
FOUR
CASE STUDIES
ON CREDIT
GUARANTEE
FUNDS FOR
AGRICULTURE
FIAT PANIS

FOUR CASE STUDIES ON CREDIT GUARANTEE FUNDS FOR AGRICULTURE

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2013

RECOMMENDED CITATION
FAO. 2013. *Four case studies on credit guarantee funds for agriculture*. Rome

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Executive summary

Latin America: *Fideicomisos Instituidos en Relación con la Agricultura* (FIRA), Mexico

The first of the four cases presented in this document is on trust funds for rural development in Mexico. *Fideicomisos Instituidos en Relación con la Agricultura* (FIRA) was founded in 1945 and is now one of the largest guarantee funds (GFs) in the world, operating as the second-tier development bank across Mexico. It operates through four specialized trust funds to stimulate the agriculture sector across Mexico. In 2010, 54 percent of FIRA's business was in loans, 37 percent was in loans with guarantees, and 9 percent was in guarantees without loans.

The study focuses on one of FIRA's trust funds, the *Fondo Especial de Asistencia Técnica y Garantía para Créditos Agropecuarios* (FEGA), which was started in 1972 to manage the guarantee service. During 2010, FEGA granted up to 67 percent of FIRA's loan portfolio with other financial intermediaries, supporting 1.08 million agriculture and agricultural value chain actors and making it the single most important trust fund for FIRA. This positive performance was based on guaranteeing the FIRA loan portfolio, as FEGA does not issue its own loans. Its accumulated earnings were one-third of FIRA's total accumulated earnings at the end of 2010.

The *Fondo de Garantía y Fomento para la Agricultura, Ganadería y Avicultura* (FONDO) was the first trust fund started by FIRA, in 1954, and it operates a system based on guaranteeing the loan portfolio's first losses, to avoid depletion of assets. The case study also provides details of the *Fondo Nacional de Garantías de los Sectores Agropecuario, Forestal, Pesquero y Rural* (FONAGA), which was created in 2008 and works as a first-loss fund, limiting the risk assumed by FEGA. It operates as a revolving fund in support of government policy for promoting loans to the sector.

The main conclusions of this case study are that the credit guarantee system (CGS) of FEGA and FONAGA could be successfully applied to similar banking systems and that FIRA provides an excellent example of guarantee systems, justifying is position as one of the largest GFs in the world.

Asia: Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), India

The Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) was set up by the Ministry of Micro, Small and Medium Enterprises, the Government of India and the Small Industries Development Bank of India (SIDBI) in 2000 with a committed capital of US$530 million, 80 percent of which was contributed by the Government of India.

The main objective of CGTMSE is to encourage member lending institutions (MLIs) to base their appraisals on the viability of the project and the security of the assets being financed, and to encourage lenders with guarantee facilities to extend credit for both working capital and term loans. The credit guarantee system (CGS) seeks to reassure lenders that in the event of default by a micro- or small enterprise covered by a guarantee, CGTMSE will meet the loss incurred by the lender up to a maximum of 85 percent of the amount in default. Any funded and/or non-fund-based loans up to a maximum ofUS$210 000 that MLIs extend to start-up and existing micro- and small enterprises without any collateral security and/or third-party guarantee are eligible for coverage under the CGTMSE system.

As of 31 January 2010, there were 110 MLIs registered with CGTMSE: 27 public sector banks, 16 private sector banks, 59 regional rural banks, three all-India financial institutions, three state financial institutions, and two foreign banks. Although the system's coverage has always grown consistently (in both number and amount), coverage growth in the 2010 financial year was phenomenal, reaching 100 percent of the cumulative total for the previous nine years. The cumulative number of approvals exceeded 300 000, with total approved coverage of US$ 2.5 billion. The average loan size covered was US$ 10 000, which is testimony to the skewed coverage towards small loans. The cumulative number of guarantees for loans up to US$11 000 was 249 515, or 83.17 percent of the total number approved. Some 52.44 percent of approved credit facilities were for loans of up to US$2 125, which demonstrates CGTMSE's success in serving microenterprises. Since its inception, CGTMSE had received US$32.04 million as guarantee

fees and US$8.96 million as annual service fees. Receipts received between 2008 and 2010 accounted for 71 percent of total receipts since the trust's inception.

The claim settlement process of CGTMSE appears to be slow and complicated. According to the bankers, the causes of the low level of guarantee invocation were the complicated procedures for filing a lawsuit as a precondition for submission of a claim, and the prescribed lock-in period of 18 months. The average time required to complete the settlement of an account (first instalment) is more than six months, which hinders the smooth functioning of the GF.

As of 31 March 2010, the GF had received 4 761 (cumulative number) claim applications from MLIs, of which it had settled 2 506 for US$11.30 million – a success rate of 52.64 percent. During the 2010 financial year alone, 1 722 guarantee claims were settled for US$7.30 million, accounting for 64.6 percent of total claims settled. This steep rise in the invocation of guarantees during 2009/10 suggests that the trust will face challenges in the years to come.

At its current level of operation, CGTMSE will not be able to serve the envisaged demand for guarantee coverage and is currently revising some of its operating procedures. One way of upscaling operations would be to extend credit guarantee cover to 2 000 cluster group of potential borrowers that have been identified across the country.The banking sector is already carrying out interventions in 500 of these clusters. Another response could be to extend guarantee coverage to parts of the services sector, which is growing rapidly, but is not included in CGTMSE. Inclusion of the cooperative banking system in guarantee coverage for loans extended to micro- and small enterprises would increase the breadth of credit institutions.

As of 31 March 2010, CGTMSE had leveraged itself to more than six times its corpus funds of US$530 million by extending credit guarantee coverage. It has now become imperative that the settlers of CGTMSE increase the corpus of the trust so they can increase the volume of credit guarantee approvals and tap the emerging market of micro- and small enterprises in India. Exploring the possibilities for reinsuring the guarantee coverage extended by CGTMSE in a cost-effective manner could also improve the position.

Currently there is no CGS working specifically for the agriculture sector in India. To improve the credit flow to agriculture and agribusiness, various working groups, thinkers and policy advocates favour the creation of an agriculture credit guarantee fund at either the apex or bank level, in line with CGTMSE. Suggestions for the design and features of such a fund are made in the case study.

Africa: Agricultural Credit Guarantee Scheme Fund (ACGSF), Nigeria

Recognizing the need to overcome small farmers' problems in obtaining access to credit, the Government of Nigeria established the Agricultural Credit Guarantee Fund Scheme (ACGSF) in 1977. Its aim is to encourage banks to lend money to all categories of farmers by providing guarantees on loans granted by commercial banks for the agricultural purposes defined by ACGSF. The fund's objectives are to provide guarantees on loans granted by commercial and merchant banks, to increase and control access to credit for small farmers, and to encourage farmers to use banks.

The case study outlines proposed new initiatives for improving lending under ACGSF, focusing on four models:

- The Self-Help Groups Linkage Banking Programme: In this model, farmers are encouraged to create groups of up to 15 members to establish a savings fund. After operating for six months, groups can approach the partner bank for a group loan.
- The Trust Fund Model (TFM): State and local governments, non-governmental organizations (NGOs) and oil companies place funds in trust with lending banks to augment the security of farmers' group savings.
- The Interest Drawback Programme (IDP) allows farmers to borrow from lending banks at market rates, with the fund providing an interest rebate when farmers repay their loans on time.
- The Refinancing and Rediscounting Facility (RRF) aims to expand the production base through encouraging bank lending.

The case study details the requirements for obtaining an ACGSF guarantee and the fund's impact and results, including its economic and financial, social, technical, political, institutional, environmental and psychological impacts, each of which affects agricultural enterprises in different ways. A strengths, weaknesses, opportunities and threats analysis of ACGSF identifies the strengths that can be used and the opportunities that should not be neglected.

Eastern Europe: Rural Development Foundation (RDF), Estonia

This case study describes and analyses mechanisms for promoting and enabling investment and finance in the Baltic country of Estonia. Much understanding can be gained from the success and lessons learned of the Estonian Rural Development Foundation (RDF) (referred to as *Maaelu Edendamise Sihtasutus* [MES] in Estonian). It issues banks with guarantees on loans granted to farmers and other entrepreneurs in Estonian rural areas.

RDF was established in its present form in 2001 as a merger of two predecessor organizations: the Rural Life Credit Foundation founded by the government in 1993; and the Rural Credit Guarantee Fund established in 1997. This merger of a credit guarantee with a more general agricultural promotion organization aimed to adapt the work of both to the changing investment environment as Estonia evolved from a Soviet command economy to a market-based one with privately owned and managed farms.

RDF's mission is to promote rural development through the provision of loans and guarantees on loans for agriculture, agribusiness and rural development projects. Its main objectives are to: i) promote investments in agricultural and rural areas; ii) provide loans and guarantees to rural and agricultural entrepreneurs and organizations; and iii) offer training, capacity building and other types of technical assistance to end borrowers. Its primary function is as a GF that provides guarantees for up to 80 percent of loans.

Financial results are the real indicator of the success of RDF, which has generated US$6 million of net profits during the life of the fund.

RDF's beneficiaries are mainly small, medium and large farmers and agro-enterprise owners who require guarantees to meet borrowing needs. Savings and loan associations and some non-profit community association clients also use RDF's services to obtain access to finance.

Acknowledgements

Special thanks to the authors of the case studies presented in this document:

- Luis Roberto Llanos Miranda and Rodrigo Sánchez, *Fideicomisos Instituidos en Relación con la Agricultura* (FIRA);
- Prasun Kumar Das, Credit Guarantee Fund for Micro and Small Enterprises (CGTMSE);
- Bolarin T. Omonona, Agricultural Credit Guarantee Scheme Fund (ACGSF);
- Raul Rosenburg, Rural Development Foundation (RDF);
- Calvin Miller, Rural Infrastructure and Agro-Industries Division (AGS) of FAO.

These cases form part of a comprehensive study on *Credit guarantee systems for agriculture and rural enterprise development* conducted by Rauno Zander, Calvin Miller and Nomathemba Mhlanga and published by FAO in 2013. The cases and the comprehensive study were reviewed at an Expert Roundtable held in Yerevan, Armenia in September 2011,[1] for comparing the cases and increasing understanding of their approaches, strengths, weaknesses and lessons.

The four case studies benefited immensely from interactions between the consultants and authors and leaders of the guarantee funds in each of the countries, as well as with bankers and users of the guarantees. From India, it is important to note the contributions of Mr U.R. Tata, Chief Executive Officer and Mr Mukesh Kumar, Assistant General Manager, CGTMSE; Mr B. Subrahmanyam, Managing Director, National Federation of State Cooperative Banks Ltd (NAFSCOB); Mr B.B. Nayak, Credit Guarantee Manager, Department for Cooperative Revival and Reforms (DCRR) of the National Bank for Agriculture and Rural Development (NABARD); Dr Baskar Reddy, Head of Agriculture, Federation of Indian Chambers of Commerce and Industry (FICCI), New Delhi; and Mr D.N. Thakur, Director (Agriculture Credit), Ministry of Agriculture, Government of India.

The authors also sincerely thank Astrid von Pruesen, Milica Petruljeskov, Giang Duong and Kathleen Charles for their work and editing of the cases in the document as well as Jane Shaw for copy editing, Simone Morini for desktop publishing, Francesca Cabré-Aguilar for proof-reading and Larissa D'Aquilio for production coordination.

[1] Expert Roundtable Meeting on Agricultural and Agribusiness Guarantee Funds, organized by FAO, the Agriculture Cooperative Bank of Armenia, Crédit Agricole Bank and the Ministry of Agriculture of Armenia on 27 to 28 September 2011.

About the authors

The authors of the four case studies in this document are experienced professionals in agricultural finance and guarantee programmes. They prepared the case studies under the guidance and support of Rauno Zander, finance consultant, and Calvin Miller of FAO, who authored the accompanying publication, *Credit guarantee systems for agriculture and rural enterprise development*.

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Abstract

Four case studies on credit guarantee funds for agriculture is an in-depth analysis of different models of guarantee system. An assessment of these cases, together with a review of the global industry of agricultural guarantee systems, was published as *Credit guarantee systems for agriculture and rural enterprise development*. The four case studies in this document provide the reader with a more detailed description of how these individual programmes have worked over time. Three of the programmes are among the largest and longest standing agricultural guarantee funds in the world, and have had both successful and difficult experiences as they evolve over time. The fourth case, from Estonia, shows how a small, efficient guarantee fund can operate profitably year after year.

Acronyms

ACGF	agriculture credit guarantee fund
ACGSF	Agricultural Credit Guarantee Fund Scheme (Nigeria)
ANBC	adjusted net bank credit
BIS	Bank of International Settlements
CBN	Central Bank of Nigeria
CGCI	Credit Guarantee Corporation of India
CGS	credit guarantee system(s)
CGTMSE	Credit Guarantee Fund Trust for Micro and Small Enterprises (India)
DIC	Deposit Insurance Company (India)
DICGC	Deposit Insurance and Credit Guarantee Corporation (India)
DMB	deposit money bank
ECGC	Export Credit Guarantee Corporation of India
EU	European Union
FEFA	*Fondo Especial para Financiamientos Agropecuarios* (Mexico)
FEGA	*Fondo Especial de Asistencia Técnica y Garantía para Créditos Agropecuarios* (Mexico)
FIRA	*Fideicomisos Instituidos en Relación con la Agricultura* (Mexico)
FONAGA	*Fondo Nacional de Garantías de los Sectores Agropecuario, Forestal, Pesquero y Rural* (Mexico)
FONDO	*Fondo de Garantía y Fomento para la Agricultura, Ganadería y Avicultura* (Mexico)
FOPESCA	*Fondo de Garantía y Fomento para las Actividades Pesqueras*
GDP	gross domestic product
GF	guarantee fund
IDP	Interest Drawback Programme (Nigeria)
IMC	Interim Management Committee (Nigeria)
MFB	microfinance bank
MIS	management information system(s)
MLI	member lending institution (India)
MSMEs	micro-, small and medium enterprises
NABARB	National Bank for Agriculture and Rural Development (India)
NGO	non-governmental organization
NIRSAL	Nigerian Incentive-Based Risk Sharing System for Agricultural Lending
NPA	non-performing asset
RBI	Reserve Bank of India
RDF	Rural Development Foundation (Estonia)
RRF	Refinancing and Rediscounting Facility (Nigeria)
SAGARPA	Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (Mexico)
SCB	scheduled commercial bank
SHG	self-help group
SIDBI	Small Industries Development Bank of India
SMECGS	Small and Medium Enterprises Credit Guarantee Scheme (Nigeria)
SMEs	small and medium enterprises
TFM	Trust Fund Model (Nigeria)

Introduction

The collateral requirements of banks can pose a serious challenge for farmers and rural micro- or small entrepreneurs seeking funding for their businesses or funding. In many countries around the world, credit guarantees are implemented as a partial substitute to conventional collateral.

Credit guarantees are a comparatively new instrument in agricultural development finance. Following the introduction of credit guarantee systems (CGS) in Japan in 1937, their use spread first throughout Europe and the Americas in the 1950s, and then to Africa, Asia and Oceania in the 1960s and 1970s. A recent count found 2 250 in almost 100 countries. The design of these systems has evolved to address the new and changing needs of intermediary finance service providers in areas such as portfolio concentration risks and the capital requirements for cushioning against lending risks. At the public policy level, CGS are an instrument for facilitating lending to specific sectors considered to be policy priorities.

Taken together, CGS hold promise and provide attractive features for borrowers, financial institutions and policy-makers alike and are attracting growing interest as an instrument in development finance. Well-designed, well-funded and well-implemented CGS can improve micro-, small and medium enterprises' (MSMEs') access to credit and their integration into formal financial markets; assist these enterprises in obtaining finance for working capital, fixed assets and investment at reasonable conditions; and enable them to improve their competitiveness and extend their economic activities. These advantages ultimately translate into improved business performance and job creation.

Although CGS are relevant to all sectors of the business economy, many – especially in developing countries – are applied to agriculture and rural MSME development. In these cases, the benefits of increased access to credit often include improved food security and well-being for farming families and communities, and reduced poverty.

This document contains four case studies describing experiences of designing and implementing agricultural credit guarantee funds in four countries in different continents:

- *Fideicomisos Instituidos en Relación con la Agricultura*, (FIRA) in Mexico, Latin America;
- the Credit Guarantee Fund for Micro and Small Enterprises (CGTMSE) in India, South Asia;
- the Agricultural Credit Guarantee Scheme Fund (ACGSF) in Nigeria, sub-Saharan Africa;
- the Rural Development Foundation (RDF) in Estonia, Eastern Europe.

The four case studies were developed as background studies for a FAO publication on *Credit guarantee systems for agriculture and rural enterprise development* (FAO, 2013). Together with a draft of this comprehensive study, they were reviewed at an Expert Roundtable Meeting on Agricultural and Agribusiness Guarantee Funds, organized by FAO, the Agriculture Cooperative Bank of Armenia, Crédit Agricole Bank and the Ministry of Agriculture of Armenia in Yerevan, Armenia from 27 to 28 September 2011.

The purpose of the case studies is to illustrate a range of issues related to guarantee fund implementation by outlining the systems' different approaches, which reflect specific local needs and conditions, and their outreach and impact, local partnerships and success factors. Information from these case studies will be of use to development agencies, fund managers and policy-makers who are involved in or considering the use of guarantee mechanisms as a facility to enhance the supply and use of financing to agriculture and enterprise development.

REFERENCE

FAO. 2013. *Credit guarantee systems for agriculture and rural enterprise development*. Rome.

Chapter 1
Latin America: *Fideicomisos Instituidos en Relación con la Agricultura* (FIRA), Mexico

Luis Roberto Llanos Miranda and Rodrigo Sánchez

1.1 INTRODUCTION

Fideicomisos Instituidos en Relación con la Agricultura (FIRA) – Trust Funds for Rural Development – is one of the oldest and largest guarantee funds (GFs) in the world. FIRA operates as a second-tier development bank across Mexico, representing a group of four publicly held trust funds for supporting rural development, including agriculture and agribusiness, livestock, forestry and fisheries. FIRA's operations started in 1954 when the first of this group of funds was established. The trust funds provide loans and guarantees along with training, technical assistance and technology promotion:

- *Fondo de Garantía y Fomento para la Agricultura, Ganadería y Avicultura* (FONDO) (1954) focuses on mobilizing resources to the primary sector through short-term financing targeting working capital.
- *Fondo Especial para Financiamientos Agropecuarios* (FEFA) (1965) provides financing, subsidies and other services for the production, collection and distribution of goods and services through long-term financing for the acquisition of machinery, equipment, installations, etc.
- *Fondo Especial de Asistencia Técnica y Garantía para Créditos Agropecuarios* (FEGA) (1972) focuses on identification, evaluation, guarantees, technical assistance, supervision, training transfer services to improve the sector's development and credit payback.
- *Fondo de Garantía y Fomento para las Actividades Pesqueras* (FOPESCA) (1989) channels FIRA's resources towards the fishing sector.

FIRA uses this array of products and services provided through the four trust funds to stimulate the agriculture sector across Mexico with particular focus on:

- supporting smaller producers with no access to credit lines;
- strengthening project design by offering training and technical assistance to projects for small producers;
- broadening and deepening the flow of funds to the agriculture sector through increasing the participation of rural private financial intermediaries;
- promoting the gradual privatization and independence of financial intermediaries serving rural areas;
- preserving its institutional assets.

As a second-tier financial institution, FIRA provides financing through banks and other financial institutions including: i) credit unions; ii) financial companies and agents; iii) leasing companies; iv) factoring companies; and v) warehouse management companies.

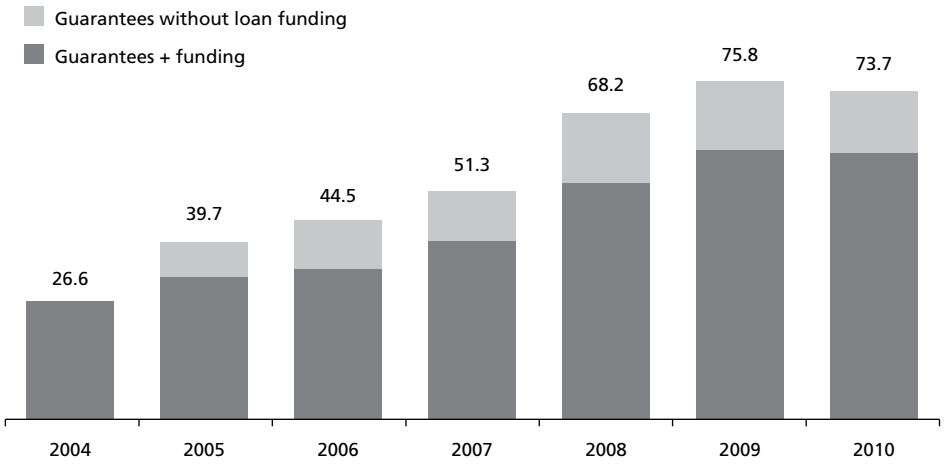
This case study focuses on FIRA's guarantee programme.

1.2 THE FIRA GUARANTEE PROGRAMME AND OUTREACH

During 2010, FEGA, the FIRA trust fund in charge of the guarantee service, granted US$4 755.18 million in guarantees, representing 67 percent of the total FIRA loan portfolio, plus US$1 038.53 million to guarantee loans granted by other financial intermediaries with their own resources (guarantees without loan funding). This total of US$5 902.18 million in guarantees supported 1.08 million agriculture and agricultural value chain actors (Figure 1 shows the figures in pesos).

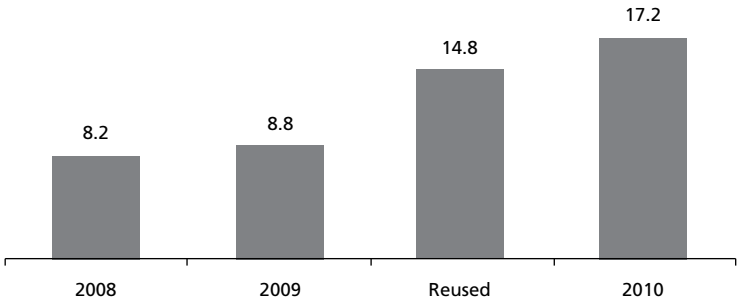
From April 2008 to December 2010, FEGA's special GF, the *Fondo Nacional de Garantías de los Sectores Agropecuario, Forestal, Pesquero y Rural* (FONAGA), guaranteed US$4 194.82 million of loans, of which US$3 456.70 million (82.4 percent) targeted low-income, small producers; US$1 582.55 million (37.7 percent) was granted to develop the poorer southern and southeastern regions of the country; and US$761.59 million (18.2

FIGURE 1
FEGA's guaranteed loans, December 2010 (million Mex$)



Source: L. Miranda, FIRA, 2011.

FIGURE 2
FONAGA's increasing promotion factor



Source: L. Miranda, FIRA, 2011.

