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**TERM FINANCING IN AGRICULTURE:
A REVIEW OF RELEVANT EXPERIENCES**

VOLUME II: CASE STUDIES



**FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS
TECHNICAL COOPERATION DEPARTMENT
INVESTMENT CENTRE DIVISION
FAO/WORLD BANK COOPERATIVE PROGRAMME**
In cooperation with:
**FAO AGRICULTURE DEPARTMENT – AGRICULTURAL
MANAGEMENT, MARKETING AND FINANCE SERVICE**

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ABBREVIATIONS

ACB	Agricultural Credit Board
BAAC	Bank for Agriculture and Agricultural Cooperatives
BAB	<i>Banco Agrícola de Bolivia</i>
BA-rate	Bankers' Acceptance Rate
CEF	Community Equity Fund
CLA	<i>Caja Los Andes</i>
CPA	Common Property Association
CFS	Community Facilitation and Support Grant
DA	Department of Agriculture
DAR	Department of Agrarian Reform
DLA	Department of Land Affairs
ESS	Equity Share Schemes
FAF	Financial Aid Fund
FINRURAL	<i>Federación de Instituciones Financieras Rurales</i>
FIG	Farmer Irrigators Group
GTZ	<i>Gesellschaft für Technische Zusammenarbeit</i> (German Agency for Technical Cooperation)
IPC	International Project Consult
LB	Land Bank (South Africa)
LBP	Land Bank of the Philippines
LRAD	Land Redistribution for Agricultural Development Grant
LRCF	Land Reform Credit Facility
LRGF	Loan Repayment Guarantee Fund
MGLC	Mill Group Local Committee
NABARD	National Bank for Agriculture and Rural Development
NRBG	Network Rural Banking Group
PAICOR	Panabo Agro-Industrial Corporative
PDI	Previously Disadvantaged Individual
PhP	Philippine Peso
RBI	Reserve Bank of India
RBP	Rural Bank of Panabo
RRB	Regional Rural Bank
SA	South Africa
SACGA	South African Cane Growers Association
SASA	South African Sugar Association
SASMAL	South African Sugar Millers Association
SHG	Self Help Group

INTRODUCTION

This is the second volume of the final report on Term Financing in Agriculture carried out by FAO on behalf of the World Bank.

It consists of a number of case studies which have been carried out during 2001 and 2002 in Bolivia, the Philippines, South Africa, India and Thailand. The case studies mainly present financial institutions as well as some non-financial institutions which have used different financial products (term loans, leasing and equity finance) to finance term investments in agricultural production and processing.

The case studies are presented by country and are preceded by a brief introduction to the country context highlighting the macroeconomic environment, the main features of the agricultural sector and the rural financial sector, and specific overall scope and constraints for term finance to farmers.

Moreover, a fact sheet is provided for each individual case study, highlighting the main features and lessons to be learned.

CASE STUDY FACT SHEETS

1. Philippines	<i>Rural Bank of Panabo</i>
2. Bolivia	<i>Asociación Nacional Ecuménica de Desarrollo</i>
3. Bolivia	<i>Caja Los Andes</i>
4. Bolivia	<i>Agrocapital</i>
5. India	<i>Basix</i> <i>Mulukanoor Cooperative Rural Bank and Marketing Society</i>
6. Thailand	<i>Bank for Agriculture and Agricultural Cooperatives</i>
7. South Africa	<i>Land Reform Credit Facility</i>
8. South Africa	<i>Land Bank of South Africa</i>
9. South Africa	<i>Umthombo/South African Sugar Association</i>

Term Financing in Agriculture: A Review of Relevant Experiences
Volume II - Case Studies
Introduction

FACT SHEET 1

Country: Philippines
Name of Institution(s): Rural Bank of Panabo (RBP)/Network Rural Banking Group (NRBG)
Panabo Agroindustrial Corporation (PAICOR)
Term Finance Products: Equity finance for capitalising rice mills as joint ventures with farmers;
Short- and medium-term loans to farmers

Institutional Background:

1. RBP

Type of Institution: Rural Bank
Year of Establishment: 1967 in Davao, Mindanao, Philippines
Regulation: Central Bank of Philippines
Net Worth: PhP73m (US\$1.55m)
Sources of Funds: Agricultural loans (10% of total loan portfolio in 2000) are refinanced through credit lines from Land Bank of the Philippines
Merger: Network Rural Banking Group (NRBG) formed in 1996 with two other Rural Banks
NRBG Branches: 39
NRBG Net Worth: PhP1.5b (US\$32.0m) in 2002

2. PAICOR

Type of Institution: Rice processing and marketing enterprise
RBP/NBRG: Main investor in PAICOR/PAICOR
Ownership: Joint Venture between farmers and RBP/NBRG; gradual divestment of shares to farmers called “corporative approach”
Board of Directors: RBP/NBRG and farmers during establishment period;
After conversion into cooperative farmers will have the majority in the BoD
Farmer Clients/
Shareholders: Smallholder rice producers (less than five ha irrigated land.) Members of Self-help Groups

Financial Procedures and Performance:

Equity Finance: RBP/NBRG invest equity in a joint venture (*corporative*), followed by gradual divestment with farmers increasing their shares through deductions from rice delivered
Loans: RBP/NBRG provide short-term (six month) and medium-term (three year) loans to farmers and working capital for PAICOR
Risk Management Mechanisms: Reliable access to financial and non financial services reduces client level risk
Careful screening and supervision of loan applicants through farmers groups
Targeting on farmers with irrigated land
Insurance coverage by Philippines Crop Insurance Company
Temporary farm take-over agreement in case of loan default (2–5 years)
Loan Collateral: No collateral requirements for most short term loans, real estate mortgage for production loans exceeding 3 ha and for term loans, Loan Repayment Guarantee Fund
Repayment Record: Production loan recovery rate 100% for last five years

Main Lessons Learned:

- Vertical integration with increasing ownership participation of farmers in processing enterprise creates a mutually beneficial long-term relationship with strong incentives for both parties to adhere to rules;
- Farmers can access a range of financial and non-financial services and have an assured marketing outlet;
- RBP/NBRG can collect loans in kind at low transaction costs without problems of side selling, thus ensuring a profitable market;

Main Challenges:

- High capital and management requirements limit the scope for scaling-up/replication;
- Dependence on key personality;
- Applicability to other crops needs to be tested.

FACT SHEET 2

Country: Bolivia
Name of Institution: Asociación Nacional Ecuménica de Desarrollo (ANED)
Term Finance Products: Leasing and medium-term lending for farm machinery and equipment

Institutional Background:

Type of Institution: Financial NGO (non-regulated)
Year of Establishment: 1978
Geographical Outreach: 24 branches in 8 out of 9 regions in Bolivia
Funding Sources: Concessionary: Inter-American Foundation funded leasing portfolio

Term Finance Products and Portfolio:

Term Loans: Up to three years and ceiling of US\$3,000 due to collateral related constraints
Leasing: Up to five years and US\$40,000 (leased assets as collateral substitute)
Loans to Groups: Up to five years: 3,497 clients, total outstanding loans US\$3.6m (2000)
Leasing Contracts: 481 clients, total outstanding US\$0.51m
Term Loans: 1483 individual borrowers; total outstanding loans US\$765,454
Loan/Leasing Purposes: Machinery, irrigation motor pumps, other farm equipment, solar energy panels
Loan Portfolio: US\$7.4m, 18,960 loan accounts, 90% rural, 75% agricultural (in 2000)

Client Profile:

General: Small farmers and rural entrepreneurs
Term Loans/Leasing: Emerging commercial farmers with investment potential, not served by group lending, have often received training in technical matters by NGOs and development projects

Financial Conditions and Performance:

Client eligibility: Depending on type of equipment, previous working experience required, might be substituted in some cases through training by NGOs/projects
Interest Rate: 16%
Down Payment for Leasing: 25%, down-payment requirement is lowered if collateral can be offered
Supervision: Periodic client visits, combined with other tasks of loan officer in same region
Loan Default: 8% in case of leasing (2000)

Main Lessons Learned:

- Leasing allows to finance medium and larger sized assets such as irrigation pumps and farm machinery for progressive farmers who cannot provide suitable collateral or in case enforcement problems prevail;
- Specific knowledge of leased equipment is crucial for successful lease appraisal;
- ANED has built on training and seed funding provided by NGOs/projects for introducing new technologies;
- Collaboration with equipment suppliers has been instrumental to ensure the availability of suitable equipment, spare-parts, after sales and repair facilities;
- Leasing requires frequent supervision which can lead to high transaction costs in rural areas;
- Long-term funds received at low costs from donors have been crucial for introducing and pilot-testing leasing.

Challenges:

- Expansion of outreach is constrained by limited capacity of markets to absorb incremental production (irrigation pumps) and by strict selection criteria for clients (previous experience, down-payment, etc.);
- ANED needs to further diversify the lease portfolio in order to de-concentrate risks;
- Equipment suppliers should participate more directly in client supervision and in sharing part of the risks;
- The establishment of a specialised leasing company is envisaged in near future;
- High operational costs need to be reduced;
- The expansion of the programme depends on enhanced access to long-term funding sources.

FACT SHEET 3

Country: Bolivia
Name of Institution: Caja Los Andes
Term Finance Products: Leasing and medium term lending for farm machinery and equipment

Background of Financial Institution:

Type of Institution: Regulated Non Bank Financial Institution (since 1995)
Year of Establishment: 1992 as Financial NGO (*Procredito*)
Supervision: Superintendency of Banks
Sources of Funds: US\$40.2m in total; mobilised through deposits, donors; national Apex organisations and national financial institutions
Uses of Funds: Loans to urban and rural micro-entrepreneurs
Geographical Coverage: Out of a total of 29 branches, 9 are engaged in both urban and rural lending

Term Finance Product and Portfolio:

Product Types: Short and medium term loans for farmers and other rural entrepreneurs
Items Financed: Land and tractors (max. US\$30,000); Trucks (max. US\$25,000); Cowsheds (max. US\$3,000); Milking equipment (max. US\$4,000)
Loan Portfolio (12/00): Total outstanding loans: US\$52.6m (18% rural loans and 13% for agricultural purposes); 51,000 borrowers; average loan size US\$1,087; 44,180 loans

Financial Conditions and Performance

Loan Duration: Loans of above US\$5,000 have terms between one to five years; loan ceiling US\$40,000
Interest Rate: Agricultural loans: Monthly rate of 1.3–2.5% (US\$ denominated) and 3.5% (nationally denominated); smaller loans are cross-subsidised
Risk Management Mechanisms: Loan appraisal and repayment schedule based on current farm household cash flow, excluding projections of incremental net revenues from financed investments
Careful screening of loan applicants (no history of loan default; verified through credit bureau, focus on high potential areas)
Portfolio diversification between economic sectors and regions (urban, rural)
20% client down-payment for term loans
Loan Collateral: Conservative loan appraisal based on existing cash flow allows flexibility in regard to collateral: Loans below US\$7,500 can be secured through pledging of assets, loans above US\$7,500 require registered land title or combination with pledged assets
Repayment Record: Rural past due rate of 9.5% (2002)
Actions in Case of Loan Default: Supervision visits by specifically trained loan officers; social pressure and penalty interest rates, eventual foreclosure of assets

Main Lessons Learned:

- Term loans for small farmers are feasible as part of a strategy of loan portfolio diversification into rural areas: during the recent economic crisis the rural loan portfolio balanced losses in the urban microfinance market;
- Term loans are instrumental for establishing a long-term relationship with promising rural clients and can be gradually introduced to complement short-term loans to farmers;
- Micro lending technologies used for urban clients require considerable adaptation to meet the specific requirements of farmers for investment capital: flexibility regarding collateral, design of individual client loan schedules based on the total farm household cash flow are key elements of successful rural term lending;
- Recruitment and training of specialised loan officers with an agricultural background, decentralisation of loan decision making and the use of staff incentive systems have contributed to CLA's success.

Challenges:

- Outreach is constrained by the use of conservative loan appraisal method and high interest rates;
- CLA is currently redesigning its lending technology to take into account projected incremental income resulting from the investment during loan appraisal.

FACT SHEET 4

Country: Bolivia
Name of Institution: Agrocapital
Term Finance Product: Medium term lending for agricultural farm and processing equipment

Institutional Background:

Type of Institution: Financial NGO – in process of conversion into *Private Financial Fund (PFF)*
Year of Establishment: 1992, with assistance from USAID and ACDI VOCA
Supervision: Superintendency of Banks
Sources of Funds: 72% commercial loans; 12% donor funding; 9% subordinated loans from the Corporación Andina de Fomento (CAF); and 5% IDB funding
Uses of Funds: Term lending to small and medium scale farmers, agro-processors and other rural entrepreneurs

Term Finance Products and Portfolio:

Product Types: Commercial Loans (CL) and Micro-Loans (ML)
Activities Financed (by value): Agriculture (54%); Trade (35%); Service (8%); and Housing (3%)
Loan Portfolio (03 /01)

	Commercial Loans	Micro-Loans
total value:	US\$9.0m	US\$3.2m
outstanding loans:	820	2,515
average loan size:	US\$10,000	US\$1,228

Financing Procedures and Guarantees:

Loan Duration: CL: (up to US\$300,000), maximum term five years
ML: (up to US\$10,000), maximum term two years
Interest Rates: CL: 15–23%; Agricultural loans bear 3% risk premium
ML: 21–42% (US\$ denominated); 27–42% (nationally denominated);
Agricultural loans bear 6% risk premium
Risk Management: Cash flow based loan appraisal
Strict client eligibility criteria: no default, three years relevant working experience;
Diversified income sources, total household/farm assets above US\$20,000);
Repayment structured to meet forecast client cash-flow
20% down-payment by client
Loan Collateral: CL: real estate collateral (including rural property)
ML <US\$5,000: combined types of collateral, pledging of assets
Repayment Record: CL: past due rate: 12.5%; ML: past due rate 25.1% (end of 2000)
Agricultural loans do not perform worse than other loan types
Loan Default: Penalty interest rates
Legal action is started 90 days after due date

Lessons Learned:

- Underserved rural areas with good infrastructure present growth potential for specialised term lenders;
- Careful borrower selection and comprehensive loan appraisal provide scope for character based term lending and more flexibility concerning collateral;
- Farmer requires access to sufficient land and mechanisation services to qualify as client for term loans;

Challenges:

- Availability of funds with longer maturities would be necessary to provide long-term loans;
- Vulnerability due to concentration of portfolio on high-risk activities in rural areas and term loans;
- The practice of farmers to borrow simultaneously from different informal lenders and unregulated financial institutions constraints the viability of cash flow based loan appraisal and the acceptance of unregistered assets as loan collateral.

FACT SHEET 5

Country:	India	
Financial Institution:	1. BASIX Group	2. Co-operative Rural Bank and Marketing Society, Mulukanoor (MCRB)
Type of Institution:	BASIX group consists of a Non Bank Financial Institution, Local Area Bank and NGO providing technical assistance	Multipurpose Co-operative Society
Established in (year):	1996	1956
Outreach:	10 locations in six states	14 villages in Andhra Pradesh ("AP")
Borrowers:	12,000	6,000 approx.
Source of Funds:	Concessionary and commercial funds	Members and State Bank of Hyderabad
Regulated:	Reserve Bank of India ("RBI")	AP government

Term Finance Products and Loan Portfolio:

Term Loans:	Term loans up to three years for pumps, farm equipment, land development, etc. Agri-term loan exposure limited to 1%	Medium-term loans (<5 years) for farm machinery and irrigation equipment Long-term loans (<14 years) for orchards
Clientele:	Small farmers (0,5–2 ha)	Loans only to member, majority (75%) own <2 ha, term loans mainly to larger farmers
Lending Modalities:	Disbursement and repayment both in cash and in kind to individual farmers	Loan disbursements and repayments both in kind and in cash
Loan Portfolio:	R188.3m (US\$4.1m) in 2000	R80 m (US\$1.73 m) in 2000

Financial Conditions and Performance:

Interest Rates/Fees:	Loan processing fee: 2% Interest rate: 24% p.a. Timely payment incentive (2%)	Interest rate: 15–16% p.a. Penalty interest rate 3% Grace period only for principal
Risk Management: – <i>Eligibility</i> – <i>Loan Appraisal</i>	Customer Service Agent selects viable clients and supervises borrowers Based on farm household cash flow including incremental income, Finance restricted to expansion or renovation of existing activities Non-financial support services Life insurance for borrowers	Provision of financial and non-financial support services (inputs and equipment, processing and marketing of produce) Loan ceiling < 5x deposits Inter-linked transactions (thrift of 5%) Good knowledge of local conditions and members
Repayment Schedule:	Monthly repayment instalments	Adjusted to cash flow of investment
Loan Default Policy:	Zero tolerance for default, use of penalties and interest rate rebates	Strict enforcement of loan repayments
Loan Collateral:	None for loans < R 50,000 (US\$1087) Social collateral, chattel mortgage	Land title deposited during membership Term loans: asset financed by loan Social collateral
Repayment Record:	91.4% (3/2001) (entire portfolio) 80% (term loans)	High repayment rate

Lessons Learned:

- Agricultural term loans require considerable adaptation of micro lending technologies, e.g. regarding frequency of repayments and dealing with default due to external factors;
- Long-term relationship between lender and borrowers and intimate knowledge of local conditions allows significant amount of long-term loans;
- Effective co-ordination of financial and non-financial services enhances viability of term lending;
- Synergies between provision of financial and non-financial services reduce high risks and transaction costs;
- Effective financial intermediation services the through use of member deposits to fund term loans.

Challenges:

- Offer a longer duration of term loans and less frequent repayment instalments;
- Vulnerability to co-variant risks due to limited geographical coverage.

