decisions and drawing on simplified and flexible lending technologies. This is necessary to minimise implicit costs, which have been high and disproportionate for micro-loans and marginal customers such as the impoverished smallholder farmers.

9.3.2 Sustainable financial institutions

Savings mobilisation is also directly related to institutional viability and has much advantage for the financial institution. Deposit savings mobilisation provides lenders with useful information about the potential clients, facilitates the accumulation of a down payment that can serve as a deductible in any credit agreement, and builds a basis of mutual trust between lenders and borrowers. Thus, savings provide some solutions to the problems of imperfect information and promote repayment. Deposits also contribute to institutional independence, sustainability and an institutional environment that encourages managers and staff (Gonzalez-Vega, 1994). As regards Mozambique, a public rural bank seems to be the most appropriate formal financial institution to mobilise savings.

9.3.3 Design of products and services

Rural financial institutions should design specific marketable products and services to meet the demand for financial services from prospective borrowers and to generate profit. For instance, the BAAC's success may be attributed largely to the design of appropriate products (e.g. to offer small emergency loans) and technology for short-term working capital loans without collateral requirements.

9.4 Institutional requirements from the viewpoint of potential clients and policy-makers in Mozambique

This section deals with the perceptions of the key informants (smallholder farmers and government representatives) on the basic requirements that must be met by agricultural financial institutions in Mozambique.

According to Chirindza (2006), seven requirements must be met by a government rural financial institution. These include:

a) Human capacity building

Both the credit practitioners and borrowers need to be trained with regards to matters of credit and farming activities. Credit institutions must provide some kind of training

programmes for smallholder farmers before credit can be made available to them. This should enable potential smallholder clients to understand that they are business partners with the lenders. Furthermore, potential smallholder clients need to understand the business in which they will be involved (savings and credit) before they are afforded the opportunity to engage in it.

b) A compromise is needed between the two partners

After the approval for credit has been granted, a compromise has to be reached between the lender and borrower. This can be done by signing a document that clearly states the responsibilities of each party. Risk-bearing by both lenders and borrowers must be accepted so that, in the case of a natural calamity, farmers alone are not penalised.

c) Lending methodology

A group approach should be the most appropriate lending methodology for smallholder farmers who often lack collateral to secure loans.

d) Monitoring

This must be a requirement for rural lenders. Bank officers have to check "*in loco*" the conditions declared by the borrowers as a group or individually to secure the loan. Factors such as the kind of activities to be undertaken (crops or livestock) and type of crop to be cultivated (irrigated or not, horticulture, staple food crops or perennial) are also important in order to provide the appropriate lending product and to define the terms of repayment.

e) Portfolio diversification

Financial institutions must diversify their lending products. This means that aspects of marketing the produce of smallholder farmers need to be taken into consideration instead of restricting lending activities to farming purposes.

f) Fungibility of money and flexibility

"Credit in kind is the same as credit in cash. There is no need for financial institutions to flee from providing credit in cash to their client. Loans in kind can be exchanged into cash. Smallholder farmers only need to be accorded access to credit. It does not matter what kind of credit is provided to them. However, if the financial institution feels comfortable in providing agricultural credit in kind, then it is fine, but flexibility is required. Reimbursement

schedules should fit the type of the activity (the cycle of the crop or the animal) being financed" (Chirindza, 2006).

g) Savings requirements

Compulsory savings being undertaken before credit is granted represents the best way to promote a culture of local savings deposits in rural areas, advocated by certain schemes of savings and credit groups such as cooperatives.

For example, according to Teyssier (2006), compulsory savings before credit is provided offers the following advantages:

the system is sustainable, since the organisations do not depend on external sources of funding alone, which usually do not arrive in time or are accompanied by pre-determined conditions of accessing the loan;

since the borrowers are members of the cooperative, they know each other better and this makes the process of selection much easier and efficient. By using the farmers' cooperative, there is a guarantee of selecting only those with good portfolios in savings management. It is also easier to assess the capacity of repayment per month based on savings capacity;

there is also a guarantee that the loan will be fully repaid, since the money used for loans comes from their own source of savings; and

therefore, saving serves as a guarantee for credit.

In addition, according to Carrilho (2006), so as to minimise the risks and costs of lending to smallholder farmers, credit facilities should be provided to them only if these are directed to a specific cash crop. To secure lending transactions, the provision of agricultural insurance is important so that banks are informed and covered prior to losses resulting from upcoming bad weather. Access to credit for smallholder farmers must be designed to fit local conditions.

Therefore, in order to improve access to agricultural credit in Mozambique, Carrilho (2006) argues that the four sustainable requirements mentioned below must be met:

Firstly, smallholder farmers must demonstrate their ability to save, the history of which must be assessed. To fulfil this requirement, the smallholder farmer must possess a savings account

in order to secure the risk of a loan or to provide a guarantee to the financial institution. Secondly, the agricultural sector must be modernised (new technology for land improvement, irrigation pumping, etc.) in order to reduce the risk of lending for banks and allow smallholder farmers to produce a surplus and commercialise their output. Thirdly, a favourable legal environment is important. This means that insurance enterprises and legal institutions must operate properly so that they can partially resolve the problems of moral hazard, ownership, etc. Fourthly, in order to satisfy the real demand for rural credit services, the government should subsidise the poor among smallholder farmers. Subsidies can be provided in cash or kind.

9.5 Conclusion

The requirements that need to be met by rural banks or financial institutions can be fulfilled by addressing many of the challenges associated with the risks and costs of lending to smallholder farmers. A functional rural financial system plays the role of allocating scarce financial resources efficiently for both productive and non-productive purposes, and social investment must gradually reduce the transaction costs for institutions and their users. Thus there is hope for rural financial institutions, including a public rural bank, if these were to be established in Mozambique, particularly if they comply with the requirements discussed in this chapter. However, in order for this to materialise they would be required to implement innovative ways of lending and managing their clients, be capable of mobilising their own resources, provide adequate financial services, cover their operational and administrative costs from their operational income earnings and profits, guard their capital resources against erosion from inflation and non-repayment of credit, while making an effort to achieve not only their own sustainability and viability but also outreach.

Thus a functional rural financial system requires that users be willing and able to pay appropriate interest rates. Rural and agricultural development also requires viable and sustainable financial institutions, which serve whole segments of potential clients, including the poor, the very poor and the non-poor. It also requires self-reliance, good governance, sound practices as regards managing farmers and clients in general, an appropriate incentive system that includes both the lenders and the staff members, and the political will to implement effective reforms and adjust them whenever there is a need to do so. These are the crucial ingredients for any rural bank or financial institution to succeed in improving access

to credit for smallholder farmers, provided that it adopts a demand-driven approach and the ability to design products that fit the needs of its varied clients.

CHAPTER TEN

SYNTHESIS AND DISCUSSION OF THE RESULTS

This chapter synthesises and discusses the results of the study. The first section considers the efforts by the government of Mozambique to improve access to credit. The second section discusses the main findings from the case studies. Thereafter, based on the findings of the study in Mozambique and other countries, the requirements to be met by rural financial institutions in the country are discussed.

10.1 Government strategies for improving access to credit in Mozambique

10.1.1 The development bank approach

The government efforts in this respect included both direct and indirect interventions. The former included establishing a development bank, in 1977, and subsequently, parastatal rural financial institutions (credit corporations and development funds). Indirect government intervention strategies included the liberalisation of interest rates in 1994, and that of the rural financial markets (1996-1997) which led to the privatisation of the former BPD. More recently, in the 2000s, the government has engaged in the granting of concessions to agribusiness firms (in the private sector) as a strategy to promote the production and commercialisation of cash crops in the country.

The findings of this study indicate that the approach taken by the development bank did not succeed in executing its mandate owing to a variety of factors; a number of other studies also support this finding. For example, Assane (1999) and Gaspar (2000) highlight that, between 1977 and 1981, only between five and ten percent of the total investment was allocated by the BPD to the agricultural sector and that the majority of the smallholder farmers received nothing at all. This means that of the small proportion of the financial resources being allocated to the agricultural sector, most of the smallholder farmers, including the villagers, could not benefit from the agricultural loans by the BPD. Hanlon (2004) and Teyssier (2006) also reinforce this finding by explaining that bad banking management, political interference and the civil war have contributed to the failure of the BPD to improve access to credit for smallholder farmers. Hanlon (2004) likewise confirms this finding by further explaining that,

in the 1980s, the mismanagement problems were more apparent as the clients were borrowing heavily while defaulting on loan repayments.

The fact that the BPD was established immediately after the country gained independence, when a shortage of qualified human resources was being experienced, may explain why the managers and the field bank staff lacked the required technical expertise to adequately perform credit assessment and monitoring procedures and to develop an alternative lending technology. Since the bank was also experiencing institutional problems, recovering its loans was difficult and the collateral provided in many cases was proven to be difficult to release. Thus, little impact resulted from this direct government intervention strategy.

Furthermore, the collapse of the BPD was not an exception in the developing world where similar approaches had been adopted by some governments. For example, a study by Zeller and Sharma (1998) found that in many developing countries, agricultural development banks did not succeed in improving access to credit for smallholder farmers. The main reasons for this included the fact that their banking principles were based on collateral lending and the lack of incentives to do business with the smallholders, including the poor. These banks, furthermore, depended excessively on government funding and were also vulnerable to political patronage. They also neglected the provision of savings and, instead, they emphasised lending at subsidised interest rates. In fact, in the case of the BPD, the intended beneficiaries did not benefit from these subsidies because the socially powerful and the wealthy clients were more prone to appropriate most of the benefits. Seibel (2000) and Meyer (2002) also support the findings that lower interest rates were not translated into improving access to credit by smallholder farmers in many developing countries. Klein *et al*. (1999) and Gonzalez-Vega & Graham (1995) similarly reinforce this finding by pointing out the fact that the ADBs also neglected the effects of diversifying the source of income earnings on the overall farm household net cash flow.

Contrary to the case of the BAAC of Thailand which was initially established with a specific mandate to provide loans for farmers only, and therefore with no room to diversify its lending portfolios into other economic activities, the BPD was established with the aim of capturing savings, and providing credit to various sectors of the economy, including agriculture, industry and housing. This diversification of the lending portfolios did not result in improved access to credit for smallholder farmers as they received virtually nothing from the BPD

between 1997 and 1981. The failure of the BPD to improve access to credit for smallholder farmers can also be attributed to a lack of favourable policies.

Although the cases of the BAAC, BRI and NDB had also experienced similar problems to those of the BPD, they quickly identified the factors that had contributed to their poor performance, acknowledged them and took action by implementing reforms. However, this was not the case with the BPD.

10.1.2 The parastatal agricultural institution approaches through CCADR

With the collapse of the BPD, the Government of Mozambique decided to shift its paradigm from the formal bank approach to parastatal models, leaving more room for the market to function. Indirect government intervention is mostly advocated in other countries with the private sector being expected to take the lead while the government role is confined to creating an enabling macro-economic environment. Following these principles, the first parastatal rural credit institution, the CCADR, was established but did too little to improve access to credit and collapsed. The main reason for the poor performance and subsequent collapse of the CCADR was that it was run by the same people who led the former BPD to its collapse. Another possible explanation for this could be that, since funds from international donors were being channelled as cheap credit to the beneficiaries, issues such as institutional profitability, sustainability and viability were never a concern. Therefore, as could be expected, the shortage of funds would eventually compromise the operational capacity of the bank.

On the client side, there are also many possible factors that might have contributed to the collapse of the CCADR. First of all, it was a specialised credit institution designed to channel its financial resources to specifically target a certain type of client, the farmer. It was later given a mandate by the government to also serve the demobilised Mozambican army forces, and certain politically powerful individuals after the civil war in 1992, as well as provide some financial capital to fund agricultural credit to victims of natural calamities in years of severe drought or floods. These categories of borrowers are prone to deliberately choose to default on their loan repayment. Those that were involved in the civilian struggle and the liberation movement for the independence of Mozambique might have believed that they had the right to be compensated by the government and that nothing would happen to them. The

victims of natural calamities might default on account of their vulnerability. By design the CCADR was prone to face "generalised" behaviour with respect to moral hazard amongst the majority of its clients who were vulnerable and disadvantaged. Even those that were not vulnerable but politically connected were likely to take advantage of the situation and act as if they had been in the same circumstances as the victims of natural calamities.

After the collapse of the CCADR, the government of Mozambique continued to search for alternative strategies and adopted the institutional development funds approach, the *fundos do fomento*. Although a significant number of these government funds were established in the country, this study focuses on the FFA and FFDHA.

10.1.3 The development funds

The FFA and FFDHA are currently facing almost the same problems as the previous institutions discussed above. The failure of FFA and FDHA to improve access to agricultural credit for smallholder farmers can be explained on the grounds that, often, government development fund institutions lack the capacity to perform proper management practices, coupled with the already well known syndrome of a poor credit culture by the smallholders.

