

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK
MULTILATERAL INVESTMENT FUND

COUNTRY: NICARAGUA

ECOMICRO FACILITY RG-M1205

DOCUMENT FOR PROJECT APPROVAL

(NI-X1008)

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PROJECT SUMMARY

FDL EcoMICRO PROJECT: GREEN FINANCE FOR ADAPTATION

(NI-X1008)

Nicaragua is one of the world's most affected countries by extreme weather events and climate variability. According to the Intergovernmental Panel on Climate Change (IPCC), changes in precipitations and rising temperatures are already observed and expected to increase. This climate variability has strong effects on agriculture, making traditional knowledge on planting dates unreliable and existing agricultural practices inadequate. As a result, crop yields of maize, wheat, beans and coffee show significant reductions in productivity in the pacific and central areas of the country. In Nicaragua, low income smallholder farmers dedicate their agricultural activities to these crops and are the most vulnerable to climate change.

Nicaraguan smallholder farmers face significant barriers to improve their ability to successfully respond to climate change impacts and reduce their vulnerability to changing weather. First, they lack access to the relevant information on the current and future effects of climate change on their crops. Second, they lack access to financial resources to invest in adaptive measures (such as investments in irrigation, improved crop varieties or diversification of farm operations, micro insurance). Finally, they do not have access to instruments to mitigate risks and are not taking part in alternative livelihood activities that could reduce their vulnerability to climate change.

This EcoMicro project will support the microfinance institution FDL, the main lender to smallholder farmers in Nicaragua, to reduce the vulnerability to climate change for both its clients and the institution through a new green finance product. The product will combine technical assistance for adaptation measures in agriculture, a loan to finance required investments for these adaptation measures, and microinsurance for crops.

Through this green finance product, the project expects to provide and maintain stable levels of income to FDL smallholder farmer clients in the western and central regions of the country, cushioning the effects of climate change. A reduced vulnerability of its clients in rural areas will also benefit the institution as it will likely improve FDL's credit risk profile.

The project forms part of the MIF's regional EcoMicro program (RG-M1205). Through the project the MIF will expand its knowledge of climate adaptation interventions through MFIs, and will test the appropriateness of green finance products as a means to reduce both the vulnerability of the clients and of the MFI.

ANNEXES

ANNEX I	Logical Framework
ANNEX II	Detailed Budget
ANNEX III	Quality for Effectiveness in Development (QED)

INFORMATION AVAILABLE IN THE TECHNICAL DOCUMENTS SECTION OF MIF PROJECT INFORMATION SYSTEM

ANNEX IV	Diagnostic of Needs of the Executing Agency (DNA)
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ACRONYMS AND ABBREVIATIONS

AOP	Annual Operating Plan
DNA	Diagnostic of Executing Agency Needs
EA	Executing Agency
EU	Executing Agency
FDL	Fondo de Desarrollo Local
IDB	Inter-American Development Bank
GHG	Greenhouse Gas
LAC	Latin America and the Caribbean
MFI	Microfinance Institutions
MIF	Multilateral Investment Fund
MSME	Micro Small and Medium Enterprises
NDF	Nordic Development Fund
PAR	Portfolio at Risk
QED	Quality for Effectiveness in Development
TC	Technical Cooperation
TOR	Terms of Reference

PROJECT INFORMATION -FDL EcoMICRO PROJECT

(NI-X1018)

Name of Project:	FDL EcoMicro Project (NI-X1008), a project under the EcoMicro Program (RG-M1205).		
Country and Geographic Location:	Nicaragua. The project will be implemented in two municipalities of the department of Leon, and in three municipalities of the department of Chinandega.		
Executing Agency:	FONDO DE DESARROLLO LOCAL (FDL)		
Access Area:	Access to Basic Services and Green Growth		
Agendas:	Adaptation agenda and expanding access to clean and efficient energy agenda.		
Type of Green Finance Product	FDL will develop a green finance product for adaptation to climate change that includes: technical assistance for adaptation measures in agriculture, loans to finance these measures and microinsurance for crops. ¹		
Direct Beneficiaries:	After 28 months, the pilot will have benefited 300 smallholder farmers. ²		
Indirect Beneficiaries:	FDL, other FDL clients and other farmers in Nicaragua, the environment.		
Technical Cooperation Financing: ³	TOTAL PROJECT BUDGET:	US\$ 411,000	100%
	Counterpart:	US\$ 131,000	32%
	NDF co-financing:	US\$ 280,000	68%
Execution and Disbursement Period:	28 months of execution and 30 months of disbursement.		
Environmental and Social Impact Review:	This operation was screened and classified as required by the IDB's safeguard policy (OP-703). Given the limited impacts and risks, the proposed category for the project is C.		

¹ Adaptation is defined as the adjustment in natural or human systems in response to actual or expected climatic change which is expected to moderate, harm or create beneficial opportunities.

² The beneficiaries will be sex disaggregated. Small holder farmers will be classified as MSME when aggregating data and indicators at Program level.

³ The estimated technical cooperation financing was defined and approved at Program level by Donors' Committee. See paragraph 4.3 in the EcoMicro Program Donors Memorandum (RG-M1205).

Unit with Disbursement Responsibility:	The project will be administered and supervised at the COF/Nicaragua. The Program will be supervised and administered by MIF.
Selected Consulting Firm	Triodos Facet, SBI and Climate Focus consortium.
Other Partnerships	Nitlapan ⁴

⁴ Nitlapan is a Nicaraguan research institute that provides technical assistance to small farmers on different agriculture sustainable initiatives in order to improve their productive capacity, sustainable practices and ensure their access to markets. Nitlapan has been a long term partner of FDL. Nitlapan is part of the Universidad Centro Americana (UCA).