FACT SHEET 6

Country: Thailand
Name of Institution: Bank for Agriculture and Agricultural Cooperatives (BAAC)
Term Finance Products: Medium and long-term loans for agricultural purposes

Institutional Background:

Type of Institution: Public sector agricultural development bank (established 1966)
Supervision: Ministry of Finance
Sources of Funds (2001): Deposits (76%), Borrowings (13%), Shareholders Equity (7%), Other liabilities (5%)
Branches: 587

Term Finance Products and Portfolio:

Types of Term Loans: Medium-term loans (3–5 years), long-term loans (up to 15 years)
Items Financed: All types of farm related investments (machinery, farm buildings, orchards, land, etc.)
Loan Portfolio (2002): B241,714m, equiv. to US\$5,621m (58% term loans);
5 million borrowers; average loan size US\$2,042, and US\$3,882 for term loans
Uses of Funds (1999): Short-term loans (42%), Medium-term loans (20%) and Long-term loans (38%)

Financial Conditions and Performance:

Interest Rates: Usually 1–2% below commercial bank rates; depending on client risk category and track record, currently between 8% and 14%
Risk Management: National outreach and income from fee based services balance lending risks
Diversified liability structure (terms, costs and sources of funds)
Accumulated knowledge of agricultural sector and long-standing bank client relationship
Loan Collateral: Land titles and Joint Liability Groups, no chattel mortgage
Repayment Record: Historically good, but recently deteriorated due to Asian financial crisis and other factors
Loan Default: Loans rescheduled, if responsibility for default does not lie with borrower
Loans written-off fully only after 10 years, historically around 0.3% write offs

Lessons Learned:

- Term loan portfolio increased gradually over several decades based on the experienced with a successful lending technology for short term loans using joint liability groups of borrowers;
- BAAC's national coverage allowed diversification of risks (despite of its agricultural focus) and low operational costs due to the use of economies of scale in lending;
- Public ownership and a mandate as development bank have forced BAAC to enhance outreach in higher risk markets by developing innovative products and procedures; term-lending is being cross-subsidised by other more profitable products;
- Though public ownership has shaped the strategic direction of BAAC, a "firewall" between owners and managers of the bank has preserved its operational autonomy;
- Decentralised decision making, staff incentives systems, staff training and a high working ethic, together with a politically induced squeeze on interest rates, have contributed to high staff productivity and operational efficiency.

Challenges:

- The Asian financial crisis has affected BAAC's loan portfolio quality and the subsequent debt moratorium for small borrowers may affect future repayment culture;
- Pressure to enhance outreach and staff productivity has reduced the time available of loan officer for appraising loans and maintaining contact with borrowers and JLGs, which may affect future repayment rates.

FACT SHEET 7

Country: South Africa
Name of Institution: Land Reform Credit Facility (LRCF)
Term Finance Products: Refinance facility to commercial banks for financing long-term loans in land reform projects; often used in conjunction with matching grants for land reform beneficiaries

Institutional Background:

LRCF Institutional Arrangement: Revolving Fund, hosted by Khula Enterprise Finance, a state owned development finance institution for SMEs
Year of Establishment: 1999
Geographic Outreach: Nationwide with focus on commercial areas in the Western Cape region
Funding Sources: Initial funding of R63m (around US\$10m) from European Union and Department of Land Affairs
Purpose: Establishing Joint Venture Companies between Previously Disadvantaged Individuals (PDIs) and commercial farmers, called Equity Share Schemes (ESS)
Structure of ESS: PDIs normally represented in Board of Directors (BOD) through workers trust, equity participation between 5 and 60%, normally minority position, Shareholder entry and exit, decision making procedures and distribution of profits are stipulated in by-laws of each ESS

Financial Products and Portfolio:

1. LRCF Purpose: Long-term refinance facility available to commercial banks
Financing capital investments in land based ESS between commercial farmers and farm workers/local communities, such as orchard development, irrigation, buildings and land purchase
2. Land Reform Grant Purpose: Sliding scale matching grant, available to land reform beneficiaries, Co-financing of land purchase or shares in ESS, the grant amount depends on the equity contribution and complementary commercial bank funding
Loan Portfolio: 14 joint venture companies (Equity Share Schemes) between white commercial farmers and black farm workers (end of 2001)

Financial Conditions and Performance:

Loans Terms: Up to 15 years with up to 6 years grace period
Interest Rate: 2–3% below the inter-banking rate, variable interest rates
Application Criteria: Simple and transparent criteria (e.g. ceiling on max. value of land and other assets to be financed per farmers to ensure outreach); Approval funds permitting on “first-comes-first-served” basis
Risk Management: On-lending commercial banks carry the full credit risk ensuring a thorough appraisal of projects; Management skills of commercial farmer; LRCF’s loan approval automatically triggers off capacity building grant
Collateral: Loans are secured by the assets of the ESS plus additional collateral provided by the commercial farmer

Lessons Learned:

- LRCF ensures the participation of commercial banks in the land reform process ensuring a better viability of the enterprises to be financed;
- ESS have a potential for win-win scenarios: PDIs get access to productive assets in high value export oriented agriculture (vineyard, orchards, ecotourism), commercial farmers benefit from political stability, enhanced productivity of workers and access to cheap external capital.

Challenges:

- ESS in capital intensive export agriculture require considerable grant resources to ensure meaningful levels of participation and tangible benefits to PDIs, which limits its outreach and replicability;
- On-going mentoring and capacity building is required to ensure institutional stability and real participation of PDIs in ESS;
- The long-term financial viability and the institutional stability are still to be proven.

FACT SHEET 8

Country: South Africa
Name of Institution: Land Bank of South Africa
Term Finance Products: Medium and long-term loans for land and other farm related assets

Institutional Background:

Type of Institution: State owned Agricultural Development Bank
Year of Establishment: 1912
Geographical Outreach: 28 branches and 45 satellite office throughout the country, with, however, a limited outreach in former homeland areas
Funding Sources: Issue of bonds and other financial instruments on the national capital market, reserves, strong equity base (>20%); no deposit mobilisation; specific fund created to finance loans to “new mandate clients” to protect its credit rating

Term Finance Products and Portfolio:

Types of Term Loans: Long-term mortgage loans (<15 years): Purposes: land purchase, land improvements, buildings, etc.
Medium term loans (<8 years); Purposes: farm machinery, livestock, etc.
Instalment Sales Finance (<8 years): Purposes: farm machinery, livestock, etc.
Special products for PDIs: Step-Up micro-loan
Loan Portfolio (12/01): R14bn/US\$1.6bn,
Around 50% of portfolio for corporate clients (farmer cooperatives, corporations, statutory boards related to agriculture/agribusiness);
50% to retail clients (individual farmers);
R452m (US\$52m) for “new mandate clients” (PDIs) who have limited assets and banking experience

Financial Conditions and Performance:

Interest Rates: According to client risk category, special long-term mortgage loans for first time buyers of land have a 15% interest rate; normally, interest rates are periodically adjusted to market trends
Risk Management Mechanisms: Loan duration, ceilings and interest rates depend on client risk categories:
Platinum, Gold Premium and Gold loans for established commercial farmers depending on the quality of collateral and debt to equity ratio;
Silver: Farmers with proven experience and skills, but with insufficient traditional collateral
Bronze loans for PDIs with few or no collateral and no track records, such as land reform beneficiaries and farmers on communal land
Silver and Bronze loans carry higher interest rates as a risk prime which is deposited in a risk fund to protect against potential losses
Loan Collateral: Collateral requirements are less restrictive for Silver and Bronze clients, Step-Up loan are collateral free, Instalment Sales Finance uses the financed asset as loan collateral
Loan Repayment: Good for commercial farmers; severe repayment problems in case of Silver and Bronze loans

Lessons Learned:

- Failure to conduct thorough market research resulted in high initial losses in lending to PDIs: Due to political pressure, LB has started this type of lending using down-scaled version of its traditional loan products;
- Lending to PDIs requires, however, a gradual and integrated approach combined with investments in infrastructure, client training and other non-financial support services.

Challenges:

- Recent market research and product redesign are expected to redress some of the flaws and to improve the loan portfolio quality.

FACT SHEET 9

Country: South Africa
Name of Institution: Financial Aid Fund/Umthombo Agricultural Finance of the South African Sugar Association (SASA)
Term Finance Product: Medium-term loans for establishment of sugarcane plantations on communal land

Institutional Background:

Type of Institution: Revolving Fund, managed and owned by SASA
Year of Establishment: 1973 as Financial Aid Fund, in 2001 reformed and renamed as Umthombo Agricultural Finance
Supervision: None
Sources of Funds: Established with a grant of R5m from SASA
Uses of Funds: Term Lending to small and medium scale farmers, agro-processors and other rural entrepreneurs

Term Finance Products and Portfolio:

Product Types: *Zimele Loan* for sugarcane establishment for farmer with at least 2 ha of rainfed land or 0,5 ha of irrigated land
Access Loan for establishment of sugarcane plantations for farmers with access to less than 2 ha of rainfed land
Loan for replacement of irrigation equipment of sugarcane growers
Loan Portfolio: Total outstanding portfolio R1m (around US\$125,000), distributed over 66,000 accounts, 70% of the portfolio are term loans and 30% short term loans (March 2003)

Financial Conditions and Performance:

Loan Terms: *Zimele* and *Access Loans* up to 8 years, Irrigation Equipment Loans up to 5 years
Interest Rates: between 20–23% p.a.
Risk Management: Secured supply of inputs and marketing of sugarcane, financing of irrigation equipment reduces production risks, disbursement in kind, single channel marketing outlet allows in kind collection and facilitates control of outside selling
Loan Collateral: Lien on the crop, no additional collateral required
Loan repayment: 95% on-time repayment, 3% write-offs, main reasons of default include fire, drought, violence and side selling (by using the marketing quota of neighbouring farmers)

Lessons Learned:

- A non-financial commercial institution can provide term loans effectively to smallholders without requiring tangible collateral by interlinking credit with marketing as long as outside selling can be prevented in a single channel marketing system;
- Sugarcane is a suitable crop for interlinked transactions due to its product characteristics (bulkiness, perishability);
- Recent reforms suggest that appraisal and management of smallholder loans are better handled by a specialised entity with sufficient autonomy, rather than directly by the sugar mills.

Challenges:

- In view of the demand characteristics of smallholder farm households, a broader range of financial services should be provided for crop and non-crop related purposes;
- Farmers should be given the opportunity to repay loans directly in cash, not only through the delivery of sugarcane, by using other household income sources.

PART 1: CASE STUDIES FROM BOLIVIA

CONTEXT

I. Macro-economic Conditions

1.1 Record annual inflation of 20,000% in April 1985 precipitated a structural adjustment programme in Bolivia. Since then, annual inflation has fallen to between 3% and 5% and down to around 1% in 2001/2002. However, significant economic development has been stifled by a growth rate per capita being amongst the weakest in Latin America (on average 4–6% p.a. during 1994–98) and an informal economy absorbing over two thirds of the total workforce.¹ In addition, the country suffers from minimal economic diversification and over-dependency on primary exports. Adverse external factors, combined with poor government policies, have resulted in further economic crisis starting in 1999.² In 2000/2001, roadblocks and severe floods caused losses to the agricultural sector estimated at US\$121m. The 2002, electoral campaign and the emergence of debts waiver initiatives raised the fear of public intervention in financial markets, especially in rural areas.

1.2 This economic and policy environment is reflected in the declining loan portfolio quality of both regulated and non-regulated financial institutions. Bad loans as a percentage of aggregate loans outstanding in the years 1998–2000 stood at 4.8%, 7% and 11.5% respectively. Arrears on agricultural loans were 16.7% in 1999. The latest available data suggest that the portfolio in rural areas amounts to 20% of the total outstanding portfolio of the formal financial system at the end of 2002.³ Financial institutions were forced to increase loan loss provisions and reduce lending. However, due to the increase of past due loans, loss provisions still only cover 63% of the portfolio in arrears. Average lending interest rates were 15% in 2000 and time deposit rates (of 180 days) were 8%. Since then, both rates have been declining to 9.85% and 2.0% respectively. Performance indicators of the case study institutions must be interpreted in this context.

II. Agricultural Sector

1.3 The country's landlocked position, low population density and lack of rural infrastructure restrict the marketing of agricultural commodities and the extension of financial services to the rural population. However, the potential and structure of agriculture in different regions varies according to their agro-ecological and socio-economic conditions:

¹ Annual growth rate averaged 4.6% during 1994–98, whereas a significant poverty reduction would have required sustained growth rates of 5–6% or above (EUI, 2001a).

² External factors were: Effects of the currency crisis and devaluation of local currencies in neighbouring countries (Argentina, Brazil), leading to loss of competitiveness and a decline in export prices for key commodities, as well as adverse weather conditions caused by El Niño/La Niña in 1998/99. Internal factors have been the eradication of the cocoa production in some regions as well as the reform of the customs system effectively cutting down smuggling activities. Apparently some of the trading activities financed by MFIs have been indirectly affected by the above-mentioned measures of the government.

³ Nueva Economía, April 2003.

- *The Altiplano* around La Paz is characterised by high–population density, land fragmentation, marginal agro–ecological conditions and lack of support services which together result in low productivity levels. However, intensive small–scale production of dairy products and vegetables has emerged in zones with reliable water supply and transport infrastructure.
- *The Inter–Andean valleys* are characterised by similar population density and farm size, but the sub–tropical climate facilitates a greater crop variety. Water supply is the crucial factor for intensification of agricultural production in Cochabamba region.
- *The tropical lowlands of Santa Cruz* have an abundant availability of land and favourable climatic conditions which have facilitated the rapid expansion of annual and perennial crops such as soya, maize, cotton, sunflower, wheat and sugarcane. Widespread mechanisation has resulted in a production pattern that is extensive in land and labour resources but intensive in capital. Ownership of farm machinery is crucial and necessitates a farm size of at least 100 to 150 ha. Table 11 (see page 42) shows the production of the main crops from 1997 till 2001.

III. Rural Financial Sector

1.4 The structural adjustment programme preceded the reform of the financial sector, which included the liquidation of state–owned development banks and the reform of the Central Bank, the Superintendency of Banks and banking legislation.

1.5 In 1998, the *Law of Property on Popular Credit* created a regulatory framework for the establishment of micro–finance institutions (MFIs). Financial institutions (FIs) can classify loans as commercial loans, secured by real estate collateral, or micro–loans, secured by other forms of collateral. Stricter loan loss provisions are required to compensate for the higher risks of the latter. FIs can be grouped into three types: commercial banks, co–operatives and MFIs, which are further classified as regulated or non–regulated. In the last decade non–regulated financial NGOs have tended to convert themselves into regulated private financial funds (PFFs). In addition, two second–tier institutions have been created: NAFIBO refinances regulated FIs, including PFFs, whereas FONDISEF provides loans and technical assistance to non–regulated MFIs, co–operatives and mutuals.

1.6 Meaningful data on the supply and demand for rural financial services in Bolivia is difficult to obtain. The closure of *Banco Agrícola de Bolivia* (BAB) in 1985 and the withdrawal of commercial banks from rural areas have led to a vacuum in agricultural lending. Agricultural credit declined from 31% of total outstanding banking sector loans in 1988 to 10,5% in 2002 and is concentrated in Santa Cruz (85%), Cochabamba and La Paz. Outreach is low, ranging from a coverage of 2% of the rural households in La Paz and Cochabamba to 11% in Santa Cruz (FINRURAL 2000). The evolution of the sectoral allocation of bank credit is illustrated in Table 12.

1.7 A recent study of 19 MFIs and co–operatives conducted by FINRURAL, the association of financial NGOs, revealed that their total outstanding loan portfolio in 1999 amounted to US\$140m, 54% of which was provided by regulated institutions. US\$23m (17%)

was lent for agricultural purposes with 81% lent by non-regulated FIs. This demonstrates the importance of financial NGOs in agricultural lending. However, an average loan size of around US\$1,000 and maturities of less than one year suggests that most of these loans are not suitable for long term agricultural investments (FINRURAL, 2000). Only 42% of the 585,000 small farmers are eligible to apply for loans, implying an effective demand of US\$198m.

1.8 Formal FIs such as banks and credit unions have traditionally been reluctant to provide agricultural loans and particularly term finance for a variety of reasons, which include:

- ***Inadequate lending technologies:*** Most financial institutions are not applying lending technologies which would enable them to manage the specific risks that are associated with agricultural finance at a reasonable cost. Due to the lack of skilled loan officers who are trained in agricultural loan appraisal, commercial banks and co-operatives tend to rely on conventional loan collateral requirements (normally the mortgage of urban property in one of the major cities). MFIs provide limited amounts for short terms, demanding high interest rates and with frequent small repayment instalments to compensate for the lack of collateral. Their portfolio is mainly concentrated in urban-based trading and services activities.
- ***Lack of suitable collateral:*** Rural households have few assets that can be used to secure loans. Most small farmers either have no registered titles over their land or these titles are incomplete or outdated. This situation is aggravated by the Agrarian Reform Law (*Ley INRA* from 1996) which prohibits the mortgaging of peasant farm land (called *Solar Campesino*). In practice, this legislation is not very clear and creates confusion amongst FIs.⁴
- ***Concentration of financial institutions in urban areas:*** The lack of rural branches limits outreach into rural areas and leads to centralised decision-making. This applies to most commercial banks and less to non-regulated MFIs.
- ***Limited variety of financial products:*** Term loans are practically the only financial product available for financing agricultural investments and apart from some recent innovations, leasing and equity finance are not adopted to a large extent for such purposes.
- ***Poor loan repayment culture:*** In addition to the general risks associated with agricultural lending (climate, prices, etc.) some regions have a low repayment morality referred to as *cultura del no pago* (culture of non repayment). Apart from some Andean regions, this particularly applies to the commercial area of Santa Cruz, where large and politically well-connected farmers have traditionally lobbied for cancellation of their debts. These so called *strategic non-performing loans* were a major factor behind the liquidation of BAB.

⁴ The law establishes also the category of *medium-sized farms* which have a commercial orientation and use wage labour and are allowed to mortgage their land. The validity of property depends on the payment of taxes and peasant farms are tax exempted. In view of the unclear legal provisions and the large variety of farm structures in Bolivia, the use of land as collateral is difficult and ambiguous.

- ***Lack of term lending resources:*** Within the financial system, no term funds at concessionary rates are available for agricultural investment finance. The APEX institutions, FONDESIF and NAFIBO, are providing re-finance facilities at commercial rates, based on the 180-day time-deposit rate plus 1% (currently at 9%). The high margins, however, required by FIs to cover all their costs and risks associated with agricultural term lending, result in on-lending rates of over 20% and sometimes even over 30%. There are few investment opportunities in agriculture with a profitability that can match such rates. Although non-regulated financial NGOs work with concessionary donor funds, the availability of these funds is decreasing. Additionally, their average maturity of 2–3 years poses severe limitations to term lending.

1.9 From a borrower's viewpoint, other than an inability to offer acceptable collateral, high interest rates, long distances to bank branches and complicated lending procedures that the main constraints to obtain credit (FINRURAL, 2000).