Contrary to the findings by the MRFSP (2003) that the *fundos do fomento* have performed poorly because they engaged in too many activities, the results of this study show that they lacked the managerial strategies to efficiently use the opportunity to diversify their lending portfolios to work in favour of the smallholders and the institution itself. This result reinforces the finding that the *fundos do fomento* lack adequate skilled human resources and further explains why the *fundos do fomento* have high administrative costs. It also explains why the managers failed to come up with proper remedies for weak performance.

Gonzalez-Vega (1994) supports this finding by explaining that, most often, the product design of the government development funds in many developing countries reflects poor organisational design which contributes to undermining the efforts to improve access to credit for smallholder farmers. Therefore, little progress can be achieved by shifting from a parastatal rural credit institution, such as the CCADR, to a development fund model without emphasising investment in institutional innovation, human capital development and social

transformation. For example, in Zimbabwe, when the government owned Land Bank was abolished and a parastatal, the AFC, was established with a mandate to improve access to credit for smallholder farmers, a new innovative product and lending technology were designed to serve the financial needs of the smallholder farmers.

The government appointed new managers who were highly qualified and experienced and also continually trained the smallholder farmers as a strategy to empower them to better face the challenges of cropping and marketing their produce. The government of Zimbabwe defined strategic crops that would be promoted and credit was provided to smallholder farmers who intended to produce these specific cash crops. In addition, technical support was provided to the farmers on how to produce the crops and how to package them in order to obtain the highest possible price. This strategy was aimed at encouraging the smallholder farmers to practise more advanced methods of farming that enabled them to produce a marketable surplus of cash crops. In the case of Botswana's CEDA, training and retraining of staff as regards managing and lending to the farmers was emphasised. Farmers were afforded similar opportunities to upgrade their farming and business knowledge before and after they were granted credit.

Therefore, international experiences demonstrate that little progress will be achieved by shifting from one type of rural financial institution to another without changing the governance structure of the institution. In addition, proper institutional design and human capital development should be included in any institutional reforms aimed at improving access to credit for smallholder farmers.

10.1.4 Indirect government intervention strategies

10.1.4.1 The privatisation of the BPD

The previous sections discussed the factors that led to the establishment of the BPD and the reasons for its collapse, as well as the reasons for the failure of parastatal credit institutions such as the CCADR and the *fundos do fomento*. This section addresses the problems encountered with indirect government intervention strategies.

The privatisation of the BPD, which led to the establishment of the Bank Austral (BA), did not succeed in improving access to credit. Indeed, it exacerbated the problem of lack of access to credit for smallholder farmers. This finding is supported by the RFSP (2003) study which found that, in 2002 agricultural loans (for livestock, forestry, and fisheries) represented only 19.5 % of the commercial bank's total portfolios of which 16.9 % were allocated to agricultural activities. However, all the available loans were allocated to only the large-scale farming sector, traders and processors (about 80 % of the above proportion of loans were allocated to large companies in the cotton, sisal and sugar industries). The Republic of Mozambique study (2007) also supports this finding by pointing out that, of the ten commercial banks, only BIM has opened a small window to finance agricultural activities.

The failure of the Government of Mozambique's indirect intervention is understandable if one takes into consideration that the financial sector in Mozambique is underdeveloped and inadequately monitored. This explains why the majority of the commercial banks only operate in larger urban centres (RFSP 2003). The results of this study have clearly revealed that the level of lending to agriculture by all the different types of financial institutions operating in Mozambique is low. This has led the smallholder farmers to rely more on semi-formal and informal rural credit operators. However, their internal capacity to meet the credit needs of smallholder farmers is limited.

One reason why the BA failed to meet its main objective is that, unlike the BPD, the BA is a private commercial bank whose operations are driven by profit rather than rural developmental goals. This explains why the new BA removed the special agricultural lines that had been made available through the BPD. Thus, clients were treated equally regardless of economic sector As a result, agricultural loans were affected by credit rationing. In addition to credit rationing, the BA started charging market interest rates which were 29% higher than those of the BPD and the CCADR (35% vs. 6%). In other words, the interest rate policy was one of the strategies employed by the BA to deter the smallholder farmers from applying for agricultural loans.

Therefore, while the conditions of access to credit from the former BPD, CCADR and the *funds do fomento* were excessively relaxed and soft, those of the BA were harsh and too stringent for the smallholder farmers. In addition, the failure and collapse of the BPD also contributed to the tendency for the commercial banks in the private sector to shy away from

the smallholder farmers. This means that the strategy of the Government of Mozambique to indirectly intervene in rural financial markets also failed to persuade the private sector to extend its credit services to the smallholder farmers. It is both expected and justified that one cannot expect to persuade anyone to do anything in any particular area if that individual or entity has already tried but failed. Thus, no one can condemn the private banks for imposing unfavourable and prohibitive credit terms and conditions on the smallholder farmers. In addition, the former BPD, the CCADR and the commercial banks, and the current strategy of the *fundos do fomento*, continue to experience difficulties with the lack of qualified managers and other bank staff to deal with the risks and the costs of lending for smallholder farmers. The study conducted by Kula and Farmer (2004), also confirms this finding by indicating that one of the main reasons why commercial banks are reluctant to lend to smallholder farm projects is that they lack skilled human resources for this specific task.

10.1.4.2 The liberalisation of the financial markets in Mozambique

In spite of the fact that the liberalisation of the financial markets in Mozambique has led to the creation of more opportunities for the private sector to operate smoothly, the financial system remains underdeveloped. The attempt to address the problem of market failures in rural areas by embarking on the privatisation of the banking sector also failed to improve access to credit for smallholder farmers. For example, only 0.27% of the commercial banks provide finance to agriculture countrywide.

The liberalisation of the BPD was to be expected because the IMF provided money to the developing countries and imposed conditions on them in order to restore their economic health. The aid received from the IMF was to be used to sustain the exchange rate, which was temporarily at an unsustainable level, and mandated hikes in interest rates, cutbacks in government spending and increases in taxes as well as structural reforms, such as political and economic changes. Many countries were obliged to forego a large proportion of their economic sovereignty in order to receive such aid and implement the IMF programme. In like manner the Government of Mozambique also followed these prescriptions. However in Mozambique and in Zimbabwe, just to cite a few examples in Africa, the IMF programme did not succeed in improving access to credit for smallholder farmers.

The study by Stiglitz (2002) confirms this result since it found that the IMF's mistaken policies which emphasised rapid financial and capital market liberalisation and a minimalist role for the government were partially responsible for the onset of the failures of the Economic Structural Programmes of the mid-1990s. Many of the developing countries (including Mozambique and Zimbabwe) had embarked on these programmes fearing the consequences of the withdrawal of international capital and therefore did nothing to prevent a crisis or minimise the damage of the IMF demands. However, the East Asian countries liberalised gradually and their governments helped shape and direct the markets. For example, during the last three decades preceding the economic crises, the East Asian countries have experienced remarkable success at reducing poverty more rapidly than any other region of the world.

However, this was achieved because of the efforts to implement developmental transformation policies which included changes in the economy and in society, through the combined strategies by the government to design education and investment policies as a strategy to close the knowledge and technology gap, as well as high savings rates and state-directed industrial policies. Indeed this is a significant lesson for Africa where social reforms are still lacking. In addition, Stiglitz (2002) confirms this by concluding that the IMF mediation of financial liberalisation programmes in many developing countries resulted in long lasting impacts on the socio-economic and political life of many countries across the world. For example, the slowing down of global economic growth led to a decline in commodity prices. Hence, liberalisation policies (free markets and a limited role for government) led to imposing huge risks on developing countries and, consequently, failed to enhance their countries' economic stability, as in the case of Zimbabwe. Therefore, government should play a key role in committing greater public investment in strengthening the infrastructure and education systems and other direct strategies to correct market failures, which usually arise in the absence of an inadequate government regulation of financial institutions.

10.1.4.3 Contracting farmer's schemes

The private sector, particularly the concessionary input credit firms, are currently trying to rescue smallholder farmers by contracting them to engage in growing certain cash crops such as tobacco and cotton, and providing them with inputs in exchange for a guaranteed output

market for their produce. Although the input credit schemes appear to be promising in terms of improving access to credit to such farmers, they are currently facing many difficulties with a tendency towards a reversal of the gains that were made in the first five years of their introduction in Mozambique. The major reason for these difficulties is the complete withdrawal of government from the concessionary input credit schemes, which leaves these farmers without any kind of support services to complement those provided by contracting firms. As a result, instead of smallholder farmers profiting from those contracting input schemes, they are making losses, with no incentive to continue participating in these schemes.

However, the case of Zimbabwe demonstrated that the government also plays an important role even when the private sector is in control of lending to farmers. For example, both Agribank and the TIMB rely on the government extension agents to train and monitor the farmers as well as to provide reliable and timely information concerning the borrower's field of farming. The cost-effective strategies by TIMB include working in partnership with the Ministry of Agriculture where agricultural extension agents assist farmers to produce better seedlings by working in groups.

In Zimbabwe, this strategy led to the majority of the smallholder farmers, growing tobacco, acquiring better experience with regards to the tobacco cropping activities. The success in training farmers regarding the new technology for cropping tobacco by the smallholder farmers in Zimbabwe was made possible owing to the role played by the government in supporting agriculture by directly intervening in rural financial markets, educational institutions, extension and research, etc. The government also furnishes a supportive service to the private sector. Therefore, a partnership between government and the private sector is needed if the input credit schemes are to become more efficient in improving access to credit for smallholder farmers. Consequently, strategies such as these effectively help to reduce the costs of production and marketing and are effective in helping both borrowers and lenders to increase their profit margins.

However, in the case of Mozambique, government support in these schemes has been lacking. Institutional interdependence is lacking with regards to the contracting schemes in particular. This is actually happening because the Ministry of Agriculture simply cannot afford to provide this kind of service to the majority of farmers owing to shortages of

qualified human capital. Similarly, the government also fails to assist the researchers and specialists (e.g. agronomists) of Mozambique Leaf Tobacco (MLT) to monitor and recommend proper remedies for the various problems that tobacco growers are facing, even if they are prepared to pay for this kind of service.

10.2 Informal and semi-formal credit institutions in rural areas of Mozambique

Other rural financial operators from the semi-formal sector such as micro-finance institutions, NGOs, and cooperatives have also contributed to enlarging the financial system in Mozambique. However, much still needs to be done to fill the gap left by the BPD in terms of agricultural credit service delivery schemes. For example, Table 1 indicates that the NGOs provide only 20.2% of agricultural credit while the cooperatives provide only 7.8% of their lending portfolios to farmers in general. This means that the majority of the smallholder farmers (about 66%) rely on the informal lenders to fulfil their financial needs. The analysis of the results in terms of the universe of the farmers (400 commercial and 3 million smallholder farmers), in Mozambique, indicates that of the semi-formal financial providers only 1% of the farmers have received credit from both the NGOs and the cooperatives. One can expect that smallholder farmers are in fact not receiving any assistance from these two types of institutions to improve the productivity of their farms.

Furthermore, these figures are disappointing since only 2.71% of the farmers in fact obtained credit from this source of funding during 2000 and 2001. This finding is confirmed by other studies such as the Bertelsmann Transformation Index (2006) which established that only 50 000 farmers had obtained agricultural credit from at least 30 rural informal or semi-formal financial institutions in rural areas of Mozambique. Furthermore, if we compare this figure with the total number of farmers in the country, the results reveal that only 1.7% of farmers in fact obtained credit from these rural providers and institutions (the moneylenders, NGOs, cooperatives and other microfinance operators) in 2006. The situation is similar in other developing countries. For example, Zeller and Sharma (1998) found that informal sector transactions in many developing countries consist of micro-loans, often taken to mitigate household consumption demands such as the purchase of food items and inputs (e.g. seed and fertiliser). The study also found that farmers tend to turn to formal lenders to obtain credit for large projects such as irrigation pumps, the lease or purchase of agricultural land and/or mechanised equipment.

The results suggest that there is a case for the Government of Mozambique to directly intervene in rural financial markets to address market failure problems. This is further supported by the 2000 IFPRI study, which arrived at the conclusion that in many developing countries, the government needs to start introducing innovative reforms in the whole range of banking sector in favour of the poor, or to support partnerships between the various types of financial institutions to reduce the costs of delivering financial products and services to the impoverished. In Mozambique, re-establishing and thereafter reforming a government owned bank appears to be the most appropriate strategy since it would have to adhere to the given mandate to improve access to credit for smallholder farmers. Furthermore, such a bank would need to take cognisance of the lessons outlined in the present study with regards to adopting, implementing and adapting an appropriate organisational design in an attempt to improve access to agricultural credit for smallholder farmers with a high degree of security and lower lending costs.