TABLE 1
FONAGA's increasing promotion factor

Concept	Promoted credit	Generated reserves	Promotion factor
2008 agreement	11 702	1 423	8.2
2009 agreement	10 415	1 188	8.8
Reused resources	11 449	773	14.8
2010 agreement	18 798	1 094	17.2
Total	52 364	4 478	11.7

Source: Case authors.

TABLE 2
FIRA and associated institutional financial products, by term and sector (million Mex$)

Type of loan	2010			2011		
	Loans granted	Loans + guarantee	Guarantee without loans	Loans granted	Loans + guarantee	Guarantee without loans
Per term						
Short-term	75 291	51 189	12 964	84 012	50 849	11 035
Long-term	13 336	8 170	1 354	14 027	8 484	1 842
Total	**88 627**	**59 359**	**14 318**	**98 039**	**59 333**	**12 877**
Per sector						
1. Agriculture	59 011	43 786	9 907	63 524	38 448	8 344
2. Livestock	17 538	7 661	2 724	20 614	12 460	2 704
3. Forestry	976	852	478	1 165	712	155
4. Fisheries	2 622	2 260	786	3 190	1 958	425
5. Rural lending	8 480	4 800	423	9 546	5 755	1 249
Total	**88 627**	**59 359**	**14 318**	**98 039**	**59 333**	**12 877**

Source: Compiled by L. Miranda, FIRA, 2011.

percent) guaranteed fixed asset investment loans across the board. Over this period, FONAGA's credit promotion or enhancement factor, measured as the relation between the guaranteed financing and the reserves generated, increased from 8.2 to 17.2 through the reutilization of resources and high levels of credit recovery (Figure 2 and Table 1). The guarantee payments of FONAGA reached US$68.57 million, of which US$26.51 million were recuperated (38 percent), representing 1.0 percent of total guaranteed credits.

As of 30 November 2010:[2]

- FIRA equity was US$5 202 million;
- FEGA equity assets were US$990 million;
- FIRA accumulated earnings were US$213 million;
- FEGA accumulated earnings were US$71 million.

Table 2 outlines the composition of FIRA's loan portfolio. As shown in Table 2 and Figure 3, most short- and long-term loans are covered by guarantees (67 percent in 2010). In all sectors, at least 50 percent of loans are covered by guarantees, apart from in the livestock sector, with 44 percent. Guarantees cover 87 percent of loans in the fisheries sector, 86 percent in forestry and 74 percent in agriculture.

FEGA guarantees are extended to financial institutions under the guidelines and regulatory framework established by the monetary and fiscal authorities of Mexico, in accordance with international rules stipulated by Bank of International Settlements (BIS) guidelines (FAO, 2013: 28–29). This guarantee service is provided to 99 intermediaries – 22 banks and 77 non-banking institutions – enabling FEGA to extend its guarantee systems throughout most regions of Mexico. As of 31 December 2010,[3] the total loans guaranteed stood at US$3 906.35 million – US$2 313.06 million in short-term loans and US$1 593.28 million in longer-term credit.

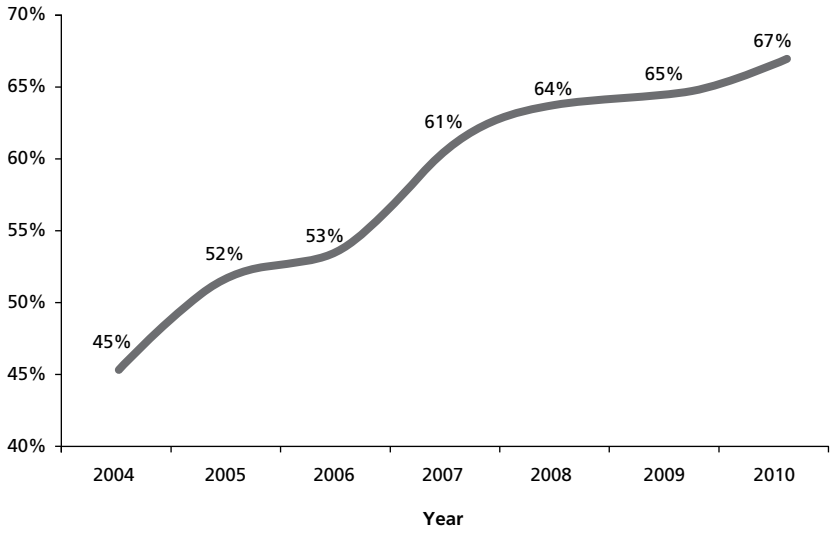
FEGA's guarantee service covers varying percentages of the guaranteed loans and is complemented by net guarantees[4] from the final borrowers (not the intermediaries) of up to 90 percent. FEGA guarantees are issued as credit to the banks and/or the portfolios of non-banking institutions. At the end of 2010, the total coverage of FEGA

[2] US$1 = Mex$12.4830 (30 November 2010).

[3] Balance of credit outstanding.

[4] In the form of cash deposited in a financial entity or instrument, with immediate availability on the date on which the guarantee is required.

FIGURE 3
Shares of loans granted by FIRA with FEGA guarantees



Source: Case authors.

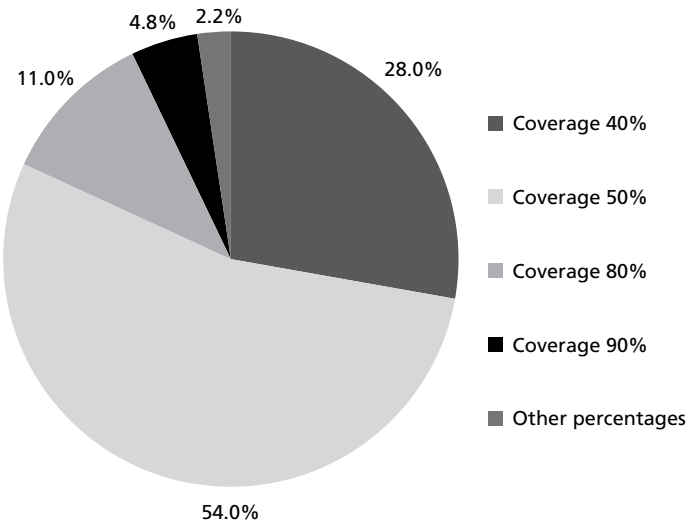
guarantees had a contingent risk of US$2 799.40 million, distributed as shown in Figure 4.

In September 2010, FEGA equity was US$997.83 million. Initially this equity was supplemented by fiscal contributions (e.g., government resources) and the participation of other FIRA trusts. However, FEGA has not received government resources since 1997, because the revenues charged for its guarantee service are sufficient to ensure its commercial viability and sustainability.

The fees charged for FEGA guarantees cover two cost categories: i) operational expenses; and ii) credit risk, which is determined annually for each intermediary (bank or non-banking), based on the adverse events recorded over the previous seven years and the subsequent risk taken by the intermediary in each operation.

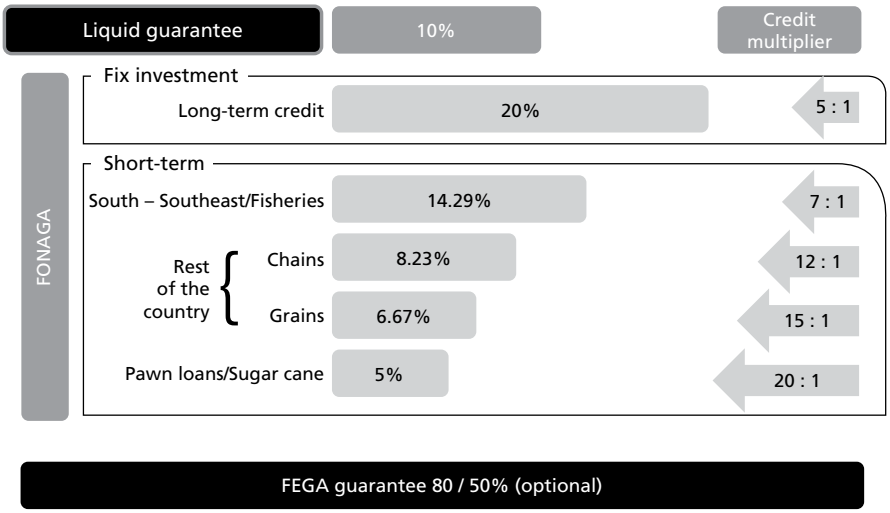
FEGA applies risk management methods that are monitored and implemented by regulatory agencies to ensure the generation and maintenance

FIGURE 4
Percentages of total credit guaranteed, by percentage of loan covered



Source: Case authors.

FIGURE 5
FONAGA reserves, by credit type and region



Source: Case authors.

TABLE 3
SAGARPA funding to FONAGA (million US$)

	2008	2009	2010	Total
Guarantee reserves	103.19	95.14	103.88	302.20
Operational expenses	4.34	3.96	3.28	11.6
Total	107.53	99.15	107.16	313.79

of adequate reserves to support its inventory financing capacity. These reserves have enabled FEGA to perform its primary functions since it started operations in 1987.

Service fees for FEGA guarantees, the risk index of intermediaries, and the reserves are calculated by FIRA's Integrated Risk Management Unit, and reported to the Chief Executive Officer.

To complement FEGA guarantees, in 2008 FIRA created FONAGA, in cooperation with several government departments and as part of a government strategy to boost credit availability for the food and agriculture industries, including micro-, small and medium enterprises (MSMEs). FONAGA is managed by FIRA.

The main purpose of FONAGA is to increase the availability of formal credit for producers with medium to low incomes engaged in agriculture, forestry, fisheries, etc. The scheme functions by providing financial intermediaries with guarantees to protect them from defaults on loans extended to these beneficiaries. FONAGA gives priority to small producers in the southern and southeastern regions of Mexico, especially for long-term projects that require fixed investments (Figure 5).

FONAGA is funded by the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), through an annual budgetary allotment that covers guarantee reserves and FIRA's operational expenses for administering FONAGA (Table 3).

Based on SAGARPA's support to major agricultural value chains and FIRA's guidelines for programme implementation and operations, FONAGA has developed financial programmes targeting low- and medium-income producers in Mexico:

- FONAGA designs products for low- and medium-income agricultural producers with credit needs of up to UDI[5] 16 million per active partner.

[5] Unit of investment – an inflation-linked index issued by the Mexican Central Bank as a reference to maintain the value of money over time.

- FIRA and FONAGA jointly provide each financial intermediary with resources for a guarantee reserve for both short- and long-term fixed investments.
- FONAGA outlines the priorities for supporting different regions of the country, including the agricultural value chains and credit products most suited to meeting these needs.
- The reserves are generated from a percentage of the credits extended by intermediaries, according to the priorities established by FONAGA.
- Intermediaries can also enter into contracts with FEGA to use FIRA's guarantee service, which cover 50 or 80 percent of loans.
- The borrower pays a share of the guaranteed amount, equal to at least 10 percent of the loan.

In the event of default, a financial intermediary with a FONAGA guarantee has the following options for covering the unpaid balance of the loan:

- 10 percent liquid guarantee from the borrower's own funding;
- FONAGA coverage of up to 100 percent of the remaining balance that is not covered by the liquid guarantee, until the financial intermediary's total reserves for the credit type concerned have been used up;
- if the financial intermediary has an FEGA guarantee, requesting payment of that FEGA guarantee, in the agreed percentage, once the FONAGA resources have been exhausted.

FONAGA operates as a first-loss fund to limit the risk assumed by FEGA (Figure 6), and a revolving fund that transcends the closing periods of budgetary financial years, to support government policy for the granting of loans to the food and agriculture sector.

1.3 ANALYSIS OF THE FIRA EXPERIENCE

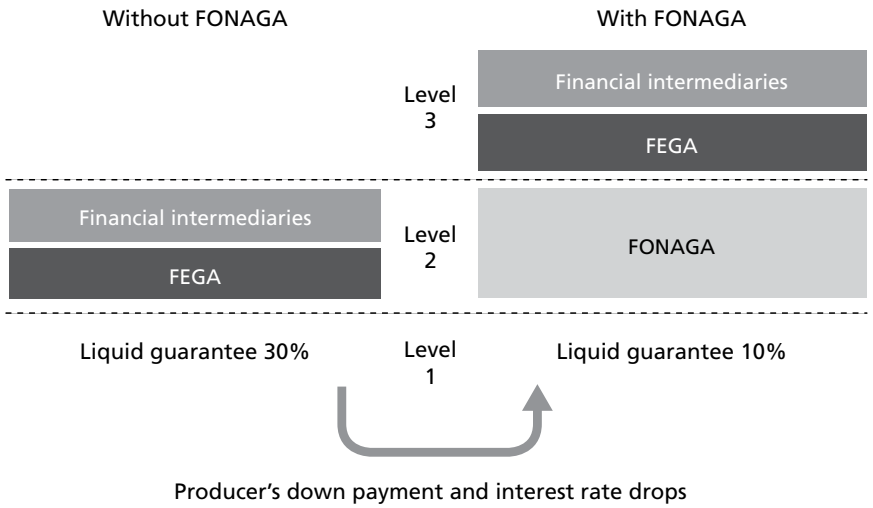
Much can be learned from FIRA's experience of guarantees. To increase understanding of the context, issues, and potential for sustainability and replication, a set of hypotheses have been developed (FAO, 2013).

Applying the study hypotheses to the case study findings

1. *Over the past two decades, some of the cost-covering GF arrangements established in developing economies have achieved medium-term sustainability through efficiency gains (information technology) and improved system design. The design and implementation parameters of these arrangements should be highlighted and their potential for replication discussed.*

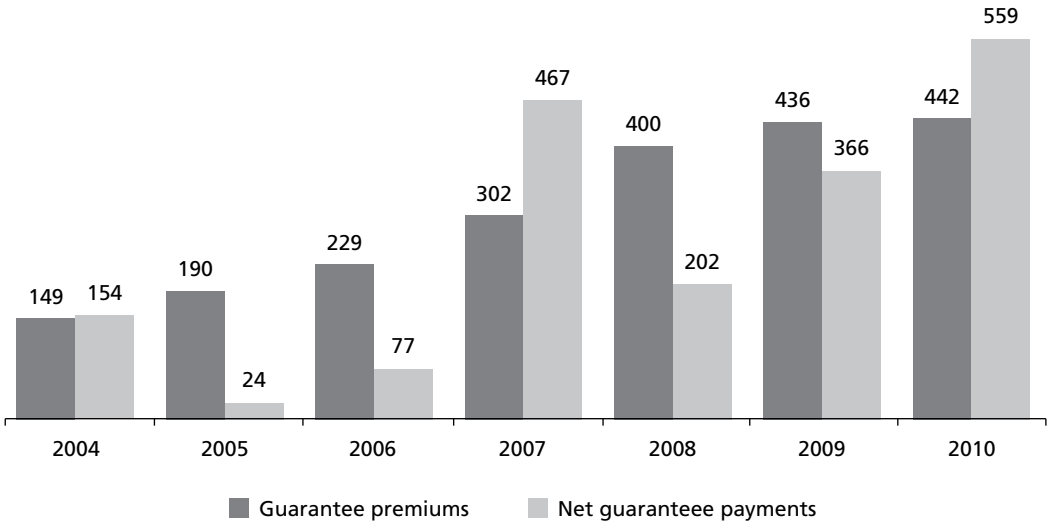
FEGA emerged as the result of a national strategy created in 1988 to foster the long-term financial and commercial sustainability of micro- and rural farming enterprises. The guarantee service was designed to serve the needs of potential stakeholders and to absorb the loan charges passed on to borrowers. The service fee is paid as a down payment, based on the annually calculated costs

FIGURE 6
Levels of guarantee with and without FONAGA



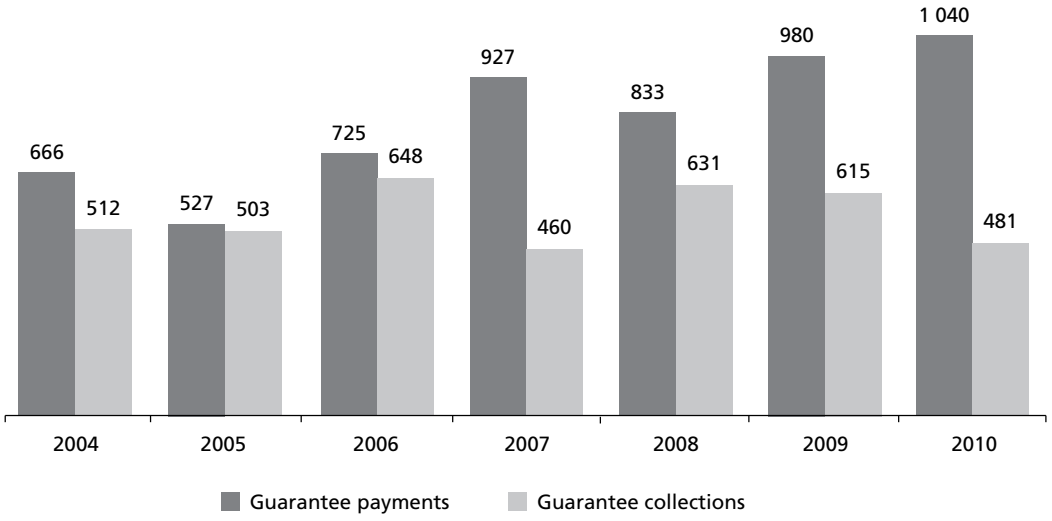
Source: Case authors.

FIGURE 7
Guarantee premiums compared with net guarantee payments (million Mex$)



Source: Case authors.

FIGURE 8
Guarantee payments compared with guarantee collections (million Mex$)



Source: Case authors.

of each operation, which have two components (Figures 7 and 8):

1. FEGA operational costs, based on a percentage of the guarantee balance, which is currently 0.27 percent for coverage of up to 50 percent, and 0.47 percent for coverage of more than 50 percent;
2. accident costs (credit risk), which are calculated on the basis of the financial intermediary's record for making guarantee payments over the previous seven years, taking into account FEGA's reserve balances.

Using this methodology, FEGA calculates the down payment to be made by each financial intermediary, based on five levels of credit risk and the premise that each intermediary will seek optimum performance to be competitive in the market.

FEGA adopts several strategies for reducing risk:

- Alliances and agreements with other government agencies: To provide guarantees to the sectors most at risk, or to encourage the extension of credit where there is little or no historical information, FEGA enters partnerships with other funds to mitigate risk, such as the first-loss funds State of Tabasco Fund in 2008, FONAGA in 2008, FONAGA Verde in 2010, Fund for Rural Business in Development, and others being created for the forestry sector, fishing, and hydro and agricultural infrastructure. These funds reduce FEGA's exposure to risk, while allowing it to increase its guarantee coverage in new and emerging market segments.
- The formation of mutual guarantee funds operating on the same level as accredited organizations and backed by liquid guarantees: Through these funds, FEGA and FONAGA remain at a second level of risk exposure, until the liquid guarantee is used up.
- Reducing guarantee coverage from 90 percent to a maximum of 40 or 50 percent: This strategy makes it possible to extend guarantee coverage to more financial intermediaries and/or other risk entities.
- Fostering a strategy of integral risk mitigation: FEGA encourages the managers and financiers of agricultural projects to use other risk management instruments available on the market, such as agricultural insurance, contract farming, exchange rate risk coverage, price coverage, and loan guarantees.

Another important element of FEGA's sustainability is maintaining consistent recuperation of paid guarantees, by ensuring that intermediaries are committed to taking all appropriate debt collection measures when necessary and before it is too late. This requires a system of regular supervision and reporting of payments made by clients and borrowers.

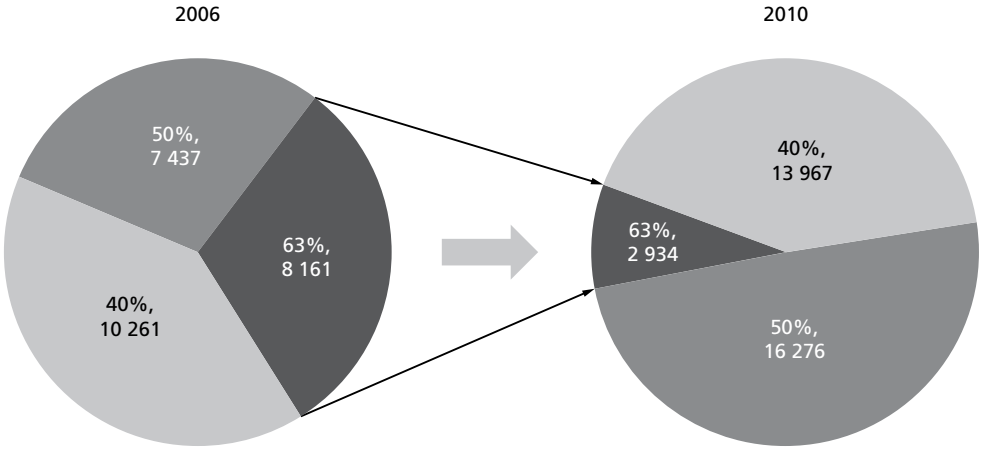
2. *GF arrangements that are governed by considerations other than the prudent and reasonable sharing of financial risk among different partners to a credit contract are likely to fail.*

FEGA's recuperation of paid guarantees from financial intermediaries encourages intermediaries to extend loans according to good banking practices and prudent management, including appropriate credit evaluations to determine borrowers' financial viability. This sharing of risk with the intermediary is an appropriate policy for avoiding divergence from appropriate fiscal and prudential measures, and is bolstered by the fees that FEGA charges for its guarantee system, which are inversely proportional to the risk that the intermediary assumes (Table 4).

As shown in Figure 9, this pricing policy has encouraged intermediaries to assume larger shares of the risk. Figure 10 shows the sums FEGA paid out as loan guarantees in 2008.

Another measure for ensuring good banking practices is obliging intermediaries to continue seeking repayment from defaulting beneficiaries, even after payment of the guarantee, which can be

FIGURE 9
Coverage of credit guarantees, number of loans



Source: Case authors.

TABLE 4
Costs of FEGA guarantee coverage, by percentage of loan covered

Effective coverage (%)	Guarantee service cost (%)
40%	0.62%
50%	1.10%
55%	3.66%
63%	3.98%

Source: Case authors.

forfeited if the intermediary does not follow the stipulated procedures and actions.

FEGA also observes a strict policy of reserve generation according to exposure.

3. *GF arrangements are organized in various corporate or legal forms, ranging from State-operated financial institutions, State-funded companies, and government-guaranteed arrangements, to independent private corporate entities, credit guarantee foundations and associations, and mutual guarantee associations; specialized single-purpose guarantee corporations operating at the national level are more likely to succeed.*

FEGA's results demonstrate the effectiveness of its integral system of risk management, which combines producers' own funds, State or sector funds, national GFs (such as FONAGA) operating as first-loss funds, and FEGA's guarantee service. These flexible arrangements allow different conditions and combinations to align the extension of loans with the percentage of risk incurred by each participant.