IV. The Expansion of MFIs in Rural Areas

1.10 Most MFIs are still urban-based and provide short-term loans for small trading, services and manufacturing activities. However, in the last few years, a number of larger MFIs have expanded into rural areas and others have been established explicitly to finance rural activities, motivated by growing pressure from donors and the government to cater for the rural population. In addition, many urban clients have proved to be financially over-committed in the current economic crisis as a result of aggressive expansion of consumer credit and increased financial competition. Both factors have led to a reduction in effective loan demand.

1.11 In contrast, lower competition in rural areas provides scope for selecting favourable regions and better clients and charging cost covering interest rates. MFIs prefer regions that have not previously faced excessive loan write-offs or donor grants and which offer potential for establishing a long-standing financial institution/client relationship.

1.12 Interestingly, amongst the 19 MFIs and co-operatives reviewed in the study by FINRURAL on agricultural credit in Bolivia, the arrears rate of agricultural loans in the late 1990s of 7.1% is slightly lower than the average overdue rate of all loans (9.5%). One possible explanation for the better performance of agricultural loans, is the relatively low level of competition in rural areas which enables lenders to select the best areas and clients.

CASE STUDY 1: ANED – LEASING AS AN ALTERNATIVE FOR FINANCING AGRICULTURAL EQUIPMENT

I. Institutional Overview and Financial Products

I.1. Background of ANED

1.13 The *Asociación Nacional EcuMénica de Desarrollo* (ANED) is a financial NGO working with small farmers and entrepreneurs in the *Altiplano* region of Bolivia. It was founded in 1978 by 11 NGOs engaged in capacity building and technical assistance to rural people. The aim of ANED is to provide appropriate financial services to rural low-income clients and to administer the funds of these institutions destined for lending.

1.14 ANED now has 24 branches in eight of the nine regions in the country. The total loan portfolio at the end of 2000 was US\$7.4m. Slightly more than half of the outstanding amount (including leasing) has terms between one and five years. Around 75% of the loan portfolio is for agricultural, livestock and agri-business activities. Over 90% of the portfolio is located in rural areas.

I.2. How Micro-leasing Emerged

1.15 ANED initially used two group lending technologies: *Crédito Asociativo* and *Crédito Solidario*.⁵ Group lending is based on small and short term loans and uses group joint liability to deal with the lack of conventional collateral. High interest rates and lack of flexibility versus standardised loan products limit the use of *Crédito Solidario* to the financing of working capital or very small investments with short amortisation periods.

Lending technology	Outstanding		Loans		Past due (%)	
	US\$	%	Number	%	US\$	ratio
Crédito Asociativo	3,716,994	49.9	3,497	18.4	376,228	10.1
Crédito Solidario	1,810,141	24.3	13,161	69.4	200,355	11.1
Individual credit	765,454	10.3	1,483	7.8	103,288	13.5
Leasing	505,671	6.8	481	2.5	42,203	8.4
Overdraft	212,228	2.8	20	0.1	40,790	19.2
Others	436,375	5.9	318	1.7	19,273	4.4
Total	7,446,864	100.0	18,960	100.0	782,138	10.5

⁵ *Crédito Asociativo* was developed by ANED to complement the technical assistance activities of other institutions (NGOs, local governments, etc.). Loans were given to pre-existing formal and informal groups consisting of at least ten people. The loans were secured by different types of non-conventional collateral such as joint liability, personal guarantors and pledging of assets. *Crédito Solidario* is granted in small amounts and for short periods to informal groups using joint liability as collateral substitute. Groups size varies between 3 – 8 persons.

1.16 In the course of time it became apparent that there existed a considerable demand for longer term finance by more advanced farmers and rural entrepreneurs to realise investments in items such as irrigation equipment, farm machinery, transportation means and others. These items were demanded by the potential investors either for use on their own farms (e.g. irrigation pumps, solar energy panels) or for providing services to other members of the community on a hiring basis (e.g. farm machinery).

1.17 Despite the potential of many more progressive farmers to manage these investments profitably, they are generally unable to access suitable external financing: For the reasons mentioned above they are “too big” for the traditional microlending technologies offered by ANED and others. On the other hand, they are “too small” to be considered viable clients by mainstream financial institutions, mainly due to lack of suitable collateral and their relatively small size. Non-financial institutions such as equipment suppliers required equally high collateral — normally a mortgage on an urban property — before accepting deferred payments.

1.18 ANED first tried to provide term loans for financing tractors, irrigation pumps and other farm implements under their group lending modality, *Crédito Asociativo*. However, contractual conditions did not provide sufficient motivation for repayment when guarantees proved to be inadequate. Legal action has been taken against several defaulting borrowers who received credit for equipment purchase, but almost all loans are irrecoverable.

Type of Loan	Outstanding		Loans	
	US\$	%	Number	%
Working capital	3,819,000	51	16,333	86
Investment capital	3,627,000	49	2,627	14
Total	7,446,000	100	18,960	100

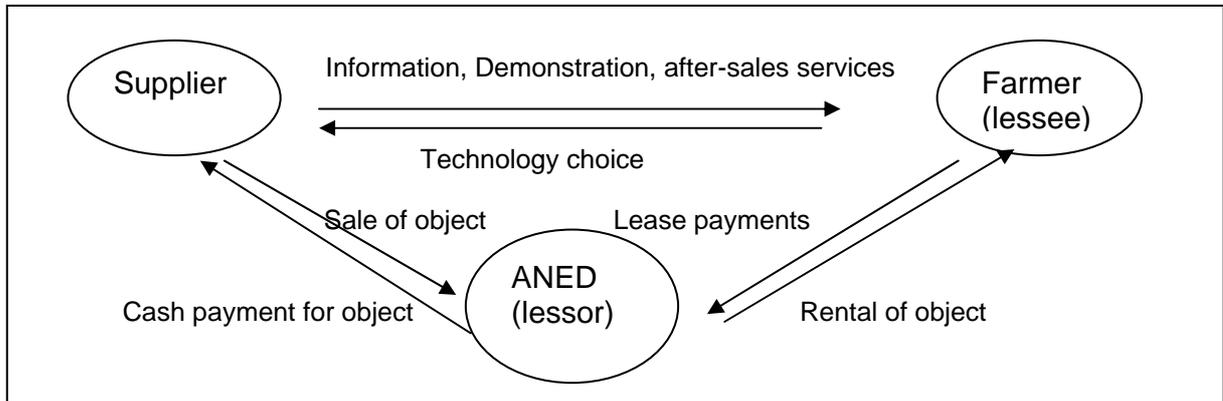
1.19 In the second half of the nineties, ANED therefore developed two new financial products which allowed the financing of the investment needs of more advanced farmers and small entrepreneurs: term loans and leasing. Because of the widespread absence of suitable collateral in rural areas, term loans are limited to three years and to a maximum amount of US\$3,000. Leasing in turn is granted up to an amount of US\$30,000 and up to five years. This case study focuses on leasing as an innovative mechanism for financing the investment capital needs of more progressive individual farmers such as motorised pumps, tractors, ploughs, solar energy panels and other farm equipment.

1.3. Types of Leasing Offered by ANED

1.20 The main type of lease used by ANED is the so-called *Financial Leasing* or *Full Payment Leasing*. ANED buys an investment item identified by the client, which is handed over to the farmer for an agreed period on a rental basis. The lease contract has to be registered and contains the main conditions such as lease period, residual value, purchase option, and the amount and frequency of the lease payments. The lease period normally amounts to two-thirds of the economic life of the leased asset. During this period the lessee meets all operational and maintenance costs and pays regular instalments covering capital and interest. After the lease

period he has the option to buy the item at its residual value — normally 1–5% of the purchase price.

Figure 1: Illustration of Financial Lease



1.21 The second financial product is *Leaseback* (also called *Retro-Leasing*). The client liquefies a specific own asset (e.g. land or equipment) by selling it to ANED for a certain amount agreed up on in the lease contract. The client can use this amount to make other productive investments. The sold item is leased back to the farmer who can continue using it against a periodic lease payment. At the end of the leaseback period the farmer has the option to buy back the item at the residual value. Basic parameters such as leasing rates and buy back options are specified in the leaseback contract.

1.4. Principal Advantages of Leasing

1.22 The core principle of leasing is the separation of legal ownership of an asset from its economic use: the leased item remains the property of the lessor (ANED) who rents it to the client (lessee) over an agreed period. This has two important advantages over a conventional term loan:

- no additional collateral requirements;
- in kind delivery: no diversion of funds.

1.23 The relaxation of collateral requirements is possible, because the leased asset remains the property of the lessor and therefore serves as collateral. In case of default the asset can be repossessed, avoiding lengthy court procedures. In the Bolivian context where settling claims and getting court approval for the seizure of property can take up well over one year this is a considerable advantage.⁶ The Bolivian land reform law prevents also small farmers whose land is qualified as "peasant holding" from mortgaging it.⁷ However, there are no sales restrictions on any type of privately owned land. In such a setting, leaseback as a type of "use sight" constitutes an alternative to the conventional mortgaging of land. The farmer sells land (or any other productive asset) to ANED which then leases it back to the farmer. This allows the farmer to

⁶ According to Dupleich (2000) the average period is 269 days without rejection by the borrower and 670 days in case of rejection.

⁷ The Land Reform law in Bolivia makes a distinction between peasant land that can not be mortgaged and commercial smallholder land plots.

continue using the asset productively on his farm against periodic lease payments. After an agreed period the farmer has the right to buy back the asset from ANED. Depending on the value of the assets and the lease period, the sales receipts can be used by the farmer for working or investment capital requirements.

1.24 From the perspective of the financial institution, the ownership of the land which would normally be mortgaged means more security and less transaction costs if foreclosure becomes necessary. Therefore, it could offer more attractive conditions concerning the financial terms of the leaseback contract or the valuation of the land/other assets.

1.25 A major drawback to the leaseback of land is that a registered title is required to allow the financial institution to sell the land if the lessee defaults. It also requires the financial institution to have sufficient medium-term funds. These requirements reduce the scope for leaseback in Bolivia.

1.5. The Leasing Portfolio

1.26 Leasing started in 1997 on a pilot basis. Since then it has expanded rapidly. The total portfolio amounted to about US\$505,671, constituting 7% of the total portfolio of ANED at the end of 2000. At the end of 2000 ANED had 481 leasing contracts in six regions of the country, 95% of them for agricultural purposes. As Table 3 shows, the most important items are tractors and motorised irrigation pumps.

Table 3: Bolivia, ANED – Most Important Items Financed Under Leasing, End of 2000			
Item	Outstanding		Number of leases
	US\$	%	
Tractors	331,845	53.2%	19
Motor pumps	178,829	28.7%	294
Truck	17,800	2.9%	1
Ploughs	15,689	2.5%	10
Others	69,430	12.7%	31
Total⁸	623,591	100.0%	355

1.27 Despite the considerable growth in leasing, the outreach of the programme is still modest. Until now, there have been only a few cases of leaseback.

II. Leasing in Practice

II.1. Client selection

1.28 An important pre-requisite to the selection of reliable clients is the selection of favourable regions for the leasing programme. These must have an above average economic growth potential in terms of production and marketing conditions. The local credit culture is also

⁸ This category includes items such as solar energy panels, sowing machines, harvesters, electric pumps, 4-wheel drives and others.

examined before ANED expands into a new village or region. ANED does not work in villages where — due to donor grants in the past or political organisation of borrowers — the credit culture is poor. In general, the credit culture is better in regions/villages which are farther away from towns.

1.29 ANED focused initially on two regions in the *Altiplano* that presented a high potential for success. In both cases, farmers had already received basic training in handling of equipment and related issues, and a commercial equipment supply chain already existed.

1.30 In the Oruro region, motorised low-lift pumps have been leased to small farmers who grow between 0.2 and 0,5 ha. of vegetables. Irrigation pumps have been introduced in the mid-90s by a NGO, which carried out a feasibility study for this type of investment and provided some basic training for farmers. Once the agronomic and economic viability had been proven and a demand from the farmers was created, the problem of how to finance these pumps had to be resolved. ANED first provided loans under the modality of *crédito asociativo*, but experienced repayment problems. In 1997, the first pumps were financed through leasing.

1.31 Tractors have also been financed in the La Paz region in cooperation with a technical assistance programme funded by the Danish government through DANIDA. The programme aimed at increasing the productivity of small-scale dairy producers in the *Altiplano*, i.e. through improved fodder production. Tractors were introduced and some farmers were trained as operators in this programme. However, a sustainable mechanisms to finance the purchase of tractors was missing. ANED's leasing programme was intended to fill this gap.

1.32 Apart from the availability of technical assistance, ANED could build on pre-existing social organisations of the farmers, most of whom were already members of formal groups like associations of dairy producers or farmer irrigation groups. The leaders of these groups play an important role in selecting members and supervising repayments. Sometimes they act also as personal guarantors.

1.33 Client selection was facilitated by the fact that ANED had worked for several years in these regions. Therefore it already knew the region in terms of agro-ecological and socio-economic conditions as well as regarding the repayment culture. In addition, it had already a client base. However, "graduation" of existing clients which perform well under group lending into leasing is restricted to low cost assets such as irrigation pumps. The necessary skills are developed through small workshops and through after-sales service.

1.34 In tractor leasing, the most important selection criteria are the experience of the farmers in operation and maintenance and their ability to make a down-payment of 15–25%. Most of the clients have already worked as tractor drivers, or have been trained in dairy development projects. Thus new clients who meet these criteria and have a sound loan track history can also apply for leases. Information on the credit history of new applicants is acquired through an informal exchange of information between different MFIs working in the region.

II.2. Lease Appraisal

1.35 The basic assumption is that lease payments should be financed mainly out of the cash-flow generated through the productive use of the leased asset. Additional income source are

only considered as a cushion to protect against an unforeseeable downswing of the activities related to leasing. To assess all factors affecting the farmer's ability to meet periodic lease payment obligations, a detailed household cash-flow analysis is made including all estimated farm and non-farm incomes and expenses. To avoid a financial over-commitment, a trigger is built into the appraisal procedure: The client should not spend more than 30% of his total net household income on lease payments.

1.36 Flexibility in determining the lease payment plan is key to ensure timely lease payments. Frequency and amounts of lease payments are adapted to the main cash inflows according to the marketing information of the main produce, while taking into account other household income. Instalments may also increase or decrease during the life of the lease contract in accordance with a changing cash flow of the lessee. This may allow staggered leasing instalments, advance payments and adjustments in payments.

1.37 In case of pumps, payments are normally made in two yearly instalments over a period of two years. Variable payment amounts according to the main or secondary harvest are also possible.

1.38 The relatively low costs of the pumps (US\$500–700) and the similar production and marketing conditions of the farmers in Oruro allowed a higher degree of standardisation in of lease appraisal procedure. However this has ultimately caused some problems because of the direct impact of pumps on increased production and a limited local market for vegetables. Prices have fallen below the historical levels which were used in the appraisal, causing higher past due rates than in case of tractors. ANED has stopped the approval of new leases in this areas, as the local vegetable market appears to be satisfied.

1.39 In the case of tractors, the high investment costs of up to US\$30,000 require a more thorough and individualised appraisal. The applicant has to present a detailed business plan showing the projected income and costs in the use of the tractor on a monthly basis. Because of the small farm size in the *Altiplano*, most cash income is generated through tractor hiring services. Therefore, the applicant must prove to have a minimum identified client base. Frequency of payments is agreed upon individually and often payments every three to four months are preferred.

1.40 Collecting all necessary information for leasing approval normally takes three days. Approvals are made by a credit committee which meets in La Paz on a weekly basis.

II.3. Selection of Equipment

1.41 The establishment of close links with equipment suppliers is crucial for the success of the leasing programme. ANED tries to establish relationships with at least two suppliers for each equipment item. It then negotiates an integrated package, including price discounts for bulk purchase and the provision of training and technical backstopping after-sale services to the farmers. The risk of technical breakdowns during the initial period is low, because normally a guarantee is given during the first year of the new equipment by the manufacturer.

1.42 In the selection of equipment, ANED faces a certain dilemma. On the one hand, it wants the client to choose the equipment thus avoiding that ANED is blamed for any technical

failures, which may be used as a pretext for non-payment; on the other hand, it realises that farmers often have little information and need assistance in selecting the most appropriate type of equipment suitable to their specific conditions. This is especially true in the case where the applicant has limited experience with the asset, such as is the case with irrigation pumps.

1.43 Although there is a second-hand market for used equipment in Bolivia, ANED normally leases new assets.⁹ In spite of the higher financial costs there are three main reasons for this:

- The risk of technical failures and default are much lower in the case of new equipment
- Tax legislation discriminates against leasing of second-hand goods, as tax deductions are only possible, if the purchase invoice of the equipment can be submitted. This leads to lower leasing rates for new equipment
- An original ownership document has advantages for the lessor, if recovery of the asset is necessary.

1.44 In the case of irrigation equipment, small motorised pumps are imported from Japan (Honda, Suzuki). The farmers can chose between four models varying in terms of horsepower (3–5 hp), price (US\$500–700) and quality. ANED has chosen to work with main importers instead of small local dealers because of their superior conditions for availability of spare-parts, after sales service and guarantees against technical breakdown. Hoses are also supplied whereas wells are mainly dug by the farmers themselves.

II.4. Leasing Terms

1.45 The lease period depends on the value of the investment good and its expected economic life. For tractors with a purchase price between US\$20–30,000 it is normally five years, while irrigation pumps (US\$500–700) are leased for two years.

1.46 The interest rates charged by ANED for leasing are comparatively low, currently around 16%. This is possible because of the low costs of leasing funds provided by the Inter American Foundation. Currently, ANED is negotiating with the Inter American Development Bank for additional funding. Down-payments of 25% of the purchase price are a strong tool to control default and to cope with the high depreciation of the asset during the first year.

II.5. Measures to Reduce Lease-payment Risks and to Induce Timely Payments

1.47 Measures to reduce lease payment risks have already been described and include:

- collaboration with NGOs/projects which provide technical assistance and capacity building
- strict client eligibility criteria

⁹ Some importers and dealers of agricultural machinery and equipment recycle used machines and offer them at prices between US\$5–7,000. Different payments of up to two years are also offered to clients who have registered property in one of the major cities.