10.3 Credit needs of smallholder farmers in Mozambique

Regarding credit needs, this study found that four main types of credit are in demand by smallholder farmers in Mozambique. These are consumption, working capital, investment and trade credit. However, no formal or semi-formal rural financial institutions provide credit facilities to fulfill the credit demand for consumption purposes while credit facilities for mechanisation are limited. Yet, the smallholder farmers have pointed out that their demand for such credit facilities is a top priority. Therefore, if such credit facilities were available, they would be in a better position to cope with shortages of maize during periods of dire need. This would contribute to a reduction of the risk of loan defaults as smallholder farmers would not be forced to sell all their maize, particularly at harvest time when prices are at their lowest.

Although the majority of the smallholder farmers (the subsistence farmers and the fishing crew) require more savings, small-scale insurance and money transfer/payments than credit facilities, not all these financial services are being provided by the financial and credit institutions in Mozambique.

Therefore, rural financial institutions/banks should focus more on these types of services for this particular type of client. The fact that the only credit facility for which the farmers expressed a dire need is one for consumption purposes indicates how vulnerable they are in terms of their food security requirements. Therefore, it is reasonable to suggest that the Government of Mozambique should provide them with grants instead of banks trying to fulfill this credit need. The rationale for this is to minimise the risk of loan defaults since the majority of the poor fall into this category of farmers. Alternatively, banks could attempt to close the gap left by the BPD, CCADR and not yet filled by the FFA and FDHA by supporting smallholder farmers with a small amount of subsidised credit for consumption purposes. In this regard, the government will have to secure the bank loans by, for example, contributing to third party guarantee schemes.

The other credit facilities mostly needed by smallholder farmers in Mozambique include those for fishing, trading of farm and non-farm commodities and livestock production. These results are expected since the majority of the smallholder farmers are more devoted to trade, fishing and other micro enterprises while the medium-scale farmers are more engaged in cropping activities. This means that banks can charge subsidised interest rates to only a small proportion of their clients (the subsistence farmers) while moderate and higher rates of interest are charged on loans to the remaining smallholder farmers and the upper category of clients, respectively. In addition, the demands of the majority of the subsistence farmers as discussed above could mean that the goal of improving access to credit for smallholder farmers is more likely to be achieved with minimum effort by banks since fewer subsidised loans would be needed from these institutions.

The results of this study can be interpreted to mean that there is scope for the formal rural banks/financial institutions in Mozambique to improve access to credit for smallholder farmers, provided they meet the demands of the farmers.

10.3.1 Demand for savings and other financial services

The study also finds that the smallholder farmers in Mozambique do save, although most of them do so in kind, particularly in the form of livestock. The challenge, however, in this regard, is that both informal and semi-formal credit institutions are not allowed to mobilise

their clients' local savings. Nevertheless, if rural financial institutions/banks intend to improve access to credit for smallholder farmers, they should also provide savings services and use the strength of the rural clients' ability to save and to treat this as an asset. In this regard, formal financial institutions are the most suitable to comply with this requirement. This can be achieved by affording the smallholder farmers the opportunity to use their savings in kind to secure part of their loans. For example, the rural financial institutions could require the smallholder farmers to secure a certain proportion of their loans in kind instead of restricting them to the requirement the present bank statements, which the majority of the smallholder farmers cannot provide. The reason for this is not only because they usually do not save in cash due to cultural or consumer reasons, but also because formal banks (which are allowed to mobilise domestic savings by law) do not operate in the rural areas. Therefore, if a rural formal bank could be established in the country, it would find an overwhelming number of clients demanding savings facilities.

Another finding of this study is that the smallholder farmers themselves suggest that rural financial institutions/banks should require potential clients to save before credit is granted to them as a strategy to prove their capacity to save. Therefore, the fact that formal banks have the capacity to mobilise domestic savings, one of the most important sources of capital generation for the bank, is one good reason why the establishment of a formal rural bank is preferable compared with rural non-banking credit institutions (the *fundos do fomento*, NGOs, and other parastatal institutions).

10.4 Key lessons from the case studies

This section presents the key lessons, and discusses that which Mozambique can learn from the cases that were successful in improving access to credit for smallholder farmers in Botswana, Indonesia, Thailand and Zimbabwe.

10.4.1 Key lessons from the case of the BAAC of Thailand

One of the lessons learned from the BAAC is that the governments need to design appropriate agricultural policies to attract commercial banks and to provide financial support, for example, by making a certain percentage of their capital available to be used by the government agricultural bank. Furthermore, financial means can be mobilised among other

sectors of the economy in order to support the funds of a development bank. In the case of the BAAC the Government of Thailand also succeeded in this regard by investing in its physical infrastructure, which included branch networks, information technology and training programmes for field work and staff members, as well as for impoverished potential smallholder clients.

The case of Thailand also proved that successful financial reforms require not only a gradual process of reform and investment in human development capital, but, more importantly, the exercising of long-term financial capital investment plan. For example, it took more than 30 years for the BAAC of Thailand to implement reforms, but since the beginning of the 2000s, more than 90% of smallholder farmers, including the poor, have been served by the Agricultural Development Bank.

The other key learning point stemming from the case of the BAAC is that, in order for a rural public bank to succeed in improving access to credit for smallholder farmers, it needs to adopt innovative lending technology designed to capture more profit. This could be achieved by charging differentiated higher interest rates for middle-income, higher-income and better-off farmers (higher rates for those who use modernised farm technology). However, these categories of clients (middle smallholder and large-scale farmers) will have to account for a larger proportion of the bank's loan portfolio. Consequently, in order for a public financial institution to succeed in extending access to credit for smallholder farmers, a proper system of credit delivery of loans and the overall management of the loan portfolio need to be adopted and effectively implemented. Actually, a major achievement of the reforms at the bank is that most of its funding resources are mobilised through savings. Currently, the BAAC's outreach and degree of self-sustainability rank the bank among the world's leading agricultural development banks.

10.4.2 Lessons from the case of Indonesia

In Indonesia, it is evident that liberalising the financial system alone will not lead to increasing access to credit for smallholder farmers. Instead, the government needs to play a key role by directly intervening not only by making the funds available to the bank but also with sound financial policies that support innovation. The adoption of a solid framework of

financial deregulation (interest rate deregulation, commercialisation of the bank's operations and supervision) and the assurance of management autonomy should improve the quality of financial products. These form the pillars that rendered the BRI, a government development bank, able to achieve its sustainability and a major outreach by improving access to credit for smallholder farmers including the poor in remote rural areas.

A further notable lesson from the BRI is the need for a sound conducive macro-economic environment in order for reforms in a rural financial institution to perform well within a short period of time. The reason for such an environment is that it contributes positively to the performance of such institutions. These could provide a solid environment for producers, including smallholder farmers, by creating opportunities for them to be paid the best prices and to accumulate assets that can be used as collateral in the future. This would help free them from subsistence levels of production and thus release the financial institution from the high cost of subsidised loans. It would also lead to the bank making a profit, since the bulk of former subsidised smallholder farmers could then be able to graduate from being subsistence to becoming commercial farmers and hence being able to pay market interest rates on their new loans schemes.

Furthermore, another important point pertaining to the BRI is that despite operating in terms of a market-based approach, the bank relied on subsidies to assist the poorest smallholder farmers to access loans while gradually helping them to organise themselves into associations and urging them to form joint liability groups. Training smallholder farmers to prepare business plans also contributed to successfully mobilising their savings plans. As a result, the bank began to achieve its outreach goals. Only after the basics were established for smallholder farmers to start producing beyond their subsistence levels did the bank shift its lending technology towards emphasising further individual loans at market interest rates.

10.4.3 Key lessons from the case of Botswana

One key lesson from the case of Botswana is that, in order for a rural financial institution to succeed in improving access to credit for smallholder farmers, the parameters of lending should continually shift in order to suit the macroeconomic environment and the needs of all its clients.

Furthermore, the NDB of Botswana emphasises that investing in human capital as an ongoing exercise is an effective human resource risk management strategy to address the challenges of a deficiency in skills at all operational and managerial levels; an important aspect which both the BPD and the government funds (the FFA and FDHA) have failed to address. Investing in such capacity building is also emphasised by the BAAC of Thailand and the BRI of Indonesia.

In addition, it is worthy to note that the Government of Botswana's small stock support programme includes the involvement of the extension agents, other specialists in animal production and other institutions at the local government level to deal with issues of ownership and property rights in order to facilitate the process of identifying and selecting the smallholder farmers' potential clients for credit facilities as well as management training with regards to small stock farming. The farmers were also closely monitored in this regard, to which the success of this programme can be attributed. The critical information system in which records are maintained is also vital in order to provide timely and accurate data, for example, birth dates mortality and sales.

In Botswana, not only did the NDB need to be reformed, but grants needed to be allocated only to those who really needed them. In addition, this case has also shown that innovative strategies can be effective if government funds are used appropriately in order to make a significant difference to smallholder farmers living in villages and districts. An example of this is the launch of agricultural projects to integrate young people into the country's mainstream economy through the development of sustainable agricultural projects for those who exhibit a passion for agriculture and are committed to it.

Finally, an ingredient for success that can be derived from the case of Botswana is that, in any business involved in agriculture, both the government and the beneficiaries/clients must demonstrate their commitment and take responsibility for the business in which they are partners. In all the examples cited in the present study, it is evident that smallholder farmers also need to evidence some confidence and commitment in the business they run in order to lighten the burden of repayment, whether they are accessing the loans at subsidised rates or not.

10.4.5 Lessons from the case of Zimbabwe

In the case of Zimbabwe, the lessons drawn were divided in two sections so as to include those from the smallholder farmers' input contracting schemes and the parastatal credit institution (AFC).

The case of Zimbabwe provides an important lesson for Mozambique in terms of tobacco input credit schemes which are currently facing the problem of unfair tobacco grading when the time arrives to commercialise tobacco growing with contractor firms. The establishment of government marketing boards would encourage the private sector also to form its own marketing boards and to accelerate the formation of tobacco farmers' associations. These associations would create a competitive environment needed to address the issues of lower prices and unfair grading. Similarly, this is the main reason why smallholder farmers in the Tete and Manica Provinces of Mozambique do not show a profit while tobacco firms continue to increase their profit margins. The establishment of tobacco marketing boards in Mozambique would act as an intermediate entity in the selling process between growers and contracting firms who are currently taking advantage of impoverished smallholder farmers who cannot defend themselves.

The other major lesson from Zimbabwe's experience is that marketing discipline needs to be facilitated by other functions of the government. For example, central marketing agents need to be established for most commodities, particularly cash crops. This would make it easier for Tobacco Input Credit Schemes, for example, to collect repayments from farmers by means of stop orders payable to the marketing boards. This calls for marketing boards to be commercialised in order to be sustainable with the help of the government by subsidising them for a limited and specific period (particularly during the first years of their establishment).

Furthermore, the Government must be committed to developing the agricultural sector by heavily investing in the development of human capital and funding relevant institutions supporting the agricultural sector, as well as subsidising farmers and providing support services. Because of the role played by the Government of Zimbabwe in promoting cash crops (export earners), the tobacco industry, for example, up to 2007, the country was still managing to survive the actual economic crisis it is facing, partly owing to the contribution of

this sector of the economy. During the past two decades, this strategy led to the yields increasing dramatically; this important achievement was evident in the two agricultural revolutions. However, the experience also teaches that investment in human capital takes many years to produce the desired impact in transforming and developing both the bank staff and the farmers. However, it is worth investing in because it has produced competent and experienced researchers, specialists and extension agents who are the pivotal role players in providing the necessary complementary services in an attempt to improve access to credit to smallholder farmers. These groups of people equipped farmers with appropriate knowledge with regards to new techniques and tools and the best ways to produce better yields with high quality crops, particularly cash crops (tobacco, maize, cotton and wheat).

Three major lessons arise from the failure of the AFC's credit system in improving access to agricultural credit for smallholder farmers in Zimbabwe:

a) in order for a public financial institution to succeed in this regard, a proper system of credit delivery of loans and the overall management of the loans portfolio need to be developed or adopted and effectively implemented;
b) a complete shift in paradigm in the politicians' attitudes toward smallholder credit so that no undue interference or intervention is allowed in the credit management system. That is, "the government needs to create the appropriate enabling environment for free flow of credit to the smallholder farming sector" (Zumbika, 2000, p.14), and in order for this to take place, there it is important to treat the smallholder borrowers as business partners in the same manner as any other sector of the economy, and a need for the agricultural financial institutions to operate not only freely but also competitively; and
c) any type of agricultural finance corporation needs to allow itself to engage in functioning as a fully fledged commercial bank, seeking to provide a whole spectrum of financial products and services to the public at large instead of confining its clientele to the farming sector.

10.5 Requirements to be met by rural financial institutions in order to address the needs of smallholder farmers

In Thailand, for example, the results have indicated that the implemented reforms and strategies to deal with the risks of lending to smallholder farmers at the BAAC included:

sound interest control policies regarding agricultural loans by differentiating rates of interest to suit both the nature of agricultural activities, and the smallholder farmers' cash flow;

long-term investment in extending the branch network infrastructure; and

a favourable environment in which to accommodate both group and small loans for smallholder farmers without the security of physical collateral. Both the individual and large loan approaches applied to better-off farmers working with modernised agricultural operations and who received an additional source of income from non-farming activities. Thus unstructured loans were adopted.

