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# NICARAGUA

# CATTLE LEASING FOR SMALL-SCALE FARMERS

**(SP/TC-0306010-NI)**

## FINANCING AND TECHNICAL COOPERATION PROPOSAL

This document was prepared by the project team consisting of: Dieter Wittkowski, Team Leader (SDS/MSM); Martha Sarria (COF/CNI); Michael Steidl (Consultant); Kevin McTigue (LEG/OPR); Cecilia Parra (LEG/OPR); and Margarita Reyes (SDS/MSM).

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## EXECUTIVE SUMMARY

**Executing agency:** Nitlapán Research and Development Institute of the Universidad Centroamericana (Nitlapán)

**Amount and source:**

| | IDB (US$) | Local (US$) | Total (US$) |
|---|---|---|---|
| Financing: | 350,000 | 94,000 | 444,000 |
| Nonreimbursable technical coop.: | 100,000 | 66,000 | 166,000 |
| Total: | 450,000 | 160,000 | 610,000 |

The resources will be drawn on the net income of the Fund for Special Operations (FSO).

**Terms and conditions:**

| | |
|---|---|
| Amortization period: | 10 years |
| Grace period: | 5 years |
| Disbursement of the financing: | 42 months |
| Execution of the financing: | 36 months |
| Interest rate: | 4% real |

The grace period will apply only to amortization of the principal, not the interest. The loan will be denominated in local currency (córdobas). Maintenance-of-value will be added to the interest rate and will be set based on the annualized consumer price index (CPI) from the last six months, as determined by the Central Bank of Nicaragua.

**Problem to be addressed:** Low-income, small-scale farmers do not have sufficient capital to invest in cattle, which is one investment that would enable them to generate some savings and accumulate some wealth. Moreover, the establishment of a quality herd is a long-term process that takes at least 2.5 years, and many farmers do not have the know-how, technology, and financial resources to make such an investment. In addition, the procurement of cattle of high genetic quality is a risky investment, due to uncertainty about the animals' productivity or potential infertility. The financial market, thus far, does not offer modes of financing that reduce farmers' risk when buying cattle of high genetic quality or long-term financial products in rural areas that are suitable for purchasing cattle.

**Objectives:** The objective of the project is to boost the income of small-scale farmers in the Pacific and central interior regions of Nicaragua, by

restructuring productive practices[1] and increasing their productivity.

The specific objectives are to: (i) sustainably increase and improve cattle production methods, through the cattle leasing service; and (ii) improve small-scale farmers' technical and managerial capacity, by providing appropriate technology and generating and disseminating local technical information.

**Description:** The project is divided into two components: (i) reimbursable financing; and (ii) nonreimbursable technical cooperation.

The **reimbursable financing** component will support the creation of a program for cattle leasing and coinvestment in fattening cattle, by investing in a portfolio of productive animals that will be provided to small-scale farmers under lease or fattening service contracts, in order to boost the farmers' productivity and income. The nonreimbursable **technical-cooperation** component is aimed at building: (a) small-scale farmers' knowledge and capacity to assimilate the necessary techniques for restructuring production; and (b) Nitlapán's capacity to efficiently and sustainably provide financial products and technical assistance to farmers.

**Reimbursable financing component: (Bank: US$350,000; Nitlapán: US$94,000)**: In order to offer an innovative financing alternative to low-income, rural, small-scale farmers that would enable them to boost their productivity, with reduced risk, Nitlapán will use Bank and own resources to establish a program for cattle leasing and coinvestment in fattening cattle (hereinafter "cattle fattening"). This program will build on and improve the preliminary projects that Nitlapán has implemented in the last year in a pilot cattle-leasing initiative, which yielded promising results. Through this program, Nitlapán will finance the procurement of some 950 heads of cattle (approximately 448 dairy cattle and 500 beef steer), benefiting at least 200 small-scale farmers during the execution period. The cattle-leasing portfolio is divided into two parts: (i) leasing dairy cattle, for production of milk to be sold for consumption in peri-urban areas of the Pacific region; and (ii) cattle fattening for industrial slaughter (or exportation) in the central interior region of Nicaragua.

[1] In this project, the term "restructuring production" is defined as adaptation to new conditions in an intrinsically changing environment, to achieve production that can successfully compete, protecting the local market, and efficiently penetrate foreign markets.

In the case of *dairy cattle* (estimated total financing of US$350,000), newly calved cows of high genetic quality will be leased to small-scale farmers, who may not necessarily have animal husbandry experience, but who must first be trained at the Nitlapán Field School, to learn about modern methods of restructuring production in managing farms and cattle. For the duration of the lease contracts, program professionals will supervise the productivity of the leased cattle and management of the farms and will provide technical assistance to the farmers, to ensure that they adequately implement the recommended restructuring measures.

In the case of *cattle fattening* (estimated total financing of US$144,000), Nitlapán will develop and test a new methodology for coinvestment with small-scale farmers to fatten cattle, in accordance with the methodology for restructuring production in the area. During the first year of the project, Nitlapán will finance a *pilot test* involving 250 steers, using own resources. In the second and third years, another 250 steers will be procured with both Bank and Nitlapán resources.