1. BACKGROUND AND JUSTIFICATION

A. Background on the EcoMicro Program Facility

- 1.1. The EcoMicro Program Facility (RG-M1205) is a US\$ 7 million technical cooperation (TC) Program, co-financed by the Nordic Development Fund (NDF) and the Multilateral Investment Fund (MIF), to pilot green microfinance for micro, small and medium enterprises (MSMEs) and low-income households in LAC. The impact of the Program is to facilitate green finance as a means to develop renewable energy and energy efficiency markets and to assist in adaptation to climate change. The result of the Program is to train 12 microfinance institutions (MFIs) to provide green finance instruments to capitalize on new opportunities in green financing, while adjusting their risk management models to climate change risk, and incorporating climate impact into their internal policies and operations.
- 1.2. **Execution Mechanism and Delegation of Authority.** Donors delegated authority to the MIF General Manager for the approval of the projects under the Program. In total, 12 projects will be submitted to the MIF General Manager for approval following three selection rounds. In the first round, a Selection Committee composed by MIF and other IDB staff selected four MFIs to implement 4 projects: FDL (Nicaragua), Caja Municipal de Ahorros y Crédito de Arequipa (Peru), Diaconia (Bolivia) and Te Creemos (Mexico).⁵ This third project (NI-X1008) corresponds to the initiative of Fondo de Desarrollo Local (FDL) in Nicaragua, to develop a green finance product for adaptation to climate change.
- 1.3. **Consulting firm involvement during design phase.** In accordance with the procurement policies described in the paragraph 5.4 of the Donors Memorandum of the EcoMicro Program RG-M1205, and with the procedures described in 5.5, 5.6, 5.7, 5.8 and 5.9 of the same document, pre-screened consulting firms are selected by the MFIs prior to project approval.
- 1.4. This Project Document is a proposal for the MIF General Manager's approval of the EcoMicro project for Fondo de Desarrollo Local (See section 8. MIF General Manager's Approval).

B. Diagnosis of the Problem to be addressed by the Project

- 1.5. **Nicaragua is highly vulnerable to the effects of climate change.** Nicaragua is one of the countries in the world that is most affected by extreme weather events. From 1991 to 2010, more than forty extreme climate events occurred in the country which led to annual economic losses of almost 2 percent of GDP.⁶ Additionally, rising temperatures are creating changing weather patterns that are negatively affecting Nicaragua's

⁵ Selection procedures and Selection Committee were described in Section V paragraph 6 of the EcoMicro Program Donors Memorandum RG-M1205. Selection documents and proposal scorings are available in the Program's technical files.

⁶ Major extreme climate change events include tropical hurricanes, storms, and associated hazards such as floods. (Harmeling, 2011).

economic growth.⁷ According to Intergovernmental Panel on Climate Change (IPCC) assessment reports, important changes in precipitations and rising temperatures are already observed in the region and are expected to increase.⁸ In agriculture, this climate variability makes traditional knowledge on planting dates unreliable and existing agricultural practices inadequate. As a result, crop yields of maize, wheat, beans and coffee in the pacific and central areas of the country show significant reductions in productivity.⁹ Additionally, climate change scenarios for the Nicaraguan departments of Chinandega, Leon, Managua and Masaya, located in the central and northwestern regions of the country, show that severe droughts and floods will contribute to further reductions of crop yields.¹⁰

- 1.6. **Climate change is expected to push vulnerable rural populations into deeper poverty.** Low income smallholder farmers are highly vulnerable to climate change. Their cash flows are uneven due to the seasonal character of agriculture. Changing weather patterns further increase income instability by reducing crop yields and disrupting cash flows.¹¹ In these cases, savings or credit (if available) are the primary sources of additional liquidity. But, as climate change continues to reduce soil productivity, smallholder farmers will likely exhaust their savings and their ability to access credit will decline as their loan repayment capacity deteriorates. Climate change is expected to reduce rural per capita income, hence pushing these populations into deeper poverty.¹²
- 1.7. **Rural farmers can respond to climate change by improving their adaptive capacity.** Adaptation to climate change occurs when an individual, community or business improves its ability to successfully respond to climate change impacts. Adaptation therefore requires information on climate change impacts in order to adjust behavior, adopt new practices or technologies, and pursue new sources of livelihoods. Some examples of small scale adaptation responses in agriculture include but are not limited to: the use of drought resilient seeds, crop variety change or change in planting dates, local irrigation, as well as diversification of livelihoods.
- 1.8. **Barriers to adaptation for smallholder farmers.** Smallholder farmers face significant barriers to increase their adaptive capacity. First, they lack access to the relevant information on the current and future effects of climate change on their crops. Second, they lack access to financial resources to invest in adaptive measures (such as investments in irrigation, improved new crop varieties or investing in diversification of

⁷ Changing weather patterns include the late arrival of wet periods, longer droughts, and change in the seasonality of rains.

⁸ IPCC (2007). Rise in temperatures in Central America are expected to rise +0.4 to +1.1 degrees Celsius during the dry season and +0.5 to +1.7 degrees Celsius by 2020 and decrease rainfall in Central America and change in rain patterns will affect populations and their economic activities.

⁹ Maize yields have been reduced in average by 15% in the last decade and is expected to further decrease yields across Central America by 21% by 2020.