For example, in Thailand, the strategy to effectively cut the BAAC's loan administration costs (currently a stumbling block for the performance of the *fundos do fomento* in Mozambique) includes:

a decentralised structure that enables a broad client coverage;

a delegation of authority to offer loans;

simplified loan appraisal procedures that minimise the time required for loan processing, loan approval and loan disbursements (more effective through solidarity leadership style);

close contact with local organisations and networks (providing useful client information);

effective management information systems (providing key information); and

diversification of the rural loan portfolio in terms of location and lending purposes to help balance the uneven staff work load.

10.5.1 Requirements to design strategies to deal with risks of lending to smallholder farmers

Rural financial institutions should not underestimate the risks of the agricultural sector and are therefore also required to consider strategies to manage the risks of lending to clients in this sector. Particular attention need to be given to agricultural insurance schemes to avoid the risks associated with lending, for agricultural activities in particular. While strategies to deal with the risks can vary between domestic and international policies, they should include rural financial government banks being free from political interference in their management

operations in a daily basis. Agricultural lenders are required to monitor market and policy changes which affect their smallholder borrowers as one of their basic risk management strategies.

The risks involved in constraints regarding loan collateral can be dealt with by using collateral substitutes, which have already proven to be more effective than conventional types of loan guarantees and have also resulted in the provision of important loan repayment incentives. For example, in the BAAC, the group approach is used for collateral but the bank rapidly expanded to improve access to credit for smallholder farmers by providing wholesale loans for cooperatives and farmer associations. At the BRI, both the group and individual loan approaches are offered, depending on each case, while in Botswana and Zimbabwe, land ownership is mostly used as collateral. In Mozambique, any of these collateral substitutes may be appealing but a careful merit assessment needs to be carried out

Both the BAA and BRI overcome the requirement of the conventional physical collateral required by formal banks by utilising new innovative lending technology such as a joint liability group guarantee, being the principal collateral substitute. A reasonable social environment was greatly facilitated by the implementation of this lending approach to effectively lead to lower transaction costs of lending and promote high rates of loan repayments. The innovative use of peer group pressure to enforce timeous loan repayments, and to deal with market failures and the problem of moral hazards, are some examples that stem from the Asian case studies (the BAAC and BRI) illustrating the power of a demand-driven approach to improve access to agricultural credit for smallholder farmers.

In fact, these requirements form the foundations on which financial institutions can operate profitably. If the political and regulatory environments do not allow financial institutions to mobilise savings or enjoy the freedom to set interest rates reasonably high to cover operational and fixed expenses and still make profit, then loan recovery rates would be negative and sustainability would not be possible nor would they be able to survive in a competitive environment. Even if they were being pumped full of donor and government funds, these would eventually cease. Such a scenario caused the collapse of the BPD and is still threatening the financial viability of the FFA and FDHA in Mozambique. In previous years, when many of the agricultural banks and programmes were dependent only on donor and government funds, the BAAC of Thailand, the NDB of Botswana and the AFC of

Zimbabwe experienced similar difficulties. Subsequently, through implementing reforms and continually searching for the most appropriate strategy to better service their clients, they succeeded in achieving their primary objective, as discussed above.

Fortunately, Indonesia successfully implemented effective reforms promptly, consequently shortening the process of restructuring compared to the BAAC. The BRI is a reference showing how rapid reform can occur in a development government bank without compromising its sustainability. Outreach can also be achieved in a short time. All this was achieved owing to the sound political and regulatory environment, a favourable social environment which facilitated the provision of appropriate lending technology (group approach), decentralisation of decision-making, and the organisation of the poorest of smallholder farmers into associations. This would not have been effectively achieved if timeous information and an extensive branch network had not been favourable factors. Therefore, a solid infrastructure, which is a requirement to expedite reforms of rural development banks / institutions, also serves as a poverty reduction strategy.

Specifically, the requirements that need to be met by rural financial institutions can be highlighted to include:

10.5.2 Portfolio diversification requirements

The policy of interest rate differentiation in any agricultural or development bank, is a sound strategy because it guarantees access to credit for smallholder farmers who would otherwise not be able to afford high interest rates. The inability to pay such rates would be due to the nature of their farming activities. On the other hand, since a development bank needs to secure satisfactory outreach and sustainability, rural credit institutions should be actively involved in adopting cost-effective credit delivery strategies when designing and operating demand-driven oriented rural microlending services. The BAAC succeeded in developing appropriate financial products and innovative deliverable lending technologies. The culture of the bank implementing cost-reduction strategies in loan portfolio diversification consists of lending for farming activities as well as other economic non-farming activities. The Government of Thailand played a major role in bearing heavy initial overhead costs in order to extend branch network infrastructures. The Government of Mozambique has also

previously invested in physical branch network infrastructure while the former BPD was still operational. However, if the government were still to consider re-establishing the developing bank, then rehabilitating the existing ex-BPD branch network would be necessary.

In chapter five the results of the present study reveal that there are fewer large-scale farmers than subsistence farmers. This indicates that the rural bank/financial institution should diversify its lending portfolios by creating more possibilities to lend to non-farm clients and seek a balance between lending to the various clients. Based on the experiences from Indonesia (BRI), Thailand (BAAC), and Botswana (NDB), rural banks should seek to serve a diverse array of clients, particularly those who are wealthy, especially during the initial phases of development or soon after being reformed. Furthermore, the said banks should attempt to engage more farmers slowly but continuously as a strategy to improve access to credit for smallholder farmers while they strive to become sustainable and viable and to achieve effective outreach in the long run.

One method of diversification could be to begin operating in production zones with low risks, which can also be gradually be expanded to include the more risky areas. Individualised credit products and repayment schedules need to be set in tandem with the loan repayment capacity of the smallholder farmer borrower as a strategy to reduce the risk of loan default. Loan portfolio diversification is also a requirement, since it essential to protect agricultural creditors against covariant risks. Managing external risks can be accomplished by means of rescheduling the loan and agricultural insurance when it is justified. Emergency assistance can help smallholder farmer borrowers and rural lenders while staff incentive systems would stimulate staff and effectively improve their lending productivity mechanisms. In addition, close monitoring of markets and risks are critical for rural banks.

10.5.3 Strategies to minimise the transaction costs of lending to smallholder farmers

In order to minimise the costs of lending to smallholder farmers, rural financial institutions must come up with strategies to improve the quality of their information systems. One such strategy would be the requirement to work in partnership with local organisations such as NGOs, extension agents, village banks, and co-operative savings and credit schemes which

already enjoy a good reputation in servicing the smallholder farmers including the poor in remote areas.

While to minimise the risks of moral hazard problems increases the costs of lending in rural financial markets, particularly in a distorted credit culture environment like that of Mozambique and Zimbabwe, rural financial institutions and banks are required to induce and cultivate good credit discipline amongst their clients by promoting regular visits and developing personal relationships between the loan officers and their clients. This will also contribute towards building a healthy relationship as well as engendering mutual trust between the two partners. For example, the BAAC in Thailand achieved this by adopting an incentive system which included paying good salaries, bonuses, human capital development initiatives and training programmes that address leadership issues.

In order for rural financial institutions to address the moral hazard risks in a distorted credit culture, information and technology infrastructure needs to be provided to ensure that clear information is given to borrowers with regards to the lending conditions and repayment obligations. The co-signing of loan contracts and moral persuasion are also effective strategic means to enhance good credit discipline. Close contact between the borrower and lender is conducive to an environment of mutual trust and better credit discipline.

10.5.4 Develop and adopt strategies to minimise the risks of lending to smallholder farmers

In terms of the findings of the present study, the strategies to minimise the risks of loan defaults require greater flexibility rather than restricting the loans to specific activities, thereby also mitigating the risk of misallocating the credit, particularly by smallholder farmers, to consumption rather than production purposes. Therefore, if rural financial banks / institutions were to also adopt such a strategy, they would be in a position also to address the aspirations and expectations of the smallholder farmers in Mozambique as well as being of crucial relevance to the rural financial institutions, especially when farmers are faced with high intra-seasonal price variations particularly of maize and/or food insecurity that mostly affect those in the southern region of Mozambique. The study conducted by Meyer and

Nagarajan (2001) also supports this finding by identifying when the smallholder farmers experienced food shortages (generally during a few months before the following harvest).

Therefore, in order to minimise the risks of lending to smallholder farmers, rural financial institutions are required to manage external risks by adopting flexible loan scheduling, agricultural insurance schemes and the provision of emergency assistance to their clients in the event of an occurrence of any natural calamity. For example, the BAAC administers a subsidised emergency fund in partnership with the government of Thailand. In addition, rural financial institutions are also required to continuously monitor the markets closely as a strategy to minimise their exposure to the risks of lending to smallholder farmers associated with changes in domestic and international market policies and prices. The implication of this, however, is that rural financial institutions/banks need to develop the relationships with their clients based on trust, which could include lending to groups. Such a methodology has the advantage of using peer pressure mechanisms to comply with their loan obligations and to deal with any possible situation including the delinquent members in terms of the group constituency rules. However, the challenge of achieving this lies in implementing strategies to address the problems associated with the lack of credit discipline inherited from the past and failed government strategies of the BPD, CCADR and various development funds. Training could add greater value to the efforts to build good relationships and trust between the group members as well as between the two parties (lenders and borrowers).

10.5.5 Lending methodology requirements for smallholder farmers

As discussed in Chapter two and three of this study, both the smallholder farmers and the rural financial institutions are often vulnerable to a variety of risks such as unfavourable weather conditions exacerbated by a lack of managerial dryland farming practices and irrigation systems. Furthermore, they are exposed to unfavourable agronomic pathological vagaries (e.g. diseases, and pests affecting crops and livestock). Improved access to credit for smallholder farmers would encourage them to adopt modern farming technology and equip them with the necessary tools such as improved seed, fertilisers, pesticides, irrigation schemes, modern land preparation and cultivating methods, etcetera, while encouraging them to diversify so as to include non-farming activities. This will enable them to maximise their income returns and increase their likelihood of repaying their loans.

Since the very nature of the farmer is indeed heterogenous and individualistic, diversification within farming projects also must to be considered so as to accommodate the different types of agricultural loans demanded by farmers. These include the provision of:

short term loans – the majority of the emerging smallholder farmers in Mozambique need short term loans for operational production costs such as crop production, purchase of stockfeeds, etc. Short-term production costs may be repayable over a period of up to two years.

medium term loans – the results of this study have shown that in Mozambique, most of the upper echelons of the smallholder farmers need medium term loans (credit for investment purposes) in order to extend their farming enterprises such as improving their greengrocer shops, working capital to hire labour, tractors and other equipment, purchasing fencing and for establishing livestock water supplies. Medium term loans may be repayable over a period of up to five years.

long term loans – the majority of the large-scale commercial farmers in Mozambique need long term loans mostly to expand or buy mechanised technology, for example, to establish/expand a farming enterprise or irrigation scheme facility, to construct a building to house the livestock, buy the animals, storage facilities, and to purchase a tractor and other types of machinery and implements, a track, etcetera. These loans may be repayable over a period of up to 15 years.

Indeed, the fact that there are different categories of farmers among the smallholder farmers themselves and the large-scale farmers demanding different types of credit, should be viewed as an excellent opportunity for the rural credit/financial institutions to not only diversify their lending portfolios within the agricultural projects but also to retain flexibility since many of the various terms of investment and credit needs occur as a result of agricultural seasonal production cycles. Consequently, a rural bank or any other type of financial/credit institution is required to adopt specific repayment schedules for each loan in order to meet the cash flows and enterprise revenues of the farmers/borrowers.

However, the implication is that, in order for rural banks/financial/credit institutions to adequately address the said credit needs, they must understand the nature and operations of the variety of farming activities/projects. For example, chicken and egg production enjoys a relatively constant revenue stream and cash flow while beef production and sales fluctuate. Crop production activities vary from land preparation to marketing, yet the income revenues generally occur only at the time of selling the crop and are often received in one lump sum. This implies that the smallholder farmers must be encouraged to diversify their projects among farm and off-farm income generating activities as a strategy to better cope with their household income expenditure. The diversification strategy which enabled them to meet their loan repayment obligations was well received by the smallholder farmers and has turned out to be a better tool to combat the default rates that have characterised the agricultural credit institutions and the development banks of the past. Therefore, the rural banks/financial and credit institutions need to be open and prepared to meet the credit needs half way in order to accommodate most, if not all, of the smallholder farmer's credit needs and to include both farm and non-farm projects as a means to diversify their lending portfolios as well.