The risk management system encourages the use of insurance, technical consultancy, supervision, contract farming and other tools that mitigate the exposure of FEGA and other private or government GFs.

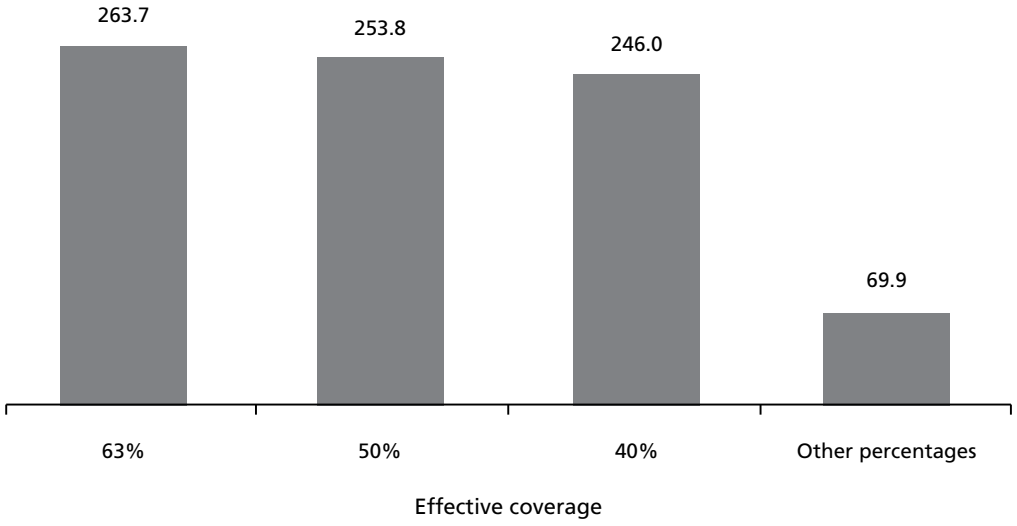
4. *Proper monitoring and supervision arrangements, including automated management information systems (MIS), play a key role in the costs of administering the CGS and thus, eventually, in its success or failure.*

Loan recovery is critical for success. FIRA monitors the recovery of loans, and its guarantees are subject to norms and policies that maximize the recovery process. These monitoring activities are supported by technical systems that oversee loan recovery and generate timely information for decision-making and verification of recovery actions. The legal risk is assessed as well as the affect on the trust's portfolio.

FIRA has documented procedures and norms for the recovery guarantees, as well as technical tools for:

1. post-recovery tracking of payments, reorganization, recoveries and credit balances;
2. managing information relating to recently paid guarantees (precautionary and extrajudicial);

FIGURE 10
FEGA guarantee payments, by percentage of loan covered, 2008



Source: Case authors.

3. disseminating information relating to extrajudicial recovery actions and judgments against beneficiaries;
4. registering beneficiaries' credit histories and FIRA guarantees, to identify beneficiaries with negative payment records and unrecovered loans.

Implementation of these procedures is supported by a strong MIS, which informs officers in time for them to maximize loan recovery.

5. *Risk sharing mechanisms have regained prominence in development finance because of excess liquidity in the banking system and lending restrictions to development sectors through the risk management departments of banks and other financial institutions.*

In the 38 years of FEGA's existence, there have been periods of credit shortage and financial crises in the banking system, including liquidity and other problems that can be circumvented by adapting the procedures and processes related to risks and guarantees.

For example, when producers and companies have had a good year, the government is likely to promote the creation of new private GFs to complement producers' contributions, while years of credit restriction require the leveraging of other instruments for risk sharing – such as contract farming, buyers' retention of credit payments, cessation of rights and liquid guarantees – along with higher coverage of FEGA guarantees.

Excess liquidity in the banking system for the agriculture sector in Mexico reduces the need for FIRA guarantees, as financial intermediaries can grant more credit from their own resources. In general, excess liquidity leads to an easing of banking practices.

6. *The percentage of risk shared, the claim procedures and timing of claim submissions, and the fee arrangements have a bearing on the market acceptance and eventual success of a credit guarantee system (CGS).*

FEGA's system of differentiating the guarantee fee for each intermediary has been accepted in the market although prices remain high. However, it is clear that sustainability cannot be based on the payment of fees alone, given market forces and tolerance levels. Contracts should therefore make provision for the exceptional suspension of FEGA's guarantee service when a set maximum percentage of irregular operations is exceeded, particularly regarding non-payment of loans or excessive payments of FEGA guarantees. Measures such as fee increases for intermediaries with high guarantee payments and programmes for improvement should be implemented before the guarantee service is suspended or cancelled.

Other Agricultural Guarantee Schemes in Mexico

Among the wide array of GFs in the Mexican rural and small and medium enterprise (SME) sectors, FONDO PYME should be highlighted. This fund was created by the Ministry for Industry and Economy to increase credit access for micro- and small enterprises.

FONDO PYME operates a scheme in which intermediaries participate in a selection process and guarantees are assigned to those offering the lowest interest rates on loans, especially to borrowers with high growth potential. The system guarantees the lender´s first losses, avoiding situations that would lead to asset depletion.

Another GF provides access to funding administered by *Financiera Rural* through a mutual guarantee for securing loans against non-payment by borrowers.

1.4 IMPACT OF FIRA GUARANTEES AND LESSONS LEARNED

FEGA promotes access to credit, not only by increasing the number of borrowers but also by providing certain enterprises and sectors with easier access to credit. The enterprises and sectors targeted are usually in an early phase of technological development and require access to new markets for their products, or are perceived as high-risk by intermediaries.

FEGA has acted as both coordinator and catalyst in these developments. The Special Programme for Financing Sugar Cane, which establishes credit conditions for credit-worthy participants in the sugar sector, provides an example. Through FEGA, refineries and sugar operators now benefit from the credit extended to agribusiness and the commercialization of the sugar sector, which was not possible ten years ago when banks neglected agricultural operators. Sugar refineries, producers, inventory warehouse managers, etc. have become new players on the market via their increased access to credit from banking and non-banking financial intermediaries. The implications for FEGA are reputational

as well as commercial through fewer losses for the sector.

The shrimp sector provides another example of guarantees for agriculture promoting sector development along the value chain. Financial intermediaries had little interest in or knowledge of this subsector's potential until 1988, when FEGA included it in its portfolio, financing laboratories, pre-fattening enterprises, agroprocessing farms, distributors and related industries (ice factories, food factories, transport companies, cold storage), and service enterprises such as consultancies, certification bodies and logistics.

FEGA has developed reliable standards and appropriate MIS tools and applies them in its operations. This has allowed the GF to maximize the recovery of guaranteed credit by generating timely information to guide decision-making. This function, and the resulting reputation for responsible recovery, is important to FEGA's success.

1.5 REPLICATION

The CGS of FEGA and FONAGA is replicable in banking systems that are similar to Mexico's, because the global regulatory context favours the standardization of good international banking practices and prudential risk management.

FEGA has provided guarantee services for nearly 40 years and has promoted the expansion of credit into sectors that otherwise would not be served. It encourages the participation of intermediaries by guaranteeing some of the loans that they grant. Under Mexican banking regulations, FEGA and FONAGA guarantees can reduce the minimum capitalization requirements from 8 to 2.2 percent (when FEGA guarantees cover 90 percent of the credit). It is interesting to note that the percentage of reserve capital required falls when the rating of the intermediary's portfolio improves by reducing the proportion covered by FEGA. Both of these considerations have an effect on the profitability of operations and tend indirectly to reduce loan costs to the beneficiary.

FEGA's experience also demonstrates the need for solid risk analysis systems. Factors taken into account include the level of expertise of the intermediary, the region of the country where the project is taking place, the type of borrower, and the type of credit required. With this information, risk analysis can be improved and guarantee policies can be refined throughout the system. Other important elements include periodic analysis of guarantee payments, identifying the causes for arrears, borrowers' commercialization problems, climate risks, and the payment patterns of clients with little or no track record. This periodic information allows timely actions to reinforce:

- the credit structure, terms and conditions;
- the supervision of credit during its term of validity;
- the consideration of FEGA guarantees as complements to other guarantees given to the beneficiary;
- the intermediary's mandate in the specialized function of collection.

In countries with no national GFs or where intermediaries have been working without guarantee coverage, it is important not to overemphasize the role of GFs, but to view them in the appropriate context of providing strategic support to sectors that are otherwise neglected or that are development priorities for the government. Both of these considerations apply to agriculture.

REFERENCES

All information in this case study was provided directly by FIRA, with guidance and review from FAO. It draws from both internal and external FIRA documents.

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Chapter 2

Asia: Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), India

Prasun Kumar Das

2.1. HISTORY OF CREDIT GUARANTEES IN INDIA

Worldwide, credit guarantee systems (CGS) are used as instruments for enhancing credit in targeted sectors. Partial and full credit guarantee funds (GFs) have existed since at least the beginning of the twentieth century, becoming more popular over recent decades. *The typology of credit guarantee funds around the world* (Beck, Klapper and Mendoza, 2008) presents data on 76 partial guarantee schemes across 46 developed and developing countries.

In India, formal credit guarantees started in 1957 with establishment of the Export Credit Guarantee Corporation of India (ECGC) to provide export credit insurance and trade-related services to the country's exporters (Box 1). ECGC provides various types of credit risk insurance to exporters, and guarantees to banks and financial institutions, to enable exporters to obtain better results. Minimum guarantee coverage under ECGC is 66.66 percent of the outstanding loan/export value. Exporters receive a rebate on their premiums when banks have a whole turnover guarantee of at least 25 accounts and an assured premium of US$10 650. ECGC's standard policy covers both commercial and political risks from the date of export and is issued to exporters whose anticipated export turnover for the following 12 months is more than US$10 650.

Deposit insurance was introduced in India on 1 January 1962 by the Deposit Insurance Corporation (DIC), a wholly owned subsidiary of the Reserve Bank of India (RBI) created under an act of the Indian Parliament implemented to guarantee the deposits of customers of both public and private sector banks. India was the second country in the world to introduce such a scheme, after the United States of America in 1933. In 1971, RBI established the Credit Guarantee Corporation of India (CGCI). While DIC aimed to protect depositors, ensure financial stability, instil confidence in the banking system and mobilize deposits, CGCI sought to meet the credit needs of hitherto neglected sectors and weaker sections of the population. The main aim was to persuade

BOX 1
Export Credit Guarantee Corporation of India

ECGC is a governmental company established under the Ministry of Commerce and Industries to provide export credit insurance to Indian exporters. It was set up as the Export Risks Insurance Corporation in 1957, changing its name in 1964. ECGC is the fifth largest credit insurer in the world in terms of coverage of national exports. Its paid up capital is US$192 million, and authorized capital is US$213 million. The main functions of ECGC are to:

- provide a range of credit risk insurance products to exporters against losses incurred in the export of goods and services;
- offer guarantees to banks and financial institutions to encourage them to provide exporters with better credit facilities;
- provide overseas investment insurance to Indian companies investing in international joint ventures in the form of equity or debt.

ECGC guarantees provide the following advantages: i) insurance protection against payment risks; ii) guidance on export-related activities; iii) information on country credit ratings; iv) easy access to export finance from banks; v) assistance to exporters in recovering bad debts; and vi) information on the credit-worthiness of foreign buyers.

Source: ECGC.

banks to make credit available to less credit-worthy clients. In 1978, DIC and CGCI merged to form the Deposit Insurance and Credit Guarantee Corporation (DICGC), whose focus shifted to credit guarantees after the merger. Under financial sector reform in the 1990s, credit guarantees have gradually been phased out, and DICGC's focus has moved back to its core function of deposit insurance. DICGC has received no guarantee fees since 2003/04, but it continue to receive its share of recoveries in claims paid accounts.

During the 1990s, there was growing interest in CGS as an instrument to increase SMEs' access to the various loan instruments of financial institutions. Many countries around the world have made partial credit guarantee funds a central part of their strategies to alleviate the financing constraints on SMEs. These schemes seek to increase lending to SMEs, sometimes focusing on specific regions or sectors, through reducing the lending risk for banks or other financial institutions. Beck, Demirgüç-Kunt and Martinez Peria (2008) report that banks see CGS as the most common and effective government support programme for SME lending, ahead of direct credit and interest rate or regulatory subsidies. In response to this need, the Ministry of Micro, Small and Medium Enterprises, the Government of India and the Small Industries Development Bank of India (SIDBI) set up the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) on 27 July 2000. CGTMSE operates a CGS that guarantees the loans extended by member lending institutions (MLIs) to micro- and small enterprises without collateral security and/or third-party guarantees.

2.2 PUBLIC POLICY FOR MSMEs

Micro-, small and medium enterprises (MSMEs) have emerged as the most important economic multipliers in India, and are considered the engine for growth over the next decade, with high potential to generate employment and make a significant contribution to overall economic growth (Box 2).

In 2006, the Government of India enacted the Micro, Small and Medium Enterprises Development Act (Box 3), which envisages all-round development in this sector. Since then, several measures have been initiated through public policies that provide incentives for streamlining the production, management, market linkages and access to finance of this vibrant sector and for making MSMEs globally competitive. Experience over the past decade has demonstrated that the MSME sector survives

BOX 2
MSMEs' contribution in India

- There are an estimated 26 million MSMEs in India.
- They employ nearly 60 million people and generate 1 million new jobs a year.
- They contribute about 39 percent of manufacturing sector output and 40 percent of national exports.
- The MSME sector accounts for 45 percent of manufactured output and 8 percent of gross domestic product (GDP).

Source: Government of India, 2010.

BOX 3
MSME Development Act, 2006

In accordance with the act's provisions, classification as an MSME depends on whether the enterprise is in the manufacturing or the services sector; enterprises in the manufacturing sector are categorized by the amount of investment they have made in plant and machinery, while those in the services sector are classified by their investments in equipment.

Sector	Microenterprises	Small enterprises	Small enterprises
Manufacturing	≤ US$ 53 000	US$53 000–1.06 million	US$1.06–2.12 million
Services	≤ US$ 21 300	US$21 300–1.06 million	US$1.06–2.12 million

Source: Ministry of MSME, 2006.

TABLE 5
Bank credit to micro- and small enterprises (million US$)

As of 31 March	Public sector banks	Private sector banks	Foreign banks	All SCBs	% of ANBC for SCBs
2007	21 819.15	2 794.89	2 475.96	2 7090.00	7.2
	(32.56%)	(108.40%)	(15.41%)	(39.56%)	
2008	3 2156.81	9 981.28	3 295.53	45 433.62	11.6
	(47.38%)	(257.13%)	(33.10%)	(67.71%)	
2009	40 725.11	9 926.81	3 843.19	54 495.11	11.4
	(26.65%)	(-0.55%)	(16.62%)	(19.94%)	
2010	59 233.62	13 730.64	4 485.11	77 449.36	13.2
	(45.45%)	(38.32%)	(16.70%)	(42.12%)	

Figures in parentheses indicate percentage growth over previous year.
SCB = scheduled commercial bank.
Source: RBI, 2010c.

competition and grows at a good pace when the supporting system works properly.

Although MSMEs contribute significantly to the overall economic growth of the country, they suffer from several bottlenecks. Of the top five impediments to growth in this sector (Box 4), access to credit has been identified as the most critical. The major reasons for this are banks' perception of MSMEs as a high-risk sector and the high transaction costs of loan processing and appraisal. The perceived high risk is a more serious issue for microenterprises that require small loans, and for first-generation entrepreneurs without credit history and collateral.

India's public policy has responded to these challenges and given high priority to the MSME sector to facilitate balanced, sustainable, more equitable and inclusive growth in the country. Micro- and small enterprises have been categorized as a priority sector for lending;[6] banks are required to extend to microenterprises 60 percent of their total loans to the micro- and small enterprise sector. The banking sector's loans to this sector have increased over the years, both in absolute terms and as a percentage of adjusted net bank credit (ANBC)[7] (Table 5).

BOX 4
Top five key factors for MSME growth

- Access to adequate, timely and low-cost credit.
- Collateral requirements for obtaining credit facilities.
- Access to equity capital.
- Access to markets, technology and innovations.
- A business-enabling environment (e.g., taxation, labour laws, rehabilitation).

Source: Government of India, 2010.

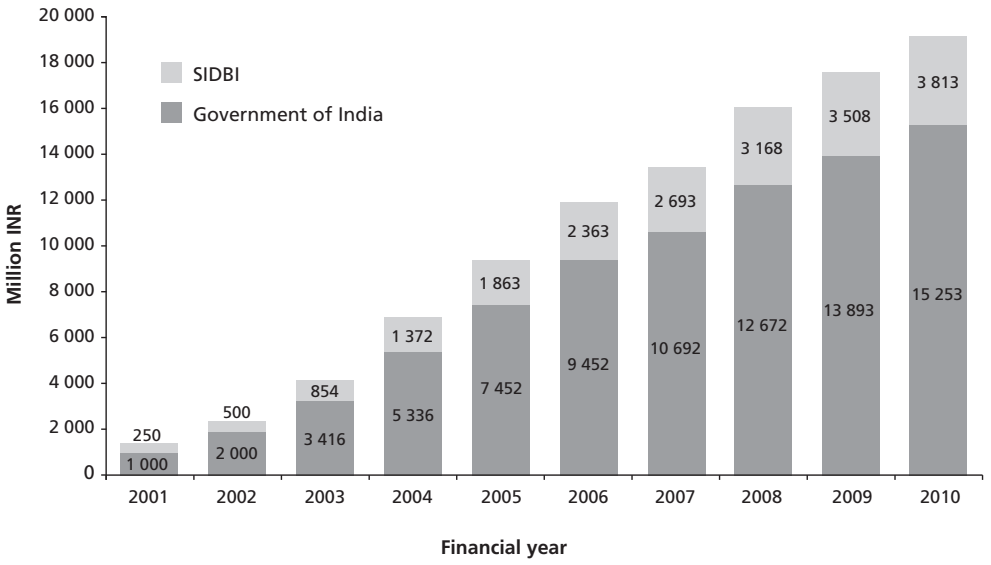
The high transaction costs and unsatisfactory collateral related to micro- and small enterprise lending explain financial institutions' reluctance to extend credit to MSMEs. Beck and de la Torre (2007) observe the same trend worldwide. A high turnover rate among SMEs results in high probability of default,[8] and it is often difficult for banks to conduct risk assessments as data may be sparse and unreliable because SMEs lack audited financial statements. Commercial banks in India generally insist on secondary collateral, particularly in the form of immovable property and third-party guarantees, to hedge against default in the small

[6] It is mandatory for commercial banks in India to lend to the priority sectors identified by RBI – agriculture, MSMEs, housing, education, etc. Domestic banks are required to lend 40 percent of their adjusted net bank credit (ANBC) to this sector, and foreign banks 32 percent.

[7] ANBC is net bank credit plus the investments made by banks in non-statutory liquidity ratio bonds in the held-till-maturity category.

[8] However, there is also evidence that the tail risk is lower for SME loans than for loans to large enterprises (Adasme, Majnoni and Uribe, 2006).

FIGURE 11
CGTMSE trust fund contribution



Source: CGTMSE, 2010.

loan segment. However, as timely and adequate bank credit without the need for collateral and third-party guarantees is essential for small first-generation entrepreneurs setting up their own micro- and small enterprises, RBI has instructed banks not to require secondary collateral on credit of up to US$10 650 extended to these enterprises. With support from CGTMSE's CGS, this decision has enabled the Indian banking system to increase the credit flow to the micro- and small enterprise sector, as reflected in Table 5.

2.3 CGTMSE'S CREDIT GUARANTEE SYSTEM

Objective of the system

CGTMSE encourages member lending institutions (MLIs)[9] to base their appraisals on the viability of the project and the security of the primary collateral for the assets being financed. Its other main objective is to encourage lenders with guarantee facilities to extend credit to borrowers for both working capital and term loans. The CGS seeks to reassure lenders that in the event of default by a micro- or small enterprise covered by the guarantee, CGTMSE will meet the loss incurred by the lender up to a maximum of 85 percent of the outstanding amount in default.

Capital of the Trust Fund

The committed corpus of the trust is US$530 million divided between the Government of India (US$425 Million) and SIDBI (US$105 million) at the ratio of 4:1. Of the cumulative US$406 million received by the trust as a corpus fund by 31 March 2010, the aggregate contributions of the Government of India and SIDBI were US$325 million and US$81 million respectively. The balance contribution of US$124 million from the government and SIDBI was expected to be received over the following two financial years. The year-wise corpus contribution is given in Figure 11.

Eligible MLIs

CGTMSE operates its CGS through MLIs. All commercial banks included in the Second Schedule to the RBI Act of 1934 and other institutions as may be notified by the Government of India from time to time are eligible to become MLIs. As of 31 January 2010, there were 110 MLIs registered with CGTMSE: 27 public sector banks, 16 private sector banks, 59 regional rural banks, three all-India financial institutions, three state financial institutions, and two foreign banks (Figure 12).

[9] MLIs are financial institutions that have become members of CGTMSE to obtain credit guarantee cover for the loans they extend to micro- and small enterprises.

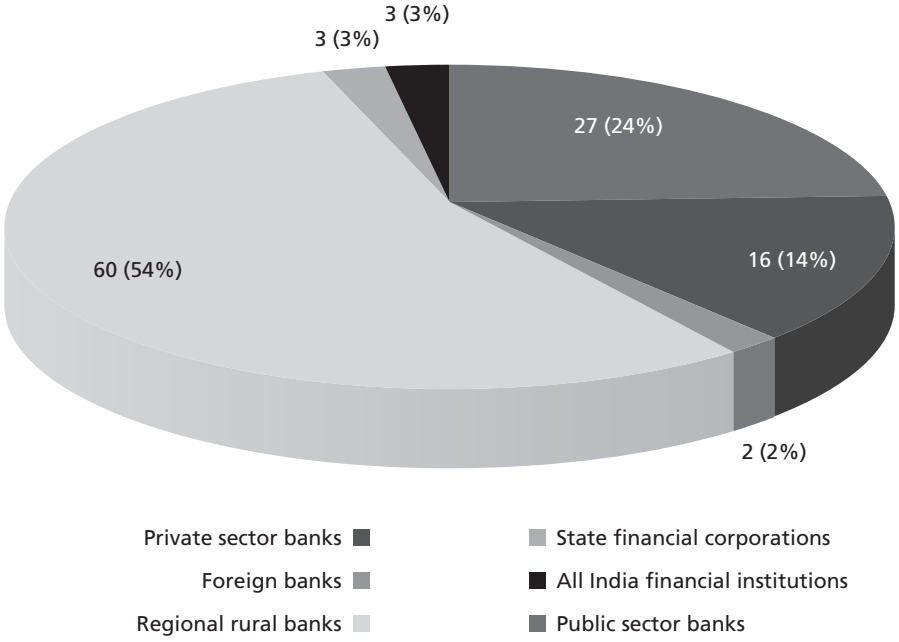
Eligible Borrowers

All start-up and existing micro- and small enterprises in the manufacturing and services sectors as defined by the MSME Development Act 2006 that have received loans without any collateral security and/or third-party guarantees are eligible for guarantee cover under the CGTMSE system.