- leasing of new equipment to reduce the risk of technical breakdown
- contracts with equipment suppliers which include guarantees against breakdown, technical training and after-sales services
- in kind delivery avoids the risk of deviation of funds.

1.48 In addition, the following measures aimed at addressing moral hazard risks are applied:

- down payments of up to 25% of the new value of the equipment compensates the large depreciation during the first year
- close supervision through the carrying out of inspection visits on a regular basis by ANED loan officers
- charging penalty interest rates (1% monthly) in case of loan default
- social pressure is exerted e.g. through the Chairman of a Dairy Association or by public announcements on the local radio of the names of defaulters
- defaulting clients receive a reminder letter and after 60 days of non-payment the leased item is repossessed or juridical measures are taken against lessee.

II.6. Performance of the Programme to Date

1.49 The default rate of 8% is in fact below the average loan arrears rate of ANED (see Table 1). This shows that up to now these measures have proved to be sufficient to contain the risk of non-payment of lease contracts at reasonable levels. There have been only two cases of serious defaults where pumps have been taken away from the lessees and sold: The strict legal actions taken may have discouraged other potential defaulters. Repossession was only necessary in one case of poor management of a tractor.

1.50 Although the second-hand market for used equipment is limited in Bolivia, ANED faces a high demand for leasing. Therefore defaulting lessees can easily be substituted by new applicants. Insurance coverage has been considered too expensive in relation to the default risk.

1.51 However, the overall low default rate is somewhat biased towards tractors which dominate the portfolio. Therefore, the recent payment problems for irrigation pumps mentioned earlier are not properly reflected. In fact, these problems do not originate in leasing but result from the difficulties of expanding the leasing programme in the face of limited markets for increased perishable produce. This illustrates the need for a constant monitoring of the market potential and trends at the time of appraisal and afterwards, even in case of minor irrigation equipment, to ensure economic and financial viability.

II.7. Future Plans of ANED

1.52 Currently, ANED seeks to strengthen existing operations and to broaden the range of leasing arrangements by enlarging the number of machinery suppliers, and better diversifying its financial risk. Two options are considered:

- Deferred payments to suppliers, based on their performance of after-sales services and the occurrence of lease payment problems due to technical breakdown of the machinery.¹⁰ In case of technical breakdown the supplier has to financially compensate ANED.
- The establishment of a specialised leasing company. The advantages of specialisation lie in:
 - Better technical knowledge of specific types of equipment with regard to their technical and commercial conditions
 - Better quality and higher efficiency of appraisal and supervision services, because specifically trained staff concentrate on rural leasing operations
 - Eventually, importation of the most appropriate equipment for the particular needs of the farmers target clientele and which often is not available in Bolivia.¹¹

III. Challenges

1.53 The main advantages and challenges as compared to term-lending are summarised in Table 4 below:

Table 4: Bolivia, ANED – Advantages and Challenges of Leasing		
	Advantages	Challenges
ANED	<ul style="list-style-type: none"> • in case of default easier recovery and faster re-possession of leased assets • lower transaction costs (no collateral) • zero risk of diversion of funds 	<ul style="list-style-type: none"> • Lack of diversification of leasing portfolio • small second-hand market for used equipment • no full coverage of default risks, because of high supervision costs
Client	<ul style="list-style-type: none"> • easily accessible medium-term finance instrument for investments • lower transaction costs, because of no collateral requirements • better after-sales services for equipment 	<ul style="list-style-type: none"> • strict eligibility criteria (down-payment, previous working experience) • high financial costs of new equipment

1.54 Leasing is an innovative way to offer medium-term finance to a clientele of emerging commercial small farmers and rural entrepreneurs who are not served by mainstream financial institutions. Despite the successes so far, the micro-leasing programme of ANED faces also challenges which are discussed below:

- **Outreach:** Despite the rapid expansion of the leasing portfolio since 1997, the small farmer coverage is still low. The potential to increase outreach is constrained by the limited number of farmers who meet the strict eligibility criteria, especially for farm machinery like tractors. Although the emphasis on prior working

¹⁰ Each time an after-sales visit is made, the farmer should sign a receipt indicating the work carried out and the condition of the machinery in question. These receipts should assist both parties in case a dispute arises.

¹¹ Traditionally, the imported farm machinery suits the needs of medium and large farmers which make up the bulk of demand for these items.

experience is prudent from a financial institution's point of view, ANED may have to invest more in training and capacity building. This could be achieved through a broadening of its cooperation with NGOs, development projects and suppliers.

A second major constraint is the down payment of US\$5–7,000 in the case of tractors, which may prevent even experienced farmers from having access to lease finance. A combination of leasing with special savings products might help to lower these entry barriers, but ANED as a non-regulated financial institution is not allowed to mobilise savings. Alternatively, insurance coverage could reduce the required amount of down-payment. Larger number of leasing contracts would enable ANED to negotiate better conditions for acquisition prices and after-sales service with the suppliers.

- **Diversification:** There are undoubtedly good reasons for focusing initially on a few selected assets and regions to gain the necessary experience. However, such a portfolio concentration implies high financial risks. The use of leaseback contracts may provide some scope for financing assets such as buildings or tree crops.
- **Supervision/Inspection:** Leasing removes the collateral constraints of conventional term-lending and the problem of asset re-possession in case of default. Nevertheless, there is no automatic protection against the risk of accelerated depreciation of the leased item through improper use, maintenance or loss. Therefore frequent inspections visits are necessary, if proper insurance cover is not in place. According to ANED, these problems have not yet emerged on a wide scale as to justify seeking insurance coverage at the current high premium levels. This may be partly attributable to the high down payments, the careful selection of clients, and the limited outreach of the leasing programme. With an increasing number volume of leasing contracts, supervision will become more difficult and costly. On the other hand, the expansion of leasing might also encourage the development of more suitable and competitive insurance products.
- **Sustainability:** Because of the limited size and the comparatively high starting costs micro-leasing programme require relatively large margins. Up to now, the programme has been funded at highly concessionary terms by the Inter American Foundation. This has allowed ANED to cover the high initial costs of developing and introducing a new financial product while charging comparatively low interest rates to clients. Currently, it is difficult to get a break down of the costs of the leasing programme because the leasing operations are carried out by the loan officers of ANED together with the other lending activities. To reap the benefits of increased specialisation and outreach, and economies of scale, access to a larger range of funds is necessary. In the medium-term ANED will have to cut down its operational costs to be able to attract higher costs, commercial sources of funds. On the other hand better access to long-term funds at reasonable costs would facilitate the mainstreaming of leasing, allow arrangements economies of scale and provide further scope for the development of leaseback. Donors could play an important role in further developing and mainstreaming of micro-leasing into commercially viable operations.

CASE STUDY 2: CAJA LOS ANDES

I. Background

1.55 *Caja Los Andes* (CLA) started as a financial NGO, called ProCredito, in 1992. In 1995, it was the first micro-finance institution that received a license from the Superintendency of Banks and was allowed to operate as a Private Financial Fund. Since then its loan portfolio has grown vigorously and it has a good portfolio quality and operational efficiency. CLA is often quoted as a benchmark for other Bolivian micro-finance institutions.

1.56 Towards the end of the last decade, urban micro-finance markets in Bolivia became increasingly saturated. Especially, the aggressive entry of consumer finance companies contributed to over-borrowing by many urban micro-finance clients and a corresponding decline in loan portfolio quality of many MFIs. On the contrary, rural areas continued to be under serviced by formal financial institutions. CLA started to direct its attention to rural areas as a strategy to diversify its loan portfolio risks and to develop a profitable rural clientele base with relatively low degrees of competition.

II. Development of a Rural Loan Portfolio

1.57 CLA started its rural lending operation in 1995 with the opening of a rural branch office in Punata, near Cochabamba. Table 5 illustrates the expansion of both the urban and rural loan portfolios. However, rural loans were first provided to rural SMEs outside the agricultural sector, which required little modifications in the urban credit technology. The rural loan portfolio gained momentum since 1998, when the difficulties in the urban micro-finance markets became more acute. Reaching out to farmers required however, the development of a specific lending technology, recruitment and training of new staff with an agricultural background and adaptations in the lending products to the specific characteristics of rural clients.

Table 5: Bolivia, Caja los Andes – Rural and Urban Loan Portfolio, 1995–2002

Item	1996	1997	1998	1999	2000	2001	2002
Total no. of loans	23,905	29,545	34,838	39,335	44,180	46,605	51,073
Rural loans	906	1,285	3,312	5,817	7,770	7,136	7,833
Total gross portfolio o/s, US\$	11,899,908	20,459,135	28,613,915	35,852,453	46,759,853	52,633,850	64,219,993
Rural gross portfolio o/s, US\$	386,586	740,027	254,742	5,073,053	7,103,379	6,337,044	6,132,715
% Rural	3.2%	3.6%	9%	14.1%	17.9%	12.%	10%

1.58 As can be seen in the table above, the rural lending peaked in June 2001, with outstanding of US\$8m, amounting to about 20% of the total outstanding loan portfolio. The following contraction of the loan portfolio and the deterioration of the portfolio quality were due to the prolonged economic and political crisis which was exacerbated in 2002 during the election campaign. Moreover, debtor initiatives emerged which were lobbying for loan forgiveness programmes. Many lending institutions feared state interventions in financial markets, particularly in rural areas.

1.59 Rural and agricultural lending is mainly administered from branches which are located in towns and larger villages and agricultural lending is concentrated in certain favourable regions to contain costs. Of the 29 existing branches, nine carry out both rural and urban lending activities, the main ones being located in Obrajes (in La Paz), Punata (near Cochabamba) and Tarija. None of these branches are exclusively dealing with agricultural clients, but they service also urban clients and clients engaged both in rural and urban activities (agriculture, services and trade). This contributes to the strategy of CLA/portfolio to diversify its loan.

III. Financial Products

1.60 CLA provides loans to urban and rural micro-entrepreneurs, gold-based pawn loans, savings accounts, time deposits and housing loans. Its total outstanding net loan portfolio at the end of 2002 was US\$63.4m with an average loan size of US\$1,766 and a total of 41,223 borrowers. Total deposits amounted to US\$37.4m spread over 29,701 savings deposit accounts.

1.61 The MIS does not classify loans according to loan purposes and terms so that detailed information regarding the purpose and term structure of rural loans is not available. However, information obtained from management suggests that approximately 69% of the rural loans are used for agricultural purposes. The proportion of agricultural term loans is increasing. In Cochabamba, agricultural loans constitute one third of the total loans and have a maturity structure of between one and five years. The most common financed investments are land (up to US\$30,000), tractors (up to US\$30,000), trucks (up to US\$25,000), cowsheds (up to US\$3,000) and milking equipment (up to US\$4,000). The loan ceiling is US\$200,000.

1.62 Loan size distribution is a fair proxy for the term structure of the loan portfolio. Loans above US\$5,000 are likely to have maturity structures of one to five years. Table 6 shows the distribution of CLA loans accounts by size.

Amount (US\$)	Number of loans	Share in% of loans
Less than 500	24,532	48.03
501–1,000	9,783	19.15
1,001–2,000	7,593	14.87
2,001–5,000	6,379	12.49
5,001–10,000	1,918	3.76
10,001–20,000	481	0.94
More than 20,000	387	0.76
Total	51,073	100,0

IV. Interest Rates and Sources of Funds

1.63 Agricultural term loan interest rates range between 1.09 to 2.5% per month for loans denominated in US\$, and 3.0% to 3.5% per month for loans denominated in national currency. Rates depend on loan size (larger loans carry lower rates, reflecting lower administrative costs per dollar lent), collateral provided and client credit history. Preferential client status, attained by borrowers who have no history of default (verified by credit bureaux), no past due dates

exceeding two days and at least one year of good track record, entitles them to borrow at the lowest prevailing interest rate.

1.64 CLA's total liabilities stand at approximately US\$61,04m, funded by deposits, borrowings from international institutions, national Apex institutions, and national financial institutions. The maturity structure of available funds restricts term loans to a maximum of five years and up to ten after special management authorisation.

V. Lending Technology

1.65 The developed rural lending technology has emerged by adapting the successful urban micro-lending technology. Since agriculture plays a major role in the rural economy and commerce, manufacturing and other activities are often linked to agriculture, the lending technology had to respond to specific features of income seasonality and need for larger amounts and longer repayment periods. CLA has received assistance from GTZ through the German consulting firm IPC in developing their rural lending technology.

1.66 The key principles of the CLA rural lending technology are:

- Individualised and customised loan products
- Minimising transaction costs both for rural clients and loan officers
- Building up a long-term relationship with the clients
- Fast loan processing
- Charging lending interest rates that cover all costs.

1.67 Loan amounts and repayment modalities are tailored to the needs and possibilities of each individual client. Loan application and disbursement requires only two visits of the client to the branch office: One for filling in the application form and bringing the supporting documentation and the other one for the disbursement of the loan. Moreover, a loan appraisal visit of the loan officer is required. Application forms and procedures are streamlined and simplified as much as possible. Efficient procedures and the adaptation of loan terms and repayment conditions to client needs are important pre-requisites for establishing a long-term relationships with clients. Though no formal graduation process is applied, the possibility to eventually receive larger loan amounts with longer repayment periods creates additional incentives to farmers to honour their repayment obligations.

1.68 ***Selection of borrowers:*** Farmers applying for loans to CLA should have:

- a diversified income structure with at least one main profitable agricultural activity;
- established markets for their main agricultural outputs.

1.69 In addition to these requirements, access to irrigation facilities as well as the existence of good rural infrastructure are valued positively.

1.70 There is no specific client graduation policy for accessing term loans. Applications of repeat borrowers, however, are faster processes.

1.71 **Collateral:** The lack of registered land titles reduces the number of people who have access to term loans. CLA addresses this constraint by adopting a maximum flexibility in collateral requirements. For loans less than US\$7,500, pledging of land and other rural assets is accepted. Non-registered land titles are deposited with CLA. In this case, the loan contract stipulates that pledged assets will become the property of CLA in case the borrower defaults. Although legal foreclosure normally requires lengthy procedures, CLA emphasizes the psychological impact of such arrangements. Deposited land titles can constitute a maximum of 50% of the total collateral. Loans secured in this way are classified as micro-loans by the Superintendence of Banks. Larger loans above US\$7,500 require real estate mortgage and are classified as commercial loans.

1.72 **Loan appraisal:** Loan officers have been trained in appraising rural and agricultural loan applications. Loan appraisal is based on the following assessment criteria:

- **willingness to repay:** This is verified by credit bureaux linked to the Superintendency of Banks. Due loans with other financial institutions exclude prospective borrowers from lending of CLA. Key informants at village level, preferably existing borrowers of CLA, are also contacted for further information and the loan officer assesses the credit worthiness of prospective clients during his appraisal visit;
- **repayment capacity:** This is assessed during the appraisal visit. The loan officer drafts a balance sheet that estimates the current market value of all assets and liabilities of the applicant and incorporates the results of the credit history investigation. The maximum loan amount cannot exceed the net asset value of the farm household. Monthly cash-flow schedules are drawn-up to determine the loan term structure required to finance the specific investment. Existing farm household cash flow and investment costs, excluding incremental income arising from the investment are examined and the resulting liquidity determines loan amount, disbursements, loan duration and repayment schedule. The incremental income is only considered in cases when the investment serves to intensify a production in already existing activity of a farmer. Exclusion of incremental income resulting from the investment limits the potential of CLA to finance term investments. However, this approach enables the institution to contain the related high risks and costs involved. In addition, time and costs involved in preparing feasibility studies and estimating investment risks can be saved. The same applies to supervision of loans. Borrowers can use other income sources, as long as they fulfil their repayment obligations.

1.73 **Assessment of risks:** Loan officers with agricultural backgrounds and knowledge of local conditions estimate production and marketing risks, and take into account risks at household level resulting from increased expenditures for instance, due to illness of family members and other unforeseen events;

1.74 **Loan processing and approval:** CLA puts much emphasis on fast loan appraisal and processing. Loan applicants are visited to gather information on farm household assets and liabilities and to make a cash flow analysis. The visit normally takes between 30 minutes and one hour. Loan appraisal and processing are facilitated by the use of special software which calculates

monthly cash flows and balance sheets. The total loan processing and approval period normally takes three to seven days. For loans above US\$7,500, more time may be needed, if the farmer has to register his land.

1.75 Decentralisation of loan approval increases its efficiency. The bulk of the loans up to US\$5,000 can be approved by the branch manager. Larger loans up to US\$18,000 need to be approved by the regional director and only the loans above this amount need endorsement by the national director of credit operations. Even in the latter case, approval is generally done within one week.

1.76 ***Additional measures to minimise credit risk:*** In the case of term loans, borrowers must contribute at least 20% of the total investment costs. Risks are further reduced by only financing activities in which farmers have already working experience. Start-up finance for new activities or farm diversification is considered too risky. In the Cochabamba area, the preferred clients are dairy and potato producers, who use proven technologies and have established markets. Dairy producers receive also regular cash income from the selling of milk.

VI. The Importance of the Loan Officer

1.77 ***Recruitment and training:*** The main reason for success is embodied in the experienced loan officers who are responsible for the lending procedures from the first contact with the client until the full repayment of the loan. Due to the individual lending technologies and the personalised design of the loan contract, the skills, experiences and motivation of the loan officer are crucial for the success of the lending operation and thus for the quality of the loan portfolio. CLA therefore invests considerable time and resources in selection and training of loans officers for the rural loan portfolio. Moreover, it provides incentives to maximize the profitability of loan officers as well as their willingness to remain with the institution.

1.78 CLA recruits mainly young graduates, of which all have an agricultural degree. Moreover, rural loan officers must either be native from a region (most cases) or should at least have lived there for a minimum period of time. This ensures that loan officers understand the economic and farming problems of the region and as well as the specific features of the local farming population. Experience in banking and financial analysis is only a secondary criteria and is strengthened by an intensive training programme followed by several months of “on the job-training” working with an experienced loan officer in a branch.

1.79 ***Staff incentive systems:*** Since the human skills of the loan officers are one of the most important assets of CLA, the institution makes efforts to maintain and increase their value. One important means is a remuneration system which provides incentives increasing the efficiency of the lending operations. CLA pays a competitive base salary, plus a bonus. In effect, a significant part of loan officers salaries (up to 100% of the base salary) are variable depending on their productivity (number and amount of loans disbursed) as well as on the quality of their portfolios (arrears rate). Loan officers have an incentive to include a certain percentage of term loans into “their” portfolios because of the larger loan amounts involved. At the same time they must carefully appraise and supervise these loans as the default on one long-term loan may have significant consequences for their salary.