¹⁰ Climate risk management for the health sector in Nicaragua. International Institute for sustainable development (January 2013)

¹¹ Climate and rural income Mendelsohn, R (2007)

¹² The Economics of Climate Change: The Stern Review by Nicholas Hebert Stein. Chapter 20: The role of adaptation in sustainable development

farm operations or buying micro insurance). Finally, they are not taking part in alternative livelihood activities that could reduce their vulnerability to climate change. When frequently exposed to climate change shocks, smallholder farmers try to save more in light of expected crop losses and pass up entrepreneurial opportunities. This risk-averse behavior limits the development of alternative sources of income.

C. Beneficiaries

- 1.9. The project will benefit smallholder farmers in the central and northwest regions of Nicaragua, more precisely in the departments of Leon and Chinandega. In Leon and Chinandega, 50% or more of the population live in poverty.¹³ Farmers in these regions, who are clients of FDL, the main lender to rural low-income farmers in Nicaragua, are already suffering the negative effects of changing weather patterns. In recent years, their loan repayment capacity has been negatively affected.¹⁴ The target group of this project is 300 smallholder farmers in Leon and Chinandega who own or rent between 2 and 10 acres of land to cultivate crops and raise livestock. These farmers are engaged in planting rice, beans, maize and sesame and use very limited technology for this production. They usually devote more than two-thirds of their sales to pay rent and buy seeds for the next agricultural cycle and keep the remaining one third for household consumption. The resulting annual income is on average between US\$ 1,000 and US\$ 5,000.¹⁵ When the harvest produces low outputs, the one-third devoted to the household is exhausted; this negatively affects the wellbeing of the farmers' household. FDL will select the beneficiaries of the pilot based on two main variables: (i) health of credit profile and (ii) willingness to adapt new technologies or practices in agriculture. This project is expected to benefit women as they represent 54% of FDL's loan portfolio. Rural poor women are more vulnerable to climate change.¹⁶ In a country already endowed with very high levels of gender inequality, supporting women in the face of climate change is expected to reduce their vulnerability.¹⁷
- 1.10. The project will also benefit FDL, the main lender to smallholder farmers in Nicaragua. In spite of soaring PAR numbers due to the "no pago" movement and the deterioration of its agricultural loan portfolio as a result of climate stresses, FDL remains committed to

¹³ Rural poverty in Nicaragua is 67.9%, much higher than 29.1 % in urban areas (World Bank, 2012). According to the National Institute of Development Information (2007), extreme poverty is higher in the Atlantic Regions (over 50% in Jinotega and Río San Juan). In the regions in which FDL maintains its financial services (i.e. center and western pacific regions) percentages of extreme poverty are lower. The poverty map <http://geocommons.com/maps/163763#> highlights that in the areas where the project is being implemented poverty indices are still high: in the Chinandega region the poverty index is 54.2% and in the Leon region of 49.4%.

¹⁴ FDL's loan portfolio at risk (PAR <30 days) increased exponentially in most of its rural agencies from December 2008 to December 2011, in which severe droughts and floods affected the western part of the country. The PAR<30 days for agriculture increased from 2.8% to 13.3% in 2009 and to 22.3% in December 2010. As of December 2011, PAR increase to record high of 27.1%. In order to isolate the impacts of climate change from the "no pago" movement, we compared with PAR levels of non-agricultural activities which were much lower: PAR<30 days of 4.5% in 2009, 6.9% in 2010 and 5.4% in 2011.

¹⁵ FDL's information on client segmentation.

¹⁶ Chronic Poverty and the Environment: a vulnerability perspective. Lucy Scott. Overseas Development Institute Working Paper. August 2006.

¹⁷ Nicaragua ranks 101 out of 146 countries in UNDP's Gender Equality Index.

serve rural populations. FDL will therefore benefit from the project as reducing the vulnerability of its clients in rural areas will also likely improve FDL's credit risk profile. Furthermore, FDL will also benefit from the implementation of the EcoMicro model by decreasing operational energy costs and further improving its climate change risk management strategy.

- 1.11. The environment is also a beneficiary. FDL will develop environmental policies to improve the institution's practices to reduce its direct carbon footprint and will develop environmental guidelines for its lending activities.

D. Contribution to MIF Mandate, Access Framework and IDB Strategy

- 1.12. **Contribution to MIF Mandate and IDB strategy:** Nicaragua is the second-poorest country in Latin America after Haiti, and the poorest in Central America.¹⁸ The impacts of climate change are expected to affect poor countries in the tropical and subtropical areas first and will likely push the most vulnerable populations in these countries deeper into poverty.¹⁹ By developing projects in adaptation that directly target smallholder farmers in these geographic areas, the MIF contributes to develop "autonomous adaptation models" while increasing the resilience of vulnerable populations. Autonomous adaptation refers to actions that are taken naturally by the private sector, households or businesses in response to actual or expected climate change. The MIF supports private sector adaptation models which represent a bottom-up approach to adaptation.²⁰ This project expects to generate information on autonomous adaptation models that will fill a knowledge gap on opportunities generated for MSMEs and smallholder farmers that will proactively deal with climate change.
- 1.13. **Relation of FDL project to the EcoMicro Program objectives and Access Framework.** The FDL project will seek to reduce vulnerability to climate change for both MFI clients and the MFI itself through a new green finance product that combines: (i) technical assistance for adaptation measures in agriculture, (ii) a loan to finance required investments for these adaptation measures, and (iii) microinsurance for crops. Additionally, the project will contribute to building MIF's knowledge on the adaptation agenda by (i) testing new adaptation models that represent opportunities for smallholder farmers, (ii) testing adaptation interventions through MFIs instead of directly targeting the beneficiaries, and (iii) testing the appropriateness of the three-leg green finance product as means to reduce both the vulnerability of the clients and of the MFI. The knowledge resulting from this project will be compiled and used in the execution of future projects and will be shared with international audiences under the

¹⁸ In 2010, gross national income in terms of purchasing power parity was US\$2,790, almost three times less than the regional average (World Bank, 2012). Rural poverty levels in Nicaragua are at 67.9%, much higher than 29.1 % in urban areas (data from 2010).