Guarantee Cover

Any collateral- and third-party-free loans extended to start-up and existing micro- and small enterprises up to a credit limit of US$200 000 are eligible for CGTMSE cover. The extent of the guarantee cover varies, as shown in Table 6.

FIGURE 12
Composition of MLIs, January 2010



Source: CGTMSE, 2010.

TABLE 6
Extent of guarantee cover for loans

Borrower category	Maximum guarantee for loans:		
	≤ US$10 650	US$10 650–106 500	US$106 500–213 000
Microenterprises	85% of the amount in default, to a maximum of US$9 040	75% of the amount in default, to a maximum of US$79 800	US$79 800 plus 50% of the amount in default above US$10 650, with an overall ceiling of US$133 000
Women entrepreneurs/ units in northeastern region (including Sikkim) other than microenterprises with loans of ≤ US$10 650	80% of the amount in default, to a maximum of US$85 100		US$85 100 plus 50% of the amount in default above US$10 650, with an overall ceiling of US$138 300
All other categories	75% of the amount in default, to a maximum of US$79 800		US$79 800 plus 50% of the amount in default above US$10 650, with an overall ceiling of US$133 000

Source: CGTMSE, 2010.

TABLE 7
Fees for credit guarantee coverage

Loans	Guarantee fee		Annual service fee
	General category	Special category (northeastern states including Sikkim)	
≤ US$10 650	1.00%	0.75%	0.50%
US$10 650–106 500	1.50%	0.75%	0.75%
US$106 500–213 000	1.50%	1.50%	0.75%

Source: CGTMSE, 2010.

Guarantee Tenure

Cover commences from the date of payment of the guarantee fee and runs through the agreed tenure of the loan. For working capital, guarantee cover is available for up to five years or for blocks of five years or for such period as may be specified by CGTMSE. Units covered under CGTMSE that default because of factors beyond the control of management can be covered for up to the credit cap of the CGTMSE system (US$213 000).

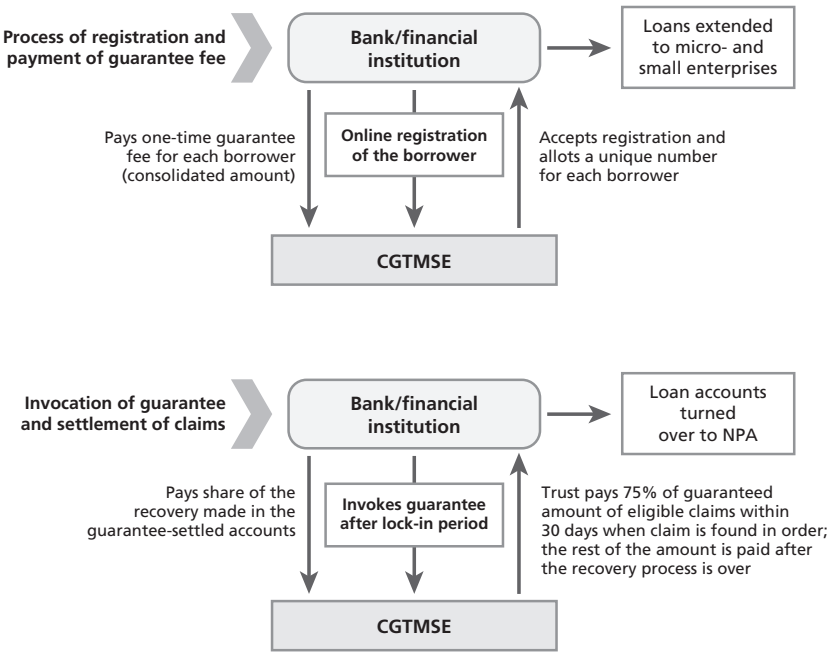
Guarantee and annual service fees

MLIs pay a one-time guarantee fee and an annual service fee for each account covered. The one-time fee is paid upfront within 30 days of registration of the account. The annual service fee depends on whether the credit is a term loan or a working capital facility and is payable by 31 May of every year. Table 7 shows the guarantee and annual fees charged.

Guarantee registration and settlement procedures

On approval and disbursal of the loan, the MLI starts the registration process, which is online and generates a unique identity number for each borrower on acceptance by CGTMSE. The MLI then pays the one-time guarantee fee against each borrower, which is transferred online to CGTMSE within 30 days of disbursal of the loan.

FIGURE 13
CGTMSE system



Source: CGTMSE, 2010.

MLIs may invoke a guarantee within a maximum of one year from the date of the loan account becoming classified as a non-performing asset (NPA) if the date of such classification is after the lock-in period of 18 months from the date of the guarantee, or within one year after the lock-in period if the date of classification is within the lock-in period under satisfactory terms and conditions. A flow chart of registration and settlement processes is shown in Figure 13.

Performance

Of the 110 MLIs registered with CGTMSE in 2010, 85 had obtained guarantee cover as of 31 March 2010, compared with 57 in 2009. Details on guarantee approvals (numbers and amounts) and average loan sizes are shown in Table 8.

Although coverage has grown consistently (in both number and amount) since the trust's inception, coverage growth in the 2010 financial year was phenomenal, reaching 100 percent of the cumulative total for the previous nine years. The cumulative number of approvals exceeded 300 000, with total approved coverage of US$2.5 billion. The number of MLIs using the facility also increased. The average loan size covered was US$9 660, which shows that coverage is skewed towards small loans of less than US$10 650. The cumulative number of proposals approved for loans up to US$10 650 was 249 515, or 83.17 percent of the total number approved. Some 52.44 percent of approved credit facilities were for loans of up to US$2 127, which demonstrates CGTMSE's success in serving microenterprises (Table 9).

TABLE 8
Guarantee approvals and loan sizes

As of 31 March	Active MLIs	Loan approvals (cumulative)	Cumulative guarantees approved (million US$)	Average loan covered (US$)
2001	9	951	1	1 340
2002	16	3 247	8	2 723
2003	22	8 202	20	2 511
2004	29	14 805	45	3 787
2005	32	24 321	115	6 723
2006	36	40 605	213	6 021
2007	40	68 062	363	5 447
2008	47	97 282	575	7 404
2009	57	150 034	1 026	8 702
2010	85	300 105	2 459	9 660

Source: CGTMSE, 2010.

TABLE 9
Guarantee approvals, by loan amount, March 2010

Loan amount	Approved proposals (cumulative)	Approved amount (cumulative) (million US$)
≤ US$2 127	157 375 (52.44%)	153.92
US$2 127–4 255	42 511 (14.17%)	139.41
US$4 255–10 638	49 709 (16.56%)	377.71
US$10 638–21 277	23 655 (7.88%)	402.22
US$21 277–53 191	20 434 (6.81%)	740.77
US$53 191–106 383	5 133 (1.71%)	420.03
US$106 383–212 766	1 388 (0.46%)	225.43
Total	**300 105**	**2 459.49**

Figures in parentheses indicate the percentage share of the total.
Source: CGTMSE, 2010.

TABLE 10
Top 10 MLIs by numbers of approved guarantees, March 2010

No.	MLI	Guarantees	Guaranteed amount (million US$)	Average loan size (US$)
1	State Bank of India	55 042	376	6 830
2	Punjab National Bank	43 413	266	6 128
3	Canara Bank	37 608	202	5 362
4	Bank of India	36 821	426	1 155
5	Allahabad Bank	13 639	79	5 809
6	Union Bank of India	10 376	82	7 872
7	Bank of Baroda	8 838	123	13 894
8	State Bank of Bikanir and Jaipur	8 403	22	2 681
9	Indian Overseas Bank	7 933	51	6 426
10	United Bank of India	7 671	64	8 298
Total for top 10 MLIs		**229 744**	**1 691**	–
Total for all MLIs		**300 105**	**1 155 962**	–
Top 10's share of total (%)		**76.55**	**69**	–

Source: CGTMSE, 2010.

TABLE 11
Claim settlements by CGTMSE

As of 31 March	Claims settled	Total amount of claims settled (million US$)	Average loan size (US$)
2005	47	0.11	2 426
2006	113	0.23	2 085
2007	111	0.31	2 766
2008	238	1.52	6 383
2009	275	1.82	6 596
2010	1 722	7.29	4 234
Total	**2 506**	**11.28**	**24 489**

Source: CGTMSE, 2010.

As of 31 March 2010, the top ten MLIs (in terms of numbers of approvals) were all public sector banks, which accounted for 76.55 percent of the total cumulative number of approved guarantees (with 229 744 guarantees) and 68.75 percent of the total cumulative guaranteed amount (with US$1 691 million). The State Bank of India topped the list, with 55 042 guarantees at a total value of US$376 million, accounting for 18.34 percent of total guarantees in number and 15.31 percent of the total guaranteed amount approved, and an average loan size of US$6 830. It was followed by Punjab National Bank, Canara Bank, Bank of India and Allahabad Bank (Table 10).

By 31 March 2010, CGTMSE had received 4 761 claim applications from MLIs, of which it had settled 2 506 for US$11.28 million: 533 applications were not eligible, 420 were incomplete and 1 302 were pending settlement. During the 2010 financial year, there were 1 722 (68.7 percent) claim settlements for US$7.29 Million (64.6 percent), indicating that there was a steep rise in the invocation of guarantees during the year, which suggests that the trust will face challenges in the years to come (Table 11).

As shown in Table 12, the top five MLIs alone accounted for 67.8 percent of this total number (1 704) and 49.7 percent of the amount (US$5.63). Canara Bank topped the list with 867 claims settled for US$2.30 million, followed by Union Bank of India, Bank of India, State Bank of India and Dena Bank.

In 2010, CGTMSE had received US$32.04 million as guarantee fees and US$8.97 million as annual service fees since its inception. Of these total receipts of US$41 million, US$29 million was received in the two years from 2008/09 to 2009/10, accounting for 71 percent of total receipts (Table 13).

Table 14 shows that nearly 70 percent of the guarantees are categorized as being in "other manufacturing sectors" (208 402 guarantees for US$1 594 million), followed by industry-related services (23 859 guarantees for US$163 million), metal products (13 635 guarantees for US$107 million), textile

TABLE 12
Top five MLIs by number of claims settled, March 2010

No.	MLI	Claims settled	Total amount of claims settled (million US$)
1	Canara Bank	867	2.30
2	Union Bank of India	313	0.81
3	Bank of India	215	1.17
4	State Bank of India	150	0.92
5	Dena Bank	159	0.43
Total for top 5 MLIs		**1 704**	**5.63**
Total for all MLIs		**2 506**	**11.28**
Top 5's share of total (%)		**67.8**	**49.70**

Source: CGTMSE, 2010.

TABLE 13
Annual receipts of guarantee fees (million US$)

As of 31 March	Guarantee fees	Annual service fees	Total
2001	0.01	0.00	0.01
2002	0.16	0.02	0.18
2003	0.27	0.08	0.35
2004	0.50	0.19	0.68
2005	1.40	0.44	1.84
2006	1.92	0.86	2.77
2007	2.03	0.00	2.03
2008	2.68	1.42	4.09
2009	5.25	2.25	7.49
2010	17.84	3.73	21.56
Total	**32.04**	**8.97**	**41.00**

Source: CGTMSE, 2010.

products (12 283 guarantees for US$154) and food products (12 034 guarantees for US$110 million).

CGTMSE has adopted a multi-channel approach to business development and expansion of its MLI base by creating awareness about the CGS among all stakeholders – including banks, industry associations and entrepreneurs – through print and electronic media, workshops, seminars, etc. At the time of preparing this case study, CGTMSE had conducted more than 1 000 workshops and seminars on the CGS. It has also simplified procedures to encourage more business-to-business transactions. Partner institutions have been identified in different states to reach people across the country. CGTMSE publications have been translated into 11 Indian languages and English.

Overall impact of operations

An assessment of the impact of CGSMSE operations made on 31 March 2010 gathered the following information:

TABLE 14
Top ten sectors by number of guarantees approved, March 2010

No	Sector	Guarantees	Total amount of guarantees (million US$)	Average loan size (US$)
1	Other manufacturing sectors	208 402	1 594	7 638
2	Services (industry-related)	23 859	163	6 809
3	Metal products	13 635	107	7 872
4	Textile products	12 283	154	12 511
5	Food products	12 034	110	9 149
6	Wood furniture	5 811	25	4 277
7	Electrical machinery	4 174	42	9 957
8	Paper and printing	2 556	42	16 426
9	Leather and fur products	2 549	18	6 936
10	Basic metal industries	1 807	24	13 404
Total		**287 110**	**2 278**	–
Total share of industry (%)		**95.67**	**92.62**	–
Total industry and services		**300 105**	**2 459.49**	–

Source: CGTMSE, 2010.

- Number of micro- and small enterprises with guaranteed loans: 300 105.
- Total loan amount covered: US$2 459 million.
- Turnover of guarantee funds: US$14 720 million.
- Exports by guaranteed units: US$435 million.
- Number of jobs created: 1.756 million.
- Number of registered MLIs: 111.

2.4 ISSUES AND CONCERNS

Membership of the trust

Under the trust's mandate, only scheduled commercial banks (including regional rural banks) and financial institutions are eligible for membership of CGTMSE to obtain guarantee cover. However, according to the latest available data, there are currently 1 674 urban cooperative banks (53 scheduled and 1 621 non-scheduled) and 96 751 rural credit institutions (of which 31 are state cooperative banks, 370 are district cooperative credit societies and the rest are primary agriculture cooperative credit societies), which play a critical role in extending loans to micro- and small enterprises across the country but are not eligible to register as MLIs. As of 31 March 2010, 26.5 percent of lending by urban cooperative banks was extended to micro- and small enterprises. The equivalent figure for rural cooperative banks is not available, but it is estimated that a sizeable amount of their flow of credit is directed to the same sector. There is an immediate need to revise eligibility criteria to include microfinance institutions and cooperative banks with strong portfolios in the micro- and small enterprise sector.

Extent of Guarantee Cover

CGTMSE's mandate allows it to provide guarantee cover for loans up to US$213 000. Analysis of data on the loans extended by scheduled commercial banks revealed that only 3.09 percent of such loans, accounting for only 1.88 percent of their total value, were covered by CGTMSE at the end of March 2009. A year later, the position had improved slightly with 3.44 percent of loans and 3.18 percent of total value (Table 15). However, this situation demonstrates that the CGS has not been attracting sufficient interest from lending institutions.

The RBI working group on CGTMSE (RBI, 2010b) made similar observations while studying the guarantee coverage of collateral-free loans up to US$53 250 extended by all public sector banks to micro- and small enterprises: at the end of March 2008 and 2009 respectively, only 8.46 and 9.77 percent of such loans – 13.95 and 21.97 percent in value terms – were covered under the CGS.

Claim Settlement process

The claim settlement process of CGTMSE appears to be slow and complicated. According to the available data, the trust had received a total of 4 761 claim applications from MLIs by 31 March 2010, of which 2 506 were settled, giving a success rate of 52.64 percent. Of the cumulative settled account, the share settled during 2009/10 was 68.72 percent (1 722). About 11.20 percent (533) of the claim applications were not eligible, 420 (8.82 percent) were incomplete and 1 302 (27.34 percent) were pending settlement. This demonstrates that both invocation and settlement of guarantees under CGTMSE are slow.

According to the bankers, the causes of this low level of guarantee invocation were the complicated procedures for filing a lawsuits as a precondition for submission of a claim, and the prescribed lock-in period of 18 months. CGTMSE is of the view that most of the applications are not in line with requirements. The average time required to complete the settlement of an account (first instalment) is more than six months, which hinders the smooth functioning of the GF.

The provision that the final instalment of a claim (25 percent of the total amount) is paid by the trust only after the decree of recovery has become time-barred – approximately 12 years after it has been passed by the courts – causes

TABLE 15
Commercial bank loans to micro- and small enterprises covered by CGTMSE

As of 31 March	Total loans to sector		Loans to sector covered by CGTMSE	
	Number (million)	Amount (million US$)	Number (million)	Amount (million US$)
2009	4.85	54 495.11	0.15 (3.09%)	1 026.46 (1.88%)
2010	8.73	77 449.36	0.30 (3.44%)	2 459.36 (3.18%)

Figures in parentheses indicate percentage of total.
Source: RBI, 2010a.

BOX 5
Effectiveness of CGTMSE

The review was carried out by the Standing Advisory Committee on Credit Flow to Micro and Small Enterprises in 2010, in response to concerns expressed by associations of micro- and small enterprises regarding banks' reluctance to apply for guarantee cover and the high guarantee fees charged. Issues raised by stakeholders included the following:

- All the loans to service activities specified in the MSME Development Act 2006 (e.g., loans to educational institutions, self-help groups and retail traders) should be eligible for CGTMSE cover, which should be amended to align it with the act.
- The heads of MLI local branches are not authorized to apply for CGTMSE cover for the loans that they sanction, as this authority is normally vested in the MLIs' operating offices (zonal, regional or corporate). This delays the process for obtaining guarantee cover.
- Cover under the CGS should be made mandatory for all loans up to US$53 250, with guarantee and annual service fees borne by the government.
- CGTMSE should give reasons for rejecting unsuccessful applications for cover under the scheme. This would enable MLI branches to correct their applications, or take action to ensure future acceptance.
- A whole-turnover policy could be considered, to allow coverage of the entire micro- and small enterprise loan portfolio of an MLI, rather than the current system of covering individual loans.
- As the cost of credit to the micro- and small enterprise sector is already very high, the guarantee and annual service fees should be reduced by at least 50 percent across the board.
- Risk-based guarantee fees could be introduced, based on risk factors in the industrial/service sector.
- Annual service fees should be based on the outstanding amount of the loan, rather than on the loan principal. It would also be appropriate to discontinue collection of the annual service fee on loans that have become NPAs.
- The lock-in period for submitting claims could be reduced from 18 to 12 months. As small business loans under government-sponsored schemes do not normally have realizable asset values, there should not be a lock-in period for submitting claims on such loans.
- Prompt settlement of claims would increase bankers' confidence in the CGS.
- When an MLI recovers a loan for which it has already received a settlement, it is required to remit the full amount to CGTMSE, which then refunds 25 percent to the MLI. This procedure is cumbersome and MLIs should be able to remit only the 75 percent that is retained by the trust.

Source: RBI, 2010b.

problems to participating MLIs, leading some of them to book this 25 percent as a loss after receipt of the first instalment of the claim (75 percent of the total eligible). Box 5 summarizes the findings of an RBI review of the CGTMSE's effectiveness, which included inputs from various stakeholders.

2.5 UPSCALING AND REPLICABILITY OF THE SCHEME

Doubling MSME Credit

Credit is the lifeline of any business. The Government of India is committed to doubling the flow of credit to MSMEs over the next five years. Access to credit can accelerate the modernization and expansion of these enterprises and help augment their productivity and competitiveness. Representatives of India's top banks and industry associations noted that the perceived risk of financing this sector is a serious hindrance. They also pointed out that strengthening the CGS could play a vital role in achieving the government's target.

The RBI working group set up to review CGTMSE suggested measures for enhancing the trust's usage. These recommendations include doubling the limit for collateral-free loans to micro- and small enterprises from US$10 650 to US$21 300; increasing the extent of guarantee cover; waiving guarantee fees for collateral-free loans, subject to certain conditions; simplifying the procedure for submitting claims; and increasing awareness about the CGS. Following these recommendations, RBI has issued mandatory guidelines for all scheduled commercial banks and

TABLE 16
Credit flow to agriculture, by type of lending institution

Lenders	Financial year (million US$)					Growth rate (%)		
	2005/06	2006/07	2007/08	2008/09	2009/10	2005–2010[a]	2008/09[b]	2009/10[b]
Cooperative banks	8 384	9 038	10 268	9 780	12 234	8.7	(-4.7)	25.1
Regional rural banks	3 239	4 348	5 386	5 695	7 331	21	5.7	28.7
Commercial banks	26 697	35 422	38 529	48 713	58 503	20.8	26.4	20.1
Others	81	0	0	48	0	--	--	--
Total	**38 401**	**48 809**	**54 183**	**64 236**	**78 068**	**18.5**	**18.6**	**21.5**

[a] Compound annual growth rate.
[b] Change over previous year.
Source: National Bank for Agriculture and Rural Development (NABARD) Annual Report 2010.

has advised CGTMSE to take appropriate action to address the recommendations. Implementation of the recommendations is expected to facilitate increased usage of the CGS, improved quality and quantity of loans, and the inclusion of more micro- and small enterprises, leading eventually to sustainable inclusive growth.

Upscaling the CGS

At its current level of operation, CGTMSE will not be able to serve the envisaged demand for guarantee coverage and is currently revamping some of its operational aspects. One way of upscaling operations would be to extend credit guarantee cover to the 2 000 clusters group of potential borrowers that have been identified across the country, and the banking sector is already carrying out interventions in 500 of these clusters. Another response could be to extend guarantee cover to parts of the services sector, which is growing rapidly but is not included in CGTMSE. Inclusion of the cooperative banking system in guarantee coverage for loans extended to micro- and small enterprises would increase the breadth of credit institutions.

As of 31 March 2010, CGTMSE had leveraged itself to more than six times its corpus funds of US$406 million by extending US$2 459 million of credit guarantee coverage. It has now become imperative that the settlers of CGTMSE increase the corpus of the trust so they can increase the volume of credit guarantee approvals and tap the emerging market of micro- and small enterprises. Exploring the possibilities for reinsuring the guarantee coverage extended by CGTMSE in a cost-effective manner could also improve the position.

2.6 CGS FOR AGRICULTURE

Agricultural loans

Loans to agriculture in India showed a positive compound annual growth rate of 18.5 percent between 2005/06 and 2009/10. Although agricultural loans were expected to decline following the government's announcement of agricultural debt waiver schemes in 2008, financing to the sector maintained a healthy growth rate of 18.6 and 21.5 percent in 2008/09 and 2009/10 respectively (Table 16).

RBI's targets for agricultural loans

RBI regulations make it mandatory for domestic commercial banks to direct 18 percent of their ANBC to agriculture and allied sectors; banks have to deposit any shortfall in NABARB's Rural Infrastructure Development Fund. The impressive growth shown in Table 16 provoked concerns about domestic banks' achievement of this target – at the end of March 2010 more than half of public sector banks (15 out of 27) and exactly half of private sector banks (11 out of 22) had failed to meet the target. Among private sector banks, performance was poorer among longer-established banks, while most of the newer ones were able to meet the target (RBI, 2010c).