10.5.6 Strategies to improve the loan repayment capacity of the smallholder farmers

This study also reveals that in the rural areas of Mozambique, the smallholder farmers including the poor do save although the majority saves in kind, mostly in the form of livestock. Therefore, the rural financial institutions/banks intending to improve access to credit for smallholder farmers should also provide savings services and furthermore use this strength as an opportunity for them to secure part of their loans. This can be done for example by requiring that the smallholder farmers should contribute in kind for a certain proportion of their required loans instead of restricting them to the requirement of producing bank statements which the majority of the smallholder farmers cannot provide, since they usually do not save in cash not only because of cultural reasons, but also because formal banks (which are allowed to mobilise domestic savings by law) do not operate in rural areas of Mozambique. Therefore, in order to address one of the weaknesses that led to the former BPD, the CCADR and the *fundos do fomento* collapsing or performing poorly in Mozambique, a savings requirement, before credit is provided, needs to be strongly advocated.

However, the implication of the abovementioned requirement is that, if a rural public bank is to be established, the Government of Mozambique will have to also invest in establishing branches in rural areas in order for the bank to be able to maximise the potential to fully mobilise savings deposits where these services are rarely met. This would also enable the bank to achieve its outreach goals since part of the funds mobilised through savings will be used to reach more and more smallholder farmer clients each time a new branch in a new area is opened. However, based on the experience of Botswana, rural banks/financial institutions need to avoid deliberately extending the bank's branches to the extent that it increases administrative costs that do not justify the demands of the clients.

In order to address the failure of the past government agricultural credit institutions such as the BPD, CCADR and the *fundos do fomento*, which have undermined their institutional sustainability by neglecting the mobilisation savings deposits locally, the rural financial institutions are required to encourage the smallholder farmers to cultivate the habit of savings with their credit institutions or banks by requesting them to prove their savings capacity before credit is granted to them. For example, in Zimbabwe, the ADAF clients are required to present their savings deposit passbook containing at least 30 percent of their total savings if they are interested in borrowing from this credit institution. In the case of Mozambique, the smallholders usually form groups for savings purposes, the so called *xitique* (in the southern region) but the deposits are held by informal lenders instead of banks. In addition, most of the smallholders who practise *xitique* usually require loans for non-farming projects while some obtain credit from informal credit institutions (NGOs). Therefore, savings requirements also serve as a suitable collateral substitute which in turn is a strategy to improve access to credit for smallholder farmers. Savings deposits would ultimately serve as an alternative means of securing a considerable portion of the loan in case the smallholder borrowers default.

Furthermore, a solid repayment capacity depends more on the ability of the institutions to minimise the transaction costs and the risks of lending to smallholder clients. Therefore, rural financial institutions are required to simplify their loan appraisal procedures and disbursements. Lending to groups, by utilising the joint liability of the group's leader, can also help in screening loan applications of the members of the group. However, the challenge is to introduce leadership programmes and train the group leaders to inspire and motivate them to do the right job and empower them to be able to persuade their group members to repay their loans, using peer pressure mechanisms among other persuasive strategies.

Another strategy includes limiting the size of the loan to the group to a certain maximum proportion of the borrower's income generating capacity. In the case of Thailand, the BAAC limits the loan size to a maximum of 60 percent and relies on the group leader to act as a liaison person with the bank's loan officer.

10.5.7 Decentralisation of decision making about lending assessment and appraisal

Rural financial institutions/banks are required to decentralise their managerial structure and systems to enable them to achieve broader client coverage in rural areas. This implies that the government must support the public rural bank financially to enable it to build an extensive branch and field office network that will empower it to develop and adopt an effective organisational structure as well as management information and control system. However, remedies to cut loan administrative costs should also include the delegation of authority to efficiently operationalise the decentralisation of the entire loan process.

The aforementioned implies that rural banks/institutions are required to hire not only qualified and highly motivated field staff but also those who are self-reliant in order for them to make a positive impact on the productivity of the lending portfolios. However, rural financial institutions must find a balance between employing highly qualified staff (agronomists, managers, specialists in the rural financial field, etc.) and those with minimum qualifications, but with a solid background in the local environment, who could be retrained whenever the need arises. Training should include issues regarding how to conduct market studies, technical issues of farming practices of production and marketing, methods of financial assessment and loan appraisal, etcetera, while new staff should be given the opportunity to be tutored by experienced loan officers who closely monitor and evaluate their performance. However, in order to motivate them to continually improve their performance and efficiency, rural financial institutions should offer increases in remuneration based on a significant performance based bonus.

10.5.8 Information and technology systems

Another strategy to improve the performance of a rural bank or any other type of financial institution is to improve the information system of the institution. Information and technology

are of critical importance in disseminating the findings of research each time a new technology or idea is produced and developed. Efforts to render information available and disseminate it to farmers would provide them with timely and relevant information about where to buy inputs and where to market their output, with reference to the right time, places and prices. Hence, the dissemination of information has the potential to enable farmers to timeously adopt recommended technologies in their field while reducing costs of inputs which could lead to an improvement of their profit margins, thereby minimising the loan default rates. Consequently, everybody, including farmers, contracting firms (private sector or parastatal) and the government would reduce the transaction costs associated with lending for farming projects.

Furthermore, institutions would be in a better position to gather timeous and accurate information about their clients by using the available appropriate networking facilities such as computers, telephones, fax machines, etc.

10.5.9 Institutional sustainability

In addition to the strategies to mobilise client savings as previously discussed, other sources of capital should also be mobilised in order to render their institutions profitable; for example, an interest rate policy that does not undermine the capacity of the smallholder farmers to pay market interest rates, and their diversifying their lending portfolios. The policy of lending diversification would enable the rural financial institution to design a variety of loan products including both farm and non-farm projects. By so doing, a large variety of clients will also be assisted while the bank should improve its profits by charging different interest rates according to the client categories (farmers and non farmers; vs. poor, non poor, and wealthy) and projects (farming, livestock, fisheries, forest, agribusiness, trading, etc.). However, the challenge will be to distinguish between the poor, who really need grants, the smallholder farmers who qualify for subsidised interest rates, and those who can pay market related interest rates; similarly for the remaining category of non-farmer clients. Thus the savings, profit margins and other commission fees charged will allow the institution to use these capital resources, particularly those stemming from the wealthy clients, to assist the smallholder farmers including the impoverished. Therefore, portfolio diversification and

interest rate policy are important tools with which to create the sustainability of the financial institutions and to improve their outreach.

The mismanagement of the *fundos do fomento*, which led to their depletion, may have led to the withdrawal of certain international donor funds to these institutions in response to the disappointing lack of progress in terms of their performance and consequently the failure to fulfil their mission to improve access to credit to smallholder farmers. In this regard, the present researcher ascertained that this problem is not unique to Mozambique and it has occurred in certain other developing countries covered by the current study, for example, the AFC in Zimbabwe via the government strategy. However, since the problem in Zimbabwe was properly identified, an appropriate course of action was taken to overcome the problem. For instance, the Government of Zimbabwe decided to provide financial resources for the former Deputy Manager of the AFC to go abroad and visit other sister rural financial institutions namely, in Thailand, Indonesia and the Philippines in order to acquire experience from these countries and adapt it to suit the role of the AFC of Zimbabwe. This is a valuable lesson for Mozambique and also offers an alternative means to motivate the staff by upgrading their knowledge base and experience in terms of the appropriate lending technology and to adapt it to suit the specific needs of the smallholder farmers, and the culture of their own country.

The conclusion of the present study and the implications with regards to related policies are addressed in chapter 11 of this study.

CHAPTER ELEVEN
SUMMARY, CONCLUSION, AND RECOMMENDATIONS

11.1 Background

Economic development in Mozambique depends largely on the sound performance of the agricultural sector. The Government of Mozambique recognises the crucial role of this sector in the economy and its potential for reducing poverty. Improving access to credit for smallholder farmers should help to accelerate investment in agriculture. Therefore, greater availability of rural credit is needed to ease the burden on the poor. Mozambique's challenge is to identify the most effective government strategy for improving access to credit for smallholder farmers and this is the focus of this study.

11.2 Data sources and methods

The *multiple case study* method was selected because of the need for an extensive examination of the context in which past and government strategies failed in the given situation. The research efforts were organised around the study of the cases of Thailand, Indonesia, Botswana and Zimbabwe. Data were collected from primary and secondary and sources. The primary data sources involved interviews with key informants such as representatives from the National Union of Farmers; two government funded agricultural financial institutions, namely, the FFA and FARE as well as certain officials of the Ministry of Agriculture in Mozambique. Secondary data sources include existing documents. To complement the secondary data sources, informal interviews were also conducted with key informants from government financial institutions and representatives of smallholder farmers in Botswana and Zimbabwe.

The data analysis techniques consisted of searching for themes regarding successful strategies in terms of dealing with costs and risks of lending to the agricultural sector. The analysis also included a description of the main findings concerning the issue of what made rural financial institutions in the four countries a benchmark for a successful government intervention strategy. Similarities and differences across the multiple cases were identified in order to determine common patterns between the African and the Asian case studies. Lessons from these cases were drawn.

11.3 Summary of the findings of the study

11.3.1 Government efforts to improve access to credit for smallholder farmers in Mozambique

It was found that the government efforts in this respect from the post-colonial era till the present included:

the establishment of the BPD, a development bank, in 1977; but its performance was disappointing and therefore it collapsed;

privatisation of the BPD in 1997;

Caixa de Credit Agrícola para o Desenvolvimento Rural (CCADR), (a kind of parastatal financial institution), was established in 1988 but also collapsed;

in the middle of the 1990s, the *fundos do fomento agrícola* (Government Development Funds for jump-starting agricultural activities) were established, including the FFA and FDHA, but they are experiencing managerial problems and shortage of funds leading to their survival being brought into question; and

indirect government strategies, which include encouraging the private sector to intervene in rural financial markets through contract growers' input schemes to promote the production of cash crops, but little progress has been achieved.

Therefore, the performance of many of these rural financial institutions remains disappointing.

a) The BPD government approach

Owing to problems of imperfect information in rural areas of Mozambique, mismanagement and moral hazard, the BPD's day-to-day management operations also deteriorated. The lack of a strategy to improve the business skills of the recipients of subsidised credit, the lack of institutional capacity to enforce mechanisms for timely loan repayments, political interference and the lack of credit culture and discipline on the part of beneficiaries led to high loan default rates.

b) The parastatal approach through CCADR

The government strategy of establishing a specialised credit institute, the CCADR, also did not succeed. The main reason for the failure was that it was conceived as part of a targeted agricultural credit programme. As such, the interest rate on agricultural loans was subsidised for all clients, while portfolio diversification and mobilisation of local savings were neglected. It also lacked efficient managerially skilled credit personnel because it was run by former BPD managers who had led to the collapse of that bank. The managers were simply transferred to this parastatal without having attended any re-training programme regarding the agricultural credit issues.

c) The development funds strategy

To fill the gap left by the CCADR, an alternative strategy by the Government of Mozambique included the establishment of the *fundos do fomento* (particularly the FFA and FDHA). However, agricultural government funds also largely failed to achieve their objective, mainly due to mismanagement problems, shortage of funds and lack of well motivated and skilled field staff.

Since loans in all the above credit institutions and bank were provided only at subsidised interest rates, these institutions had also overlooked the capacity of some of their clients to pay market related interest rates, while political interference led to politically well connected clients not being followed up when they failed to repay their loans. Hence, these credit institutions and the BPD were also left with no alternative but to expand their sources of funds to non-agricultural projects.

d) The privatisation of the BPD approach

On the privatisation of BPD, a new bank (Austral Bank) was created, but as with other commercial banks, the objective of improving access to credit for smallholder farmers was simply abandoned. As a result, it did not design a product to extend its lending portfolio to smallholder farmers. Consequently, the privatisation of the financial markets resulted in even less progress.

e) Contracting Input Schemes

Regarding the alternative strategy of indirect government efforts in rural credit markets to encourage the private sector to start investing in them, the results of this study indicate that improving access to credit, for example, through the Tobacco Input Credit Schemes in Mozambique, is cumbersome. Although a considerable number of smallholder farmers rely on contracting schemes to access credit for cash cropping activities, neither the farmers nor the contracting firms (lenders) count on government support, not even in terms of the provision of extension services. The study reveals that the smallholder farmers are not benefiting enough from the contracting firms who often provide inputs at high cost and offer low prices for produce by practising unfair grading. Thus the study concludes that linking agricultural credit with a variety of cash crops, such as sunflower, cashew nuts improved varieties, cotton, tobacco, coffee, tea, maize, vegetables, etc. would be a more cost effective strategy. Such a strategy would also give farmers the option to determine the best investment project for credit rather than linking credit to very specific inputs. This would also prevent the farmers from side marketing, or ceasing to produce tobacco.

Despite the fact that the Government of Mozambique has attempted both direct and indirect intervention strategies to improve access to credit for smallholder farmers, this objective remains unmet.