VII. Action on Default and Portfolio Quality

1.80 In addition to providing preferential interest rates to borrowers with good repayment performance, default is discouraged by the use of penalty rates (regulated by the Superintendency of Banks). Initially, loan officers will visit a client to find out the reason for default. The officer may then visit the client accompanied by the local police or public announcements may be made on the radio. CLA seeks to use social and psychological factors such as the borrower reputation within his community and with other FIs to encourage him to repay the loan. If default continues, legal action is taken as a last resort to foreclose on the assets specified as collateral in the loan contract. According to CLA, this has only been necessary in few cases.

1.81 CLA's loan portfolio has proved to be more resilient to the economic crisis and social insecurity than that of other FIs, with a total past due ratio of 9.55% at the end of 2002. The rural past due rate in recent years has been higher than the urban one.

Table 7: Bolivia, Caja los Andes – Past Due Rates of the Rural Loan Portfolio (by % of Clients)				
Date	1–7 days	8–30	More than 30 days	Total
12/96	1.02	1.33	0.25	2.60
12/97	0.42	0.79	0.76	1.97
12/98	0.67	0.85	1.05	2.57
12/99	0.11	0.93	2.04	3.08
12/00	0.10	2.05	4.77	6.93
12/01	0.10	1.20	8.18	9.48
12/02	0.01	1.37	8.17	9.55

VIII. Conclusions and Lessons Learned

1.82 Despite the low proportion of agricultural term loans the overall portfolio of CLA, important lessons can be learned by microfinance institutions that wish to incorporate rural and agricultural lending in their portfolio. CLA uses its normal loan appraisal and client selection procedures. The following factors lie behind the success of the rural lending strategy:

- Careful diversification into and expansion of rural lending. After pilot testing of an agricultural lending technology, the share of agricultural loans, including term loans, has been gradually increased;
- Identification of regions with relatively low risks and a high potential and select farmers who have good entrepreneurial qualities;
- Adaptation of the urban micro lending technology to the specific farm household cash-flow pattern, which is characterised by income seasonality and takes into account the high risks of agricultural activities;
- A conservative lending approach and prudent provisioning of losses are followed to minimize risks and ensure sustainability;
- Considerable investments have been made in recruitment and training of specialised rural loan officers who have an agricultural background. Thus the

quality of the client selection, loan appraisal, structuring of terms and repayment schemes has been improved.

- Use of decentralised decision-making and staff incentive systems by remunerating rural loan officer in accordance with their performance.

1.83 The experience of CLA suggests that successful agricultural term-lending can be developed as part of an overall strategy to expand rural lending which aims at diversifying the loan portfolio risks and creates new markets. Moreover, CLA has shown that under certain conditions lending even to small farmers can be profitable. If risks can be assessed and managed through the use of an appropriate lending technology, term lending is feasible and constitutes a crucial element in a long term relationship with clients.

CASE STUDY 3: AGROCAPITAL

I. Background

1.84 Agrocapital was established in 1992 by USAID to provide working and investment capital to qualified small and medium-sized farmers and rural entrepreneurs. It was intended to fill the gap in rural finance following the closure of the state owned *Banco Agrícola* and in view of the urban bias of mainstream financial institutions. Seventy-five percent of the total loan portfolio is administered by five branches located in the tropical lowlands around Santa Cruz and the remaining twenty five percent are overseen by the head office in Cochabamba and El Alto near La Paz.

II. Financial Products

1.85 Agrocapital provides short and medium-term loans to qualified individual farmers. Loans are categorized according to the classification of the Superintendency of Banks into two categories:

- **Commercial loans.** Their size can be up to a maximum value of US\$300,000, although they range mainly from US\$5,000 to 50,000. The maximum loan duration is five years. The average loan size is approximately US\$10,000. Commercial loans must be secured by real estate collateral.
- **Micro-loans.** These loans are used to diversify the portfolio and to increase the outreach. They require a much less sophisticated loan appraisal and do not need collateral. The maximum loan size is US\$10,000 and the repayment period is up to two years. Loans less than US\$5,000 can be secured with personal guarantees and by pledging non-registered assets. Specially trained loan officers have been recruited to supervise micro-loan products, which are administered separately from commercial loans.

1.86 Table 8 illustrates the expansion of micro-loans and the stagnation of the commercial loan portfolio since 1997. It also shows the increase of the average size of the micro-loans. The latter was precipitated by the economic crisis in Bolivia, which reduced demand for term loans.

Table 8: Bolivia, Agrocapital – Evolution of Portfolio

Item	1996	1997	1998	1999
Commercial loans (US\$)	7,946,298	8,624,966	8,029,727	8,631,022
Micro-loans (US\$)	1,040,942	1,989,780	3,706,092	4,560,260
No. of o/s commercial loans	793	857	773	810
No. of o/s micro-loans	3,187	3,171	3,663	3,714
Average size of commercial loans (US\$)	10,021	10,064	10,388	10,656
Average size of micro-loans (US\$)	329	627	1,012	1,228

1.87 Sixty-three percent of the outstanding loan amount has a maturity structure of between two and five years, which underlines a continuing focus on the provision of term loans

for investments. Approximately, two-thirds of the total outstanding loans are secured by real estate mortgage and one-third by personal guarantees (pledging of land and other rural assets). Although micro-loans can be used to finance small investments, most term loans are classified as commercial.

1.88 Information obtained from management and loan officers suggests that in terms of numbers of loans, 28% are disbursed for agricultural activities, mainly agricultural production and agro-industry; 60% for trading activities; 8% for services and 3% for housing and other activities. In terms of loan value, however, 54% relate to is for agricultural activities and only 35% are for trading, suggesting that agricultural loans are, on average, of a larger size.

1.89 In the Cochabamba area most loans are for milk and vegetable production and irrigation, while in Santa Cruz they are mainly for farm machinery, trucks and agro-processing.

III. Interest Rates

1.90 Interest rates for commercial loans range from 15–23% p.a., according to the purpose and amount of the loan and the quality of the loan collateral. The average rate applied in 2000 was 18.6%. A risk premium of 3% is added for agricultural loans. In the case of larger loans the interest rate can be reduced by 2–3%. Interest rates for micro-loans vary from 27–42% in national currency and 21% in US\$, while a 6% premium is applied to agricultural loans.

IV. Sources of Funds

1.91 The capital structure of Agrocapital is characterised by its strong equity position, amounting to almost half of the total liabilities. Up to the end of 1995 the portfolio was mainly funded by donor funds. However, by the end of 1999, 72% of the external long term funds were borrowed at commercial rates, 12% were donor funds, 9% were concessional subordinated loans from the Corporación Andina de Fomento (CAF), and 5% were granted by BID at concessionary interest rates. The remaining 3% were funds administered on behalf of other agencies for specific lending purposes. The maximum duration of borrowed funds is five years.

V. Lending Technology

1.92 Agrocapital emphasises the profitability of the proposed lending activity rather than that it insists on full coverage of all risks by the loan collateral. The decline in real estate prices during the economic crisis has underscored the importance of this approach.

1.93 ***Selection of borrowers:*** The following eligibility criteria are used:

- a sound credit history. Any of past loan default must be proven to have been for reasons beyond the responsibility of the borrower. The client should have at least three years working experience in the activity to be financed and only in exceptional cases start-up finance will be provided;
- the applicant must prove that he has identified output market outlets.
- the farms should have reliable irrigation;
- farm households should have diversified income sources;

- the value of farm household combined assets should amount to at least US\$20,000.

1.94 Agrocapital has used the old credit files of BAB to identify successful borrowers and it has employed some loan officers from the former agricultural development bank. It targets regions characterised by good agro–ecological potential, rural infrastructure and with a reasonable proximity to markets.

1.95 **Collateral:** provision of real estate collateral is essential in order to receive commercial loans at preferential interest rates and Agrocapital accepts rural property as mortgage. Micro–loans which exceed US\$5,000 require also real estate mortgage. Titles of non–registered land or other rural assets are accepted as guarantee for smaller loans. Borrowers must contribute at least 20% of the total investment costs, which can be provided in cash or kind, to reduce default risks.

1.96 **Loan appraisal:** Agrocapital has adjusted and standardised its appraisal procedures in response to the economic crisis. The application form requires the prospective client to indicate the loan purpose and the collateral to be provided. The loan officer then visits the client to inspect the collateral, to assess the technical and agricultural feasibility of the project and the management capability of the client. In addition, a project–based cash–flow analysis of the client farm household is drawn–up to assess the various income sources for loan repayment and to estimate the incremental net income derived from the investment proposed. The loan officer also assesses the character and the skills of the client with respect to farm production, marketing, management and handling of equipment.

1.97 **Loan disbursements:** Disbursements are normally effected in cash at the branch office. In case of machinery and equipment, loan disbursements are made directly to the supplier in order to avoid the risk of diversion of funds.

1.98 **Loan repayment:** The number of instalments and frequency of loan repayments are tailored to the clients' cash flow. Normally, repayment is required twice a year in accordance with the harvests in Santa Cruz, but variations in the amounts and frequency are possible according to the cash flow. The borrowers can prepay part or all of an outstanding loan at any time. If a client lives far away from the branch office, then he can also pay the instalments directly to the loan officer who will give him a receipt.

1.99 **Loan monitoring:** Borrowers are normally visited twice a year, especially before harvest time. This enables the loan officer to estimate the expected production and to identify eventual losses. In case of loan arrears monitoring and supervision visits are intensified.

VI. Action in Case of Loan Default

1.100 One month prior to a payment instalment falls due, the borrower receives a written notice. Once the due date has passed, administrative measures such as penalty interest rates are applied. When the instalment is more than 90 days overdue, Agrocapital initiates legal action.

1.101 Repayment problems in the Santa Cruz area are due to a significant part to the indebtedness of farmers to multiple lenders. Other than financial institutions, farmers also borrow from equipment and input suppliers and obtain advances from agro–processing enterprises, which

are in a much better position to recover their loans by deducting loan repayments from farmer's crop sales. The recent economic crisis and corresponding over-indebtedness of all types of farms illustrates the lack of information on informal credit relations and the need for formal financial institutions to improve exchange of credit information, for instance through credit bureaux for example.

VII. Institutional Viability

1.102 Table 9 indicates that commercial loans amount to around 75% of the total portfolio. Until 1998 the loan arrear or past due rate was approximately 2% and only US\$20,000 were written off. However, by the end of March 2001 loan arrears stood at an average of 14%, forcing Agrocapital to adjust its operations. Agricultural loans did not compare negatively with other lending activities, but the micro-loan portfolio was particularly affected by the economic crisis.

1.103 The crisis indicated the need for farmers to have sufficient production potential and financial strength and resilience in order to be able to meet unforeseen unfavourable conditions. Agrocapital now extends micro-lending activities only to farmers who meet these requirements. It will focus more on commercial lending to medium-sizes farmers who have real estate collateral.

Table 9: Bolivia, Agrocapital – Commercial Loans Portfolio, End of March 2001												
Item	Production		Trade		Services		Housing		Consumption		Total	
	Total	Past due	Total	Past Due	Total	Past due	Total	Past due	Total	Past Due	Total	Past Due
O/s loans (000's US\$)	4,998	798	2,503	300	1,025	203	235		82		8,945	1,121
Past due%		15.9		12		19.8						12.5
No. of accounts	476	94	196	32	93	13	24		31		820	139

1.104 According to Agrocapital, the high repayment rate for housing loans reflects the high priority assigned to these loans by the borrowers. This becomes apparent during crisis periods when clients default on housing loans only as a last resort. The 100% repayment rate for consumption loans is explained by the fact that these loans have only been granted to Agrocapital employees and repayments are deducted directly from their wages.

1.105 To standardise and increase the efficiency of commercial lending, Agrocapital has employed a credit manager from a commercial bank and has developed a new credit manual. The lending operations have been intensified in the Santa Cruz region, while, in Cochabamba and the lower inter-Andean valley where small-scale agriculture predominates, two or three branches have been closed in order to cut down fixed costs.

1.106 The Apex body, FONDESIF, has responded to the economic crisis by refinancing the purchase of bad loan portfolios from farm machinery supply lenders by four financial institutions. Agrocapital participates in this programme and has bought outstanding loans from equipment suppliers to good farmer clients.

OVERALL CONCLUSIONS FOR BOLIVIA

1.107 The Bolivian case studies have shown that the overriding constraints in the provision of term loans to agriculture are the lack of suitable collateral, inadequate lending technologies (especially loan appraisal skills) and the shortage and high cost of longer-term funds.

I. Different Responses to Constraints

1.108 *ANED's* micro-leasing programme focuses on dealing in an appropriate and flexible way with collateral constraints. Its main challenges are how to reduce costs, increase outreach and mobilise new sources of funds.

1.109 The experience of *Caja Los Andes* suggests that sustainable agricultural term-lending can be developed as part of an overall strategy towards rural lending. CLA has a fairly diversified portfolio across regions and economic sectors thus balancing the loan portfolio risks, but it confines term loans to better-off farmers with collateral.

1.110 *Agrocapital* has opted to specialise in lending to agriculture and other rural based activities. Thus, it has accumulated a considerable knowledge of the agricultural sector and developed comprehensive loan appraisal procedures. However, the concentration of the loan portfolio on high risk activities in rural areas combined with the high proportion of term loans, exposes the institution to higher risks. The vulnerability of the loan portfolio has become apparent during the recent economic crisis.

II. Lending Technology

1.111 Agrocapital and CLA have had differing experiences with lending to small farmers. Agrocapital has suffered from high losses on small loans during the recent economic crisis, which has forced the institution to withdraw from this type of lending. On the other hand CLA experienced lower agricultural loan losses (both in absolute terms and relative to its urban portfolio) and keeps expanding its agricultural loans. This would suggest that the CLA lending technology, which focuses on the existing repayment capacity rather than the expected investment revenues, might be more suitable in providing loans to small farmers.

1.112 Nevertheless, small farmers requiring larger term loans (more than US\$7,500) must provide real estate collateral and have a high loan repayment capacity from their existing cash flow. The micro-leasing technology offered by ANED relaxes two of these constraints by including incremental income from leasing in the appraisal and making additional collateral redundant. Down-payments and previous working experience in handling machinery are, on the other hand, the main constraints for potential farmer clients of ANED.

1.113 In general financing institutions must incur some specific investments if they want to venture into agricultural lending. The most important ones are the recruitment and training of specialised rural loan officers with an agricultural background and the development and pilot-testing of new lending technologies. Lenders should also be more flexible in their collateral requirements by combining different types of collateral and focusing more on sound borrower selection and a cash-flow based loan appraisal.

III. Benefit of Alternatives

1.114 There is no single best approach or type of financial institution for providing term finance to small and medium-sized farmers. From the farmer's perspective, the choice depends on his requirements, capability and resources. A farmer with a registered land title may prefer Agrocapital because of its lower interest rates. For a farmer who doesn't have registered real estate collateral, but who operates a highly profitable small farm, CLA may be the best choice. For a third type of farmer, who doesn't have real estate collateral, but has good entrepreneurial capabilities and previous farm machinery experience, leasing may be a most suitable (perhaps the only) option.

1.115 The track record of these institutions in agricultural term finance is still relatively short and only provide preliminary insights. An ability to broaden the outreach, while remaining financially sustainable, needs still to be proven. To facilitate this process, main external constraints, such as lack of collateral and inadequate sources of funds, need to be resolved.

Table 10: Bolivia – Key Macro–Economic and Statistical Indicators

	1998	1999	2000	2001	2002
Prices and earnings (% change, year to year)					
Consumer prices (average annual%)	7.7	2.2	4.6	1.6	0.9
Exchange rates					
Bolivar/US\$	5.51	5.81	6.18	6.61	7.17

^a All maturities.

Table 11: Bolivia – Agricultural Production from 1996/97 to 2000/01

Production (thousand tonnes)	1996/97	1997/98	1998/99	1999/2000	2000/01
Rice	256	296	180	299	329
Potato	659	591	633	721	717
Maize	498	391	483	489	535
Wheat	169	175	145	102	117
Barley	64	57	60	66	67
Sugarcane	3,928	3,446	3,358	3,696	4,091
Cotton	22	20	14	2	5
Coffee	23	23	23	28	24
Soya	1,040	1,152	801	1,198	1,016
Sunflower	81	115	95	111	150
Sorghum	131	97	148	94	105
Banana	146	151	158	162	168
Plantain	367	357	366	379	385
Grape	24	21	22	24	25
Tomato	91	81	86	98	102
Alfalfa	143	131	140	150	152

Source: Instituto Nacional de Estadística.

Table 12: Bolivia – Bank Credit to the Private Sector, 1998–2002					
<i>Bolivar in million (% annual change)</i>	1998	1999	2000	2001	2002
Commerce	6,045 (-37.7)	5,980 (-1.1)	4,811 (-19.5)	3,997 (-16.9)	3,666 (-8.3)
Manufacturing industry	4,304 (12.5)	4,642 (7.9)	4,524 (-2.5)	4,375 (-3.3)	4,639 (6.0)
Services	10,190 (19.2)	7,528 (-27.6)	5,939 (-21.1)	6,488 (8.6)	5,893 (-8.6)
Construction	1,254 (56.4)	5,815 (363.7)	3,852 (-33.8)	2,406 (-37.5)	2,349 (2.4)
Agriculture & Livestock	2,967 (26.8)	2,666 (10.1)	2,443 (-8.4)	2,048 (-16.2)	2,097 (2.4)
Others, incl. transport, communications & warehousing	707 (41.2)	980 (18.9)	960 (-2.0)	902 (-6.0)	1,205 (33.6)
Mining	433 (15.6)	334 (-22.9)	271 (-18.9)	165 (-39.1)	98 (-40.6)
Total	26,042	27,945	22,916	20,548	19,948
Shares (%)					
Commerce	23.2	21.4	21.0	19.5	18.4
Industry	16.5	16.6	19.7	21.3	23.3
Services	39.1	26.9	26.3	27.8	34.5
Construction	4.8	20.8	16.8	11.7	11.8
Agriculture & livestock	11.4	9.5	10.7	10.0	10.5
Other, incl. transport, communications & warehousing	2.4	2.8	2.7	3.2	6.0
Mining	1.7	1.2	1.2	0.8	0.5

Source: Superintendencia de Bancos y Entidades Financieras, *Boletín Informativo*.