Analysis of the reasons for this non-achievement of targets found that most of the banks finance small-ticket, collateral-free loans to small farmers through the Kisan credit card. Small farmers lack the collateral for medium- and big-ticket loans. In discussions, bankers revealed that it is impossible for them to achieve the 18 percent target by extending loans to small and marginal farmers; they have to finance medium and large

TABLE 17
Credit flows to agriculture and allied activities, by subsector

Subsector	Financial year (million US$)				Growth rate (%)	
	2005/06	2006/07	2007/08	2008/09	2005/06–2009/09[a]	2008/09[b]
I. Crop loans (short-term production credit)	22 415	29 459	38 594	44 779	26.4	16
II. Term loans (medium- and long-term investment credit)	15 986	19 350	15 588	19 457	3.8	24.8
a) Small-scale irrigation	1 843	1 823	604	677	(-33.7)	12
b) Land development	372	486	543	614	17.5	13.1
c) Farm mechanization	2 063	2 152	1 767	1 773	(-6.3)	0.4
d) Plantations and horticulture	953	1 120	1 257	1 286	10.7	2.3
e) Animal husbandry[c]	1 562	1 712	1 922	2 212	12.3	15.1
f) Fisheries	217	303	266	273	5.7	2.6
g) High-tech agriculture	2 072	4 574	7 090	8 871	61.6	25.1
h) Others[d]	6 904	7 180	2 139	3 793	(-26.2)	75.4
Total	**54 388**	**68 159**	**69 771**	**83 735**	**17.9**	**18.6**

[a] Compound annual growth rate.
[b] Change over previous year.
[c] Includes dairy development, poultry farming and sheep/goats/pigs.
[d] Include storage/market yards, forestry/waste land development, the Rural Infrastructure Development Fund, bullocks and bullock carts, biogas, and loans through private sector commercial banks.
Source: NABARD, Annual Report 2009/10.

farmers. Bankers are of the view that enhancing the upper limit for collateral-free loans could solve this problem.

Proposed agriculture credit guarantee fund (ACGF)

Currently there is no CGS for the agriculture sector. To improve the credit flow to agriculture, working groups, academic institutions and policy advocates favour the creation of an agriculture credit guarantee fund (ACGF) at either the apex second-tier) or bank level, in line with CGTMSE (Das and Baria, 2005). This subsection of the case study suggests some features and designs for such a fund, based on discussions with stakeholders across India.

The main constraint to creating an ACGF in India will be establishing a corpus fund as the banking system extends a massive amount of loans to agriculture. One way round this problem would be to select a subsector of agriculture, such as farm mechanization, for a pilot. There is long-standing demand from India's farm machinery industry for revision of the eligibility criteria for financing farm machinery. Most banks and financial institutions (including cooperative banks) require collateral for loans to this subsector, which creates a major challenge for farmers. As shown in Table 17, the growth rate of credit to farm mechanization from 2005/06 to 2008/09 was negative, with only negligible growth during 2008/09.

The Federation of Indian Chambers of Commerce and Industry has been encouraging the banking community to waive collateral requirements for the financing of farm machinery, to help improve the efficiency of farming. Banks have reduced the landownership criterion from 9 to 4 acres of irrigated land (3.6 to 1.6 ha), but only for loans of up to US$1 200. Given the need for farm mechanization to improve cropping intensity, the ACGF could be floated as a public–private partnership led by national institutions such as NABARD. The new fund would have the following features:

- Coverage would be extended to loans for the purchase of farm machinery, both used and new (tractors, combine harvesters, power tillers, etc.).
- The fund would operate as a discrete financial entity with professional management and decision-making independent of government.

- Initial funding of US$212 million would be sourced from stakeholders such as the farm machinery industry, banks, non-governmental organizations (NGOs) and donor agencies, with the government possibly joining at a later stage. If required, medium-term (five-year) public deposits could also be accepted at a fixed interest rate.
- To ensure that the fund serves its intended purpose, overall supervision could be provided by NABARD or another agency selected by stakeholders.
- The proportion of each loan subject to guarantee could vary according to the perceived degree of risk in each case (possibly ranging from 40 to 70 percent).
- The guarantee would be on the outstanding loan amount or the amount declared to be an NPA, whichever is lower.
- Banks with loan guarantees would bear a significant residual proportion of the risk (up to 50 percent of the loan value).
- Guarantees would be provided only for loans extended without collateral security and/or third-party guarantee.
- The current cap for guarantee coverage (US$10 650) could be increased (to US$21 300) depending on demand.

Loans would be guaranteed only when maximum effort had been made to minimize exposure to risk (e.g., through the careful preparation and design of projects, and the use of insurance against adverse weather affecting crop yields).

The process flow for creating the ACGF is outlined in Figure 14.

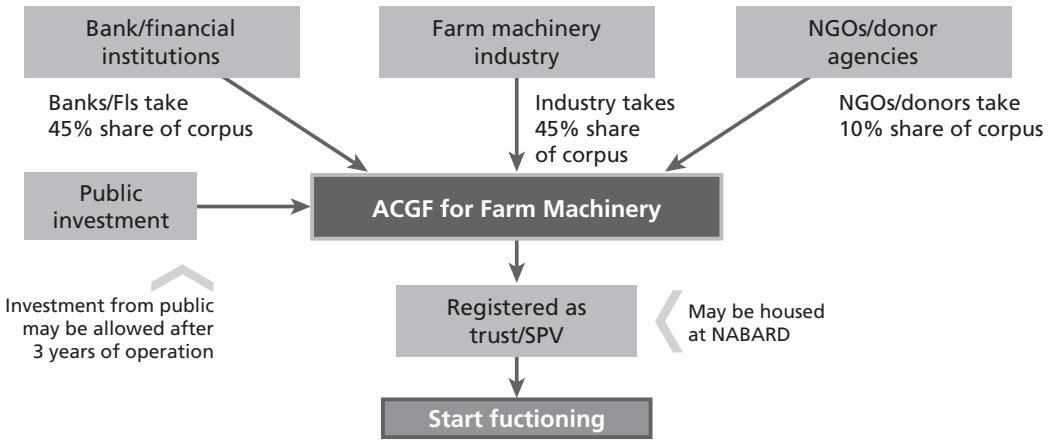
GFs appear to be a particularly appropriate way of overcoming the current constraints to financing farm mechanization in India and are likely to play a pivotal role in boosting entrepreneurship by compensating for the lack of collateral, providing access to longer-term loans, and providing advice and coaching to a vast clientele. However, the proposed ACGF faces some potential challenges:

- There may be a conflict of interest between the waiving of agricultural loans (e.g., the central government's waiving of US$14 900 million of agricultural loans in 2008) and the ACGF, which will require the existence of a demand for guarantee cover.
- There may be a widespread tendency to assume that the guaranteeing of loans reduces the need for normal prudential standards in processing loan applications, leading to the funding of projects even when there is no serious prospect of debts being serviced.
- Establishing viability and suitable business models for the ACGF may pose a considerable challenge during its first years of operation.

2.7 CONCLUSIONS AND THE WAY FORWARD

Easy access to credit generally assists small enterprises (both MSMEs and small agribusinesses) in

FIGURE 14
Process flow for creating an ACGF



Source: Author.

realizing their full economic, market and social potential and has considerable effects on a country's economic growth in the long run. Ensuring uncomplicated access to credit for MSMEs and small agri-businesses requires a well-functioning market, competition, the availability of credit products and a good delivery system.

By reducing the risk to banks that lend to MSMEs, CGTMSE aims to increase lenders' interest in this segment and to initiate a learning process through which banks develop the expertise to make MSME lending profitable. The scheme's favourable credit terms and conditions (without collateral and third-party guarantees) encourage entrepreneurs to increase their investments and enhance their performance, promote the growth of entrepreneurship in rural areas, and help decrease rural–urban migration.

CGTMSE's CGS has emerged as an instrument for policy-makers seeking to increase access to lending, especially for constrained groups of micro- and small enterprises. The current scheme has served more than 300 000 enterprises and differs greatly from the earlier scheme (DICGC) in terms of organizational structure, government participation, risk management and pricing mechanisms.

This study shows that government has an important role in CGTMSE. This role has largely been limited to funding and management, with far less involvement in credit risk assessment and recovery. The corpus fund for the guarantees now needs to be increased to accommodate the additional applications that will result from the government's doubling of MSME financing. There is also need to base the pricing of guarantee cover on the risk potential of individual activities, rather than having a flat rate for all types of activity, which defeats the purpose of having a guarantee mechanism.

The current scheme has very limited potential for replication in other important economic sectors, and scale is an important hindrance. However, replication of the scheme in the agriculture sector (particularly the farm mechanization subsector) could be piloted through a private–public partnership to increase its potential scope.

GFs such as CGTMSE require more research in the areas of organization, pricing and risk management, which can help maximize the impact of the guarantee while minimizing the risk. There is also need for a cost–benefit analysis of CGS compared with other government interventions for MSMEs before replicating and scaling up CGS in other sectors.

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Chapter 3

Africa: Agricultural Credit Guarantee Scheme Fund (ACGSF), Nigeria

Bolarin Omonona

3.1 INTRODUCTION

Finance stands out among the many problems confronting the agriculture sector in Nigeria. This is because the availability of finance is directly linked to other problems facing agriculture, affecting production, transportation, processing and storage. When farmers have adequate access to finance, they can obtain the inputs they require for production processes. Without credit, farmers are forced to produce food and fibre using out-dated biological inputs and tools, on soils that are characterized by lack of nutrients, as fertilizer use is very rare.

A key source of financing is farmers' own savings from extra income generated from production and farm sales. However, because the lack of adequate finance forces farmers to use minimal levels of inputs, they are able to produce agricultural products in only small quantities, which can often barely meet their families' basic needs. Under this scenario, the potential for saving is very low, leading to low investment and low levels of income. This vicious cycle of poverty continues until it is broken by an external capital inflow from outside the smallholder farming system. The external source increases investment, which consequently increases output, income and savings.

The sources of the big push described in the previous paragraph are usually in the credit market. In Nigeria, operators/players in the agriculture market can be broadly classified into two categories: formal and informal. Small farmers have more access to informal credit sources than formal rural farm enterprises have, but the local moneylenders who represent the predominant source of credit to small farmers usually charge exorbitantly high interest rates. These high interest rates are counterproductive to the farmers, who lack alternative sources for the loans they need to finance their farm operations. Many farmers lose out when the assets they use to secure a loan are recovered by moneylenders in case of default, leaving the farmers worse off than they were before they acquired the loan.

Although the government encourages commercial and merchant banks to increase lending to agriculture, most banks have not done so because of the risks confronting agricultural production in Nigeria. In addition, the loan amounts required by small farmers are lower than the sums that commercial banks prefer to lend. Even when banks do make these loans, processing costs are higher relative to the size of the loan.

This financial bottleneck preventing small farmers from obtaining access to credit led the Government of Nigeria to create an institutional programme for making credit available to this vulnerable but productive sector. In 1973, the National Agricultural Cooperative Bank was integrated into the National Agricultural Cooperative and Rural Development Bank to create the Bank of Agriculture. The government encouraged commercial banks to support the Bank of Agriculture's financing of agriculture by opening branches in rural areas. It was hoped that rural people would adopt the practice of banking and start saving deposits, to enable them to obtain loans to finance their farming.

Another policy stipulated a minimum percentage of total loans to be granted to the agriculture sector, encouraging banks to relax some of their restrictive lending procedures. However, banks preferred to pay a fine rather than to comply with this directive of the Central Bank of Nigeria (CBN). Banks complain of the high risks they incur in financing smallholder farmers, who usually lack the right kind of collateral to qualify them for any form of bank credit. Recognizing this challenge, the government established the Agricultural Credit Guarantee Fund Scheme (ACGSF) in 1977, which became operational in 1978, primarily as a mechanism to encourage commercial and merchant banks to lend to farmers, with ACGSF and the banks sharing the risks.

At the outset, commercial and merchant banks were enthusiastic about the risk sharing formula, in

TABLE 18
ACGSF income and expenditure statement (thousand US$)

Item	2006	2007	2008	2009
Income				
Investment	2 649.42	2 062.70	3 169.82	1 332.73
Operating expenses				
Claims	109.06 (7.02%)	155.64 (7.96%)	13.58 (0.80%)	94.97 (4.46%)
Salaries and wages	583.7 (37.55%)	744.03 (38.06%)	943.7 (55.96%)	1 123.1 (52.76%)
Other administrative expenses*	796.3 (51.23%)	997.4 (51.02%)	697.8 (41.38%)	870.1 (40.88%)
Uninsured stolen vehicle written off	Nil	Nil	0.40 (0.02%)	Nil
Directors' emolument	28.4 (1.83%)	24.63 (1.26%)	4.44 (0.26%)	10.56 (0.50%)
Audit fees	3.5 (0.23%)	3.5 (0.18%)	3.5 (0.21%)	3.5 (0.16%)
Travels for audit inspection of branches	3.79 (0.24%)	5.21 (0.27%)	8.26 (0.49%)	13.34 (0.63%)
Depreciation	29.7 (1.91%)	24.61 (1.26%)	14.54 (0.86%)	13.08 (0.61%)
Total expenses	1 554.5	1 955.09	1 686.32	2 128.69
Surplus/deficit	**1 094.91**	**107.61**	**1 483.49**	**(795.96)**
Reserves b/f	10 228.23	11 323.14	11 430.76	12 914.25
Reserves c/f	11 323.15	11 430.76	12 914.26	12 118.29

Figures in parentheses are percentages of total costs.
* See Table 19.
Source: ACGSF annual reports and financial statements, 2006 to 2009.

which ACGSF covers 75 percent of the total loan and interest obligation, and the banks cover the remaining 25 percent. In the early days, claims were paid promptly, but later, when defaults mounted, there were delays in the settling of claims. This led to a drop in the number of banks participating in the guarantee arrangement. Recent evidence shows that the number of participating banks has begun to increase again.

This case study examines ACGSF's organizational arrangements and procedures, and assesses the possibilities for replicating the system.

3.2 FINANCIAL AND OPERATIONAL DATA ON ACGSF

This case study focuses on the income and expenditure statements for the years 2006 to 2009 to analyse ACGSF's financial position. As shown in Table 18, the fund's only source of income is its investment in gilts (treasury bills and treasury certificates) with interest accruals.

Table 18 shows that income fluctuated from year to year, decreasing from US$2.5 million in 2006 to US$2 million in 2007, rising to US$3.2 million in 2008 and dropping again to about US$1.3 million in 2009. However, expenses increased every year except for 2008, reaching US$2.1 million in 2009.

Operating expenses include claims paid to deposit money banks (DMBs) on farmers' defaulted loans, staff salaries and wages, other administrative expenses and directors' emoluments. Other expenses include audit fees, travelling expenses for the audit of branches and depreciation.[10]

The amount paid as claims to participating DMBs ranged from 0.8 to 7.96 percent. In 2006, about 7.02 percent of total expenses were claims. This marginally increased to 7.96 percent in 2007

[10] Depreciation of capital assets was 20 percent per annum for motor vehicles and office equipment throughout the period analysed.

TABLE 19
ACGSF other administrative expenses (thousand US$)

Item	2006	2007	2008	2009
Hotel and travelling	511.62 (64.25%)	695.11 (69.69%)	607.85 (87.10%)	523.10 (60.12%)
Stationery, postage and communications	527 (0.07%)	19.09 (1.91%)	34.43 (4.93%)	203.49 (23.39%)
Conferences and seminars	5.85 (0.74%)	116.64 (11.69%)	16.55 (2.37%)	3.48 (0.40%)
Newspapers and periodicals	2.17 (0.27%)	2.55 (0.26%)	2.02 (0.29%)	1.89 (0.22%)
Entertainment	17.25 (2.17%)	19.08 (1.91%)	8.31 (1.19%)	6.75 (0.78%)
Medical	1.32 (0.17%)	644 (0.07%)	436 (0.06%)	Nil
Repair, maintenance and vehicle running	4.70 (0.59%)	6.35 (0.64%)	1.60 (0.23%)	496 (0.06%)
Consultancy	145.53 (18.28%)	23.49 (2.36%)	Nil	2.42 (0.28%)
Training	107.36 (13.48%)	65.10 (6.53%)	1.60 (0.23%)	Nil
Advertisements and publicity	Nil	24.69 (2.48%)	25.24 (3.62%)	117.19 (13.47%)
Incentives for farmers	Nil	24.69 (2.48%)	255 (0.04%)	Nil
Total	796.34	997.46	697.87	870.14

Figures in parentheses are percentages of total administrative expenses.
Source: ACGSF annual reports and financial statements, 2006 to 2009.

before crashing to 0.8 percent in 2008 and rising again to 4.46 percent in 2009. In all years, claims accounted for a larger share of total expenses than did directors' emoluments, audit fees, travelling and depreciation. However, the shares of total expenses paid on salaries and wages, and on other administrative charges were far higher, with salaries and wages accounting for between 37.55 and 55.96 percent, and other administrative expenses for between 40.88 and 51.23 percent. This disproportionate share of expenditure means that less than 8 percent of ACGSF's annual expenditure was used for its primary purpose over the four years under consideration.

Investment income for 2009 was considerably lower than in all the other years, although total expenditure reached its highest point in that year. As a result the fund had a deficit of about US$800 000 in 2009.

Table 19 shows a breakdown of other administrative expenses. Hotel and travelling costs accounted for a substantial 60.12 to 87.10 percent of these expenses. Other costs varied, with training and consultancy ranging from zero to 18.28 percent over the period; conferences and seminars ranging from less than 1 to 11.7 percent; entertainment declining from 2.17 percent in 2006 to 0.78 percent in 2009; advertisements and publicity increasing from 2.48 percent in 2007 to 13.47 percent in 2009; and stationery, postage and communications rising from a meagre 0.07 percent in 2006 to nearly 24 percent in 2009. The incentives awarded to farmers ranged from zero to 2.48 percent. Other costs such as those for repairs, maintenance and running of vehicles, medicals, and newspapers and periodicals constituted less than 1 percent every year.

The only item that CBN subsidizes for ACGSF is the building. All the other cost items, including staff salaries and running costs, are borne by the fund.

Loans guaranteed

In 2006, a total of 54 032 loans were guaranteed, valued at US$28.29 million. In 2009, there were 52 787 loans, valued at US$44.84 million. ACGSF started to guarantee loans in April 1978; as of 31 December 2009 it had guaranteed a cumulative total of 647 351 loans valued US$229.607 million.

The distribution of loans by type of enterprise varied from year to year. In 2006, the food subsector predominated in terms of both number and value of loans guaranteed, with about 92.8 percent of the total number and 76 percent of the total value. In 2009, 88.6 percent of guaranteed loans by number and 83.3 percent by value went to the food crop subsector – grains, tubers and roots – which had dominated lending under ACGSF for the previous 15 years. In 2009, the subsector accounted for a total of 570 793 loans (88.2 percent) valued US$179.64 million (78.2 percent). The livestock subsector followed, with 31 459 loans (4.9 percent) valued at US$30.88 million (13.4 percent).

In terms of size of loans granted, loans from US$133.46 to US$333.64 dominated in 2007 and 2008, but in 2009 the highest number of loans were in the ≥ ₦ 100 000 (about US$679)[11] category. This category also accounted for the largest number of guaranteed loans from 2006 to 2009 because of escalation in production costs and farmers' need to request larger loans. According to the First Bank Agricultural Finance Unit, in the early 1980s, ₦1 500 was enough to establish a poultry farm with 1 000 layers, which would have required ₦4 to ₦5 million to establish in 2011.

The cash crop subsector generally requires long-term credit, which banks are rarely able to grant because of the short-term nature of their funds. Although the number of guaranteed loans in this subsector increased from 2006 to 2009, their percentage of total value declined from 14 to 3.58 percent, in spite of the refinancing scheme that was introduced to boost lending to this subsector. In general, the order of importance of agricultural subsectors in terms of lending and guaranteed funds was food, livestock, fisheries, cash crops, others and mixed farming.

Regarding borrower categories, 2008 and 2009 data reveal that individual borrowers dominated the system, with more than 90 percent in both number and value terms, although there was a significant drop in the percentage of individual borrowers between 2008 (95.9 percent) and 2009 (92.4 percent). Informal groups accounted for very low percentages of both number and value, declining from 3.2 percent in 2008 to 1.53 percent in 2009. However, cooperatives seem to be becoming more important, as both the number and the value of guaranteed loans to this category of borrower increased from an insignificant 0.8 percent in 2008 to 5.73 percent in 2009. Companies represent the smallest percentages, although they increased from 0.06 percent in 2008 to 0.34 percent in 2009.

In terms of purpose of the guaranteed loan, the largest percentage went to food crops (more than 80 percent), followed by livestock, fisheries, cash crops and others. In terms of number, the percentage of guaranteed loans for fisheries increased significantly from 1.77 percent in 2008 to 6.02 percent in 2009, while food decreased slightly, from 88.5 to 83.2 percent.

Every year the three states with the highest proportions of loans guaranteed by number were in the northern part of the country, with the exception of Delta State, which came second in 2009 with 12.76 percent, after Katsina (14.39 percent). Zamfara State featured among the top three states in three of the four years under review, rating first in 2008, with 17.94 percent. Jigawa, Kwara, Kebbi, Benue and Sokoto each appeared once among the top three states in terms of number of guaranteed loans under ACGSF between 2006 and 2009.

Fully Repaid Loans

By 31 December 2009, a total of 442 726 loans valued at US$121.44 million had been repaid, representing average loan repayment rates of 68.4 percent by number and 52.9 by value or amount. Compared with 2007, these figures indicate a decline in performance. The values for 2007 were respectively 69.7 percent and 58.5 percent. According to CBN (2009), the single factor constraining the repayment of loans under the system was the bad loans granted in the early years (1978 to 1988). From 1989 to 2009, there was a remarkable improvement in the system's procedures for loan appraisal, monitoring and records of repayment.

Kwara State seems to have one of the best records of repayment performance, as it featured among the top three states in the four years of evaluation. It was closely followed by Zamfara and Katsina states, which featured among the top three in two of the four years. Kano, Kebbi, Adamawa and Jigawa each appeared only once. The states that recorded the highest numbers of guaranteed loans are not necessarily those with the highest loan repayments.

ACGSF claims settled

DMBs can make two types of claim from ACGSF: when the farmer pays the credit and interest on schedule; and when the farmer defaults. In the first instance, the farmer qualifies for a 40 percent

[11] US$1 = approximately ₦150 as of 1 January 2011.

rebate on the loan interest under the Interest Drawback Programme (IDP). These claims require less time for verification.

Banks' claims under the IDP seem to be increasing as more borrowers become aware of it. The number and value of claims under the IDP increased from 15 796 claims worth US$325 000 in 2006 to 26 970 claims worth US$832 000 in 2008 (the highest for the four years surveyed), before decreasing to 15 545 claims worth US$744 000 in 2009. This increase in IDP claims for rebates implies that the default rate may be decreasing.