¹⁹ The Economics of Climate Change: The Stern Review by Nicholas Hebert Stein.

²⁰ The IDB has developed several adaptation initiatives in Nicaragua including a program on natural disaster management in collaboration with the Swedish Cooperation Agency and JICA, and the POSAF (Programa Ambiental y de Desarrollo Forestal in collaboration with the Norwegian Fund.

broader EcoMicro Program RG-M1205 Component 3: Knowledge Capturing and Dissemination.²¹

E. MIF Additionality

- 1.14. As referenced by the Climatescope 2012, Nicaragua is home to a well-developed green microfinance sector.²² However, these green initiatives usually refer to the financing of clean energies and energy efficiency rather than the financing of adaptation initiatives. The EcoMicro project will provide further impulse to develop the adaptation concept as a “green” use of funds. Additionally, testing a new green finance product that combines technical assistance for adaptation, a loan for adaptation measures, and microinsurance responds to the MIF mission of testing innovative business models. This product, if successful, may also serve other financial intermediaries that are willing to serve rural clients but that find it risky to enter this market. Additionally, MIF involvement in regional microinsurance networks positions the MIF as an ideal broker between insurers, microinsurance networks and re-insurers which is expected to be critical for the sustainability of the microinsurance leg of the green finance product.²³

2. PROJECT DESCRIPTION

A. Impact and results

- 2.1. **Project Impact:** The EcoMicro FDL project is aimed at reducing smallholder farmers’ vulnerability to climate change by maintaining the stability of their income levels.
- 2.2. **Systemic Impact:** The EcoMicro FDL project will contribute to the systemic impact of the broader EcoMicro Program which consists in developing the markets of clean energies, energy efficiency and adaptation finance for MSMEs and low-income people through sustainable green finance models.
- 2.3. **Project Results:** To achieve the project impact, smallholder farmers will use FDL’s green finance product to stabilize their income levels in the face of climate change. The green finance product combines: (i) technical assistance for adaptation measures in agriculture, (ii) a loan to finance required investments for these adaptation measures, and (iii) microinsurance for crops.²⁴
- 2.4. The combination of these three “legs” in one financial instrument is aimed at responding to the complexity of climate change impacts and to address the three main challenges

²¹ Activities of the EcoMicro Program Component 3 knowledge and dissemination include: compilation of case studies of each project executed, a how-to guide to facilitate extrapolation of the Program lessons learned, annual workshops and dissemination events that will take place at least twice a year, and a wrap up publication that will gather all relevant experiences at the end of the Program.

²² A total of 10 out of the 31 MFIs surveyed in Nicaragua are offering green finance. Climatescope2012.

²³ The combination of technical assistance and loans could reduce insurance costs by initially reducing small holder farmers’ vulnerability through the financing of adaptation measures.

²⁴ Adaptation measures include among others, the adoption of change in planting dates, improved crops or fertilizers, resilient seeds to droughts, irrigation, and diversification of crops that can help prevent soils’ exhaustion.

identified in the background section: (i) small farmers' lack of access to information on current and future climate change impacts, (ii) limited access to finance in order to invest in these measures and (iii) access to microinsurance as a tool to reduce risk-averse behaviors.

B. Description of Model/Solution/Intervention

- 2.5. **The EcoMicro model** intervenes directly with financial intermediaries, in this case FDL, and includes three major components: (i) greening the financial institution by developing environmental guidelines and policies, reducing carbon footprint and educating management and staff in green habits,²⁵ (ii) assessing the institution's loan portfolio vulnerability to climate change and (iii) design and implementation of the green finance product. The success of the project will be dependent on the ability of the green finance product to maintain the stability of FDL clients' income levels and reduce their vulnerability to climate change.

C. Sustainability

- 2.6. The EcoMicro FDL project consists of a pilot that will test a three leg green finance product for adaptation to climate change. The coordination among the providers of each leg of the green finance product (FDL, Nitlapan and the local insurance company) will be crucial for sustainability. We expect that collaboration between Nitlapan and FDL during and after pilot will be successful as both entities have a long term partnership in place.²⁶ Both entities have already developed a process whereby knowledge gathered by Nitlapan on the client side is transferred to FDL. In past projects, Nitlapan sent its recommendations to FDL so that the finance product can be designed following Nitlapan's findings. This knowledge transfer is compiled in an "investment guide" that FDL will use to finance each of the adaptation measures recommended by Nitlapan. As regards to the microinsurance leg, the local insurance provider will conduct a feasibility study to assess the financial sustainability of the micro insurance leg beyond the pilot phase. If results are positive and the company commits to provide the microinsurance for crops, FDL can successfully offer this product as it counts with experience in the provision of microinsurance. If results are negative and the microinsurance leg is not sustainable (i.e. the premium is too expensive), FDL could continue offering the green finance product if the pilot indicates there can be demand for an adaptation loan without the microinsurance leg.