11.3.2 Smallholder farmers' credit needs in Mozambique

Generally, the credit needs of farmers relate to both household consumption and agricultural production. Other credit needs include money for investment, working capital, trade, savings, insurances, money transfer facilities and equity. However, not all the credit and financial products demanded are currently being offered by the rural credit institutions operating in Mozambique. Another finding concerns the limited credit facilities available for mechanisation activities. Yet, the smallholder farmers have identified this as their top priority.

The Asian case studies represent good examples of success in designing products that meet the smallholder farmers' credit needs. Unlike many commercial banks, the two Asian public

agricultural banks offer small loans for emergencies and technology and for working capital purposes without requiring formal collateral from smallholder farmers in order to access their loans. They also set repayment schedules that are consistent with the smallholder farmer borrower's cash flow.

11.3.3 Successful cases of improving access to credit for smallholder farmers by governments in Asia

a) Thailand

The lessons from BAAC suggest that developing and adopting policy reforms for embarking on restructuring government agricultural development banks may offer potential and also that their solid performance and sound outreach could be greatly improved. However, this goal can only be accomplished if specific preconditions exist to facilitate their rehabilitation. Certain preconditions that seem to be crucial in reforming such a development bank include the following:

an effective demand for rural financial services;

a favourable financial sector environment; and

a real commitment to the economic and financial viability of the operations .

Thus, financial reforms matter to the success of financial institutions, but an innovative lending approach and flexibility are also crucial. In other words, well managed and gradual financial reforms, coupled with an appropriate lending technology that suits the credit needs of the whole range of clients, rendered the BAAC a successful case of improving access to credit for smallholder farmers in the developing world. This case offers a good example for the Government of Mozambique. That is, if establishing a rural public bank is the way forward, the source of funds can be mobilised through donor institutions and the government itself. However, once the bank starts operating, strategic product design and savings mobilisation schemes such as those implemented by the BAAC could be critical for it to continue in a sustainable manner.

b) Indonesia

The results have indicated that reform occurred more rapidly in the BRI than in the BAAC of Thailand because reforms in the BRI required not only operational autonomy but, more importantly, freedom from government political interference. This also entailed setting up an appropriate legal and regulatory framework to create an enabling environment for effective internal control and to allow external supervision. As a result, the BRI village units benefited greatly from the policy of interest rate deregulation and a flexible management style to commercialise operations. This enabled the bank to cover its expenses by means of the interest rate margin which allowed the institution to expand its financial products from its profits. In addition, to resolve the problem of market failures, the BRI adopted a large range of other innovative techniques.

The BRI also represents a valuable example of the power of leadership ability and practice at any level of decision-making. The Indonesian experience indicates the need to value human resources, as well as impoverished smallholder farmers, even if they are the beneficiaries of subsidised programmes.

Another important lesson provided by the case of Indonesia is that, unlike the case of the BAAC of Thailand, if reforms are properly implemented, it takes a relatively short time horizon to reform a bank of this kind. The key to achieve this is the high savings mobilisation capacity which is emphasised as a major policy to reduce subsidised loans and government interference in the managerial operations of the bank.

One of the key factors of the BRI's success is its ability to adopt a large range of innovations in order to resolve the problem of failures in rural financial markets.

c) Summary of the reforms from Asian case studies

Both Asian case studies provide sufficient evidence to show that reforms are crucial in an attempt to improve the performance of a government-owned bank with a mandate to serve the smallholder farmers. In both Asian case studies, the strategy by the governments of Thailand and Indonesia was mainly to establish agricultural rural banks. However, in all four case studies, the development banks/financial institutions also developed appropriate strategic management.

11.3.4 Successful cases of improving access to credit for smallholder farmers by government in Africa

a) Botswana

The experience of the CEDA indicates that it is critical for such financial institutions to continue to strengthen the skills of their staff members through, for example, coaching and training. Operational risk management strategies also need to be evaluated by an internal audit, while operational risk is monitored by the Audit Committee.

Diversification and sharing of risks are also situated at the core of the success of government intervention strategies in agricultural loans.

b) Zimbabwe

In general, the case of Zimbabwe indicates that that an input credit scheme cannot operate effectively without the government playing its role in the production and commercialisation of the export crops involved. In addition, input credit schemes must be afforded an internally sound structure that seeks to improve the productivity of their clients while also minimising the risk and cost of production for farmers, in order to make the farming business viable and more profitable for the companies and the farmers themselves.

Therefore, a well devised policy certainly matters. However, it is also the role of the government to protect farmers from price instability caused by an inflationary environment and other unfavourable macroeconomic conditions.

c) Summary of the reforms from African case studies

The strategies of the Government of Botswana included restructuring the National Developing Bank (NDB), providing grants for the poor and the youth, as well as establishing parastatal rural financial institutions designed to address the credit needs of smallholder farmers. The case of Zimbabwe also indicated how important it is for governments to intervene in the agricultural sector.

One interesting finding from the African cases is that securing loans is strongly emphasised in comparison with the Asian cases, where a substitute for collateral is at the core of the success of these agricultural banks. Hence, these innovative ways of improving service delivery and strategies to deal with the risks and the costs of lending to smallholder farmers can be adopted, adapted and adjusted to the specific credit needs and macroeconomic reality of Mozambique.

11.3.5 Major lessons from the case studies

Major lessons from the Asian cases include the fact that the extensive branch networks and sub-branches of the BAAC and BRI made it possible for these banks to effectively and massively mobilise savings from rural clients and the poor. Contrary to the supply-led approach that governed agricultural government banks in the past, the experience of the BAAC and the BRI provided sufficient evidence that savings mobilisation can be an adequate source of income for the banks and their client savers. Consequently, local savings mobilisation is a sustainable source of funds for lending and diversifying the loan portfolio. The two cases provide a valuable point of reference with regards to the importance of investing in infrastructure (e.g. a computerised accounting system; communication systems, telephones; and roads) so as to effectively and efficiently reduce transaction costs and risks for lenders as well as clients.

Access to credit for smallholder farmers without offering training will only lead to a waste of financial resources and time. The two cases from Africa have shown that the training of farmers should be a prerequisite for granting credit. Consequently, extension, finance and supervision are prerequisites for success. In the case of Zimbabwe, this led to both agricultural revolutions. Furthermore, smallholder farmers were wise to organise themselves into tobacco farmer associations in order to share experiences and minimise the costs of production.

Two important learning points were drawn from the two cases of Botswana and Zimbabwe. The first is that smallholder farmers should be required to contribute a certain proportion of the total amount they request for a loan, which can be provided to the formal rural bank/institutions in cash or in kind. The second is that insurance must also be required as one

of the strategies to deal with the risks of lending to agriculture, to partially cover loss when hard times such as drought and other natural disasters occur. In this regard, the government should play a critical role in acting as a third party guarantor to the bank by covering a considerable part of any lost funds.

11.4 The requirements that need to be met by rural financial institutions in Mozambique

A rural financial institution must have a decentralised structure. The NDB, CEDA, BAAC and BRI comply with this requirement while they also developed different strategic approaches to manage the costs of lending to smallholder farmers.

Such institutions are also required to assess the main risks that are associated with a range of rural production projects and, in order for them to succeed, the strategies discussed in the following paragraphs could be adopted.

a) The need for an insurance mechanisms

Some sort of insurance mechanism is necessary to protect against the risks of production failures which may result from widespread problems, such as drought or low output prices. These were major factors that might have significantly contributed to the poor performance of both the FDHA's underused funds and the FFA's minimal spending of these development funds, particularly in 2000 when the floods devastated Mozambique.

The cases of Thailand and Botswana furnish certain lessons concerning how important it is for agricultural banks to work in partnership with insurance institutions and also regarding what role a government needs to play to ensure that the two institutions work together. For example, the BAAC and NDB mitigate the risks derived from natural calamities by providing special government credit lines for emergency operations. These lines are partially subsidised by the government on a case by case basis to protect both the borrowers and the institution from unpredictable external factors such as natural disasters and external price and market shocks. In addition, the classification of missed repayments of credit as authorised arrears and the re-adjustment of repayments without extra costs to the client form part of the strategy to manage external risks from the BAAC.

At the BRI, indirect strategies are used to reduce risks, such as:

compulsory savings mobilisation in terms of the formation of a group;

formalisation of associations of savings and credit;

the requirement of compulsory group savings; and

the employment of the group formation approach and diversified loan portfolio.

These also constitute the main strategies to reduce costs and cut the risks of lending to smallholder farmers. In addition, zones classified according to various agro-ecological features and the overall loan portfolio should define limits in order to contain the incidence of risks derived from bad weather conditions, natural disasters, diseases and pests.

b) Agricultural credit subsidies should only be required for the poorest category of smallholder farmers

All four cases studied demonstrated that strategies as regards improving access to credit for smallholder farmers imply the necessary subsidising of a certain section of these clients. Furthermore, client education should not be neglected by rural government financial institutions. This is vital for lenders (to increase outreach and profitability), as well as for borrowers who need to graduate from emerging conditions to a higher level of income in order to enjoy life with dignity. Consequently, there is a need for rural financial institutions to prioritise training programmes for prospective borrowers, while serving the poorest smallholder farmers at subsidised costs. In this regard, governments must intervene through service provision and delivery to ensure that specialised training institutions are accessible at affordable costs to smallholder farmers. In addition, the Mozambican government should take the lead by not only implementing financial policies, but also by reconsidering the establishment of a rural bank and restructuring the *fundos do fomento*.

c) Innovative lending technologies are required

Agricultural lending institutions are prudent to use both group and individual lending technologies. The fact that borrowers' transaction costs may be higher, particularly for lending to smallholder farmers through solidarity group loans than for individual lending loans, may explain the reason for Indonesia preferring individual loans in the first place. It established the group formation approach only subsequently through informal associations with large memberships (30 to 300 per association). Therefore, lending directly to individuals

by indirectly lending to groups may have proved to be more effective in reducing borrowers' transaction costs, judged by the rare defaulting cases reported in Indonesia. At the same time, though, it might be the case that market-based interest rates charged to individual loans constituted the main reason for lowering transaction costs as regards the institution and, therefore, that the lending technology needed to be properly assessed (case-by-case) in order to minimise costs for both lender and borrower. The diversification of products is certainly another requirement for the success of a financial institution.

d) Evaluation and monitoring mechanisms are required

Although the innovation of training and retraining programmes improved loan repayment rates, this strategy on its own proved not to be effective. Training programmes must be complemented by evaluation and monitoring mechanisms which should also be practised to keep smallholder farmer borrowers informed and reminded of their loan repayment obligations. This will help to combat the mentality that debt will be forgiven on the client's side. Further, loan repayment enforcing mechanisms and specific incentives, both positive (rewarding good loan repayment behaviour) and negative (penalising late repayments and default resulting from moral hazard problems), should be emphasised as being the outcomes of evaluation and monitoring processes which have been effectively implemented.

The results from informal conversations with key informants, particularly smallholder farmers in Mozambique, indicated the need to provide loans to match the cash flow shortage of potential clients, while also helping them to diversify the source of their household income. However, for this to effectively take place, the lessons from the African case studies (Zimbabwe and Botswana) with regards to monitoring and evaluation, as well as product diversification and flexibility in meeting credit needs, should be taken into account.

e) Sustainability of the financial institution is required

Lastly, but not least, all four cases addressed in this study provide a vital lesson, in that compulsory deposit mobilisation needs to be seriously considered by rural financial institutions and agricultural government banks. Consequently, legal mechanisms for this mobilisation comprise part of the solution to information difficulties. Such mechanisms also contribute to the viability of a financial institution that promotes the culture of repaying loans, including subsidised ones, while the institution creates its financial independence from external and donor funding. Therefore, the sustainability of a financial institution with

regards to all its components (financial, institutional and social) is a requirement. Conversely, before the sustainability of a financial institution is even considered, the necessary and sufficient conditions that need to be met are financial self-sufficiency, organisational and operational effectiveness.

The experiences of Botswana and Zimbabwe reinforce the requirement that a smallholder farmer hold a savings account with any formal bank in order to secure the risk of the loan, or as a method of providing a guarantee to the financial institution. However, in the case of Mozambique, this implies that the government should invest more so as to expand the banking branch network in rural areas. At the same time, commercial banks need to simplify the conditions for a client to open an account (minimum amount, paperwork, etc.). This should be adhered to since, given the actual conditions of the majority of smallholder farmers, particularly in rural areas (high rates of illiteracy, low levels of cash income, etc.), implementing this requirement would end up denying access to credit instead of facilitating it.

Collaboration with rural institutions operating in rural areas whose services complement those of financial institutions is crucial. To mention only the most important ones, these include the case of the extension services offered by the Ministry, NGOs (including farmers' associations), marketing boards, insurance companies and courts. A collaborative network with these complementary institutions would be more effective in reducing the costs and risks of lending to agriculture and smallholder farmers, particularly in rural areas.