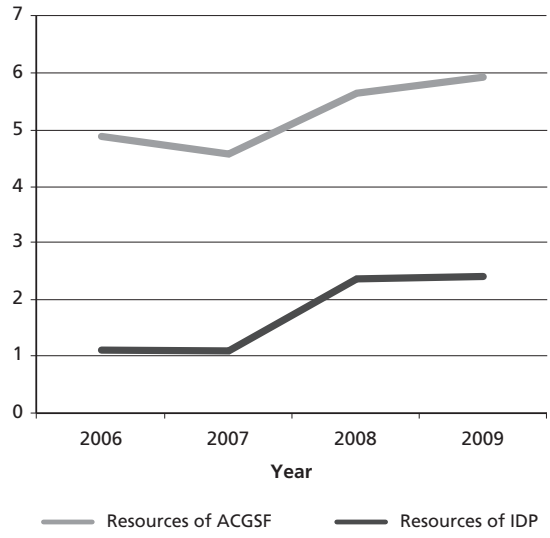
When farmers fail to pay the principal and interest on schedule, DMBs often encounter problems with ACGSF's very slow response to claim submissions. As the managing agent of the GF, CBN reports that it takes time to assess and verify all the necessary documents, even when claim forms are properly submitted. However, to the DMBs interviewed, it seems as if ACGSF waits for the DMB to follow up on its submission before CBN begins to act. Ideally, CBN should not wait for follow-up from the DMB before confirming that all the claim forms have been properly completed.

Between 2006 and 2009, performance[12] appears to have declined in terms of both the number and the value of claims settled.

This situation is worrisome because claim settlement, which should constitute the cornerstone of ACGSF, seems to be given very low priority in the system's administration. CBN has a history of taking a very long time to settle claims, as attested to by both Union Bank of Nigeria and First Bank of Nigeria. Union Bank did not receive claims due from ACGSF since the 2008/2009 farming year until January 2011, and First Bank had not received any claims since 2007.

Another issue that DMBs have with ACGSF is that irrespective of how long it takes ACGSF to settle a claim, it applies its 75 percent payment of the principal and interest from the time of filing the claim (one year after the farmer obtains the loan and is expected to have repaid it, which he/she cannot do without settlement of the guarantee claim). This system causes the bank to lose out for as long as the claim remains unsettled, as interest on the loan continues to accrue. This situation makes the use of short-term deposits (liabilities) to finance short-term farming loans unattractive to most DMBs in Nigeria, because the resulting short-term credit in default functions as medium-term credit, with the DMB unable to recover its money for two to three years, while interest payments are made only for the first year of the farmer obtaining and using the fund.

FIGURE 15
Resources of ACGSF and the IDP (billion ₦)



Source: Adapted by B. Omonona, 2011.

ACGSF and IDP resources

In general, the resources of ACGSF and the IDP increased slightly between 2006 and 2009, in spite of a small drop in ACGSF resources between 2006 and 2007 (Figure 15).

Banks participating in ACGSF

A striking feature of the profile of ACGSF participating banks is its variability. For instance, the number of DMBs dropped from 11 in 2007 to nine in 2009, while microfinance banks (MFBs) increased[13] from ten in 2007 to 70 in 2009, representing a 600 percent increase. However, the value of the ACGSF loan guarantees granted to

[12] Claims are not paid until the DMB has submitted a claim and the claim has been processed and approved by the board of ACGSF. However, the DMBs interviewed claimed that they were still in arrears for claims made two to three years previously, with CBN paying no interest on the delayed funds.

[13] This increase in number of MFBs compared with DMBs does not make the MFBs more important that the DMBs in financing agriculture through the GF arrangement. The minimum share capital of an MFB is ₦25 million, compared with ₦25 billion for a DMB.

DMBs increased from US$28.03 million in 2007 to US$47 844 million in 2009, while MFBs' loans to agriculture increased from US$1.6 million in 2007 to US$2.8 million in 2009.

Among DMBs, Union Bank of Nigeria, First Bank of Nigeria and the United Bank for Africa featured as lenders under ACGSF in all four years under review. Apart from these three banks, however, there was high turnover in participation, with one-third of the DMBs participating in 2008 leaving the system in 2009 and three new ones joining. Union Bank and First Bank were the two most active players, accounting for 89.6, 89.4 and 82.0 percent of total loans for 2007, 2008 and 2009 respectively.

Borrowers have access to ACGSF through participating banks, giving the scheme the characteristics of a portable guarantee scheme (one borrower and many possible bank candidates).

A major reason for the variable use of the scheme was DMBs' lack of interest in financing agriculture, much of which is still purely subsistence. Loans to subsistence farmers are very small, increasing the costs of administration. DMBs therefore prefer to pay the fine for not providing small farmers with credit rather than offering loans that will not be repaid.

3.3 ESTABLISHMENT OF THE FUND

ACGSF was established by Decree Number 20 of the Federal Republic of Nigeria in 1977. The purpose of the system was to encourage banks to lend money to all categories of farmers by providing guarantees on the loans granted by commercial banks for the agricultural purposes defined in the ACGSF Act of 1977:

a) establishment or management of plantations for the production of rubber, oil-palm, cocoa, coffee, tea and similar crops;
b) cultivation or production of cereals, tubers, fruits of all kinds, cotton, beans, groundnuts, shea nuts, benniseed, vegetables, pineapples, bananas and plantains;
c) animal husbandry, including poultry, pigs, animal raising, fish farming, rabbits, snails, grass cutter farming and honey production.

The scope of animal husbandry was expanded in a 1988 amendment to include fish culture, fish capture and storage. The same amendment also incorporated farm machinery hire services and integrated agricultural projects (embracing both production and processing), provided that the primary production component accounts for at least 50 percent of the raw materials required by the factory.

The general objectives of the system are to stimulate agricultural production and encourage commercial and other banks to participate in increasing the productive capacity of agriculture through a capital lending programme. Under the system, the securities that may be offered to a bank for the purpose of obtaining a loan are:

- a charge on land in which the borrower holds a legal interest, or a charge on assets on the land, including fixed assets, crops and livestock;
- a charge on the movable property of the borrower;
- a life assurance policy, a promissory note or another negotiable security;
- stocks and shares;
- a personal guarantee;
- any other security acceptable to the bank.

Objectives of the Fund

ACGSF is an instrument of national government policy for agricultural credit. The broad objectives of the system are to:

- facilitate the flow of credit to farmers, to enable them to adopt new technologies and farming practices that raise their productivity and income, with strong emphasis on accommodating disadvantaged small- and microscale farming units;
- encourage farmers to patronize formal credit markets, to prevent rural borrowers from being exploited by informal moneylenders;
- institutionalize agricultural credit purveyance to prevent the improper practices of non-institutional lenders, such as high interest rates and other stringent borrowing conditions;
- ensure that the mainstream financial system provides adequate funds to the agriculture sector on reasonable terms, particularly because financial institutions, especially banks, are likely to discriminate against agriculture in view of the inherent risks and lower rates of returns;
- assist banks in supporting agriculture through measures designed to moderate their exposure to loss.

More specifically, the objectives of ACGSF as stipulated in its enabling decree are to:

- provide guarantees on the loans granted by commercial banks and DMBs for agricultural production and processing;
- accelerate the flow of institutional credit to small-scale farmers, either individually or through cooperatives;

- cultivate farmers' use of banking, to encourage the mobilization of savings.

To achieve these objectives, the national government nationalized commercial banks and instructed them to establish a certain number of branches in rural areas. The government also laid down credit guidelines, prescribing in detail the types of transaction to be financed by commercial banks and the proportions of their credit to be made available to each sector of the economy. Six percent of total loans to all sectors was to be allocated to agriculture[14] at 5 percent interest rate per annum, through the Nigeria Agricultural Cooperative and Rural Development Bank, now known as the Bank of Agriculture.

ACGSF Board of Management

The ACGSF decree and its subsequent amendments provide for the establishment of a board of seven members to manage the CGS: two representatives from CBN; one representative each from the Ministry of Finance, the Ministry of Agriculture and the Bankers' Committee; and two non-government officials, of whom one is the board's chairperson. As the managing agency, CBN is responsible for the day-to-day running and administration of the fund and has established a network of ACGSF branch offices at CBN branches in all states of Nigeria. The Development Finance Department at CBN's headquarters coordinates the work of these branch offices and serves as the Secretariat of the fund.

In October 2007, the ACGSF board was dissolved following the emergence of a new government earlier in the year[15] (along with the boards of other federal agencies). To ensure that the accounts for 2008 could be approved, CBN requested the shareholders to constitute an Interim Management Committee (IMC) pending the new government's appointment of a new board. This IMC was in operation throughout the 2009 financial year, until the Federal Government constituted a new board in 2010. One of the results of this situation was that there were no board meetings in 2008, so claim submissions could not be processed. The IMC was made up of five members from the Ministry of Finance, the Accountant General's Office and CBN.

ACGFS's original decree of 1977 provided for a fund of ₦100 million: 60 percent from the national government and 40 percent from CBN. By the end of December 1978, only ₦15 million had been subscribed – ₦9 million by the government and ₦6 million by CBN. The level of guarantee was set at 75 percent of principal plus interest, subject to change. Conditions for determining such changes are not specified in the decree, but according to an impact assessment of ACGSF (CBN, 2007), a high rate of default should lead to an increase in the level of guarantee cover, as the CGS's intention is to increase the government's share in the social costs of agricultural development. A low rate of default would imply a low risk to the public and to the commercial banks financing agricultural development, normally encouraging commercial banks to lend more and leading to a reduction in the government's willingness to provide higher guarantee cover for loans.

The size of loan eligible for an ACGSF guarantee depends on the type of loan. For example, guarantees for loans to individual proprietors cannot exceed ₦50 000, while those for groups or cooperatives cannot exceed ₦1 million; group farms and cooperatives are expected to be better-managed that farms owned by individual farmers, and it is easier and far cheaper to appraise and recover loans from cooperatives because each member wants to keep her/his integrity.

3.4 NEW INITIATIVES/MODELS FOR IMPROVED LENDING UNDER ACGSF

Since the inception of ACGSF in 1978, CBN has adopted various models to ensure sustainable operations. During the pre-Structural Adjustment Programme era (before 1986), emphasis was on a regulatory approach to financial management in which lending to the agriculture sector was made mandatory for banks. With deregulation of the economy in 1986, banks were left free to determine their own investment options and portfolios. ACGSF has collaborated with farmers, state and local governments and oil companies to develop models that are relevant and effective in channelling credit to the agriculture sector in a market-based economic system. The following models are the most prominent.

Self-Help Groups Linkage Banking Programme

This programme was launched under ACGSF in 1991 and became operational in 1992. Under

[14] Until the Structural Adjustment Programme was introduced in 1986, the government stipulated the percentage of total loans to be directed to agriculture.

[15] In Nigeria, change of leadership at the national level is usually accompanied by the dissolution of institutions controlled and financed by the national government.

the programme, farmers are encouraged to form self-help groups (SHGs) (informal or formal) of between five and 15 members with a common purpose. The groups are then encouraged to make regular savings, which are deposited in partner banks of their choice. After operating such a savings scheme for six months, the SHG can apply to the partner bank for a group loan.

Bank loans to SHGs are normally in multiples of the balance in the group's savings account at the time of loan application. So far, banks have approved and disbursed up to four times the balance in the savings accounts of SHGs nationwide. While the loan remains current, the lending bank holds the group's savings as security, which are not drawn on until the loan is fully repaid. The aim of SHG linkage banking is to inculcate the culture of savings and good banking practices in the groups, enabling them to build up resources for self-financing.

The Trust Fund Model (TFM)

In this model, oil companies, state and local governments and NGOs place funds in trust with the lending banks to augment the security of farmers' small group savings. The trust fund secures 25 percent of the borrowers' loans, the farmers' savings secure another 25 percent, and ACGSF guarantees 75 percent of the remaining 50 percent. This leaves the lending bank with a risk exposure of only 12.5 percent at the point of guarantee. If the farmers have low capacity, a trust fund provider may decide to increase its stake beyond 25 percent. Specifically, the TFM aims to increase the volume and flow of funds to farmers while reducing the risks associated with banks' lending to agricultural borrowers without collateral.

The Shell Petroleum Development Company has adopted the TFM in its Micro-Credit Scheme for Agricultural Development, which supports farmers in its host communities in the Niger delta area. The Nigerian Agip Oil Company has adopted a similar model for its GREENCARD Programme.

State and local governments throughout the country are becoming very interested in the TFM. In Jigawa State, the State Government Trust Fund for Agricultural Development has pledged about ₦50 million to assist farmers in acquiring loans for cotton and sugar cane production. The farmers' outputs provide raw materials for the state-owned sugar company and cotton ginnery.

Some state governments pledged funds during a joint campaign with officials of the Ministry of Agriculture and Rural Development in states with low agricultural credit performance under ACGSF. For example, Nasarawa State Government pledged ₦10 million, and Ebonyi State Government ₦30 million as cash security under the model. New entrants to the TFM include Kogi, Ondo and Plateau States.

As of December 2009, the total funds placed under the TFM were about US$36.7 million, guaranteeing about US$146.8 million of loans. Information about the sources and amounts are shown in Table 20.

The Interest Drawback Programme (IDP)

The IDP was introduced in 2003 when DMBs' interest rates on loans became too high for small farmers. Its aim was to influence borrowing rates without introducing a dual-interest rate regime or conflicting with the government's deregulation policy. Under the IDP, farmers borrow from lending banks at market rates, with ACGSF providing an interest rebate of a set percentage to farmers who repay their loans as and when due.

The Government of Nigeria agreed to provide 60 percent of the IDP's funding, and CBN the remaining 40 percent, to a total of about US$13 345 million. The IDP fund is to cover interest drawbacks on agricultural loans and is quite separate

TABLE 20
Fund placements under the TFM, 31 December 2009

Type of stakeholder	Amount placed (million%)	Number
Multinationals/oil companies	2.96	4 multinationals
State and local governments/ministries	16.21	17 states, 17 local governments and 3 ministries
National government organizations	13.34	National Food Reserve Agency
Individuals/organizations	4.23	13
Total	**36.75**	**55**

Source: ACGFS annual report and financial statements 2009.

from ACGSF. It is invested in Nigerian treasury bills with the investment income used to settle interest drawback claims. At the end of 2009, the total resources of the IDP were US$14 013 million.

The Refinancing and Rediscounting Facility (RRF)

The CBN introduced the RRF for medium- and long-term loans in May 2002, in response to DMBs' refusal to grant loans for agricultural activities with long gestation periods. The RRF's aims are to encourage medium- and long-term bank lending to the productive or real sector of the Nigerian economy, to expand and diversify the production base; and to reverse the trend whereby the bulk of credit to the domestic sector is short-term credit for general commerce and trade rather than medium- and long-term credit for development of the entire productive sector, especially agricultural production, processing and manufacturing, mineral exploration and exploitation, and information technology.

The conditions for access to the RRF are as follows:

- Banks can use the RRF for up to 60 percent of their qualifying loans.
- The loan portfolio must have been held for at least one year, and have an original tenure of at least five years.
- Banks have access to the facility only once in every 12 calendar months.
- When these conditions are met, a promissory note is issued and presented to CBN's Discount Office where it is rediscounted at 2 percentage points below the prevailing minimum rediscount rate.

Community banks' participation in ACGSF

In September 2003, the management of CBN and the board of ACGSF approved the participation of licensed community banks in the CGS from January 2004. At the end of 2009, 70 MFBs held guarantees on 12 281 loans valued at US$7 874 million.

3.5 OTHER LITERATURE REVIEWED

Credit markets in Nigeria and sub-Saharan Africa have generally been characterized by an inability to satisfy the demand for credit in rural areas. Among informal sources of credit, the main reason for this inability is the lack of sufficient resources and an adequate lending base. In the formal sector, the inability to satisfy demand can be attributed to difficulties in loan administration such as the screening of applications and monitoring, high transaction costs, and the risk of default. Credit markets are characterized by information asymmetry, agency problems and poor contract enforcement mechanisms (Nissamke and Aryeetey, 1995). They tend to be fragmented with different segments serving clients with different characteristics. Because of this fragmentation, lenders are unable to meet the needs of borrowers interested in certain types of credit, which creates a credit gap in which borrowers cannot satisfy their needs from the informal market and have no access to formal sources. Enterprises seeking to expand beyond the limits of self-finance often lack access to bank credit and cannot acquire the necessary external financing from the informal sector.

Poor access to financial services for smallholders is usually seen as a major constraint. In most cases however – especially among formal financial institutions – the access problem is created by institutions' restrictive lending policies, such as prescribed minimum loan amounts, complicated application procedures and restrictions on credit for specific purposes (Schmidt and Kropp, 1987). For small-scale enterprises, reliable access to short-term, small loans is valuable, and should be emphasized in credit programmes aimed at such enterprises. Schmidt and Kropp (1987) note that the type of financial institution and its policy often determine the access problem. Where the loan duration, terms of payment, required security and provision of supplementary services do not fit the needs of the target group, potential borrowers will not apply for credit even where it exists, while those who do apply will be denied access.

The Grameen Bank experience demonstrates that most of the conditions imposed by formal credit institutions, such as collateral requirements, should not prevent smallholders and the poor from obtaining credit. The poor can acquire and repay loans if effective procedures for disbursement, supervision and repayment have been established. The Grameen Bank experience also supports the view that high interest rates on loans can discourage influential non-target groups from supporting a targeted credit programme (Hossain, 1988). This demonstrates the need to develop appropriate institutions for the delivery of loans to small-scale borrowers.

Notable disadvantages of formal financial institutions are their restrictions on extending credit to specific activities, making it difficult to compensate for losses through other forms of enterprise, and their use of traditional collateral such as land. There is need for a broad concept of rural finance that encompasses the financial decisions

and options of rural economic units, and considers the kind of financial services needed by households and the institutions that are best suited to providing these services.

The main cause of formal financial institutions' failure to cater to the credit needs of smallholders is their lending terms and conditions. The rules and regulations of formal financial institutions often create the impression that poor people cannot be bank clients and are not credit-worthy because they cannot afford the required collateral (Adera, 1995). Hence, despite efforts to overcome the widespread lack of financial services for smallholders in developing countries, and despite the expansion of credit to the rural areas of these countries, most smallholders still have only limited access to banking services that support their private initiatives (Braverman and Guasch, 1989). Recently, there have been increased efforts to fund credit programmes for small-scale enterprises in the developing countries, while experience of informal finance shows that the rural poor, especially women, often have greater access to informal credit facilities than to formal sources (Hossain, 1988; Schrieder and Cuevas, 1992; Adams, 1992).

Improving the availability of credit facilities for the agriculture sector has been proposed as a way of stimulating growth and realizing the sector's potential for contributing to the economy. However, existing institutional problems have not been addressed, especially the terms and conditions for lending.

Although informal credit institutions have proved relatively successful in meeting the credit needs of farm enterprises in some countries, their limited resources restrict the extent to which they can effectively and sustainably satisfy the credit needs of these farmers (Nappon and Huddlestone, 1993). This is because as farm enterprises expand in size, the types of loan that they require become increasingly difficult for informal credit sources to provide, while the amounts borrowed remain too small for formal lenders (Aryeetey, 1996). Studies of financial markets in Africa have shown that credit markets are segmented and unable to satisfy the demand for credit in rural areas. The main constraints are limited resources in the informal markets, and complicated procedures for loan administration in the formal sector.

Both the development finance academic community and the governments of developing countries have conceived and promoted credit guarantees as a way of substituting collateral and providing implicit subsidies for credit-rationed borrowers and groups without collateral, such as SMEs, microentrepreneurs, small farmers and women operating in an environment of inherent risks that arise from size (diseconomies of scale), information constraints, poor and irregular incomes, low profit margins and low savings. Credit guarantees, supported by multilateral donors or national government funds and/or subsidies, are designed to circumvent collateral constraints and mitigate the risks of project failure and repayment default as perceived by the lender. A guaranteed loan proposal therefore represents an enhanced substitute or surrogate in profit, risk and acceptability schedules. This appeal is reinforced by the partial or total shift of the burden of debt monitoring and recovery from the lender to the guarantor,[16] which has a financial and contractual stake in the performance of the credit account.

In legal terms, a guarantee is a contract or promise in writing made by one party (surety) to a third party (lender, creditor) assuming collateral liability for the default, omission or inactions of another party (primary borrower). It is thus a contingent liability, arising only if the primary borrower fails to pay up as agreed. It is usually entered into in utmost good faith, which evokes an intricate duty of care on the part of the three parties to protect each others' interests, especially those of the guarantor. A valid guarantee requires an offer with offeree and offerer, acceptance, consideration, written evidence and intention to create legal relations. More generally, guarantees involve underwriting the risk of default on any contract and have been profitably utilized in lending to disadvantaged groups for agricultural development, export promotion, etc., especially in developing countries.

The importance of credit in agricultural production cannot be overemphasized. Credit allows producers to satisfy the cash needs induced by the production cycles that characterize agriculture (Feder *et al*., 1990). Small farmers in Nigeria can call on various institutional/formal sources (commercial banks, para-Statals, government ministries, etc.) and non-institutional/informal sources (moneylenders, friends and relatives, etc.) to obtain credit (Soyibo, 1994). Credit from non-institutional sources, although easier to obtain, is not

[16] However, this is not the case of ACGSF. Instead, the lending DMBs are expected to use their own resources to recover borrowers' loan defaults, returning to the guarantor (CBN) the percentage of the defaulted loan they have received in settlement of the guarantee. Ideally, lenders should not have to use their own resources to recover defaults, or should be paid in some way for doing so.

available in sufficient volume and usually incurs higher interest rates than those charged on loans from institutional sources. However, institutional credit sources also have problems, such as excessive bureaucracy and time-consuming loan procedures, and political considerations, which make them a difficult and unattractive source of credit. Based on investigations and empirical findings, several studies (Freeman, Ehui and Jabbar, 1998 in Kenya and Ethiopia; Feder *et al*., 1990 in China; Kochar, 1997 in India) conclude that most traditional small farmers are poor and lack access to formal credit because credit schemes discriminate against smallholders. According to these researchers, the causes of farmers' lack of access to formal credit include information problems; low savings in financial institutions, which make them non-credit-worthy; cumbersome bureaucratic procedures; political considerations; inadequate collateral security; and the high costs of processing small loans.

Credit guarantees are advocated for many developing countries as a means of enticing reluctant lenders to lend to client groups and sectors that are of interest to governments and donors, such as agriculture, small farmers, women, microenterprises and the poor. It is usually assumed that a major impediment to formal sector lending is the perceived risk associated with such loans. By reducing default risk, guarantees are expected to encourage lenders to make more loans to credit-rationed clients. The use of partial guarantees enables more borrowers to benefit than would use of the same funds to rediscount the targeted loans. It is also expected that lenders will start to lend to these client groups without demanding guarantees, when they realize that doing so is less risky than currently perceived.