PART 2: CASE STUDY FROM THE PHILIPPINES

BACKGROUND ON AGRICULTURAL CREDIT IN THE PHILIPPINES

I. Main Features of the Agrarian Sector

2.1 Agriculture in the Philippines is characterised by a dualistic agrarian structure composed of large-scale plantation agriculture (banana, pineapple, sugar and mango) and small-scale peasant farming (rice, corn, coconut). Medium-scale commercial farming is absent. The fragmentation of farm holdings has been increased by the implementation of the Comprehensive Agrarian Reform Law (1988) that established a national ceiling of 5 ha per landowner (including the large-scale plantation sector). Due to the low average farm size, levels of mechanization are low and farm work is mainly carried out manually or with simple farm equipment.

2.2 Despite the future issuance of land titles and the conversion of short-term leases into longer-term contracts, scarcity of land titles that can be used for mortgaging continues to be a major constraint to the expansion of the formal financial system into rural areas. The Certificate of Land Ownership Award, issued by the Department of Agrarian Reform, does not constitute a proof of ownership until the long term mortgage loan to finance land transfer has been fully repaid to the Land Bank of the Philippines. Since land reform mortgage loans are to be repaid over a thirty years, land titles can not be used to secure additional loan finance for working or investment capital. This and other structural factors, such as lack of non-financial support services and inadequate rural infrastructure, have kept the agriculture growth rate of the Philippines below that of the average for South East Asia. Table 22 provides an overview on the main crops produced in the Philippines.

II. Agricultural Lenders

2.3 The banking institutions in the Philippines can be classified into four categories: a) Commercial Banks, b) Thrift Banks, c) Rural Banks and d) Specialised Government Banks such as the Development Bank of the Philippines and the Land Bank of the Philippines.¹² Table 13 shows the evolution of the total assets of the different financial institutions.

2.4 The main agricultural lenders to small-scale farmers are the Rural Banks (RBs) and the Land Bank of the Philippines (LBP). Some commercial banks are engaged in financing large-scale plantation agriculture or livestock enterprises such as pig or chicken farms. Due to restrictive collateral requirements, commercial banks loans are inaccessible to most small farmers.

¹² The banks differ in their capital requirements. A commercial bank requires a minimum capital of around PhP1.25 billion, while a rural bank requires PhP3–20 million depending on the head office location. The specialised government banks have agricultural rediscount windows for rural banks and other types of banks.

Table 13: The Philippines – Total Assets 1997–2001 (End of Year)					
<i>(million PhP)</i>	1997	1998	1999	2000	2001
Commercial banks	2,513.0	2,512.2	2,722.3	3,013.6	3,070.5 ^b
Thrift banks	208.4	216.4	223.8	245.8	259.3 ^b
Rural banks	57.6	60.0	61.9	67.4	71.3 ^c
Non–bank financial institutions	610.3	656.8	733.6	738.8	703.0 ^b
Total	3,389.3	3,444.8	3,741.3	4,065.5	n/a

^a Excluding Central Bank. ^b Preliminary. ^c September. Source: EIU, 2003.

II.1. Rural Banks

2.5 Rural Banks were initially established as unit banks and most of them were owned by members of the rural elite. In the 1960s and 1970s, they RBs were used to channel national and international funds from unsecured credit lines to meet the working capital requirements of small farmers. The banking reform in the early 1980s allowed them to open branches, which led to an impressive growth of the rural banking sector to more than 1,200 banks in the 1980s. This growth was fuelled by tax privileges, technical assistance and extensive refinancing by the Central Bank and donors.

2.6 In the second half of the 1980s, the rural banking system underwent a serious crisis, reducing their total number to less than 800. Radical restructuring and a gradual extension of the branch network, precipitated by an earlier crisis in the banking system, have led to a sustained growth of rural banks in the 1990s. Lack of access to government funds forced them to mobilise savings and strengthened their autonomy. Increasing competition led to mergers and diversification towards lending for non–agricultural purposes. Short term loans to traders, urban SMEs and salaried employees dominate the portfolio of most rural banks, whereas term lending is still minimal. Despite the consolidation and the emergence of some larger Rural Banking Groups, most of them continue to be run as small owner–managed unit banks

II.2. Land Bank of the Philippines

2.7 LBP is the main apex institution for the countryside. LBP operates as a wholesale lender providing refinancing facilities to retail banks such as rural banks, commercial banks, and thrift banks. Apart from special lending programmes at concessionary rates, e.g. to support agrarian reform beneficiaries, it lends mainly at market rates. Term loans are mainly extended under the commercial wholesale lending window using funds provided by several World Bank projects.¹³ The main objective of these projects is to enhance the availability of long–term funds to qualified retail lenders in order to encourage them to finance investments in rural areas. Funds to retail banks are priced at market rates and are mainly onlent by commercial banks to medium and large–scale farmers and enterprises which can offer collateral and have financial statements.

2.8 Term loans are also offered under the cooperative lending window for registered cooperatives and to small farmers and agrarian reform beneficiaries under a number of different special lending programmes. Two of them which played a role in scaling up and replicating the “corporative approach” of the Rural Bank of Panabo, will be briefly highlighted.

¹³ Countryside Loan Fund 1 – 3, Agricultural Loan Fund.

Box 1: The Philippines – Different Types of Farmer Clients According to Income Sources and their Demand for Financial Services

Term lending:

The TODO UNLAD-programme aims at fostering the participation of small farmers and land reform beneficiaries in market oriented agriculture through promoting vertical integration between production and agribusiness. It does so by coordinating special lending programmes which are offered separately through different lending windows to farmers, agroindustry and local governments in order to create synergies between the lending activities and enhance their impact. The participation of the local government is related to investments in infrastructure. The rice processing and marketing co-operative initiated by Network Bank also received from the TODO UNLAD programme working and investment capital.

Equity finance:

Under the ACCESS-programme, introduced in 1999, LBP makes equity investments in joint ventures formed by farmer cooperatives and private agribusiness investors. Land Bank equity participation is intended to trigger off private investments in neglected areas with high potential and is to be divested according to a pre-defined exit strategy. Agribusiness investors are supposed to contribute management expertise and specific subsector knowledge. Land Bank is bound to divest its share of a maximum of 35% in favour of the farmer cooperative guaranteeing a significant equity stake. The ACCESS programme has some similarities with the corporative approach developed by Rural Bank of Panabo, and is currently used for in replications.

II.3. The Informal Lenders

2.9 For short-term loans, either for production or consumption or emergency needs, informal moneylenders are the first option and often they are the only option open to farmers. Payment is in-kind and there is no collateral required. Established local monopsonies and interlinking of credit with input supply and output marketing allow a high loan recovery performance, providing comfortable margins to marketing and processing. However, a serious indebtedness of farmers to these informal money lenders, who are mostly traders-millers, and low levels of competition, weaken the position of the farmers in bargaining for better prices for their produce.

THE CORPORATIVE APPROACH IN SMALL FARMER FINANCING

I. The “Corporative Concept”

2.10 A *corporative* is a hybrid between a private sector corporation and a co-operative and is set up as a joint venture between a bank and farmers. In the case of RBP, it is an integrated rice mill and marketing enterprise, providing all the services that farmers require to produce paddy and process and market the milled rice. Initially, the investor bank is the majority shareholder and business managing partner, but it commits itself to gradual divestment of its shares in favour of the farmers once the latter have gained financial resources and management capabilities.

2.11 Before turning to the description and analysis of the first corporative, a brief overview will be given of the Rural Bank of Panabo and the background of developing the corporative approach. *The Rural Bank of Panabo* (RBP) was established in 1967 with headquarters in Panabo in Southern Mindanao, Philippines. In 2000, the bank employed 67 people and had a net worth of PhP73m (US\$1.46m). In 1996, RBP merged with two other rural banks to form the

Network Rural Banking Group (NRBG). In 2000, NRBG had a total staff of 406 and 39 branches and consolidated total assets of PhP1,476m (US\$29.5m).

2.12 Loans constitute 78% of the total income earned, followed by inter-bank cash transfers (10%) and bank deposits (5%). The majority of loans are for non-agricultural purposes. Salary loans constitute almost 60% of the total loan portfolio, followed by industrial (20%), commercial (11%) and agricultural loans (10%). Deposits constitute 80% of the total liabilities and Land Bank refinance facilities, used for agricultural lending, account for an estimated 8%.

Table 14: The Philippines, RBP – Loan Portfolio

Types of Loan (PhP)	Current	Past due	Under Litigation	Total	Percent of Total
Agricultural	17,913,028	1,757,743	130,401	19,801,172	10.2%
– Supervised ¹⁴	7,999,631	776,868		8,776,499	4.5%
– Non-Supervised	9,913,397	980,875	130,401	11,024,673	5.7%
Non-Agricultural	158,112,679	14,296,359	299,702	172,708,739	89.7%
– Industrial	35,695,405	2,814,993	–	38,510,397	20.0%
– Commercial	19,713,666	1,184,376	125,402	21,023,444	11.0%
– Others	102,703,608	10,296,990	174,300	113,174,898	59.0%
Total Loans	176,025,708	16,054,101	430,103	192,509,912	100.0%
<i>Percent of Total</i>	<i>91.4%</i>	<i>8.3%</i>	<i>0.2%</i>	<i>100.0%</i>	

2.13 RBP/NRBG faces increased competition from other rural banks and commercial banks in non-agricultural lending and savings mobilisation, particularly in lower-risk activities such as salary loans and deposits. In agricultural lending, the main competitors are informal lenders who charge interest rates of as high as 8% per month. Most agricultural term lending is restricted to farmers who have real estate collateral, thereby excluding the majority of farmers in Southern Mindanao. RBP has developed an innovative approach, which combines building-up of capital of farmers in rice processing and marketing enterprises with the provision of financial and non-financial services. This so called “corporative-approach” is the main focus of this case study.

II. Origin of the Concept

2.14 In the early 1970s RBP participated in the Masagana 99 Rice Production Programme, a collateral-free supervised credit programme of the government for small farmers. The experience was traumatic for the bank since almost half of the PhP300,000 credit exposure had to be written off. In 1977, collateral-free loans to new farmers were completely stopped by the bank.

2.15 After the failure of the Masagana Programme, RBP reconsidered lending to groups of small rice farmers in 1980, because of the establishment of the National Irrigation Administration (NIA) and the Philippine Crop Insurance Corporation (PCIC) which addressed two principal reasons for loan default: crop failures due to drought and calamities. The third reason, unwillingness to pay, was perceived to be solvable with rigid supervision and close contacts with the rice farmers.

¹⁴ Loans to farmers who are shareholder in the corporative PAICOP.

2.16 The initial high collection rate encouraged RBP to expand its exposure to more farmer groups. However, loan defaults gradually increased until 1985 when a 4% past-due ratio prevailed. With the Central Bank-imposed 6% maximum interest spread on rediscounting money, 4% default coupled with high supervision costs showed that the bank was not profitable in agriculture lending. A more efficient mechanism for controlling the moral hazard risk as well as of market and price risks had to be found.

2.17 An assessment of the loan repayment problem led to the following observations:

- Farmers without tangible collateral borrow from informal money lenders/traders both for production and for emergency needs. Lack of competition and continuous indebtedness of the farmers through interlinked trade/credit transactions allow traders to pay low produce prices and to charge high interest rates.
- Traders/creditors have good loan collections from farmers simply because they have the facilities to collect in kind. For the same reason, some farmer cooperatives have a good collection performance.
- Main profits are made in processing and marketing of rice and not in lending for production.
- Cooperatives often fail because of internal governance problems and lack of management skills.
- Contract farming arrangements without active farmer participation in returns and decision making, often fail in the long run because of a lack of ownership and commitment by the farmers. Extra-contractual marketing and diversion of inputs for other purposes are a widespread consequence.

III. Why a *Corporative*?

2.18 From the above observations it was concluded that two key factors would be required to allow successful lending to small farmers without requiring tangible collateral:

- ability to collect in kind;
- vertical integration of production, processing and marketing by interlinking input supply, credit and output marketing.

2.19 Investing in a rice mill with facilities for hauling, drying, milling and marketing was perceived as the best way to create the basis for an in-kind loan collection strategy. Additionally, it would reduce other lending risks by ensuring that inputs and essential support services are available in time and the output will be bought at competitive prices. A vertical integration of input supply, transport, milling and marketing combined with the availability of reliable credit services, reduces transaction costs and allows the use of economies of scale in marketing and processing.¹⁵ The increased overall margin would not only guarantee the profitability of the enterprise, but also enable it pay attractive prices for the *palay* (paddy).

2.20 Normally, successful in-kind loan collection requires a single-channel market outlet through a monopsonic market position or as a result specific product characteristics which require

¹⁵ The *corporative* operates hauling trucks, dryers and a mill.

immediate post-harvest handling and processing. In the case of rice milling, none of these conditions apply.¹⁶ Therefore, RBP had to develop a different system, providing clear incentives to strengthen the commitment of the farmers and to avoid side selling, thus evading deductions for loan repayments from sales revenues.

IV. Providing Proper Incentives in a Long-term Partnership

2.21 The “corporative” joint venture model, which leads to increasing equity participation of farmers and the integrated supply of financial and non-financial services, provides the basis for a long-term relationship between farmers and banks. Farmers get reliable access to inputs at competitive prices through the corporative together with access to a range of banking services at low transaction costs. Output marketing at prevailing market prices is also assured by the corporative. Moreover, farmers get additional income and dividends which increase over time. The latter have also an important psychological impact, since it is the clear objective that farmers will become majority shareholders with increased decision making powers, including the option of conversion of the corporate into a cooperative at a later stage.

2.22 The incentives necessary to increase the reliability of the in-kind loan collection have to be weighted carefully against the needs of ensuring stable and professional management of the post-harvest enterprise, especially during the start-up phase. The *corporative* approach ensures sound economic and financial management, while providing tangible incentives to farmers to patronise the corporative which increase over time: RBP’s control of the management of the *corporative* over a considerable period protects the large equity investment made by the bank and overcomes the typical management and governance constraints of coops. On the other hand, the commitment of the bank to gradually divest and the option to completely hand-over the enterprise to the farmers through conversion into a cooperative once farmers have become majority shareholders create a strong sense of ownership and patronage amongst farmers.

V. RBP’s Interest in Establishing Corporatives

RBP’s main motivation for the *corporative* idea was to increase the bankability of small rice farmers, thereby creating a market of viable clientele which they hoped to capture. Long-term partnership with selected farmers based on mutual trust also saves costs, which are incurred in the selection of borrowers and the supervision of loans. The first *corporative*, Panabo Agro-Industrial Corporative (PAICOR), has demonstrated that profitable production lending to smallholders is possible with complementary investment loans and inter-linked credit, marketing and processing arrangements. Loans to farmer shareholders of PAICOR constitute approximately half of the agricultural loans extended by RBP. RBP is now replicating the *corporative* approach as part of its strategy to establish a long-term market for agricultural loans.

¹⁶ Traders achieve this through combined monopsony in local markets for credit, transport, and produce, guaranteed by long-established informal cartels. Moral hazard is additionally controlled by inspecting the fields prior to harvest.

PUTTING THE CONCEPT INTO PRACTICE: THE PANABO AGRO-INDUSTRIAL CORPORATIVE (PAICOR)

I. The Development of the Corporative

2.23 *The initial investment:* PAICOR started in February 1986 on a relatively small-scale but a complete set of facilities. The initial investment comprised of a small rice mill, a truck, two hectares of industrial land and a warehouse with 5,000-bag capacity. The initial capital structure was as follows:

Table 15: The Philippines, PAICOR – Initial Capital Structure (February 1986)

Stock Holder	Number	Authorized	Subscribed	% of total	Paid-up	Unpaid
RB Panabo	1	400	400	40%	400	–
RB Owners	43	150	150	15%	40	110
Farmers	185	450	450	45%	20	430
Totals	229	1,000	1,000	100%	460	540

Amounts in thousand PhP.¹⁷

2.24 The above table shows that:

- RBP subscribed to 40% of total shares, the maximum proportion allowed by the Central Bank for a rural bank investment in a non-financial allied undertaking.
- The individual owners of the rural bank subscribed for an additional 15%, thereby giving majority control (55%) to the rural bank group. This gave the rural bank group the right to have five members in the nine-seat board of directors while farmers had the other four seats. The rural bank group thus controlled the management to protect its investment in PAICOR.
- The 185 rice farmers subscribed to 45% of the shares but only paid a minimum of PhP100 each at the start equivalent to an aggregate investment of only PhP20,000. However, they made the commitment to supplement their unpaid per capita subscription of PhP2,400 at the rate of PhP300 per farmer per harvest until full payment.

2.25 The working capital of around PhP2m was sourced through borrowings from several individual owners of RB Panabo.

2.26 *Expansion:* By September 1990, the total-paid up capital of the 185 farmers had increased by almost PhP300,000¹⁸, indicating strong farmer commitments. To save on interest expenses, the shareholders decided to increase the authorised capital of PAICOR from PhP1m to PhP4m. The capital structure then shifted in favour of the farmers who continued their capital build-up, while the bank waived its right to subscribe to additional shares. The combined share of farmers now stands at 58% of PhP2.6m subscribed shares, while RBP and the rural bank owners shares are down to 31% and 11%, respectively.

¹⁷ Exchange rate June 1986: PhP20.9 = US\$1.

¹⁸ US\$12,000 (exchange rate PhP24.7 = US\$1 in September 1990).

2.27 The steady and profitable operations led also to an expansion of the number of farmer shareholder and therefore of the area under rice production. The initial 185 farmers shareholder who grew 400 ha of rice increased to 285 farmers with 800 ha in 2000. Consequently for PAICOR, the hauling, drying, milling and storage capacity was expanded. Expansion of membership is also on-going by accepting good farmers endorsed by the Land Bank from neighbouring weak cooperatives who no longer can borrow as cooperative members from the Land Bank. In spite of its close connection with RBP, the current PAICOR is not obliged to borrow exclusively from RBP. The working and investment capital requirements of PAICOR in fact are mainly met by the Land Bank which offers more attractive interest rates.¹⁹

2.28 *Conversion into a cooperative:* Along with the changes in the capital structure, PAICOR decided to convert itself into a cooperative. The reasons were the various benefits given to cooperatives by the government such as tax exemption and grants. Besides these benefits, the bank also observed that the farmers have now developed sufficient maturity to continue the business and the management and staff of PAICOR have proven their professionalism. Thus in April 22, 1992, PAICOR as a corporation was dissolved and converted into a co-operative with the new name PAICOR, Panabo Agro-Industrial Co-operative, Inc. The farmers have 7 out of the 11 Board Seats. The equity of RBP of PhP400,000²⁰ was reclassified belonging to a non-voting Associate Member. All professional staff were retained in PAICOR. The "one-man, one-vote" system is applied in all general meetings.