By offering these financial products for financing technological restructuring without taking excessive risk, the project aims to reduce the cost to small-scale farmers of making short-term investments to improve the quality of their herd. The program guarantees the high genetic quality of the leased animals, which means that farmers do not run the risk of the animals having low productivity or being infertile.

**Technical-cooperation component (Bank: US$100,000; Nitlapán: US$66,000)**: Concurrently with the investment component, the technical-cooperation component will allocate resources to: (i) improve Nitlapán's capacity to monitor and oversee these new technical and financial products; (ii) improve the program's technical capacity to offer effective services to support small-scale farmers in restructuring production; (iii) strengthen business management for positioning the farmers' products and help them to develop marketing strategies; (iv) conduct technical exchanges to share experience and improve the financial products offered; (v) monitor environmental aspects of the program; (vi) procure small equipment; and (vii) hire the incremental members of the program's technical support team.

**Social and environmental review:**

The Committee on Environment and Social Impact (CESI) concluded, at meeting 25-03 of 7 July 2003, that the program did not require specific evaluations or environmental protection measures, but must ensure that it does not support unsustainable use of cattle in forestland. The program stresses the protection of forested areas against the pushing back of the agricultural and livestock frontier and promotes reforestation of farms by small-scale farmers. For clients to be eligible, the program must verify that unsustainable ranching on forestland will not be supported and that soil use in forest areas will not be shifted to cattle operations. Moreover, the technical-cooperation component includes funds for monitoring environmental considerations.

**Beneficiaries:**

The project will directly benefit roughly 200 small-scale farmers in the Pacific and central interior regions of Nicaragua. To ensure that project benefits reach low-income, small-scale farmers, 80% of the cattle leasing clients must have monthly pre-project income of no more than US$250. Women will also be actively encouraged to participate in the program.

**Risks:**

The main risk of this operation is related to the fact that Nitlapán and the farmers are just beginning to have experience with financial leasing. In particular, making the products widely available entails portfolio management risks that could not be identified during the pilot test. To mitigate this risk, the project would commission consulting services to design a specialized information system for portfolio management and monitoring.

With expanding the cattle leasing product, there is also the risk that the expected demand will not emerge in the anticipated volume and time frame, which could slow or impair the project's capacity to become self-sustainable and to meet its financial obligations. Even though Nitlapán, through its preliminary client surveys and market studies, has already identified nearly 300 eligible clients interested in participating in the leasing program, this risk would be mitigated by using a "demonstration effect" strategy: some leading farmers (primarily medium-scale farmers) in the project execution area would be encouraged to take part, and the outcome of their experience would be demonstrated to small-scale farmers, to encourage them to participate in the program. During the pilot test, this strategy yielded high levels of demand among farms of all sizes.

There are also portfolio management risks owing to the lack of experience with respect to the productivity of a cattle leasing and cattle fattening coinvestment portfolio. It is foreseeable that some of the cattle portfolio will not be productive, due to the death of

animals, disease, low productivity etc. To mitigate these risks, Nitlapán plans to establish reserves, using conservative assumptions regarding the loss of animals and the portfolio usage rate (percentage of cattle being leased).

Another major risk is that the small-scare farmers may not be well prepared or have sufficient technical capacity to manage high-quality cattle under the expected conditions. Nitlapán will therefore make a significant effort to train clients on technical and managerial issues, so they are adequately prepared, before they begin cattle leasing or steer fattening operations. This risk will be mitigated through: (i) the selection of clients with past experience in or exposure to cattle raising; (ii) the requirement that clients participate in a series of workshops at the Field School on the most important aspects of cattle management; and (iii) the technical assistance and ongoing advising that Nitlapán professionals and veterinarians will provide to clients, to ensure that they satisfactorily apply the know-how and good practices acquired in the training phase.

In the cattle-fattening component, there is a market risk stemming from Nicaragua's current trade policy. A potential free-trade agreement with the United States and Mexico could lower tariff barriers for meat from the Southern Cone, particularly Uruguay and Argentina. The Nicaraguan cattle-raising industry is not currently in a position to compete with Uruguayan or Argentinean meat in an open market. Although this project seeks to enhance the competitiveness of the industry, that process will take several years, during which the pressure of competition will gradually mount. While the project cannot control this risk, it will not be affected to a great extent, because cattle fattening represents roughly 25% of the financing component and that activity can be dissolved in short order if any market-related problems are detected, without incurring further losses; the resources would then be used to continue to expand the dairy cattle leasing program.

**Role of the project in the Bank's country and sector strategy:**

Two of the three pillars of the Bank's new country strategy with Nicaragua, set forth in document CP-2455 (of 28 August 2002), are: (i) economic growth through increased competitiveness and production; and (ii) the productivity of the very poor. Both accord top priority to social and productive investments that promote exports and benefit the very poor, to generate income and create jobs, and that have a positive impact in the short term. This proposal, which would have a direct impact on productivity and income for the rural beneficiary families, is consistent with the Bank's country strategy.