D. Components and standard indicators

- 2.7. **Order of implementation.** The EcoMicro Program's modular approach was designed to allow flexibility in the execution of each project under the Program. In the specific case of FDL, adaptation requires the analysis of relevant information related to climate change impacts in the short and medium terms. As a result, the FDL project will start implementing Component II: Loan Portfolio assessment of Climate Change risk which

²⁵ Green habits include: habits that reduce electricity consumption (lighting, office equipment, air conditioning and heating); habits that reduce materials consumption (paper, disposal cups, marketing materials etc.) and habits that reduce natural resources consumption (paper, disposable cups, etc.).

²⁶ Nitlapan and FDL have been collaborating for decades: Nitlapan offers technical assistance and research in coordination with Nicaraguan University UCA. FDL focused on the financial services.

will produce relevant information for the implementation of Component III: Developing the green finance adaptation product.

Component I: Greening the MFI. (NDF: US\$ 23,600; Counterpart: US\$ 1,000).

- 2.8. The objective of this component is to achieve a strategic commitment to adaptation finance and climate change understanding within FDL. This module is set to facilitate an institutional “change of mind” towards greening the institution and understanding the linkages between emissions reduction (mitigation) and the need for adapting to climate change (adaptation). This component will include the design of an institutional environmental policy that supports internal environmentally friendly practices or green habits (that will result in energy efficiency measures within FDL, reduction of FDL’s direct carbon footprint) and environmental guidelines to support environmentally sustainable activities among its clients.²⁷ This is particularly important in Nicaragua where local populations lack information on how sustainable measures can improve their livelihoods by helping them cope with the negative effects of climate change.
- 2.9. The activities and products of this component are the following: diagnosis of energy efficiency at the FDL headquarters and five branches, develop a GHG baseline and methodology for GHG accounting; design and implementation of energy efficiency measures; design of an environmental policy; training of staff on green habits and on environmental guidelines. The products of this component will include an energy audit at FDL headquarters and 5 of its branches, a final report on GHG reduction,²⁸ a manual of environmental policy guidelines and the training materials for FDL staff on (i) green habits and (ii) environmental guidelines.

Component II: Loan Portfolio assessment of Climate Change risk. (NDF: US\$ 71,440; Counterpart: US\$ 3,000).

- 2.10. The objective of this component is to develop comprehensive climate change risk management in FDL. The consulting consortium will analyze FDL’s loan portfolio exposure to climate risk in the western and central regions of the country as well as the appropriateness of its current climate risk mapping tools.²⁹ The consulting consortium will elaborate different climate risk scenarios in the regions determined above based on existing and publicly available information to understand loan portfolio vulnerability to current and future climate change scenarios in order to develop a more comprehensive risk management strategy.³⁰ This component will help define climate risk-mitigation methodology and will recommend tools for a better climate change risk management.
- 2.11. The activities and the products of this component are the following: analysis of current and future vulnerability of FDL loan portfolio to climate change which includes climate

²⁷ Environmental guidelines will ensure that FDL is not lending to clients whose activities harm the environment.

²⁸ The percentage of GHG reductions to be achieved will be determined once the baseline is determined.

²⁹ FDL currently has a climate risk matrix in each of its branches that maps climate change risks per geographic area. The matrix classifies climate change risk by severity and is used by credit officers when considering loan applications.

³⁰ Publicly available information, adaptation government programs and a list of documents for Adaptation in Nicaragua is listed in the IDB technical note #IDB-TN-144: Vulnerability and Adaptation to Climate Change (Annexes)

change mapping (in the western and central regions of the country), design of new methodologies for climate risk management based and development of a risk management tool. The final product will include recommended methodologies to include in the existing FDL's risk management strategy as well as the design of a risk management tool for climate change impacts.

Component III: Develop a sustainable green finance product. (NDF: US\$ 93,390; Counterpart: US\$ 39,000).

- 2.12. The objective of this component is to develop the green finance product for adaptation to climate change. The green finance product combines: (i) technical assistance on adaptation measures for smallholder farmers (provided by Nitlapan), (ii) a loan to finance required investments for these adaptation measures (provided by FDL), and (iii) microinsurance for crops (to be provided by a local microinsurance provider). Climate change impacts defined in Component II will complement the market study of this component in order to identify climate resilient crops and practices.³¹ The pilot will be evaluated to adjust the green finance product in preparation of the broader scale launch. Preparation of large scale commercialization will require training of internal staff and promotional activities to sell the product to clients.
- 2.13. The activities and products of this component include: analysis of conclusions of FDL loan portfolio vulnerability to climate change (Component II); market study; green finance product design; pilot design and implementation; training of FDL staff for pilot; evaluation of pilot and preparation of the larger scale launch. The products will include: a market study, an operational guide for the three leg green finance product, at least 3 technical assistance plans offered to 300 smallholder farmers in the western and central regions of Nicaragua; training for FDL credit officers; a pilot evaluation report; an internal campaign to educate staff on the specificities of the green finance product and promotion materials for external sales.

Component IV: Knowledge Management and Communications Strategy. (NDF US\$ 5,000; Counterpart US\$0).

- 2.14. One of the main components of the EcoMicro Program relates to capturing, synthesizing and disseminating the knowledge generated at the project level, including lessons learned, best practices, and key factors for success. Adaptation requires changes in behavior and agricultural methods than may be rooted in cultural, even religious beliefs. Developing successful initiatives will be crucial to create demonstrative effects for replication. This project will contribute to the overall knowledge objective by focusing sharing lessons learned and collaborate in broader workshops and events to demonstrate sustainability of adaptation finance.
- 2.15. The activities and products of this component are the following: FDL will provide a full report, including results of the market analysis, and products of each component. The report will include a case study that will feed into the general program's Knowledge and

³¹ The market study will also assess that the adaptation measures suggested by Nitlapan (i.e. changing seeds or agricultural products) can meet market demand so that small farmers can effectively sell their products.