11.5 Conclusions

11.5.1 Government efforts to improve access for smallholder farmers in Mozambique

The past and current government strategies have not positively influenced access to credit for smallholder farmers. An important reason for this was the failure of financial institutions to design appropriate products to suit the credit needs of their clients. They also undermined the nature and the structure of costs and risks involved in lending to agricultural sector but, more importantly, in lending to smallholder farmers. Thus, innovative approaches in this regard still need to be developed or adopted by the rural financial institutions in Mozambique.

The lack of access to agricultural credit for such farmers in Mozambique reflects market failures in rural financial markets. Inappropriate lending policies by the former BPD and the *fundos do fomento* have also exacerbated the problem. As a result, smallholder farmers were persistently and continuously excluded by financial institutions such as commercial banks and semi-formal credit schemes operating in Mozambique. Thus, simplistic models based on the free market approach were unsuitable to deal with the lack of access to credit resulting from market failures. Therefore, the Government of Mozambique should play a major role in direct intervention in the rural financial markets.

Direct government intervention strategies to address market failures in rural areas of Mozambique through the establishment of the development bank, the BPD, and by establishing parastatal rural credit institutions such as CCADR and the *fundos do fomento agrícola,* particularly FFA and FDHA, did not succeed in improving access to credit for smallholder. The managers of these institutions failed to develop appropriate products for smallholder farmers. These problems were exacerbated by the fact that the government also failed to meet its loan guarantee obligations to the financial and credit institutions. Hence, they could not become sustainable lending institutions without a major shift in paradigm.

Thus, the strategy of the Government of Mozambique to privatize the BPD has actually worsened the problem of lack of access to credit for smallholder farmers. Furthermore, the strategy to channel credit through parastatal rural credit institutions, particularly the FFA and the FDHA, also did not succeed to improve access to credit.

The study also concludes that one of the problems that have led to the government of Mozambique not succeeding in improving access to credit for smallholder farmers is the fact that the country suffers from a lack of human capital with sufficient education and training in many fields, such as the ability to assess production cycle activities, firm, management and character risk of rural and agricultural enterprises, and to package loans with the terms and conditions that are applicable to rural enterprise needs.

Lessons from Zimbabwe suggest that other government interventions along with the efforts to improve access to credit by the Government of Zimbabwe should include the establishment of central marketing agents as a strategy to promote marketing discipline amongst farmers. Establishing the marketing boards could facilitate the rural financial institutions, including a

development bank's collection of repayments from farmers through placing stop orders with these marketing agents.

11.5.2 The smallholder farmers' credit needs in Mozambique

It is concluded that rural financial institutions/banks in Mozambique with a mandate to improve access to credit for smallholder farmers should provide not only credit facilities but also other financial services, including consumption, working capital and investment (including credit for trading purposes), credit facilities as well as savings, money transfer/payment, and small-scale insurance, respectively. While the subsistence smallholder farmers only demand credit facilities for consumption purposes, the medium large-scale traders and agribusiness farmers largely require money transfer/payment and equity capital. Above all, more money transfer/payments facilities need to be provided by rural banks/financial institutions since this is the only financial service demanded by all the categories of rural clients. Thereafter, savings, consumption credit and small-scale insurance services should constitute the second largest proportion of financial services to be provided for smallholder farmers, followed by credit services for working capital and investment purposes.

11.5.3 Requirements to be addressed by rural financial institutions

In order for any kind of public financial institution to succeed in improving access to credit for smallholder farmers, its institutional viability needs to be advocated; proper risk management measures and strategies must be developed and implemented; interest rates must be charged taking into consideration the market forces, but differentiated according to the categories of farmers (smallholders and commercial farmers); and loans need to be profitably allocated to various income generating activities (both farming and non-farming activities).

Lessons gained from the case studies also emphasise that, in order for rural financial institutions in Mozambique to adequately address the issue of lack of access to credit, it is necessary to efficiently diversify their lending portfolio so as to satisfy the demand both expressed and revealed by smallholder farmers. The diversification of products and services

offered by lenders will provide a positive response regarding the issues of the need to increase the outreach, financial sustainability and growth of financial institutions. In all the cases in this study, the need to diversify lending portfolios constituted a common strategic risk management effort.

The study found that both the former BPD, the *fundos do fomento* and even the commercial banks lack human resources with sufficient knowledge to develop products and assess agricultural loan risks. Thus some of the institutional problems can be addressed by retraining bank's staff in lending management strategies, and decision-making in order for them to improve loan repayment rates, outreach and sustainability of rural financial institutions.

11.5.4 Appropriate government strategy for improving access to credit for smallholder farmers

The main conclusion stemming from the study is that the lack of access to agricultural credit for smallholder farmers in Mozambique reflects market failures in rural financial markets but that inappropriate lending policies have also negatively exacerbated the problem.

Based on the positive experiences of the four countries included in this study which involved the establishment of a state development bank with a specific mandate to improve access to credit for farmers, it is suggested that the most appropriate strategy to address the problem of lack of access to credit for smallholder farmers in Mozambique should include the re-establishment of a rural public bank.

11.5.5 Major lessons from the experiences of the four countries

Valuable lessons can be drawn from the experiences of the four countries for the suggested public rural bank to succeed in Mozambique. The core of the success achieved in the four countries lies in designing products and services to extend lending portfolios of credit institutions to smallholder farmers, investing in market research, and developing pilot projects to test and adapt their products to meet client demands.

11.6 Recommendations

Direct government intervention rather than reliance on the private sector seems to be the most appropriate approach for improving access to credit for smallholder farmers in Mozambique. The private sector is profit driven and most of the commercial banks in Mozambique are controlled by foreign parent banks that clearly might have a different agenda to that of the government.

Successful strategies for improving access to credit for smallholder farmers need to consider both the supply and demand sides of credit. That is, the government needs to not only invest in institutions (banks, parastatals, research and extension, marketing boards, roads, information technology, training institutions, etc.) but also in human resource capacity building, including that of the farmers.

Thus, successful strategies should entail implementing innovative methods of lending and managing their clients, capacity to mobilise resources, provide adequate financial services, cover their operational and administrative costs from their operational income earnings and profits, guard their capital resources against erosion from inflation and non-repayment of credit, while making an effort to achieve not only their own sustainability and viability but also outreach.

With regards to the problem of lack of human capital expertise, the study suggest that the government of Mozambique in establishing a rural public bank it would be a prerequisite to also invest in training the bank officers in business/financial skills. The study also concludes that a public sector rural bank cannot succeed without major reforms in personnel and staffing. Since a public sector financial institution/bank is often doomed to political interference, it would be a prerequisite for these rural financial institutions to focus more on strategies for managing the risks and costs of lending to agriculture include diversifying a bank's loan portfolio in terms of lending purposes, loan maturities and market segments, rather than subsidies and government intervention.

11.6.1 The *fundos do fomento*

This study supports the finding by ECI (2003) that the FFA might have failed to define specific areas of intervention. The best strategy would be for FFA to limit its areas of intervention by identifying a number of specific strategic crops. However, caution would still be exercised to select just a few crops, including food crops. In addition, the *fundos do fomento* also need to define the geographic areas suitable for each type of project (e.g. each kind of crop). For example, in the case of Zimbabwe, the AFC and the Agribank have identified four cash crops, namely, maize, tobacco, cotton and tea, as the top priority crops to be given preferential treatment in terms of making credit (input, working capital, etc.) and other supportive services available for smallholder farmers at reasonable costs.

Conversely, the results of this study suggest that policy makers, decision makers, and the Government of Mozambique need to acknowledge the failures of the lending models discussed above, including that of indirect government intervention through privatization of the financial markets. The government must also be willing to take the responsibility for those failures by treating them as an opportunity to make further attempts as well as the necessary amendments in order to render these the most appropriate means of improving access to credit amongst smallholder farmers.

It is also recommended that the *fundos do fomento*, particularly the FFA and FHDA, develop an adequate office network throughout the country after having been reformed so as to improve access to credit. However, the government should not rule out the possibility of re-establishing a development bank.

11.6.2 Requirements for rural financial institutions to improve access to credit

Credit institutions in Mozambique should realise that, in order to succeed, they need to address the problems of seasonality and duration of agricultural credit. This can be achieved by relying on the better yields which farmers could produce if they are provided with credit to purchase inputs when they really need them, depending on the type of crop in a region. Therefore, rural financial institutions need to supervise the implementation of a variety of those projects. The implication is that both credit institutions' staff and farmers are entitled to

be trained in technical matters, including the preparation, implementation and evaluation of farm projects. For example, training of farmers and technical assistance in business management issues have been effective in dealing with both market and credit risks. However, one should not expect the private sector to provide training programmes to smallholder farmers: these are more likely to be offered for free or at best at a subsidised cost as a public good by the government, or provided as a community service by development/donor agents to development banks and the *fundos do fomento*.

For example, in the cases where a new technology is introduced and credit is made available, farmers could also be trained in the former. In this regard, agronomists, specialists, and extension agents must be prepared to do their best in disseminating the new technology, but one can also expect that other types of training and marketing institutions should also be required to do so. Hence, once again, the government should be the major role player as a provider and facilitator that will assist all the other role players to co-operate. Therefore, the public bank and the development funds or institutions are in a better position to provide this technical training for their staff. However, if they work in tandem with micro-finance institutions as their intermediaries, these institutions are much more likely also to provide technical training for farmers free of charge since they can solicit funds from international donors.

Rural financial institutions providing credit facilities for the smallholder farmers also need to be more comprehensive and much more widespread by including a large variety of rural projects instead of restricting their lending portfolios to agricultural activities. However, in order to induce marketing discipline among the smallholder farmer clients and beneficiaries, the government should consider the re-establishment of central market agents for most commodities, particularly for the strategic ones.

An important implication of the findings of this study is that it is critical to separate the smallholder farmers who really qualify for subsidised loans from those who can afford credit at real market rates as well as from those who really need grants. This will enable the borrowers to repay their loans according to their cash flow and their capability to use credit productively.

The implication of introducing the practice of flexible use of loans, however, is that rural financial institutions/banks need to develop relationships with their clients based on trust. One strategy is to lend to groups to take advantage of peer pressure mechanisms. This should be accompanied by training of the group representatives in matters of leadership which could add more value to the efforts to build good relationships and trust between the lenders and borrowers.

The problem of insufficient collateral or even a lack of it can be alleviated by lenders emphasising property rights to land in rural areas. For example, in Zimbabwe and Botswana, formal lenders and parastatals recognise land as collateral since in these countries the law allows them to sell the land to recover their money in case of a default on loans. However, in Mozambique, land belongs to the state and, therefore, it is not marketable. Considering the difficulties of dissemination of information in the rural areas of Mozambique, one way of overcoming this problem may be for the government to act as a guarantor to secure the loans for smallholder farmers, as was the case with the AFC of Zimbabwe.

In assessing the credit repayment capacity and the creditworthiness of new clients, rural financial institutions should take into consideration all income sources and expenditures of the household unit. They also need to consider all the alternative sources of funds for repaying the loan instead of restricting their appraisal to simply the income that will be derived from the investment in the project relating to the loan application.

It also recommended that rural financial institutions/banks provide credit for investment purposes to individual large-scale farmers and to farmers' associations rather than to individual smallholder farmers. Group lending technology appears to be more suitable for the majority of the smallholder farmers who demand more credit facilities compared with the subsistence farmers.

Strategies to increase borrowers' willingness to repay should include:

- imposing penalties on late payment and making use of peer pressure;
- positive incentives, such as levying interest, to stimulate on-time payments;
- maintaining an efficient internal information system;

professional management and considerable autonomy in their day-to-day operations; and

using bonus payments to promote high levels of staff efficiency.

Furthermore, to bring about social transformation on the community level, community leaders should have the wisdom within the community to sort out whatever issues might arise. In order for this to take place, the education component is critical. In working with farmers' associations for saving and credit purposes, it might be important to establish such committees as credit, supervision, education, monitoring and human resources (to deal with complaints and bring about reconciliation).

The Asian experience revealed that women enjoy a reputation for being good savers and prudent investors. If there is any relevance for Mozambique here, it is that in designing their client selection methods, rural financial institutions/public banks should pay particular attention to women. In particular, women should be involved in the participatory process which could make an important contribution to the effectiveness of rural finance projects and, in return, benefit greatly from effective projects.

11.6.3 The role of the government in improving access to credit for smallholder farmers in Mozambique

The government needs to intervene directly in the rural financial markets while it also continues to intervene indirectly by investing in improving the rural infrastructure. Similarly, the government should also continue to play a crucial role in providing a variety of services, such as information technology to facilitate communication and other supportive services (e.g. research, extension, training and marketing).

An important implication of the findings of this study is that, in order to design appropriate policies to improve access of the kind envisaged, it is necessary to first determine whether legislation regarding rural banks is applicable to the establishment of a public rural financial institution in Mozambique. Financial sector policies need to be reviewed in order to determine whether they are appropriate to create an enabling environment conducive to innovative credit system delivery, particularly in the case of parastatal financial institutions

and government development funds.