Guarantee programmes can be funded in several ways. An external source often provides the initial capital for the GF. Recent innovations based on the concept of mutual credit associations use group-based savings deposited in a bank account to guarantee loans to group members. Donors and NGOs may complement these local savings with a second-tier guarantee to leverage the funds lent. For example, the NGO Women's World Banking deposits funds in local banks to leverage the funds deposited by its local affiliates as loan guarantees.

The impact of credit guarantees is unclear, and many theorists and practitioners remain sceptical about their benefits. As most crop insurance programmes that cover specific insurable risks are subsidized, it could be expected that a comprehensive credit guarantee – with its severe adverse selection and moral hazard problems – would be even less viable. Many sceptics conclude that guarantees represent subsidized credit in disguise. However, governments, donors and bankers continue to advocate for their introduction.

3.6 APPLYING THE STUDY HYPOTHESES TO THE CASE STUDY FINDINGS

This case study is based on the following hypotheses (FAO, 2013).

1. *Over the past two decades, some of the cost-covering GF arrangements established in developing economies have achieved medium-term sustainability through efficiency gains (information technology) and improved system design. The design and implementation parameters of these arrangements need to be highlighted and their replication potential discussed.*

ACGSF is funded through the incomes obtained from investment in treasury bills and treasury certificates with interest accruals. It also has a pool of reserves for depositing any surplus generated from each year's operations, to be drawn on whenever there is a shortfall in another year. ACGSF's operating costs were lower than its income from investment in all the years studied except 2009, so it has not had to draw on its reserves, which have instead grown, making ACGSF highly sustainable.

2. *GF arrangements that are governed by considerations other than the prudent and reasonable sharing of financial risk among different partners in a credit contract are likely to fail.*

CBN and the DMBs agree that the ACGSF's coverage of 75 percent of the loan principal plus interest is adequate. This is higher than the coverage of many other schemes, although the Small and Medium Enterprises Credit Guarantee Scheme (SMECGS) provides 80 percent coverage. This percentage could have been expected to decline towards the levels provided by similar programmes in other countries, although management of the fund seems to be prudent and risk sharing seems fair.

However, DMBs and ACGSF report that there are delays of about two to three years between the submission of a claim and its settlement. This causes a high turnover among the DMBs participating in ACGSF, which reflects the GF's ineffectiveness rather than unfair sharing of the risk, and is a critical problem. The DMBs are particularly

aggrieved with CBN for refusing to pay interest on its delayed payments.

In spite of prudential management and reasonable sharing of the risks, the time lag in settling claims after submission has hindered the success of ACGSF in Nigeria.

3. *GF arrangements are organized in various corporate or legal forms, ranging from State-operated financial institutions, State-funded companies, and government-guaranteed arrangements, to independent private corporate entities, credit guarantee foundations and associations, and mutual guarantee associations; specialized single-purpose guarantee corporations operating at the national level are more likely to succeed.*

The GF arrangements in Nigeria are basically owned and operated by the government because GFs are intended to help the growth of important sectors of the economy. CBN has two GFs, one for agriculture (ACGSF) and the other for SMEs (SMECGS). Although risk sharing in not common, risks are often pooled through insurance, with private sector insurance companies. Usually, the insured party makes an annual payment to obtain compensation in the case of an adverse event against which the property has been insured. The Nigerian Agricultural Insurance Corporation insures farms against risks, with individual farmers paying for the insurance cover. Insurance is therefore separate from ACGSF, and no private concerns are involved in the GF.

During information gathering for this case study, some respondents observed that a single-purpose guarantee corporation specializing in one sector or subsector would be more likely to succeed because it would develop highly specialized expertise. However, other respondents were of the opinion that specialization may be beneficial, but it is more important that the GF is properly managed, especially regarding risk sharing and the promptness of claim settlements.

4. *Proper monitoring and supervision arrangements, including automated MIS, play a key role in the costs of administering the CGS and thus, eventually, in its success or failure.*

Proper design is essential for the easy implementation of any arrangement. Monitoring and supervision are equally important in identifying aspects of a system that may require fine-tuning or complete overhaul for optimal functioning. ACGSF has various levels of monitoring; CBN ensures that DMBs comply with all its directives, while the DMBs ensure that farmers joining the ACGSF scheme comply with all the rules.

Applicants for a loan guaranteed by ACGSF apply to a participating DMB, usually by completing the necessary forms and producing other documentation, such as a feasibility report, and security for the loan. Applications and documentations are screened by the DMB, including by visiting the farm to ensure that the applicant is a genuine farmer. Successful applications are then forwarded to CBN for review and ratification, usually involving desk research and additional farm visits. Farmers who fulfil all of the criteria are certified for an ACGSF guarantee and a certificate guaranteeing the loan amount is issued to the DMB, which then grants the farmer the loan. If there are gaps or errors in the documentation, the application is rejected.

Although the monitoring of ACGSF may contribute to its overall success, the GF does not have an automated MIS, which may adversely affect its monitoring capability.

5. *Risk sharing mechanisms have regained prominence in development finance because of excess liquidity in the banking system and lending restrictions to development sectors through the risk management departments of banks and other financial institutions.*

In Nigeria, risk sharing mechanisms have gained prominence because of DMBs' restrictive lending policies for agriculture, rather than because of excess liquidity. Agricultural enterprises have been termed high-risk because they involve biological processes that require time lags between the commitment of resources and the yielding of income. This lag can be as little as two to three months for broiler poultry and annual crops, and as long as four to five years for perennial crops. During this period, crops face many risks and there have been cases of complete loss of output. In addition, most Nigerian farmers are small in scale, and only a few are members of organized groups. As a result, individual farmers approach DMBs for small loans, which the banks process at higher comparative costs than those for larger loans. These high costs explain why banks have developed restrictive policies that discourage small farmers from applying for loans for their farming operations.

In Nigeria, even with the risk sharing arrangements available through the ACGSF, most banks

(64 percent of the 25 DMBs surveyed) have not joined the CGS. They prefer to invest their deposits in areas where quick returns are easier to obtain than in agriculture, which they see as being highly risky. Participating DMBs are greatly discouraged by the delays in settling claims.

6. *The percentage of risk shared, the claim procedures and timing of claim submissions, and the fee arrangements have a bearing on the market acceptance and eventual success of a CGS.*

All the stakeholders interviewed agreed that the percentage of risk shared, the simplicity of claim procedures and the fee arrangements are all critical to ACGFS's acceptance by DMBs and its eventual success. ACGSF's risk sharing and fee arrangements are acceptable to DMBs; the main problem is the delay in settling claims. DMBs also cited the lengthy procedures for farmers' participation in the system, which involves CBN repeating the farm visits that DMBs have already made. The DMBs felt that this double-checking of farmers by CNB made the delays in settling claims even more unjustifiable, as CBN had already carried out a physical evaluation of the farm before the loan was awarded.

All the principles set out as governing ACGSF must be implemented as stipulated. Any deviation from them will lead to stakeholder dissatisfaction, which will adversely affect the fund's success.

3.7 ACGSF'S CONTRIBUTIONS TO AGRICULTURE, AGROPROCESSING AND CREDIT ACCESS

CBN's impact assessment of ACGSF (CBN, 2007) identified the measurable changes in specific indices or parameters that resulted from the use of ACGSF loan guarantees for agricultural enterprises. Such impacts may have temporal or spatial components in particular environmental settings, and may be positive or negative, beneficial or non-beneficial, direct or indirect, reversible or irreversible, local or widespread, and permanent or temporary. They can also be major or minor, incidental or expected, and low or high. CBN classified these identified impacts into economic and financial, social, technical, political, institutional, environmental, and psychological impacts, depending on the type of effect they had on the agricultural enterprises studied. Each of these categories is discussed in the following subsections, at the national and state levels.

TABLE 21
Mean incomes of ACGSF beneficiaries and non-beneficiaries, by state

State	Beneficiaries (₦)	Non-beneficiaries (₦)
Cross River	762 004.18	59 270.00
Rivers	5 338 201.67	1 518 600.50
Enugu	180 696.67	302 171.67
Ebonyi	295 400.00	68 606.43
Oyo	684 935.58	843 415.83
Ondo	322 091.94	563 762.50
Kano	306 987.10	503 777.27
Jigawa	196 466.67	203 103.79
Bauchi	403 851.83	482 212.10
Borno	183 900.83	524 929.03
Kaduna	453 761.67	776 216.67
Kwara	694 103.33	814 153.33
Abuja	7 148 289.00	–
National	981 638.45	551 452.06

Source: CBN, 2007.

Economic and financial impacts

Many of the economic impacts of ACGFS are hidden in the savings, investments and aggregate incomes achieved by farmers with ACGSF loan guarantees between 1978 and 2005, before the CBN impact assessment. Other economic impacts are embodied in the level and/or nature of income distribution, employment generation and exportation of farmers' production.

Using data generated by the case study, the relevant economic impacts were calculated by comparing the performance of farmers benefiting from ACGSF loans with that of non-beneficiaries. Table 21 summarizes the average incomes generated by the beneficiaries and non-beneficiaries covered in the study.

Table 21 suggests that nationally the total average income generated by ACGSF beneficiaries is larger than that generated by non-beneficiaries. However, a state-by-state examination shows that only the average incomes of beneficiaries in Cross River, Rivers and Ebonyi States are higher than those of their non-beneficiary counterparts. This finding raises an interesting issue: ACGSF loan beneficiaries in other states are generating lower average incomes than farmers who do not benefit from the scheme. Could this be because the loans granted to beneficiaries are insufficient? Do non-beneficiaries

TABLE 22
Average number of jobs generated or sustained with ACGSF loans, by state

State	Before loan	After loan	Net difference	Overall effect
Cross River	3.47	6.87	3.40	Positive
Rivers	6.89	14.64	7.75	Positive
Enugu	5.33	12.37	7.03	Positive
Ebonyi	10.37	14.63	7.50	Positive
Oyo	3.90	8.10	4.19	Positive
Ondo	3.90	9.19	5.29	Positive
Kano	4.00	6.29	2.29	Positive
Jigawa	5.67	11.77	6.10	Positive
Bauchi	5.77	10.03	4.27	Positive
Borno	5.63	8.47	2.83	Positive
Kaduna	3.89	6.87	3.00	Positive
Kwara	2.33	6.03	3.70	Positive
Abuja	4.30	6.20	1.90	Positive
National	**4.84**	**9.58**	**4.74**	**Positive**

Source: CBN, 2007.

of ACGSF have access to better funding sources in the sector? Could ACGSF's operating procedures, including its approval and release processes, be faulty and have negative effects? Analyses suggest that other agricultural loan funds available to farmers (such as the interest-free Special Programme for Food Security, administered by Agricultural Development Projects) have better terms of use and operational procedures that ACGSF.

The more profitable performance of ACGSF beneficiaries in Cross River, Rivers and Ebonyi States may be connected to the types of enterprises they are involved in or apply their loans to, which would influence the amounts of the loans extended to farmers in these states.

Social impacts

The social impacts of ACGSF can be divided into three categories: the contribution to the community and social peace through employment generation and labour use; the effects on the nutrition status of beneficiary farming families; and the effects on their health. Although CBN lacked the resources to measure health and nutrition effects, some logical deductions about these two aspects can be made.

Table 22 summarizes the employment generation and labour use by beneficiary farmers in the states surveyed. It shows that loans from the scheme had a discernible positive impact in all the states and zones studied, especially in providing employment for young and middle-aged farmers. More than 92 percent of respondent beneficiaries also reported that the nutrition status of their families had improved greatly since they obtained their loans under the ACGSF.

Technical impacts

The technical impact of the agricultural technology and resources acquired with ACGSF loans can be measured in terms of increases in beneficiary farmers' yields, intensity of land use or area cultivated. Table 23 summarizes these figures as measured for the case study. In seven of the 13 states, the area cultivated was greater for beneficiaries than for non-beneficiaries. This suggests that ACGSF loans have a positive impact on the farms of beneficiaries

In addition, respondents reported that their ACGSF loans enabled them to adopt improved agricultural technologies. In order of importance, these technologies included:

1. new improved seed varieties (reported by 56.1 of respondents);
2. new improved livestock breeds (22.7 percent);
3. post-harvest technologies (8.5 percent);
4. herbicides, pesticides and insecticides (6.7 percent);
5. fertilizers (6.5 percent);
6. tractors (3.3 percent).

TABLE 23
Average areas cultivated by ACGSF beneficiaries and non-beneficiaries, by state

State	Beneficiaries' area cultivated (ha)	Non-beneficiaries' area cultivated (ha)
Cross River	3.68	0.66
Rivers	0.26	1.77
Enugu	2.92	2.34
Ebonyi	5.44	3.25
Oyo	4.75	5.50
Ondo	2.37	3.70
Kano	3.24	1.34
Jigawa	7.28	2.52
Bauchi	6.98	2.94
Borno	6.14	5.97
Kaduna	1.50	3.85
Kwara	2.41	3.09
Abuja	0.29	–
National	**3.81**	**3.07**

Source: CBN, 2007.

Political impacts

According to CBN (2007), the political impacts were not quantifiable but could be deduced, and included:

- policy support provided by various levels of government;
- infrastructural support (farm roads, storage facilities, community or municipal processing equipment and facilities, etc.), especially from state and local governments, which accelerated and/or promoted the development of beneficiaries' agricultural enterprises;
- extra loan arrangements put in place by state and local governments to supplement ACGSF;
- additional guarantees provided by state and local governments to facilitate beneficiaries' access to ACGSF loans, especially through the TFM.

Institutional and infrastructural impacts

These impacts are the changes that have taken place in institutions (especially commercial banks and government departments) as a result of implementation of the scheme. Such changes include departmental changes and rearrangements of staff within banks, the introduction of new lending procedures, and rearrangements in the government departments associated with agricultural financing or the provision of infrastructure to support agricultural production, processing and marketing.

The case study found that banks had done one or other of the following:

- created new, more effective departments for handing agricultural lending;
- closed down agricultural lending departments because they could not cope with the demands of ACGFS.

According to CBN (2007), some banks – such as Union Bank of Nigeria and the Bank of the North (now one of the stakeholders of Unity Bank) – expanded their agricultural lending operations, while others – such as First Bank of Nigeria – closed down specific operations in 1987. ACGSF can therefore be said to have helped redefine the focus of some commercial banks in the agriculture sector. Union Bank seems to have dominated bank lending under the ACGSF programme, providing an impressive volume of support to farmers under the scheme.

Working with government departments, ACGSF has helped to improve the delivery of some states' extension departments, through farm road improvements and the provision of agricultural processing facilities to support the increased production resulting from ACGSF loans. Responses from ACGSF beneficiaries indicate that more than 35 percent of the institutional and infrastructural improvements carried out by governments in their states could be described as support to encourage the increased production and processing of ACGSF beneficiaries.

Respondents indicated that such state government support to agricultural production and processing could be broken down into:

- provision of processing facilities (accounting for 25 percent of state government support);
- improvement of feeder roads (5 percent);
- provision of storage facilities (3.8 percent);
- provision of guaranteed markets for agricultural outputs (2 percent);
- development of feeding lots near respondents' farms (slightly more than 1.7 percent);
- provision of transportation facilities (1.7 percent).

Environmental impacts

The environmental impacts resulting from the application of ACGSF loans for agricultural production and processing were mixed, ranging from increased erosion in the southeastern zone to

improved land use through fertilizer and manure application in other parts of the country. Overall, however, the use of ACGSF loans seems to have had a positive effect on the environment.

Psychological impacts

Although a measurable index/value cannot be attached to psychological impacts, comments by ACGSF beneficiaries generally showed that there had been a positive psychological impact in terms of beneficiary farmers' increased satisfaction and confidence arising from the availability of loans and the resulting increased incomes from sales of produce. Beneficiaries' farming activities made it easier for them to pay their children's school fees, resulting in a more relaxed atmosphere in their homes. This positive psychological impact has encouraged individuals who previously regarded farming as a demeaning occupation – such as civil servants, teachers and traders – to become involved in agricultural production.

3.8 REPLICATION POTENTIAL OF ACGSF

ACGSF has great potential for replication because the income used to finance the scheme, which comes from investments in CBN treasury bills and certificates, has been higher than the operating costs of the GF in all but one of the years surveyed. However, with guarantee payments ranging from only 0.8 to 7.96 percent of total operating costs, it could be argued that the amount spent on ACGSF's primary objective is low.

ACGSF has a good governance structure that should allow the GF to function effectively. It is domiciled in the Development Finance Department of CBN, which is the GF's managing agent. Dedicated staff of this department at CBN's head office and in all the branch offices in Nigeria's 36 states work together to ensure the smooth running of the GF, and are answerable to the director of the department, who in turn is answerable to the ACGSF board.

The main problem with this arrangement lies in the constitution of the board, which is subject to change whenever a new government is elected. For instance, the ACGSF board was dissolved after the elections of 2007, and a new one was not constituted until two to three years later. In the meantime, CBN's Development Finance Department had to constitute an IMC to perform the duties of the board, such as approval of DMBs' claims for guarantee settlement. Any efforts to replicate ACGFS should therefore take measures to protect the new GF from political influence.

All the stakeholders interviewed were satisfied with the current terms and conditions governing ACGSF operations apart from the slow rate of processing the claims submitted by DMBs in cases of borrower default.

3.9 THE FUTURE OF CGS IN NIGERIA

Nigerian Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL)

The Nigerian Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL) was established in 2011 and adopts a dynamic, holistic approach to tackle the value chains for both agriculture and agricultural financing.

NIRSAL seeks to address the causes of low funding levels in the agriculture sector, including lack of understanding of the sector, perceived high risks, complex credit assessment processes/procedures, and high transaction costs. Its approach goes beyond the use of credit guarantees and aims to: i) fix the agricultural value chain, so that banks can lend to the sector with confidence; and ii) encourage banks to lend to the agricultural value chain by offering strong incentives and technical assistance. NIRSAL focuses on lending to all stages of the value chain and to all sizes of producer. This is unlike previous schemes, which encouraged banks to lend without having a clear strategy for the entire agricultural value chain.

NIRSAL will address five pillars, using an estimated US$500 million of investments funded by CBN:

- Risk sharing facility (US$300 million): This component mitigates banks' perception of high risks in the agriculture sector by sharing any losses on agricultural loans.
- Insurance facility (US$30 million): This facility's primary goal is to introduce new insurance products for agricultural lending, such as weather index insurance and new variants of pest and disease insurance.
- Technical assistance facility (US$60 million): This assistance develops the capacity of banks to lend sustainably to agriculture, and of producers to borrow and use loans more effectively and to increase their output of higher-quality agricultural products.
- Holistic bank rating mechanism (US$10 million): This mechanism rates banks according to the effectiveness and social impact of their agricultural lending, and makes them more accessible to the public.
- Bank incentives mechanism (US$100 million): This mechanism offers the highest-ranking

banks in pillar four cash awards as incentives for building their long-term capacity for agricultural lending.

Six pilot crop value chains have been identified based on their existing production levels and potential in six high-potential breadbasket areas: tomatoes, cotton, maize, soybeans, rice and cassava.

NIRSAL's objectives are to:

- generate an additional US$3 billion of bank lending within ten years, to increase agricultural lending from the current 1.4 to 7 percent of total bank lending;
- increase lending to the "pooled" small farmer segment to 50 percent of total lending to agriculture (typically, banks do not reach producers individually but through "pools" such as MFIs and cooperatives);
- reach 3.8 million agricultural producers by 2020 through pooling mechanisms such as value chains, MFIs and cooperatives;
- reduce banks' break-even interest rate to borrowers from 14 to 7.5–10.5 percent.

NIRSAL and its five pillars at the national level are implemented by a non-banking financial institution, reporting to a board of directors chaired by CBN and with members from the Alliance for a Green Revolution in Africa and the ministries of agriculture, finance, and commerce and industry. The board has ultimate decision-making and strategy setting responsibility for the fund. The chief executive officer of the implementing institution is responsible for NIRSAL's overall implementation and for maintaining relationships with key stakeholders. At the regional level, Regional Transformation Engines administer NIRSAL through portfolio investment managers and technical assistance representatives.

The Small and Medium Enterprises Credit Guarantee Scheme (SMECGS)

Total funding for SMECGS is ₦200 billion (approximately US$1.3 billion), all of which comes from CBN. SMECGS is managed by CBN's Development Finance Department and its activities support manufacturing, the agricultural value chain, educational institutions, local distributive trade (logistics, warehousing, distribution and service companies such as information and communications technology, tourism and health), and any other sectors specified by its managing agent.

Its objectives include:

- accelerating development of the manufacturing SME sector of the Nigerian economy by providing guarantees on bank loans to SMEs and manufacturers;
- facilitating industrialization of the Nigerian economy;
- increasing access to credit for SME promoters and manufacturers;
- increasing output, generating employment, diversifying the revenue base, increasing foreign exchange earnings and providing inputs for the industrial sector on a sustainable basis.

SMEs eligible for this scheme are enterprises with an asset base (excluding land) of ₦5 million to ₦500 million (approximately US33 000 to U$3.3 million) and a labour force of between 11 and 300 employees. The maximum loan amount is ₦100 million (approximately US$670 000), which can be in the form of working capital, term loans for refurbishment, equipment, upgrade and/or expansion, overdrafts, etc.

SMECGS guarantees cover 80 percent of the loan principal and interest and are valid until the maturity date of the loan, with a maximum tenure of seven years inclusive of a two-year moratorium. The guarantee is executed when the bank disburses the loan to the borrower and is redeemable when the loan becomes non-performing and is classified as a loss. The participating bank must submit its claim to CBN within 120 days of this classification; CBN processes all claims and settles payments within 30 days. If a bank submits a frivolous claim, it has to refund the amount paid plus a penalty at the market rate calculated from the original date of payment. In the event of default recoveries after CBN has settled a claim, the recovered funds are shared in the ratio of 80 percent to CBN and 20 percent to the concerned bank.

Interest rate and collateral: The interest rate for the scheme is the prime lending rate of the participating bank. The bank determines its own collateral requirements. According to SMECGS guidelines, all DMBs and development finance institutions are eligible for the system. The eligibility criteria for borrowers are that they:

- be any entity falling within the definition of an SME;
- be a company registered in Nigeria under the Companies and Allied Matters Act of 1990;
- be a legal business operated as a sole proprietorship;

- be a start-up company with satisfactory cash flows indicating a fixed asset cover ratio of 100:150;
- be a franchise;
- have no non-performing or delinquent loans with any financial institution;
- be an accredited member of the organized private sector bodies/associations such as the Nigerian Association of Small and Medium Enterprises and the Manufacturers' Association of Nigeria;
- have a clear business plan – start-up companies should have a feasibility report, which must incorporate all the information in their business plan document;
- provide up-to-date records on any business operations;
- satisfy all the requirements specified by the participating bank;
- comply with the Pension Reform Act of 2004.