Dissemination Component, which will disseminate credit products, methodologies, and case studies through the Program website.³²

List of Standard Indicators for the Program.

- 2.16. The project will contribute to developing the MIF Agenda “Adaptation to Climate Change” in assisting MFI clients and MFIs themselves to identify, manage and adapt to the threats, risks and opportunities related to climate change. This project will focus in developing coping mechanisms and financing structures to assist smallholder farmers in adaptation initiatives. For the purpose of aggregating indicators at the Program level, smallholder farmers will be treated as MSMEs. EcoMicro component 2: Assessing Loan Portfolio Vulnerability to climate change will also contribute to the MFI risk management of climate change by implementing activities of feed into the indicator “MFIs with risk management models that incorporate climate change risk”. The project will also contribute to develop the MIF Agenda “Expanding access to clean and efficient energy” in reducing energy use and GHG emitted at the MFI level. The Project will include different sets of indicators depending on the beneficiaries.
- a) When considering the MFIs as a beneficiary, project indicators will include the following Adaptation Agenda indicators: (i) number of MFIs developing adaptation finance, (ii) financing mobilized in US\$ for adaptation measures and (iii) number of MFIs with risk management models that incorporate climate change risk. The project indicator that will contribute to the Clean Energy Agenda is (i) energy savings in kWh.
 - b) When considering small farmers as a beneficiary,³³ project indicators will include the following Adaptation Agenda indicators: (i) number of MSMEs practicing climate-resilient livelihood strategies, (ii) number of MSMEs accessing financial products (savings accounts, loans for adaptation activities, disaster risk insurance, etc.), (iii) number of MSMEs growing crops resilient to the climate hazards affecting the area; (iv) number of MSMEs using climate risk data or seasonal forecasts in operational decision making and (v) number of MSMEs (or associations) accessing agriculture/crop insurance.
 - c) When considering the environment as a beneficiary, the project will include the following Clean Energy Agenda indicators: GHGs emissions reduced or avoided in CO2 equivalent both for SMEs and the MFI.

3. COST AND FINANCING

- 3.1. The project has a total cost of US\$ 411,000. The NDF will contribute with US\$280,000 (68%) of non-reimbursable resources, and US\$131,000 (32 %) by the counterpart of

³² Case study format to be provided by the MIF and will include a section on major challenges for designing and implementing a three leg green finance product and key factors for success.

³³ For the purpose of aggregating indicators at Program level, small farmers are classified under MSMEs.

which half in kind and half in cash. FDL's cash contribution is sourced in the contribution of HIVOS, a Dutch NGO and long term partner of FDL.³⁴ The execution period will be of 28 months and the disbursement period will be of 30 months. The project budget does not allocate resources for Contingencies, Audit and Evaluations as these are already covered in the budget by the broader Program RG-M1205.³⁵

Components	Co-Financing NDF	Counterpart In cash	Counterpart In kind	Total
Component 1: Greening the Institution	23,600	0	1,000	24,600
Component 2: Address loan portfolio vulnerability to Climate Change	71,440	0	3,000	74,440
Component 3: Develop Sustainable green finance products	93,390	60,000	39,000	192,390
Component 4 Knowledge Capturing and dissemination	5,000	0	0	5,000
Executing Agency/ Administrative	86,570	8,000	20,000	114,570
Grand Total in US\$	280,000	68,000	63,000	411,000
Total Per Line of Funding in (%)	68%	17%	15%	100%

4. EXECUTING AGENCY

A. Executing Agency

- 4.1. The NGO Fondo de Desarrollo Local (FDL) will be the Executing Agency (EA) of this project and will sign the agreement with the Bank. FDL has 15 years of experience providing microfinance services in rural and urban Nicaragua with a special focus on rural clients that represent approximately 70% of its loan portfolio. FDL's mission is to provide financial products as means to help rural populations in the country improve their productive capabilities and facilitate their insertion in broader markets. FDL has a total loan portfolio of US\$ 56.6 million and operates through a total of 37 branches in Nicaragua. The MFI serves more than 55,000 clients who receive an average loan size of US\$ 937. This loan size corresponds to an average loan balance/GNI of 81.60% which confirms low income levels of FDL's clients.³⁶ Although FDL does not have a specific mandate for women, 54% of the clients in its loan portfolio are women. The data collected by FDL on their clients will be disaggregated by gender so further monitoring and analysis could be conducted on the relationships between gender and adaptation. Through the EcoMicro project, FDL will target 300 smallholder farmers in the northwest and central regions in Nicaragua. In these specific geographic areas, FDL has 5 branches through which it serves 3,451 smallholder farmers.

³⁴ <http://www.hivos.org/about-hivos>

³⁵ Funds for audit and evaluations were budgeted under the EcoMicro Program RG-M1205. The amount allocated is US\$ 330,000 for mid-term and final Program evaluation as well as final evaluation and audits of each project.

³⁶ MixMarket FDL report <http://www.mixmarket.org/mfi/fdl/report>. The average loan balance /GNI is a ratio that provides a proxy on client poverty levels.