II. Structure and Management

2.29 Initially, the Board of Directors, which met every quarter, was controlled by RBP with 5 Directors against 4 from the farmers. The Manager of RBP was the elected President and Manager. After the conversion into a co-operative, farmers have the majority of the Board seats, but they opted for the continuation of the former management. The Board of Directors is assisted by six committees which are responsible for specific purposes.²¹ The PAICOP treasurer, who is at the same time the general manager of RB Panabo, carries out the regular supervision of all cooperative operations. **Error! Reference source not found.** (page **Error! Bookmark not defined.**) illustrates the organisational structure of PAICOR.

2.30 For day-to-day management there are four full-time employees — an Officer-in-Charge, a Warehouse Supervisor, a Truck Driver and an Accounting Clerk. Contractual seasonal labourers paid on a piece work basis are hired for drying of paddy, moving the inventory and milling.

2.31 Farmers consult amongst themselves prior to the board meetings. There are two levels of consultation. The first takes place at the farmer group level, where individual members forward their concerns and suggestions to the group leader. The second level of consultation is done at monthly meetings of all the group leaders, headed by the farmer-director. The farmer-director consolidates all the concerns and brings these up in the monthly board of directors meeting.

¹⁹ LBP lends investment capital to cooperatives at 14%.

²⁰ US\$16.000 (exchange rate PhP25 = US\$1 in February 1992).

²¹ Membership and Education Committee, Service Improvement Committee, Loan Repayment and Guarantee Fund/Credit Committee, Mortuary Fund System Committee, Audit and Inventory Committee and Election Committee.

III. Services and Products

2.32 PAICOR/PAICOR offer both financial and non-financial services to farmer members.

2.33 Financial services

- *Short-term production loans for paddy* are extended to farmer shareholders in the form of inputs and where possible they are disbursed in kind. The loan term is six months or one rice crop cycle, and the loan carries a 21% interest rate per annum. The maximum loan amount is 12,500 pesos per hectare;
- *Other production loans*: for farming activities and livelihood projects. Repayment of these loans is also charged against the paddy sale proceeds of the farmers;
- *Emergency loans*
- *Rice consumption loans*: Farmers can obtain three sacks of rice on credit each month prior to harvest, repayable at harvest time at 3% interest;
- *Pre-harvest cash advances*: PhP2,000 maximum can be advanced two weeks before harvest repayable upon harvest without interest;
- *Medium-term loans*: extended to farmers who have an established loan track record to purchase farm machinery (repayable within three-years) or land.

Table 16: The Philippines, PAICOR – Aggregate Loan Disbursements and Farmers

Year	PAICOR Working capital	Paddy Production Loans	Farm Equipment Loans	Land Acquisition Loans	Emergency Purposes Loans	Other Loans	Total Loans
1992	1,400	4,361	293	708	36	0	6,798
1993	2,800	4,276	720	0	45	0	7,841
1994	6,800	3,524	240	0	60	80	10,704
1995	6,250	4,153	0	420	75	0	10,898
1996	6,000	3,875	814	0	90	360	11,139
1997	12,900	6,845	330	247	105	0	20,427
1998	10,510	3,714	0	330	0	210	14,764
1999	14,500	6,207	0	0	0	160	20,867
2000	14,800	6,380	0	0	0	144	21,324
Total	75,960	43,337	2,397	1,705	411	954	124,766
% Total Loans	60.9%	34.7%	1.9%	1.4%	0.3%	0.8%	100.0%

Amounts in thousand PhP.

2.34 Non-financial services

- *Input supply*: Certified seeds, fertilisers, and chemicals are delivered as in-kind loans to member farmers;
- *Marketing*: Hauling of the harvested paddy, purchase from farmers at the highest prevailing market price and immediate cash payment upon delivery;
- *Training*: PAICOR provides training in paddy production;

- *Welfare: Life insurance programme and a health and education plan.*

IV. Lending Technology

2.35 ***Selection of farmer shareholders:*** For the success and long-term stability of the *corporative*, a careful screening and selection of the farmer borrowers is crucial. Once a farmer has become a shareholder, he is automatically eligible for getting rice production loans. Thus, RBP applies strict eligibility criteria to new members, who must prove their stability and profitability as farmers and have a good track record as borrowers.

2.36 To become a shareholder and therefore to become eligible for uncollateralized loans farmers must meet the following criteria:

- work on their farm (no absentee owners)
- possess secure land rights for an area are allowed between 1–5 ha
- be resident in the area for at least two years
- have a good credit track record
- farms should be irrigated and not be prone to flooding and calamities.

2.37 Additionally, a farmer must be a member of a farmer group. Although RBP lends directly to the individual farmers, groups are used for screen borrowers and loan applications. This allows RBP to save on transaction costs. Instead of creating new groups, RBP relies mainly on the existing Farmer Irrigation Groups (FIGs) of 10–40 members. The availability of water supply is so assured and additional information on the character and capability of the farmers can easily be obtained.

2.38 ***Loan Collateral.*** Real estate mortgages are only required for production loans required for more than 3 ha and for medium-term loans. Land titles issued under the agrarian reform programme and long-term lease contracts are accepted as collateral for loans up to 3 ha. To become a shareholder of the *corporative* and to be eligible for other loan categories the security of land tenure is the main eligibility criterion.

2.39 ***Loan appraisal.*** Loan applications must be endorsed by the FIG and the *corporative*. For loan purposes other than paddy production, evidence of good farming skills and a sound loan track record are required. As the loan will be repaid through deductions from sale revenues of rice paddy after each harvest, the loan appraisal is based on existing income, mainly from rice production.

2.40 ***Loan Disbursement.*** The farmer opens a special savings account in which his loan will be deposited. Withdrawal requires the counter-signature of the *corporative* officer-in-charge, who in case of fertiliser and agrochemicals loans releases the inputs and lets the farmer sign a withdrawal slip from his/her special savings account. No cash transaction is involved.

2.41 ***Loan Repayment.*** The farmer visits the PAICOR office at least three days prior to harvest to obtain paddy sacks and to indicate the date/time the paddy can be hauled. Following hauling, the gross sales proceeds of the farmer are computed and loans payable to the bank and stipulated equity finance contributions are deducted. The farmer payment takes place through the

use of a withdrawal slip from the PAICOR savings account. A receipt is issued for loans paid and the farmer can receive his money in cash.

2.42 **Risk management:** One percent of the all disbursed loan amount is allocated to a Loan Repayment Guarantee Fund (LRGF). In cases of loan default, the relevant farmer group pays 5% of the overdue principal amount, while the remainder is drawn from the LRGF. Charges and interests due are waived. There is thus an element of joint liability built in the lending methodology. In addition to the internal loan guarantee fund, an insurance premium of 2.5% of the committed loan amount is paid to the Philippines Crop Insurance Company (PCIC) to meet unforeseen crop risks. Additionally, farmers are encouraged to diversify their income earning activities through the extension of loans for different purposes.

2.43 **Actions taken in case of default:** A penalty interest rate of 12% per annum is imposed on late payments. Loan rescheduling is only carried out in unavoidable circumstances. In this case a new loan is extended for the new crop cycle and the old rescheduled loan is amortised over a period of time as agreed upon by the lender and the borrower. In the case of loan default due to mismanagement, the client's farm may be the subject of a temporary take over. An agreement will be made for 2–5 years between the bank, the borrower and a selected farmer who is willing to take over the farm. This exerts a pressure on negligent farmers to pay their loans without handing over their farm and avoids litigation.

V. Profitability of PAICOR

2.44 PAICOR did realise profits and declared dividends and retained profits in the capitalisation fund until early 1998. However, it operated at a loss in 1999 and 2000. Table 17 shows the allocation of net surplus to dividends and patronage refunds during 1992–1998. Since 1999, PAICOR has experienced financial difficulties resulting from operational losses. The main causes were low market prices of rice and poor produce quality due to delays in drying the wet paddy purchased from farmers. Recent investments in mechanical dryers are expected to improve the processing quality and to restore profitability. A second problem is related to the pricing policy for paddy delivered by shareholder farmers, which has made PAICOR vulnerable to price fluctuations between the time of purchase of the paddy until the sales of milled rice. Since 2001, however, the operational losses are diminishing and PAICOR is likely to restore its profitability.

Table 17: The Philippines, PAICOR – Allocation of Net Surplus, 1992–1998

	1992	1993	1994	1995	1996	1997	1998
Net Profit	190	224	433	1400	534	918	754
– Cash Dividend	133	157	303	455	176	303	249
– Stock Dividend	0	0	0	750	283	459	377
Patronage Refund	57	67	130	195	75	156	128
Capital Equity	1,238	1,400	1,548	1,704	2,458	2,850	3,442
<i>Return on investment</i>	<i>19%</i>	<i>20%</i>	<i>35%</i>	<i>103%</i>	<i>27%</i>	<i>40%</i>	<i>27%</i>
Members	274	275	283	272	272	277	277
Average ^(*)	0.69	0.81	1.53	5.15	1.96	3.31	2.72

^(*) Dividend + Patronage per member. Amounts in thousand PhP.

VI. Benefits to the Shareholders

2.45 **Farmer shareholders:** Participating in PAICOR gives a number of benefits to the farmers, which will improve their livelihood:

- increased access to banking services, including medium-term loans;
- higher income through lower interest rates than when borrowing from money lenders;
- better prices for their produce and lower costs for farm inputs;
- reduced produce losses due to post-harvesting handling and processing;
- RBP finances also livelihood projects which provides additional farm income and diversifies risks;
- capital shares earn dividends in excess of normal bank deposits;
- access to essential non-financial support services and training.

2.46 **Benefits for RBP as shareholder:** The Rural Bank of Panabo has the potential to increase its profits through PAICOR/PAICOP as a result of:

- larger loan volume: as indicated in Table 19 below;
- lower financial intermediation costs. Loan recovery through PAICOR reduces supervision costs. One RBP loan officer now supervises the farmers as compared to two previously;
- cash dividend rate: approximately 10%.

2.47 From 1992–2000, the income from PAICOR loans and dividends has increased from PhP793,000 to PhP2,199,000, equivalent to a 177% increase. The interlinked trade/credit experience serves as a lending model for other crops other than rice and the RBP improved its community image.

Table 18: The Philippines, PAICOR – Paddy Production Loans to Farmers, 1978–2000			
Period	Loans Granted	Loans Collected	% Collected
1978–85	6,375	5,341	83.8%
1986–91	14,659	14,638	99.9%
1992–95	16,315	16,303	99.9%
1996	3,875	3,875	100.0%
1997	6,845	6,845	100.0%
1998	3,714		
1999	6,207	5,949	95.8%
2000	6,380	5,034	78.9%
Total	60,658	57,985	95.6% <i>(average)</i>

Amounts in thousand PhP.

Table 19: The Philippines – Income Earned by RBP from PAICOR, 1992–2000

Year	Total Loans Provided	Interest Income from Loans	Dividends	Total PAICOR Income	Total Gross Income from RBP Loans	Income as % of Total Income
1992	6,798	750	42	792	7,870	10%
1993	7,841	856	45	901	11,364	8%
1994	10,704	775	78	854	14,546	6%
1995	10,898	426	277	703	21,503	3%
1996	11,139	1,335	73	1,408	33,965	4%
1997	20,427	1,581	121	1,703	36,629	5%
1998	14,764	1,194	88	1,282	48,184	3%
1999	20,867	2,152	–	2,152	45,639	5%
2000	21,324	2,198	–	2,198	45,893	5%
Total	124,766	11,272	727	11,999	265,593	5%

Amounts in thousand PhP.

RECENT DEVELOPMENTS

2.48 **Replication:** Following the success of PAICOR, NRBG decided to replicate the approach. In 1999, the *Corporative Systems Foundation* was founded as a not-for-profit organisation to support the setting up of new *corporatives*. The four staff members have the following tasks:

- selection of new areas for the establishment of rice mills and identification of potential bank farmer corporatives;
- development, installation and operation of standard systems of management and marketing, shareholder training and further technical development of post-harvest activities;
- investigation of possibility of replication to other crops such as coffee and fodder production.

2.49 Once several *corporatives* have been established, the foundation expects to cover its operating costs by charging fees for its management services. The creation of the Corpo Foundation and the standardisation of procedures for establishing and managing *corporatives* is expected to reduce the dependency on single key persons.

2.50 The changing economic environment and appearance of new actors and mechanisms, such as NRBG and LBP's ACCESS Programme, necessitate some modifications in order to replicate the *corporative* concept. These include:

- **Scale of Operations:** PAICOR started small and expanded over time. However, having gained experience, the bank is now comfortable to invest in a new facility with a paid-up capital of up to PhP20m. The first replication, DASURAICOR, has indeed much better facilities. The financing package for DESAURAICOR is illustrated in details in **Figure 2** (page 65) and summarised below.

- **Capital Structure & Divestment:** Sixty percent of the initial capital will be provided by the three partner banks of NRBG and the remaining 40% by LBP under its ACCESS Programme. Farmers will contribute PhP500 to the capital build-up at each harvest. LBP will first divest its shares in DASURAICOR, followed by the NRBG until the farmers have an aggregated equity of 65% versus 35% of NRBG. This will take approximately 10 years, at which time farmers may opt to convert the corporative into a cooperative.

Table 20: The Philippines – NRBG Investments in DESAURAICOR	
DASURAICOR	Amount (PHP)
Equity (excluding LBP equity of PhP8m)	12,000,000
Working capital loans	16,500,000
Production loans	12,500,000
Total exposure of NRBG	41,000,000 or US\$800,000^(*)

Based on a conversion rate of US\$1 = PhP50.

2.51 **New Pricing Policy:** The unpredictability of output market prices during the previous years has called for a review of the policy of “buying at the highest prevailing market price” from the farmers. This was necessary to ensure that the corporative would not buy at unrealistic-high prices, which could suddenly drop, thereby creating substantial trading losses for the corporative. The new pricing policy is still to buy at highest prevailing market price but up to a maximum price of PhP8/kg of wet paddy regular variety or at a maximum price of PhP8.50/kg of wet paddy special variety. Beyond said ceiling prices, the “pass on to traders” practice will apply.

2.52 Under the pass-on-policy, corporative farmer members must still deliver 100% of their produce to the corporative. However, when the maximum prices above are exceeded, the corporative passes on the produce for purchase by accredited buyers who are willing to pay abnormally higher prices. The accredited buyers must pay through the corporative so as to maintain the control of the corporative over the farmers’ sales proceeds and in turn, preserve the spirit of the collection in kind system for the bank.

2.53 The pass on-policy therefore shields the corporative from unusual trading risks, ensures maximum profits for farmers and preserves the bank’s collection in kind system.

2.54 **Land Titling Program for Corporative Farmers:** The Corpo Foundation has developed a “Land Titling Product“ for NRBG wherein present and future corporative farmers whose land tenure is not perfectly documented can avail of financing for the costs of titling plus the professional fee of accredited titling facilitators. The loan product is at its pilot stage with two DASURAICOR farmers given financing by the Network Bank Digos Branch. It is the aim that all present and future corporative farmer shareholder will have perfect land titles over their rice farms through this land titling loan product.

2.55 **More Rice Programme:** This programme attempts to address problems related to the low productivity of small scale rice farming which is based on traditional crop varieties. It is a joint initiative between different government departments and the private sector, including the Department of Agriculture, National Irrigation Administration, the Provincial Government, the

Land Bank of the Philippines, NRBG, the Corporatives (and other rice cooperatives), the Corpo Foundation and the farmers. The roles and responsibilities of the different partners are summarised in Box 2 (page 66).

2.56 It supports farmers to constitute contiguous plots of at least 20 ha to benefit from economies of scale in production, marketing and management and to apply improved seeds and farming practices. For this purpose, farmers can choose to sign a management contract with the CORPO–Foundation. The consolidated 20–hectare farm will be managed by the Corpo Foundation, through a production team composed of the following staff:

- Program Management Officer, who also acts as agronomist
- Crop Protection Specialist for pest management
- Crop Protection Specialist for disease management
- Auditor, whose main task is to ensure that the technical recommendations have been implemented

2.57 Members of the consolidated farm, called Organized Farmer Cluster, are given priority to work as the farm labourers at the prevailing wage rate on the farm. Instead of classroom sessions, the CORPO Foundation technicians provide practical on–the job training prior to each farming activity. Apart from rice production, the farmers may also engage themselves in any other economic activity such as developing backyard farming, hog raising, and the like.

2.58 The cluster farmers will pay a management fee of PhP100 to the Foundation for every additional bag of paddy in excess of the 100 bag per hectare guarantee. Corpo Foundation will sell the produce to the corporative based on the *highest prevailing market price*²² in the market. In the case that there is no corporative in the area, the foundation will sell the paddy to an accredited buyer/miller in said area. The direct involvement of the Corpo Foundation in production reduces the default risk of production loans due to low productivity and crop failures, but also to low trading margins.

2.59 After deducting all the expenses incurred for managing the cluster farm such as, labour, threshing, harvesting, water fee and management costs, the net income will be divided at pro–rata based on the farmer’s plots.

2.60 Apart from the provision of non–financial support services of training, the Corpo Foundation receives some seed capital funding of P 493,000 from Land Bank of the Philippines to partly meet the initial costs for implementing the programme. These funds will be mainly used for funding the salary of the Programme Management Officer/Agronomist, the two Crop Protection Specialists, the Technical Auditor. The remainder is used to pay the honorarium of the Technician of the Department of Agriculture who will assist the CORPO Foundation in documenting the activities of the Program as basis for the preparation of the Manual of Operation which can be used when replicating said Program in other areas.

²² This will still be subject to the new pricing policy of the corporative, which is “buy at breakeven point and to pass on to accredited buyers, if prevailing price is above breakeven”.