Procedure for applying for the GF: All loan applications by SMEs are made directly to the participating bank, accompanied by the documents normally required for loan processing. Banks must process applications within 60 days of receipt, and may request missing information that the applicant has failed to provide. Once it has approved a loan, the bank can submit an application for a guarantee to the managing agent, using the standard application form. In case of discontinuity of the loan, the bank must advise CBN immediately.

3.10 FINAL ASSESSMENT OF ACGSF

Strengths

- ACGSF has a good formula for shaing risk in which it bears 75 percent of the amount in default while the DMB takes up the remaining 25 percent.
- ACGSF has never refused to pay a claim, although there are often delays in settlement. Claim submissions that are not properly presented are returned to the DMB for correction.
- The DMBs have a representative on ACGSF's seven-member board, although this was not the case while the IMC was in place.
- Initiatives such as farmer of the year awards and the IDP have decreased the rate of default by borrowers, thereby reducing the number and amount of claims submitted by DMBs.

Weaknesses

- The delays in settling claims submitted by DMBs in the case of borrower default is a major weakness. DMBs reported that ACGSF did not appear to respond to claims until the DMB concered follows up on its submission.
- Failure to include a representative of the DMBs in the IMC may have reduced confidence between the two main stakeholders.
- Inadequate scrutiny of loan applications by both the banks and ACGSF led to massive default rates in ACGSF's first ten years of operations.
- Given the large volumes of loans being dealt with, the lack of an MIS at the managing agent's office is a major weakness.

Opportunities

In Nigeria, there is a large market for credit among small-scale farmers who cannot obtain the amounts they require to finance their farming operations from their (usually poor) family and friends and who face excessively high rates of interest from money-lenders.

Threats

The non-autonomous nature of the ACGSF board, which is subject to the influence of the national government, is a great threat.

The concentration of participation in ACGSF by just two banks (Union Bank of Nigeria and First Bank of Nigeria) is a threat. If one of these banks opts not to guarantee agricultural loans, the sources of agricultural credit will be adversely affected, with dire consequences for agricultural productivity and food security.

Challenges

Numerous challenges are preventing ACGSF from operating smoothly. The rapid expansion in the scope of its operations has caused problems: the number of loans guaranteed increased from 341 in 1978 to over 50 000, in December 2009. This requires effective supervision and increased resources, in terms of both personnel and materials. The fund's administrative machinery also needs to be improved, including by enhancing the managing agent's staff and equipment. The delays experienced in the settlement of guarantees to banks are derived in part from administrative problems. The installation of an effective MIS is also necessary to facilitate computerization of ACGSF's records.

The number and amounts of delinquent loans[17] declined drastically over the study period, owing to improved scrutiny of loan applications by the DMBs and CBN, introduction of the IDP, introduction of insurable projects from the Nigerian Agricultural Insurance Corporation, the publishing of defaulters' names, and introduction of the farmer of the year award. However, more still needs to be done to ensure total recovery of agricultural loans, which will encourage the channelling of more funds towards the agriculture sector. A high loan recovery rate has to be ensured, as many credit programmes have failed as a result of poor loan recovery.

Closely related to the problem of high incidence of default is the fund's delay in settling banks' claims, which was most pronounced between 2007 and 2008, when the board of ACGSF was temporarily replaced by the IMC. As the fund's credibility depends largely on the prompt and efficient settlement of claims, it is necessary for both ACGSF management and the lending banks to work to remove all obstacles to smooth and timely claim settlement.

DMBs' delays in processing, approving and disbursing loans to farmers are another factor that affects success. Such delays have been attributed to a lack of trained personnel, administrative lapses, including an overconcentration of decision-making at banks' head offices, unacceptable project packaging and presentation by potential borrowers, etc. If allowed to persist, this problem could reduce aggregate farm output, encourage loan diversion and trigger massive defaults. Wherever and whenever possible, banks in the scheme emphasized timely credit delivery, which is in the interest of both the banks and the farmer borrowers.

The unnecessarily lengthy administrative procedures for processing loans greatly discourage intended beneficiaries, who complain that loan approvals and releases take too long to benefit farming operations. As farming is a seasonal occupation that follows natural weather conditions, this problem seriously hinders farmers' advantageous use of natural resources.

Delays in banks' issuance of guarantee certificates cause many farmer beneficiaries to lose out on both operational timeliness and economies of scale. These delays greatly affect farmers' capacity for forward planning and supply scheduling with their forward-integrated partners in downstream industries, and ultimately result in increased default rates.

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[17] ACGSF recorded defaults resulting from several factors: deliberate attempts to default by borrowers; natural disasters; poor project management by farmers; poor project appraisal by banks; inadequate or total lack of project monitoring by banks; and untimely disbursement of funds by banks, which sometimes encouraged loan diversion. With the exception of natural disasters, all of these causes of default could be mitigated by banks and borrowers.

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Chapter 4

Eastern Europe: Rural Development Foundation (RDF), Estonia

Raul Rosenburg and Calvin Miller

4.1 COUNTRY CONTEXT

After a history of occupation, Estonia gained independence after the First World War, only to lose it again in 1940 with the Soviet Union occupation. Since regaining its independence with the collapse of the Soviet Union in 1991, it has strengthened its ties to Western Europe and has made a relatively rapid transition to the Western economic model.

With a population of only 1.3 million people, and a territory of only 42 400 km^2, Estonia needs economic integration with other countries, especially since losing its strong economic ties with the Russia Federation and other former-Soviet bloc countries. This transition incurs heavy investment in new machinery, equipment and infrastructure, and training and capacity building.

Estonia is now a parliamentarian republic with a stable government and has received substantial foreign investment. Its governments since 1991 have been pro-business and free market-oriented, enabling it to join the European Union (EU) in 2004 as one of the first ex-Soviet bloc countries to do so. This has facilitated access to other European countries and their markets; foreign investors, especially from Sweden and other Scandinavian countries, have provided some of the needed capital, markets and expertise.

Although Estonia was affected by the 2008/09 global financial and economic crises – along with nearly all the countries in the region – overall it has been more resilient to the recession than most other former-Soviet countries. This is partly because of the economic reforms and budget controls implemented to facilitate adoption of the Euro currency in 2011.

Transition economy

In spite of considerable progress and economic development in the capital of Tallinn, other cities and coastal areas, the break-up of communal systems has had heavy impacts on rural Estonia. High levels of outmigration have affected the viability of schools and other social and economic services in rural communities. The number of farmers dropped from 100 000 in 1991 to 20 000 in 2010. The level of these impacts depends on the economic model or models that emerged in individual rural communities during the privatization of collectives. Three principal models have been adopted:

- consolidation by local farmers and entrepreneurs who saw the potential gains of buying the land and assets of the many people willing to sell their stakes in the former collectives;
- buy-outs by foreign investors, especially from Sweden;
- formation of local cooperatives or partnerships, which continue to use a joint ownership and operational structure.

Despite the investments that have already been made, there is much room for further investment. Farming equipment and infrastructure need replacing or upgrading so that enterprises can be competitive on the EU marketplace. Even with large government subsidies, less land is being cultivated than was during the Soviet era. Not only agriculture, but also forestry, livestock, dairy and fishing are very important pillars of the rural economy that require considerable investment. The trend is for very large operations, such as farms of 3 000 to 6 000 ha and dairies with up to 2 500 cows.

Financial and investment risks

Four key factors make investment and financing in rural Estonia risky in the aftermath of Soviet Union collapse. First, markets for rural production activities continue to be a limiting factor because of the small size of the economy and the breaking of traditional trade ties to the Russian Federation and other ex-Soviet State markets; market size is very important for investment, and a small market increases the risks and uncertainty. Second, the type of government and the market economy are untested innovations in the country. Third, a

market economy led by entrepreneurs operates under different economic incentives and principles from those of a command economy; enterprise training is recognized as an important area for investment, to provide entrepreneurial expertise and understanding for the many individuals struggling to operate in a private sector-led market economy. Fourth, financing has been constrained by the collapse of nearly all national banks and their replacement with foreign banks that have little interest in rural financing, particularly in the early stages of transition.

Guarantees and supports are needed to overcome some of the perceived risks of financing agriculture and other rural investments. By sharing and reducing risks, GFs can promote investment in rural areas until confidence in such investment has increased and lenders and investors are willing to provide the necessary financing without guarantees.

The investment situation in rural Estonia

Until the onset of the financial crisis in 2008, overall financing and investment in Estonia grew rapidly, and there was slow but consistent growth in rural areas. The 2008 crisis reduced the amount of financing and led to more restrictive borrowing requirements, exacerbating the shortage of accessible financing in rural areas.

Some local entrepreneurs in rural communities understood the potential of a market economy and were able to buy land and other assets that had previously been communally owned and operated. Some of these entrepreneurs prospered and some failed, but many rural residents were eager to sell their land and migrate to Estonian cities or other countries. In many other cases, foreign investors purchased land and other assets, but appear to have had relatively little interest in investing in the wider rural community. With less economic activity from local families, and a dwindling population, many rural communities are now vulnerable to the loss of their schools and other services.

4.2 THE RURAL DEVELOPMENT FOUNDATION (RDF)

Mission, mandate and structure

The overall mission of the Rural Development Foundation (RDF) is to promote rural development through the provision of loans and guarantees on loans for agriculture, agribusiness and/or rural development projects. It serves as a catalyst to increase investment and facilitate employment creation and growth in the many rural communities that have been affected by the economic transition and the dismantling of communal farms and other State systems put in place during the Soviet era.

Objectives and functions: RDF's original objectives are to:

- promote investments in agriculture and rural areas;
- provide loans and guarantees to rural and agricultural entrepreneurs and organizations;
- offer training, capacity building and other types of technical assistance to end borrowers.

Recently, it has added another objective to support its target group: providing advisory services to help rural people develop the technical, entrepreneurial and financial skills they need to become competitive.

RDF functions primarily as a GF to leverage private capital in rural areas, which are defined as areas outside the capital city of Tallinn. It operates as a financially and operationally self-sustainable institution investing and leveraging its own resources. Over time, RDF has moved away from making direct loans, although it continues to hold many long-term loans in its portfolio. Most of these loans were made for land purchase and to support rural and local community development programmes.

Beneficiaries: Targeted clients for guarantees include small, medium and large farmers and agro-enterprise owners who require guarantees to meet borrowing needs. Savings and loan associations and some non-profit community association clients also use RDF's services to obtain access to finance, and also benefit from the assessment process and technical advice. Some clients have benefited from bridge loans, and others from grants issued from the profits generated by RDF.

Ownership structure and management

Ownership structure: RDF is owned by the Government of Estonia and its equity capital belongs to the government. The government and donor agencies provided funds for the capital. For example, funds for RDF's precursor, the Rural Credit Guarantee Fund (founded in 1997), were generated from the sale of grain donations from the United States of America and other donors. Through its earnings, the equity of RDF has also been capitalized. The RDF is governed by a Supervisory Board comprised of representatives of three governmental Ministries including the Ministry of Agriculture, two farmers unions representing both

the large and small farmers and two local parishes (local municipalities.)

Management team and portfolio: Management and operating control is held by Raul Rosenberg, Chair of the management board, and Thea Kaurla, member of the board. They are guided by a supervisory board of 14 members, comprising representatives of three government ministries, including that of agriculture, two farmers' associations for large and small farmers, and two local municipalities. The board is supported by a small staff operating out of an unpretentious office to keep costs down.

RDF operates with US$43 million (€36.3 million) in equity capital, of which US$40 million (€33.2 million) was its initial capital. As of the end of 2009, the active portfolio under management was 245 guarantee agreements for a total value of US$24.6 million (€16.6 million), 51 percent of which was for agriculture. It also manages €33.7 million in loans and provides advisory services under a management contract with the Estonia Advisory Service. For the 245 guarantee agreements, an obligation of US$22.21 million was used to guarantee bank borrowing of US$34.26 million, leveraging 1.55 times the amount of the guarantee.

Operational activities

RDF's four core activities are:

- issuing loan and other debt obligation guarantees (standing surety);
- lending;
- providing advisory services for agricultural and rural enterprises;
- promoting rural life.

Guarantees: Providing loan guarantees is RDF's main activity. Guarantees aim to facilitate small and medium enterprises' (SMEs') access to financial resources in all economic sectors, including agriculture, fisheries and transport, all of which have been negatively affected by the economic recession. As the creditworthiness of these borrowers' deteriorated through the loss in value of their assets pledged as collateral, there was growing need for guarantees, leading to a 28.5 percent rise in 2011, to a total guarantee portfolio of US$35.28 million, leveraging a portfolio of US$64.18 million for RDFs' clients.

The guarantees mitigate the high loan collateralization demanded by Estonian banks, which often reaches 120 to 150 percent of the principal loan amount. The guarantees do not significantly lower the interest rate charged by the banks, but borrowers can use them to increase their access to finance; guarantees have proved particularly valuable in the early days of the economic transition and during the 2008 financial crisis and its aftermath. Despite the well-functioning banking sector there is still reluctance to finance agriculture and rural community enterprises because of the risks of agriculture, the lack of financial knowledge among rural population and the inadequate rural banking infrastructure.

Loans: RDF has reduced its direct lending, but its portfolio still contains many 25-year loans made in the past to finance land purchases and rural and local community development. The interest rate on these loans is 6 percent per annum. The government loans that were necessary in the early years of the transition are no longer permitted, to avoid competition or interference with private sector banking activities. RDF continues to manage and service these earlier loans while leveraging private capital through guarantees.

In 2009, RDF guaranteed loans to 253 clients, for a total of US$17.58 million; this increase of 38 percent from 183 clients and US$16.27 million in 2008 was mainly owing to the effects of the global economic and financial crisis. The outstanding portfolio at the end of 2009 was US$45.04 million. Loans granted through banks and leasing companies accounted for US$15.8 million, up from US$5.9 million the previous year. The increased demand for guarantees included US$6.44 million for spring planting. Overall, half of the money was lent to agriculture.

The presence of an increasingly active banking sector would imply a reduced a role for GFs, and until the crisis of 2008/09 there was a reduction in the use of guarantees. The individuals and organizations using the guarantees are borrowers whose investments are deemed higher-risk or who use the guarantees to borrow more than would otherwise be possible.

Advisory services: A new RDF programme began in 2010 to develop and manage a system of advisory services for agricultural producers. RDF implements this programme under a contract with the Ministry of Agriculture and in close collaboration with the Farmers' Union and other partners.

Promotion of rural life: Since 2006, RDF has provided financial support to the best students and teachers at rural vocational education institutions. These and other incentives are part of collabora-

tion with the Ministry of Agriculture to encourage youth to settle in rural areas.

In partnership with the government, RDF recently become involved in an advisory programme, with farmers paying 20 percent of the training and other costs and the government subsidizing the rest. The programme already obtains technical advice from other countries, and both RDF and the Ministry of Agriculture would like additional technical support and resources from FAO.

4.3 THE RDF GUARANTEE FUND

Guarantee operations

Procedures and processes: The RDF GF provides guarantees for up to 80 percent of the loan, for amounts up to US$213 590, charging guarantee fees that range from 0.5 to 6 percent and are usually between 3.8 and 4.6 percent, depending on the risks. The 245 guarantee agreements outstanding at the end of 2009 had an average size of US$65 000 each. The median size is somewhat smaller because a number of larger guarantees increased the average size.

Client risk assessment: RDF's client risk assessment provides an important value-added service for both the lender and the borrower by assessing potential borrowers' loan proposals and structuring them in a way that makes them acceptable to bank. RDF's direct involvement with borrowers increases the banks' confidence in financing the loan requests submitted to them.

Pricing: For most loan guarantees, RDF charges a standard percentage as a guarantee fee.

Banks and other strategic partners

With its limited portfolio size of approximately US$40 million, RDF focuses on its guarantee system as the principal approach for encouraging more investment in rural areas of Estonia. The guarantees leverage private sector funds by working through two large Swedish Banks – SEB Bank and Swedbank – with several smaller banks to implement the guarantee programme. The networks of these large banks have sufficiently wide coverage to provide services throughout the country. Working with fewer strategic partners also improves the efficiency of operations by enabling RFD to establish strong working relations and mutual understanding.

EU requirements have created major challenges for the pricing of guarantees. To avoid undermining the private sector, the EU requires guarantees and loans to be priced at a level that many potential RDF beneficiaries feel is too high, which significantly reduces the demand for guarantees.

Financial results and sustainability

RDF has generated a net profit of US$6 million since its foundation. It has used 50 percent of these earnings to build the capital of the GF and has contributed the remaining 50 percent (US$3 million) to rural communities in the form of scholarships for agriculture students and grants for other community needs.

Operating environment

A stable and well-functioning government has been a major factor in Estonia's rapid development. The country has followed a prudent and well-organized rural and agricultural development plan. Its market development and renewed ties to Europe have also aided its development. Some of these lessons could be applied to other countries that enjoy similar government stability.

Systems appear to have developed less in rural areas than in the capital and other cities. A new type of leadership and governance structure is gradually being put into place, but is hindered by outmigration from rural areas because of the lack of employment opportunities and the lure of cities and other countries.

Political considerations – subsidies and EU Controls

Agriculture receives substantial subsidies in Estonia. These subsides are not unique within the EU, and without them Estonia's production and area under agriculture would be significantly lower. Subsidies would most likely be even higher were it not for EU restrictions on its Member States; the farmers interviewed for this case study, as well as the Farmers' Union and Chamber of Commerce representatives, would like more subsidies. Some subsidies were put into place during the early transition to "jump-start" production and investment in the new market economy, when traditional quotas and markets, such as the Russian Federation, ceased to function. Donors assisted in this process, but no longer do so.

Investment impact

RDF's impact on investment in rural areas is evident in some of the communities visited (see Box 6 for an example). Although foreign investment is considerable in some places, RDF has had a role in numerous transactions for local investors, both through its earlier loan programme for land purchases and

through guaranteed loans to buy equipment. Even so, many houses, much communal infrastructure and much equipment still require refurbishment or renewal. Access to finance remains a problem for the poorer segments of society, many of whom are not credit-worthy because they lack employment or adequate collateral for loans. Training and grants are needed to address the underlying social and economic issues before guarantees and loans can be considered. RDF's advisory support services and its US$3 million in grants to students and others are contributions towards this end.

Although guarantees do not appear to have significantly lowered the interest rate charged by the banks, they have increased access to finance, especially in the early days of the economic transition and during the more recent financial crisis. The banking sector is now functioning well, but there is still reluctance to finance agriculture and rural community enterprises because of the perceived risks, a lack of financial knowledge among the rural population, and a lack of rural banking infrastructure.

BOX 6
RDF guarantees in action

Hans Kruusamagi bought a former communal fish farm that had been abandoned and needed additional investment to repair and improve its infrastructure, restock, and build additional facilities, including a new building. Mr Kruusamagi used an RDF guarantee to secure bank financing and reported that "The guarantee was very good – otherwise no loan – and was very fast." Today his farm has 250 m^2 of rainbow trout and black sturgeon and employs 17 workers.

4.4 OBSERVATIONS AND LESSONS FROM THE RDF MODEL

Start-up and support

The RDF was set up by the Ministry of Agriculture using funds generated from the sale of grain donated by the United States of America to the Government of Estonia. This initial contribution of US$4 million and the subsequent self-capitalization have continued to provide the foundation's operating capital.

Ownership and governance

Although RDF is owned by the Ministry of Agriculture, its governing board of public and private representatives has considerable autonomy and flexibility. This has allowed RDF to operate with the efficiency of a private entity, offering fast and effective services to satisfy the needs of its clientele. It is also likely that its relationship with the government has strengthened RDF's reputation for reliability in times of economic difficulty.

Economies of scale and diversification

Although RDF's scale of operations may appear too small to function as a viable GF, its size is due mainly to the small size of the Estonian rural economy, and RDF has overcome this apparent lack of scale by having a lean and efficient management system that allows it to offer competitive loans and guarantee products. In addition, it has expanded into new activities as its loan programme diminished, while focusing its capital on guarantees that leverage its funds for more impact. In its vision for the future, RDF considers that a merger with another similar organization could be possible.

Partnerships and working alliances

Guarantee programmes depend on partners for creating durable and effective working alliances. RDF has been successful in finding suitable banking partners and convincing them of the value of its guarantee and other services. The two most important bank partners strongly appreciate RDF's work, which has helped them to finance rural and agricultural clients through loan guarantees, while increasing their interest and involvement in these regions.

Government, regulatory environments and financial sector development

The Government of Estonia's liberal and business-friendly regulatory environment has helped the country's economy to grow and attracted much foreign investment. RDF was created to attract the additional investment required for development and transition in rural areas.

Principles for success or failure

The RDF model demonstrates the key factors for success of loan guarantees, including:

- good governance – the governing board is independent of direct political intervention, but linked to the government, enforcing RDF's reputation for reliability;
- value added – assessments and pre-screening of potential borrowers and their businesses provide banks with a level of assurance when considering loan proposals;

- prudent pricing – the costs charged to the client of a loan guarantee are competitively priced;
- regulatory environment – Estonia's business climate and regulatory policies are supportive of investment;
- unit costs – despite the relatively small scale of operations, operating costs are kept low through prudent staffing, operational efficiency and the provision of loan and advisory services that share the administrative costs;
- low payout costs – careful selection of which investments to guarantee minimizes losses and guarantee payouts.

Prospects for replication and growth

RDF's guarantee model and the lessons learned from its use can be adapted to other countries. The model is flexible, applying various rates and serving various types of client, and it is autonomous, with none of the government intervention that often hinders such programmes. Estonia's Baltic neighbour of Latvia has no guarantee programme, but Lithuania has instituted a guarantee programme with similar objectives, although it has a small equity base with approximately two-thirds of the guarantee capital coming from government.

In summary, RDF is a self-sustainable entity fulfilling an important role in supporting investment for growth in agriculture and rural communities throughout Estonia. It has a lean staff and cost structure and well-established modes of operation that increase its efficiency. It can therefore serve as a role model for GFs in other countries, especially those that are undergoing the transition to a market economy. In the short to medium term, RDF seems likely to continue to enjoy stable income and interest from its fund. In the longer term, it is likely to need to grow or consolidate to remain viable; consolidation with an organization such as CREDEX, which provides export guarantees, may be considered. The diversification of activities, such as the recent initiative in providing advisory services under a government programme, is another example of RDF's forward thinking.

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RURAL INFRASTRUCTURE AND
AGRO-INDUSTRIES DIVISION

FOUR CASE STUDIES ON CREDIT GUARANTEE FUNDS FOR AGRICULTURE

Four case studies on credit guarantee funds for agriculture is an in-depth analysis of different models of guarantee system. An assessment of these cases, together with a review of the global industry of agricultural guarantee systems, was published as *Credit guarantee systems for agriculture and rural enterprise development*.

The four case studies in this document provide the reader with a more detailed description of how these individual programmes have worked over time. Three of the programmes are among the largest and longest standing agricultural guarantee funds in the world, and have had both successful and difficult experiences as they evolve over time. The fourth case, from Estonia, shows how a small, efficient guarantee fund can operate profitably year after year.

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