B. Project Governance and Execution Mechanism.

- 4.2. **Execution Mechanism.** FDL will be responsible for the project execution and will establish an Executing Unit (EU) within FDL. The EU will hire an administrative coordinator, and appoint internal staff as project coordinator and as an accountant for the project who will support the EU in the management of accounting, procurement and financial activities. The EU will report directly to the FDL General Manager. The EU will be responsible for the timely and effective execution of the project activities and the management of project resources. It will also be responsible for all reporting and administration related to Bank/MIF requirements. Other responsibilities of the EU will include: a) annually develop and approve the Annual Operative Plan (AOP), b) supervise and coordinate the activities of the consortium of consulting firms and Nitlapan to ensure products and results are achieved on time, c) liaise and provide the local insurance provider with all information needed to develop the micro insurance leg of the green finance product and d) control and administer project activities and financial processes required by the MIF. The annual execution mechanism will be detailed in the Annual Operating Plan and regulations (AOP).
- 4.3. **Project Supervision.** FDL will be responsible for compiling and analyzing relevant information for the ongoing monitoring of project execution and the indicators established in the Logical Framework (see Annex I). FDL will generate the institutional information required for that purpose and will complete Project Status Reports every six months.

5. MONITORING, EVALUATION AND REPORTING REQUIREMENTS

- 5.1. **Baseline.** A baseline study will be conducted to record the initial level of the indicators included in the logical framework. For Component III, the baseline study will include information about FDL clients' vulnerability to climate change. The impact indicators that will require ex-ante and ex-post income levels of beneficiaries will be sex-disaggregated. For component I, reduction of carbon emissions will require an energy consumption baseline at institutional level (at headquarters and 5 of its branches). The consulting firm will be in charge of measuring energy savings and its equivalent GHGs savings equivalent developing its own methodology.
- 5.2. **Monitoring.** The Project will be monitored by the MIF specialist in Nicaragua in accordance with the performance and risk management policies (fulfillment of milestones) established by the MIF in April 2008. Project disbursements will be contingent upon verification of the achievement of milestones.³⁷ These milestones will be verified using their means of verification, which will be agreed upon between the EA

³⁷ Milestones are activities or outputs critical to achieving the development objectives and must be determined jointly by the executing agency and the MIF. They may be revised and reprogrammed during the project implementation. The Executing Agency may also request that the Bank modifies the milestones with a limit of 2 times and provided that the corresponding deadlines have not expired. Fulfillment of milestones does not relieve the EA of the responsibilities to meet the indicators set forth in the Logical Framework

and the MIF. Achievement of milestones does not exempt the EA from the responsibility of reaching the logical framework indicators and project's objectives. According to the Performance and Risk-based Project Management approach, project disbursement amounts will be based on the project's liquidity needs, for a maximum period of 6 months. These needs must be agreed upon between the MIF and the EA and will reflect the activities and costs scheduled in the annual planning exercise. Disbursements will be made when the EA requests them to continue normal project implementation and after it is confirmed that no milestones are pending at the time of the request.

- 5.3. The first disbursement will be contingent on reaching Milestone 0 (conditions precedent). Subsequent disbursements will be issued as long as the following two conditions are met: i) MIF has verified that milestones have been achieved, as agreed to in the annual plan; and ii) that the Executing Agency has justified 80% of all cumulative advances. In the event that milestones are not reached, the MIF and the MIF/CNI will assess the severity of the situation and take appropriate measures to ensure that this does not have an impact on project implementation and /or achievement of the objectives. The amount of subsequent payments will be calculated based on the needs derived from each activity scheduled within the scope of next milestone. Supporting documentation of requests for new advances of funds will be required by the MIF and will be revised in an ex-post basis.
- 5.4. **Conditions Precedent.** The first disbursement (Milestone 0) will be made when the operation is approved by the MIF General Manager and upon fulfillment of the following condition in addition to those set by the Bank's Agreement: readiness of the terms of reference for the consulting consortium Triodos Facet, SBI and Climate Focus. The second disbursement (Milestone 1) will require the approval of the Annual Operating Plan (AOP), the signed contract with the consulting consortium, and hiring the administrative coordinator. The amount of successive disbursements will be calculated based on the Project's spending needs to cover the costs of the activities programmed for the period in question.
- 5.5. **Project Status Reports.** The EA will be responsible for presenting Project Status Reports (PSRs) within thirty (30) days after the end of each semester, or more frequently as determined by the MIF by providing at least sixty (60) days advance notice to the EA. The PSR will contain information on the progress of project execution, achievement of milestones, and completion of project objectives as stated in the logical framework and other operational planning tools. The PSR will also describe issues encountered during execution and outline possible solutions. Within ninety (90) days after the end of the execution term, the Executing Agency will submit to the MIF a Final Project Status Report (Final PSR) which will highlight results achieved, project sustainability, evaluation findings and lessons learned.
- 5.6. **Procurement.** For the procurement of goods and contracting of consulting services, the Executing Agency will apply the IDB Policies (GN-2349-9 y GN-2350-9). The EA will hire the consortium of consulting firms Triodos Facet, SBI and Climate Focus to implement the project.³⁸ Given that the Diagnostic of Executing Agency Needs (DNA)

³⁸ For more details on the selection process please refer to paragraph 1.3 of this Project Document.

<http://mif.iadb.org/projects/prjrissummary.aspx?proj=NI-X1008> generated a low level of need/risk classification, the project team has determined that the Executing Agency which belongs to the private sector, will use their own procurement methods which have been deemed compatible with commercial practices of private sector set forth in Appendix 4 of the IDB Policies and they are acceptable for the Bank. In addition, the review of procurement and contracting processes for the project will be conducted ex-post and on an annual basis. Before project contracting and procurement begins, the Executing Agency must submit the project Procurement Plan for the IDB/MIFs approval which should be updated annually and when there are changes in the methods or goods, services or consulting services to be procured.