MAJOR LESSONS FROM PAICOR

2.61 The success of the corporative idea is based on the combination of the advantages of a corporation (sound management and access to capital) and a cooperative (member ownership and profit sharing) to establish farmer-owned post-harvest enterprises and to increase their added value from agricultural production. Vertical integration and the combination of financial and non-financial support services allows RBP to provide a range of financial services at lower costs and risks to a clientele which usually is regarded as unbankable by formal financial institutions in the Philippines.

2.62 For a possible replication elsewhere, the following key lessons from this experience could be applied:

- **Start small but provide integrated services:** Rather than trying to reap scale of economies through specialisation from the scratch, the initial focus should be on providing a complete set of services to minimise risks and costs and to create confidence amongst the farmers. After gaining experience and proving viability, scaling up or replication will be easier.
- **Ensure sound management during the start-up and consolidation phases:** Professional management accountable to the main shareholders is strongly recommended. It is not only needed to protect the invested capital but also to ensure the efficiency of operations and the ability to provide reliable services to the farmers. This, in turn, is a prerequisite for a successful loan repayment collection.
- **Create a strong sense of ownership among farmers:** Gradual divestment and decision making power to farmers over a period of 5 to 10 years are important tools to foster trust and loyalty from the farmers, creating the basis for a long-term partnership. This should be clearly stated in the by laws of the *corporative*. The possibility to become majority shareholders creates strong material and psychological commitments and incentives to comply with the rules and to avoid side selling.
- **Specialise functions:** The *corporative's* core competence are processing and marketing, while the bank specialises in financial services.
- **Use of existing farmer groups:** The use of existing farmer groups for the screening and selection of loan applicants, loan processing and borrower supervision are important tools to reduce transaction costs and moral hazard risks. Nevertheless, direct bank lending to individual borrowers ensures direct accountability of each farmer to the bank.
- **Provide a range of financial services:** the lower loan recovery risks and financial transaction costs enable the possibility to offer a variety of loan products, responding to the needs of small farm households such as for consumption loans and deposits. This stabilises the farm household income and provides the base for a long-term relationship which is beneficial to both parties. The corporative approach is a good means to enhance the outreach of banks. Through investing in “corporatives”, banks can capture a market of viable farmer clients in rural areas.

- **Use of other risk management tools:** Crop insurance cover of farmers with irrigated land has helped to reduce the impact of systemic crop risks, enhancing the viability of investments in agricultural production and processing.

CHALLENGES

2.63 **Outreach:** Is restricted by the high per capita initial capital investment requirements. Strict eligibility criteria also narrow the range of potential shareholders.

2.64 **Productivity and profitability:** High productivity both of farm production and post-harvest activities are a key to long term viability. Rice productivity in the Philippines is comparatively low and alternatives to increase the profitability of rice farming, such as Integrated Pest Management, are currently being explored.

2.65 **Replication to other crops:** The experience is currently restricted to rice farmers, as this is the only tested model. However, the Foundation is studying the opportunities of high value crops such as coffee, mango and oil palm. Future experiences with the Land Bank ACCESS programme should also be closely examined.

2.66 **Dependence on key personalities:** The former manager of RBP and PAICOR played a key role in the development of the corporative approach and its successful implementation.

2.67 Some of these challenges are being addressed in the replication of the PAICOR model and recent developments such as the creation of the CORPO Foundation, the use of a new pricing formula for rice and the More Rice Programme.

Table 21: The Philippines – Key Macro-economic Data, 1997–2001					
	1997	1998	1999	2000	2001
Interest rates (<i>% average annual rate</i>)					
Manila reference rate ^a	13.1	15.4	10.4	9.4	9.9
91-day Treasury bills rate	13.1	15.3	10.2	9.9	9.9
Average bank lending rate	16.2	18.4	11.8	10.9	12.4
Gross domestic product					
Total (<i>P billion</i>)					
At current prices	2,421.3	2,674.1	2,976.9	3,308.3	3,634.0
At constant (1985) prices	893.2	887.9	918.2	958.4	989.3
% annual changes	5.5	-0.6	3.4	4.4	3.2
Per head (<i>P</i>)					
At constant (1985) prices	12,147	11,814	11,959	12,222	12,353
% annual change	2.9	-2.7	2.2	1.1	1.1
Prices and earnings					
% average annual change	5.9	9.7	6.7	4.3	6.1
Exchange rates					
1.00 US\$	29.471	40.893	39.089	44.192	50.993

^a All maturities.

Table 22: The Philippines – Production of Major Crops, 1996–2000					
<i>(‘000 tonnes)</i>	1996	1997	1998	1999	2000
Rice	11,284	11,269	8,555	11,787	12,389
Maize (unshelled)	4,151	4,332	3,823	4,585	4,511
Coconuts (<i>million tonnes</i>)	11.37	13.18	10.91	10.5	12.45
Sugar	1,894	1,954	1,549	1,624	1,620
Bananas	3,312	3,774	3,493	3,727	4,156
Pineapple	1,542	1,638	1,489	1,519	1,524
Mango	898	1,005	932	800	855
Coffee	119	130	122	116	117
Rubber	193	221	223	215	186
Tobacco	65	65	62	56	50
Abaca	70	67	71	74	78

Source: NSCB; International Sugar Organisation; Sugar Regulatory Administration.

Table 23: The Philippines, Rural Bank of Panabo – Consolidated Income Statement for 2002		
	2002	% of Total
Income		
Interest Income	62,107,211.15	84.26%
Interest – Loans and Discounts	42,762,360.87	58.02%
Interest – Agrarian Reform/Other Agricultural Credit Loans	4,728,204.94	6.42%
Interest – Development Incentive Loans		0.00%
Interest – Restructured Loans	1,879,674.26	2.55%
Interest – Past Due Items/Items in Litigation	1,895,133.78	2.57%
Interest – Investments	2,235,807.53	3.03%
Interest – Deposit in Banks	5,481,966.20	7.44%
Interest – Due from Central Bank	83,580.16	0.11%
Interest – Others	3,040,483.41	4.13%
Bank Commissions	103,419.34	0.14%
Service Charges/Fees	9,757,659.02	13.24%
Fees/Commissions – Others	688,497.87	0.93%
Foreign Exchange Profit/(Loss)	5,563.22	0.01%
Profit/(Loss) on Sale or Repossession of Investments	357,221.77	0.48%
Other Income	685,654.22	0.93%
Total Income	73,705,226.59	100.00%
Expenses		
Interest Expenses	16,149,121.64	33.08%
Interest – Deposits	15,647,163.28	32.05%
Interest – Borrowed Funds	501,958.36	1.03%
Compensation/Fringe Benefits	12,700,134.31	26.02%
Management and Other Professional Fees	430,415.33	0.88%
Fines, Penalties and Other Charges	300.00	0.00%
Taxes and Licenses	3,223,199.72	6.60%
Insurance	1,729,595.13	3.54%
Depreciation/Amortization	2,664,152.50	5.46%
Litigation/Assets Acquirement Expenses	381,153.73	0.78%
Bad Debts Written Off	350,469.70	0.72%
Other Expenses	11,186,371.55	22.92%
Total Expenses	48,814,913.61	100.00%
Net income	24,890,312.98	33.77%

Table 24: The Philippines – Network Group Financial Performance, 2002 (End of Year)				
	Network Bank	RB of Panabo	ProBank	Total Network
Operating Results (in million pesos)				
Net Income	68.54	20.60	19.45	108.59
Total Assets	1,409	540.09	278.25	2,227.78
Loans	788.68	267.85	205.96	1262.49
Deposits	998.70	383.09	200.88	1582.62
Shareholders' Equity	314.41	92.79	64.69	471.89
Dividends Declared (in pesos)				
Cash Dividend	34.25	19.0	10.24	
Stock Dividend	23.75	–	7.00	
Total Dividends	58.00	19.0	19.04	
No. of Common Shares	2,375,000	542,572	325,000	
Par value per Share	10.00	100.00	100.00	
Dividends per Share	1.60	37.97	35.55	
Earnings per Share	3.16	37.97	52.90	
Number of Employees	368	79	86	533
Number of Branches	31	6	7	44
Selected Financial Ratios (%)				
Return on Private Investment	44.43	55.06	103.00	
Return on Assets	6.47	5.07	8.00	
Risk/Asset Ratio	34.50	18.00	24.00	
Intermediation Ratio	85.13	73.50	109.00	
Liquidity Ratio	32.70	36.97	20.00	
Ranking in the (806–Members) Rural Banking Industry (Philippine Deposit Insurance Corporation Information)				
Net worth	2 nd	14 th	29 th	
Net Income	2 nd	4 th	8 th	
Total Assets	3 rd	19 th	58 th	
Gross Loans	3 rd	24 th	40 th	
Total Deposits	3 rd	18 th	60 th	

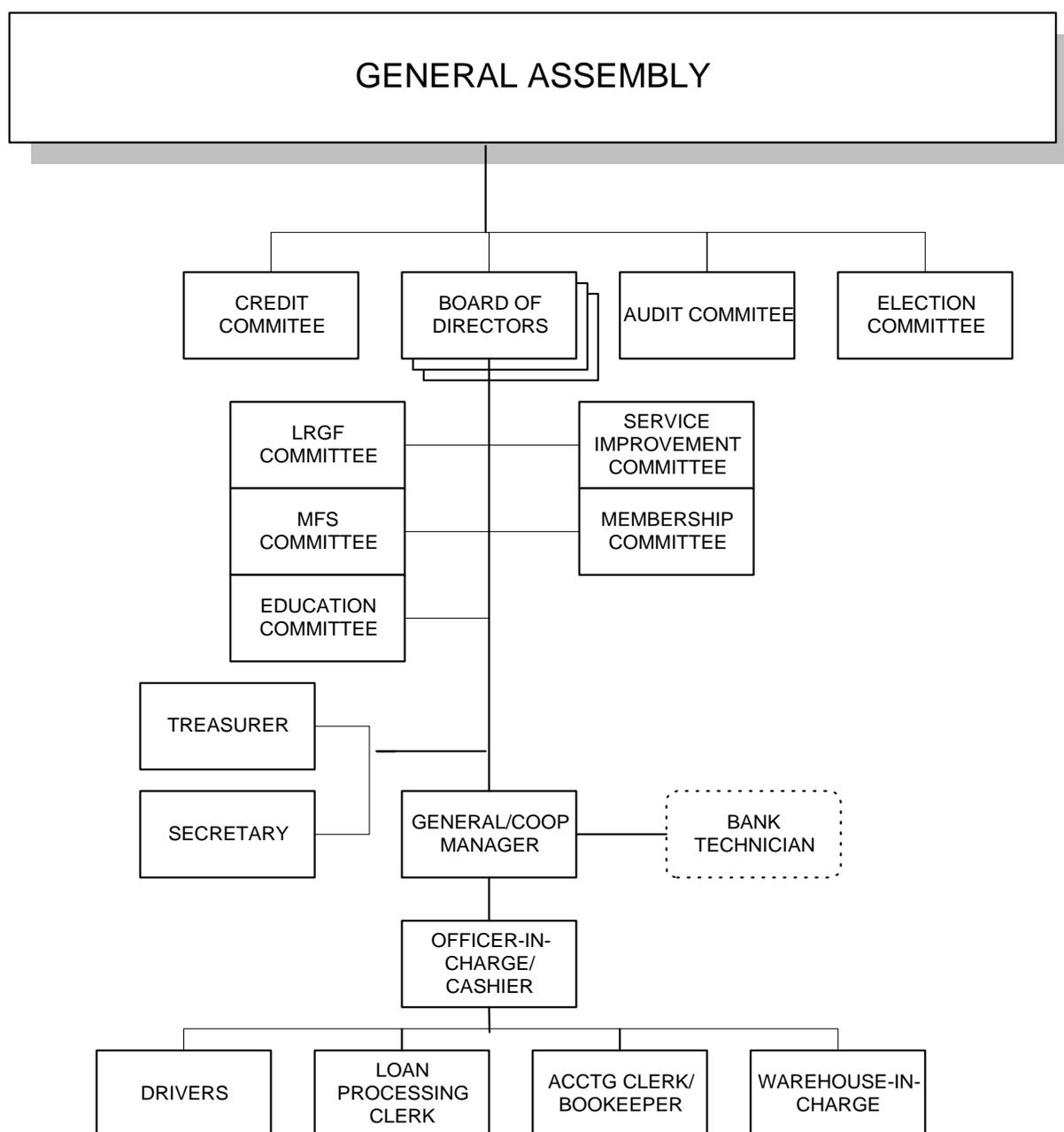


Figure 2: Organizational and management structure of PAICOR

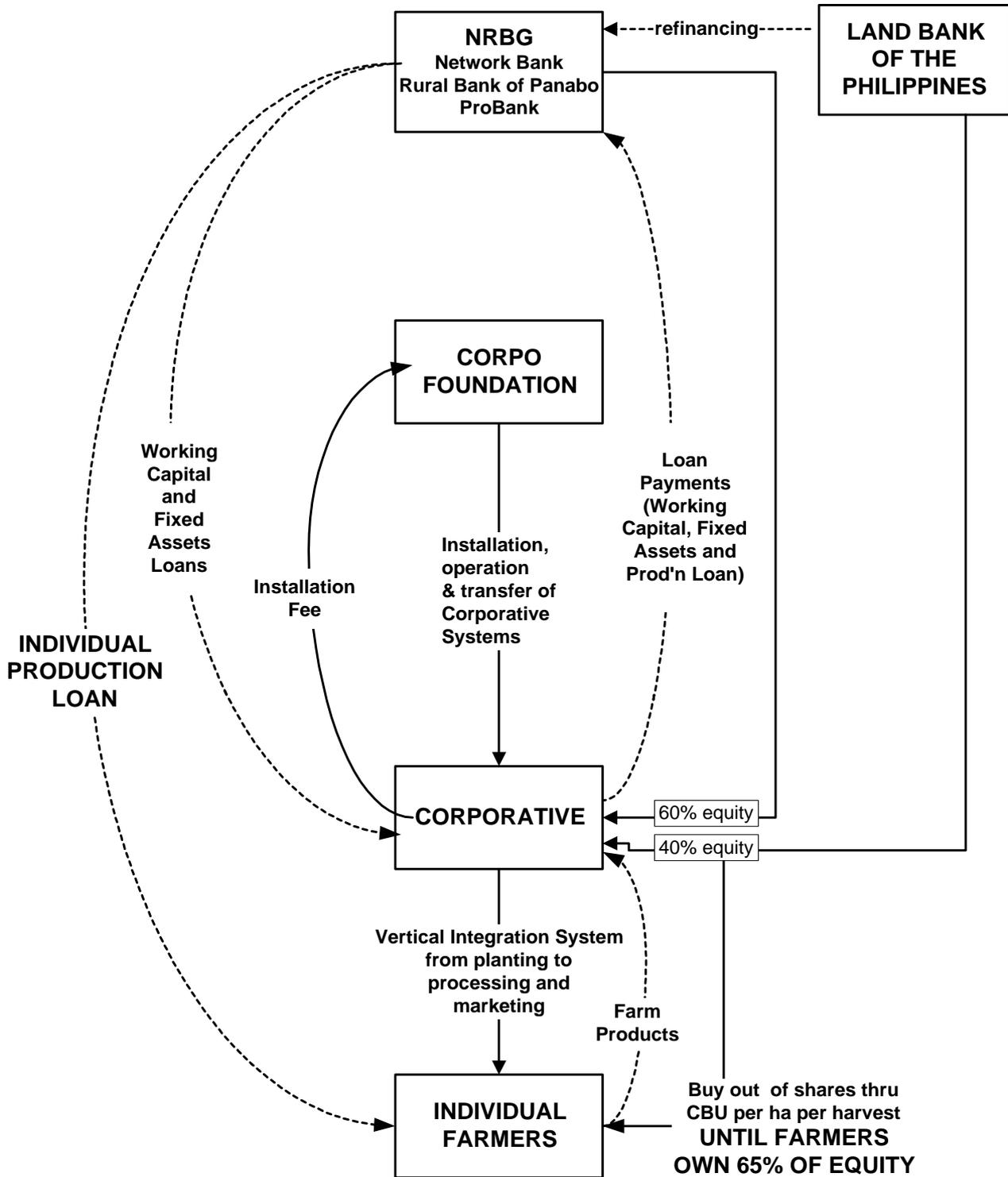


Figure 2: Financing schemes for the second corporative DESAURACOR

Box 2: The Philippines – Key Players in the More Rice Programme and their Respective Functions

- **Department of Agriculture (DA), National Irrigation Administration (NIA) and PhilRice**
 - DA: Provides financial assistance to Corpo Foundation for its technical trainings of its technicians and farmer leaders.
 - NIA: Ensures that adequate irrigation water is available to cluster the compact farms
 - PhilRice: Provides qualified F1 (hybrid) seeds at reasonable cost.
- **Provincial Government of Davao del Norte & Davao del Sur**
 - Provides technicians from each province (on part-time basis) to assist the Corpo Foundation to design and conduct baseline information as well as post-implementation data survey analysis and documentation.
- **Corporatives: PAICOR/DASURAICOR**
 - Purchasing and processing all produce of the Cluster Farms and marketing the same under the direct supervision of the Market Development Officer of the Corpo Foundation.
 - Withholds from the Cluster Farm sales proceeds the amounts to pay back the individual loans of the farmers, management fee, irrigation service fees, and other expenses incurred by the farmers.
- **Corpo Foundation**
 - Focal point and manager of the More Rice Program
 - Provides incentives to farmers through a minimum production yield level guarantee of 100 bags (of 55 kg/bag of fresh paddy) per hectare.
 - Collects a management fee of PhP100 per bag for every bag in excess of the guaranteed 100 bag yield per hectare, provided that the total management fee per hectare will be not more than PhP5,000.
- **Cluster Farms**
 - Organize themselves to constitute a minimum 20 hectares contiguous farm land per cluster.
 - Agree and sign the More Rice Contract Production Agreement
- **Network Rural Banking Group (NRBG)**
 - Grants rice production loans to each individual farmer/member of Organized Farmers
 - Finances working capital requirement of the cooperative/corporative (PAICOR & DASURAICOR)
- **Land Bank (under the Integrated Cooperative Farming System Programme)**
 - Subsidizes 10 months salary of the Project Management Officer
 - Subsidizes 6 months salary of the Market Development Officer
 - Subsidizes 10 months honorarium of DA-Technician
 - Rediscunts NRBG production loans to farmers and working capital loans to PAICOR and DASURAICOR.