Massive retraining of staff in the new culture of microbanking with its new financial services and incentive schemes was of particular importance to the success of all four cases that formed the basis of this study. If a rural public bank is to be established in Mozambique, then investment in human capital development would be crucial alongside investment in infrastructure. In other words, the Ministry of Agriculture needs to develop special training incentives for field extension workers who, ultimately, are in charge of the day-to-day field operations of smallholder clients. Retraining programmes for both the officers, field staff members and smallholder farmer clients should include issues of exercising leadership.

11.6.4 Input credit schemes and the development funds

The conclusion that the more narrowly specified the target group, the greater the risk for the lender, due to the non-diversified portfolio, the study suggest that input credit schemes for smallholder farmers engaged in cash crop production need to be established together with the provision of support services, it also entails linking credit to variety of cash crops and giving farmers the option of applying the funds for a diversifying source of income as a strategy to minimize the high defaulting rates. Furthermore, commercialisation of the cash crops should be promoted by, for example, establishing marketing boards and institutions to provide training and retraining to farmers as regards new ways of improving productivity.

Based on the lessons from the four case studies, it is recommended that the agricultural credit policy should be reviewed to allow for the mobilisation of a certain percentage of the funds from commercial banks to be compulsorily deposited with the government for later use as part of the initial capital basis for the suggested public rural banks to be established in Mozambique. The funds referred to here would be the quota that commercial banks, which will otherwise remain reluctant to lend to smallholder farmers, would allocate to lending to this sector under the new arrangements. The remaining part of the start-up liquidity injection would be allocated from other sources such as government and donors.

Rural financial institutions, whether a public bank, development fund, or any other institution, need to diversify their lending products based on the demand-driven approach to

better serve the interests of the institutions and their clients. Hence, these financial institutions should emphasise the provision of savings mobilisation and levy market-related interest rates on clients who are not poor, such as rich farmers and other non-farming clients.

11.7 Implications for policy

The findings of the study lead to the following policy implications:

11.7.1 The development funds

As regards the *fundos do fomento*, it is important to note that, to improve the performance of the FFA and FDHA of Mozambique, financial resources need to be mobilised and made available for the rural financial institutions to ensure that these are reasonably equipped to meet the credit needs of the smallholder farmers. The implication of this is that the government itself should commit a certain portion of funds from its national budget while additional resources can be sourced from international development agencies and the donor community.

11.7.2 The re-establishment of the development bank

The implication of re-establishing a formal development bank is that it should present a different face from that of the former BPD.

An important implication of the findings of this study is that, to design appropriate policies to improve access to credit for smallholder farmers in Mozambique, it is necessary to first determine whether legislation for rural banks is applicable to the establishment of a public rural financial institution. Therefore, financial sector policies need to be reviewed to determine whether they are appropriate for creating an environment conducive to financial innovations, particularly in the case of parastatal financial institutions and government developing funds.

Staff retraining in the new micro-banking culture with its new financial services and incentive schemes was crucial to success in all four cases that formed the basis of this study. Thus, if a rural public bank is to be established in Mozambique, investment in human capital

development would be essential alongside investment in infrastructure. This means that the Ministry of Agriculture needs to develop special training incentives for field extension workers, including matters of leadership and as mentioned, retraining programmes for not only the officers and field staff members but also the smallholder farmer clients.

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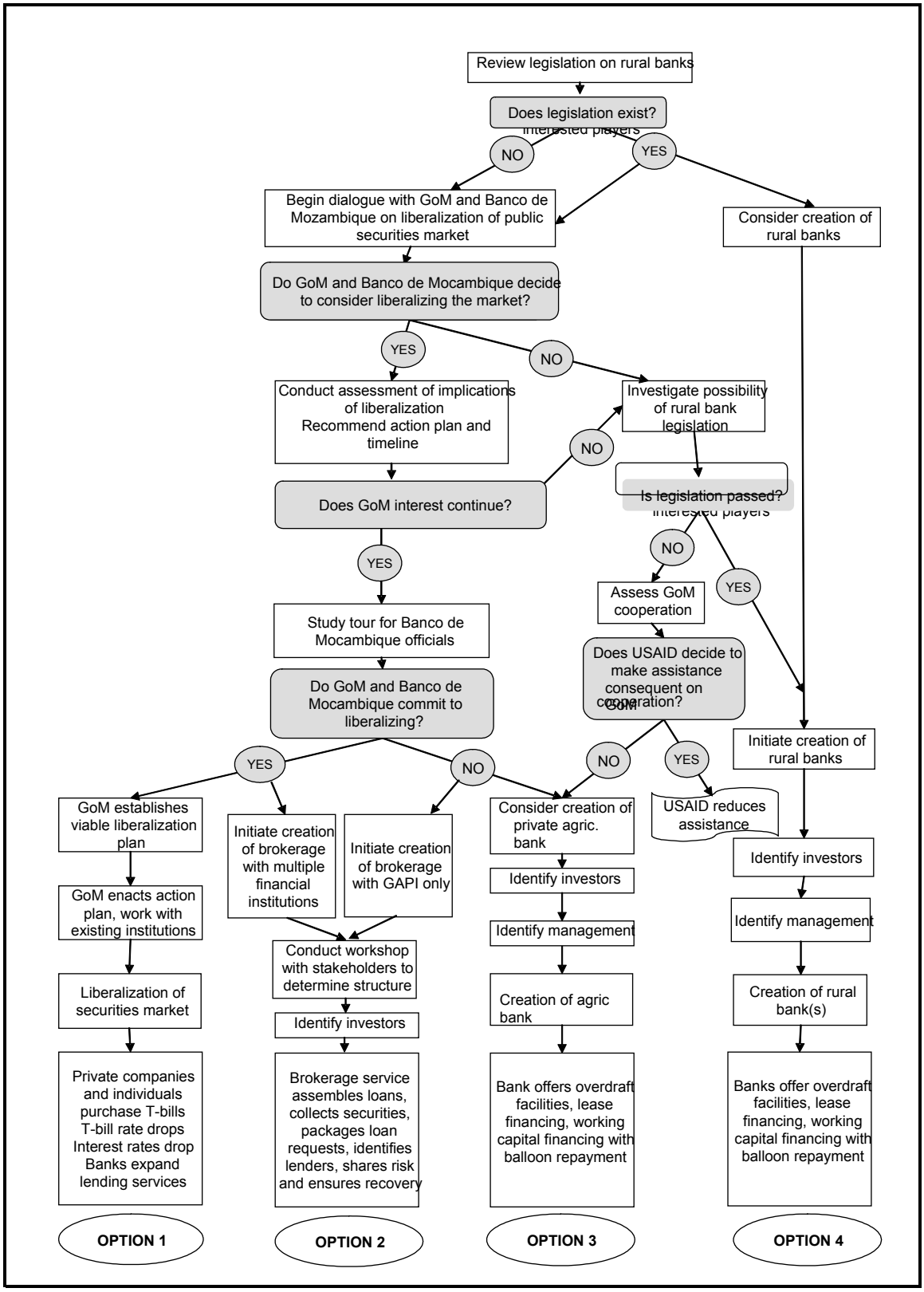
APPENDICES

Appendix 1: Options for seasonal crop financing

		Agricultural activities in household	Level of agricultural activity	
			High	**Low**
Level of non-farm activity in area	**High**	Cash crop with or without subsistence crop Subsistence crop only	Interlocking MFI (agric, standard) MFI (standard)	Interlocking MFI (standard) MFI (standard)
	Low	Cash crop with or without subsistence crop Subsistence crop only	Interlocking SACCOs? Caisses Villageoises? ?	Interlocking SACCOs? Caisses Villageoises? ?

Dorward *et al.* (2001)

Appendix 2: Mozambique financial sector enabling environment- decision tree



Source: Kula and Farmers (2004)

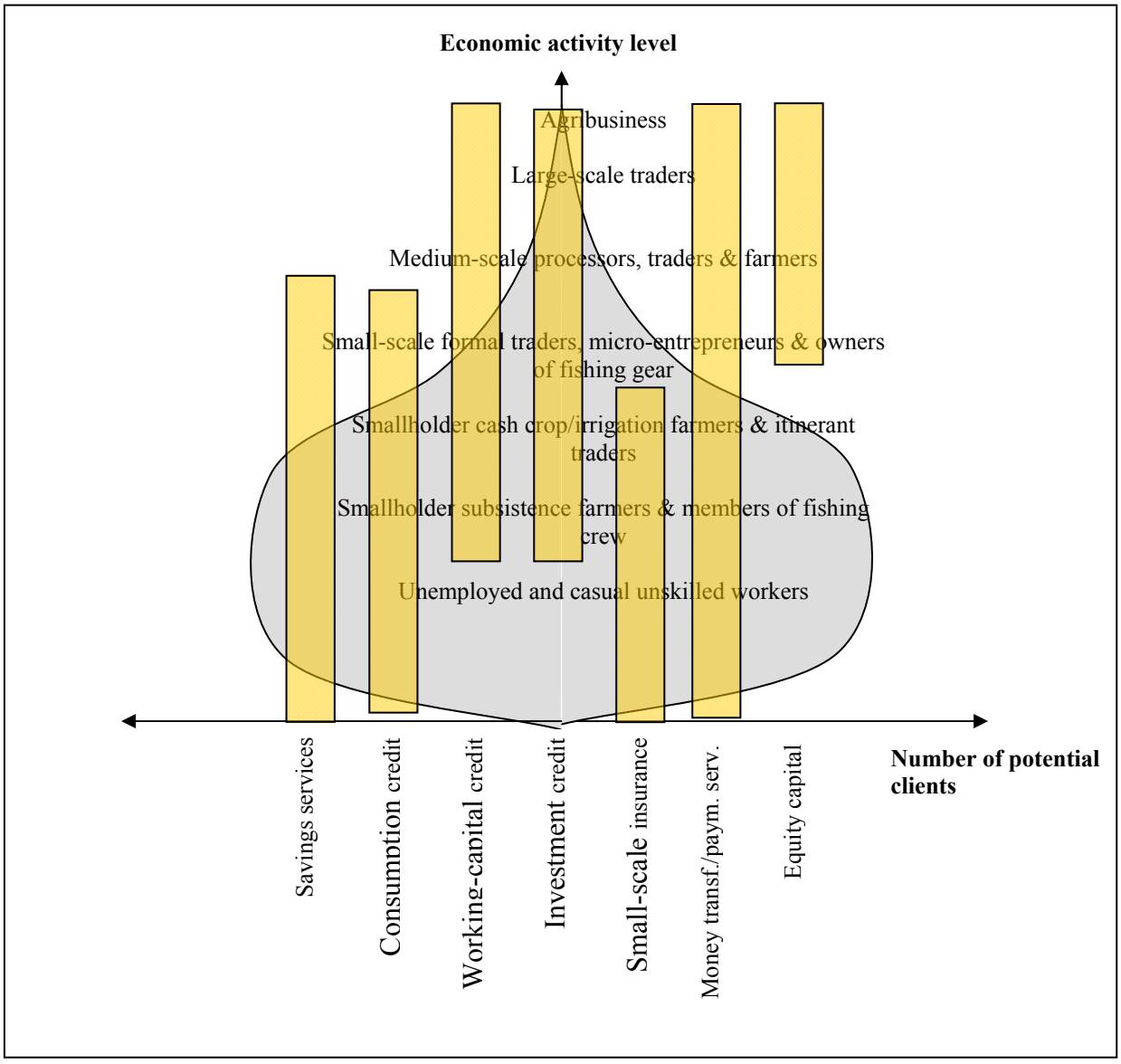
Appendix 3: Smallholder farmers' credit needs in Mozambique

Item	Women participating in semi-formal credit system (% out of 69 smallholder farmer respondents)	Women not participating in semi-formal credit system (% out of 40 smallholder farmer respondents)
Access new seed varieties	53	11
Buy or lease agricultural machinery/ equipment, such as tractor, truck; and/or major farm improvements, such as irrigation canals; and purchase of motor pumps for rice farmers; or water supply for irrigation, fencing and storage	96	4
Purchasing livestock for fattening: goats	86	14
Purchasing livestock for fattening: cows	85	15
Charcoal trading	91	8
Trading in agricultural products, inputs and non-agricultural products (e.g. street vending)	83	17
Formal small shopping market	39	0
Agricultural product storage	83	0
Greengrocer market	74	26
Fisher	93	7
Domestic handled stuffs	71	28
Dresser	17	0
Bakery	35	14
Confectionery	21	3
Housing rehabilitation	2	0
Pressing machinery such as hammer mills and maize shellers	25	6

Source: Manganhele (1999)

Appendix 4: The demand for rural financial services in Mozambique

Opportunities, strengths and weaknesses of investing in rural financial markets in Mozambique



Source: MRFSP (2003)