- 5.7. The EA will use most of the proceeds of its counterpart cash contribution (US \$60,000) to hire Nitlapan for the technical assistance on adaptation to climate change for the final beneficiaries of the project (i.e. smallholder farmers).
- 5.8. **Financial Management and supervision.** FDL will establish and will be responsible for maintaining adequate accounts of its finances, internal controls, and project files according to the financial management policy of the IDB/MIF. Given that the Diagnostic of Executing Agency Needs (DNA) <http://mif.iadb.org/projects/prjrissummary.aspx?proj=NI-X1008> generated a low level of need/risk in financial management, the review of supporting documentation for disbursements will be conducted ex-post and on an annual basis.
- 5.9. The MIF will contract independent auditors to carry out the ex-post reviews of procurement processes and of supporting documentation for disbursements. Ex-post reviews will include an analysis of the Financial Statements that the EA should prepare as part of its financial management. The costs associated with this contract will be financed with the MIF contribution resources according to IDB procedures. During project execution, the frequency of ex post reviews for procurement processes and supporting documentation for disbursements as well as the need for additional financial reports can be modified by the MIF based on the results of the ex post review reports conducted by external auditors during the project execution.
- 5.10. **Evaluation.** As part of component III, a baseline study will be conducted in order to set the starting point of the indicators included in the logical framework. The baseline will include income levels from agricultural activities of the final beneficiaries. A final project evaluation will be carried out when 90% of the MIF contribution has been disbursed or 23 months of the execution period have elapsed. This evaluation will include the results of the evaluation of the pilot (which is an activity within component 3). The evaluation will identify the key factors needed to build a sustainable business case on green finance for clean energy and energy efficiency. Furthermore, the evaluation will include the following aspects: (i) analysis of the results achieved in comparison with the baseline and the objectives set forth in the Logical Framework; (ii) scalability of the project; (iii) institutional capacity of the Execution Agency; (iv) coordination among the different providers of the green finance product, (v) efficiency, efficacy, coverage, relevance and sustainability of execution; (vi) best practices and lessons learned for future replicability and (vii) fulfillment of the pari passu of the counterpart financing. This report will indicate any corrective measures needed to ensure a better execution of other Projects

under the Program. The MIF will commission the evaluation with resources from its contribution. An evaluation and dissemination workshop will be held upon project completion to evaluate and disseminate project results.

6. PROJECT RISKS

- 6.1. **Political risk.** The microfinance sector in Nicaragua has been exposed to significant shocks. In 2009, the government passed a debt moratorium law that gave microfinance clients permission to default on their loans: it was called “movimiento no pago”. As a result, portfolio quality deteriorated and many MFIs failed. In 2012, the National Assembly approved new laws and regulations for MFIs’ unregulated activities which were at the origin of the 2009 crisis.³⁹ The Assembly also created a supervisory body for MFIs, the national commission for microfinance (CONAMI by its acronym in Spanish) which is expected to stabilize the market. These initiatives are aimed at reducing market instability and improve transparency in the microfinance segment.
- 6.2. **Vulnerability to large scale natural disasters.** Nicaragua’s exposure to extreme climate events could challenge the sustainability of the project. EcoMicro will try to address these risks through the microinsurance leg of the green finance product. However, as the frequency and intensity of these events rises, the insurance product might become too expensive to cover frequent risks and low income farmers might find difficult to afford premium payments. A potential mitigation factor consists in transferring risk to re-insurance companies. The MIF has been instrumental in linking FDL and Swiss-Re, a global re-insurance company which is potentially interested in the scaling-up phase of this project.
- 6.3. **Cultural stumbling blocks.** Cultural factors may increase smallholder farmers’ attachment to traditional crops and the reluctance to change behaviors and adopt new technologies. Unless technical assistance is provided by local actors with long term commitment, smallholder farmers may be unwilling to invest in new adaptation strategies. The participation of two local and mission driven partners, Nitlapan and FDL is expected to address this risk.

7. RECOMMENDATION

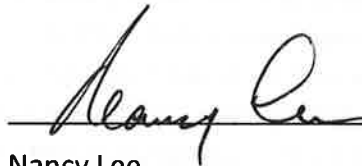
- 7.1. The project Team Leader, Gregory Watson recommends the approval of this operation by the MIF Manager, under the Delegation of Authority granted by the Donors Committee in October 5th, 2011 and the use of resources from the NDF resources totaling up to US\$ 280,000 in order to finance the corresponding project.

³⁹ Microscope 2011. Country review: Nicaragua.

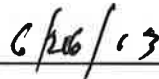
8. MIF GENERAL MANAGER APPROVAL

- 8.1. I hereby approve, in accordance to the Delegation of Authority provided by the Donors Committee on October 5th, 2011 MIF/AT-1143, up to US\$280,000 for the financing of the project "FDL Nicaragua" NI-X1008, the "Project", to be considered as part of the EcoMicro Program.
- 8.2. That the resources of the Project shall be utilized to finance the activities described and budgeted in this document chargeable to the resources of the NDF under the EcoMicro Program Facility (RG-M1205) in a non-reimbursable basis.
- 8.3. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country.
- 8.4. No resources of the Program shall be made available to cover amounts greater than the amount certified herein above for the implementation of this TC Brief.

Approved



Nancy Lee
MIF, General Manager



[Date]