**Coordination with other official development institutions:** During the analysis and design phases of the operation, the project team consulted with several international donor agencies actively supporting the rural productive sector in Nicaragua, in order to coordinate efforts and seek complementarity between the project and the interventions of the various institutions. At meetings with the World Bank, the United States Agency for International Development (USAID), and the Ministry of International Cooperation of the Kingdom of the Netherlands, among others, the need to improve the productivity of rural production and for restructuring small-scale cattle production was confirmed. An agreement was reached with those institutions that the Bank and Nitlapán would strive to coordinate project activities with other agencies' interventions during project execution.

**Rationale:** Successful execution of the project's components should significantly improve the economic situation of the participating small-scale farmers. In general, their family income is expected to increase by at least 20% over the project baseline. Other direct, measurable benefits the project will have on productive units include: (i) milk production per cow, per lactation that is roughly 50% higher than the current national average; (ii) a reduction in the interval between births from 16 months to 14 months; (iii) a 20% drop in seasonal variations in milk production between winter and summer; (iv) a 50% increase in the daily weight gain of steer, compared to current levels; and (v) an increase in the number of animals in the farm area, resulting in a 100% increase in meat production. The qualitative impact of restructuring production would be the enhanced genetic quality of the herds and higher quality products from cattle raising, a drop in overgrazing in the dry season, and reduced exposure to climate risk, by preventing risks related to drought or excess rain.

**Special contractual conditions:** As a condition precedent to the first disbursement of *reimbursable financing* resources, Nitlapán will present to the Bank's satisfaction: (i) an initial work plan for the first year of the project, including a schedule for disbursements and achievement of targets; and (ii) the Leasing and Cattle Fattening Coinvestment Operating Regulations, including a model contract to be used in the program, and evidence that the Regulations are in effect.

As conditions precedent to disbursement of *technical-cooperation* funds, Nitlapán will present to the Bank's satisfaction the terms of reference for the consulting and advisory services to be financed with technical-cooperation resources in the project's first year.

For disbursement of over 60% of the technical-cooperation funds, Nitlapán must present to the Bank's satisfaction: (i) evidence that a minimum of US$150,000 in reimbursable Bank resources has been placed in dairy cattle leasing and/or cattle fattening contracts; and (ii) evidence that the new portfolio information and monitoring system, financed with technical-cooperation resources, is operating. For disbursement of over 60% of funds in the financing component, Nitlapán will present to the Bank's satisfaction a report on the outcome of the "cattle fattening" product with own resources, demonstrating that it is feasible and is accepted by clients and that there is sufficient demand to justify use of the Bank resources earmarked for this part of the leasing portfolio.

Since the project needs to have liquidity to hire key experts and professionals in the start-up phase, the Bank will set up a revolving fund with up to 30% of the total amount of the technical-cooperation component.

The Bank can recognize local counterpart expenditures in the reimbursable financing component, up to US$45,000, that were made after 1 July 2003 to procure cattle for the leasing program. The Bank can also recognize local counterpart expenditures in the technical-cooperation component, up to US$2,000, that were made after 1 August 2003 for designing the information system.

**Reports, audits, and evaluations:**

**Reports:** Nitlapán will submit *progress reports* to the Country Office within 60 days following the end of each six-month period, and a final report 60 days following the end of the period for the last disbursement. Those reports will include an analysis of fulfillment of the performance indicators and progress made in executing the work plan, including: (i) the number of lease and coinvestment contracts signed and total amounts of those contracts; (ii) portfolio performance indicators, including at-risk portfolio and financial sustainability; (iii) information on changes in the prices that Nitlapán/Tropitécnica pay to farmers who take part in the cattle fattening program; (iv) information on changes in the implicit or explicit interest rates that Nitlapán/Tropitécnica charge as part of the cattle leasing and fattening fees; (v) implementation of training and technical assistance activities; (vi) extent to which the project has incorporated technology and increased productivity; (vii) information on monitoring the project's environmental indicators; and (viii) a summary of Nitlapán's contribution in cash and in kind as of the date of each report. The first semiannual report will include socioeconomic and productive information from the initial clients at the outset of the project. Moreover, Nitlapán will continue to compile baseline

information from all clients when they enter the program, which will be used to measure program outcomes.

*Annual audited financial reports on the financing component*: During project execution, within 120 days following the end of each fiscal year, starting in the year corresponding to the fiscal year in which disbursements of the financing commenced and throughout the project execution period, Nitlapán will submit to the Bank its audited financial statements, including a financial report audited by independent authorities showing how the Bank's contribution was used.

**Evaluations:** The Bank will use technical-cooperation resources to commission a midterm and a final evaluation of the project. When 60% of the financing component has been disbursed or 24 months into project execution, whichever occurs first, a midterm evaluation will be commissioned by the Bank and performed. The final evaluation will be conducted when 90% of project resources have been disbursed. The indicators in the logical framework and in the table of project performance indicators will be used to measure project outcomes.