

**PRIVATE INITIATIVE FOR THE DEVELOPMENT OF HUMAN RESOURCES:
PILOT PROJECT IN THE CONSTRUCTION SECTOR**

(TC-99-05-03-7)

EXECUTIVE SUMMARY

- Executing agency:** Nicaraguan Construction Industry Association (CNC).
- Beneficiaries:** The direct beneficiaries will be workers and managers in the construction industry and the suppliers of human resource services to that sector.
- Objectives:** The general objective of the project is to stimulate and expand the capacity of the private sector to manage and increase its human resource development efforts. The specific objectives of this pilot project are: (a) to enhance the capacity of construction firms to provide ongoing training for their workers; (b) to improve the quality and increase the number of training services suppliers to the construction sector; (c) to increase the incidence and quality of training for workers, particularly for laborers, in the construction industry; and (d) to lay the foundations for modernizing the national training system, by transferring experience from this project to other sectors of the Nicaraguan economy.
- Description:** The program consists of the following components: (i) establishing the foundations for a system of ongoing training: design, curriculum development and expansion of supply; (ii) pilot program for training and accreditation; (iii) systematizing and transferring experience for modernizing the national training system.
- Project activities are aimed at establishing an effective and efficient program of ongoing training in the construction industry, based on development of trade-specific occupational skills, with a view to promoting greater investment in training services and equipping the private sector with sufficient capacity to respond effectively to market demands. Specific actions are planned to expand the lessons learned from the project and apply them to other sectors, so that this experience and a strong private training system may contribute to modernizing the national training system in Nicaragua.

The project will capitalize on the strengths of the Construction Industry Association, with its leadership and technical capacity, to develop an industry-wide system with a number of innovative elements. The project represents the most ambitious effort yet undertaken in Nicaragua to establish a system for providing occupational training and skills accreditation, under private leadership. For the first time, construction workers, including casual laborers, will be the focus of a training system directed by the construction companies themselves. The inclusion of casual laborers in company training programs will allow the project to help less-qualified laborers and microenterprises. The project is also innovative in its focus on establishing a regional training market for the construction industry, drawing upon experience and capacities in various Central American countries.

Financing:	Modality:	Non-reimbursable
	Local counterpart:	US\$ 665,500
	MIF (Window II):	US\$1,022,000
	Total:	US\$1,677,500

Execution timetable:	Execution period:	36 months
	Disbursement period:	48 months

Conditions prior to the first disbursement:	Prior to the first disbursement, the CNC will submit to the Bank evidence that the Project Coordination Unit (PCU) has been established, in a manner agreed in advance with the Bank.
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I. COUNTRY AND PROJECT ELIGIBILITY

- 1.1 The Donors Committee, at its meeting of June 7, 1994, declared the Republic of Nicaragua eligible for all forms of financing under the MIF. The project is eligible for MIF financing, within the context of the Human Resources Facility, which is to help improve human resource training in the Nicaraguan construction industry, and because the pilot project will help to modernize the national training system and adapt it to the needs of the private sector.

II. FRAME OF REFERENCE

A. Background

- 2.1 Nicaragua is currently undergoing a process of structural reform and opening its economy, but the country's growth has been held back by shortcomings of two kinds in the labor market: there is a high level of unemployment, and at the same time there is a lack of qualified manpower to meet existing demands. The official unemployment rate was 16% in 1998, and underemployment is estimated at 36%. This situation was made worse in 1998, with the destruction caused by Hurricane Mitch, which had a devastating impact on key sectors of the economy. If it is to recover and move forward, the country requires a better-trained workforce that will allow the Nicaraguan economy to compete internationally and thus to generate new jobs.
- 2.2 The training system, which is currently dominated by the public sector, is not responding adequately to the needs of the private sector. The backbone of the Nicaraguan training system is a state institute, INATEC. The National Technology Institute (INATEC) receives a payroll tax of 2% levied on private businesses. INATEC has not channeled those funds into training the personnel of those companies, but has rather focused its activities on helping youth and the unemployed. Many of the courses offered by INATEC are considered to be of low quality and of little relevance to the needs of business. The private supply of training is very limited and consists almost exclusively of NGOs working with specific high-risk or low-income groups, or private institutes that offer courses in fairly restricted areas where the capacity to pay is greatest, such as administration, computer skills, and English. The levy collected by INATEC to finance its activities has had a negative impact by reducing the incentive for businesses to invest in their own training facilities. This situation has held back development of a training system guided by the private sector and focused on its needs.
- 2.3 The policies of the current government of Nicaragua offer an opportunity to transform the training system and to increase the role of the private sector. In INATEC's submission to the National Education Development Plan, it proposed as a goal that the private sector should be responsible for up to 40% of training within

a period of five years, and 50% within ten to 15 years.¹ This will require a thorough transformation in the current role played by private business in the area of training. Consistent with those goals, the government has undertaken to reimburse one-half of the 2% payroll tax, to those companies that provide private training to their workers. This refund, which should provide a significant incentive for investment in private training, was authorized in 1994, but until now most businesses are unaware of the procedure. Thus, its use has been limited to large companies that have their own human resource management systems. Another important government policy has been the decision to establish, within INATEC, a training system focused on trade-specific occupational skills. This type of system will help to match demand and supply and to improve the quality of training offered.

- 2.4 The strategy of the Nicaraguan government and of the Bank is focused on building a modern national training system, led by the private business sector and focused on its needs. The challenge is to promote a system for ongoing training in various sectors that involve small and medium-scale enterprises as well as large companies. This will require strengthening the private sector so that it can assume a proactive role in the new system. To initiate this process and lay the foundation for transforming the national system, the construction industry has been selected as a pilot sector, one whose economic potential makes it feasible to initiate reforms to the training system.

B. Importance of the construction sector

- 2.5 Construction is a sector where there is both a real need and the capacity to introduce a ongoing training system. Moreover, it is an industry where the country urgently requires growth. To date, training in the industry has been limited and has been directed primarily at administrative personnel. Training for laborers has been virtually nonexistent, because there are few courses available, and the structure of the sector is such that a high percentage of workers are employed on a temporary basis and there is a high degree of labor turnover among companies. Moreover, improving the industry's workforce has been held back because there is no proper system of certification or accreditation for workers, and hence workers have little incentive to invest in their own training or to upgrade their qualifications. Similarly, employers find it difficult to identify the skills and needs of individual workers.
- 2.6 There is a critical shortage of qualified workers in the construction industry, at a time when the sector has a great potential for growth, given the newly opened economy and the reconstruction efforts that have been undertaken in the wake of hurricane Mitch. National companies run the risk of losing out to foreign firms if they do not enhance their quality and their capacity to meet the new market demands. Construction companies have already begun to address the situation.

¹ Documents submitted by INATEC for defining goals and strategies for the National Education Development Plan, May 1999.

Nevertheless, they are aware that training their workers will have little impact on improving the quality of the workforce if they cannot establish a system of ongoing training within their industry. Such a system is important for articulating the sector's needs, expanding the supply of training and enhancing quality standards, while broadening the level and quantity of training available within the sector. To this end, the Nicaraguan Construction Industry Association, which represents the great majority of major companies in the sector, has set up an ad hoc training committee that has taken a number of initial steps to expand and develop a training system. These initiatives, which were part of the preparation of this project, include the signing of an agreement with INATEC to make greater use of the tax refund. The project proposed for the MIF will reinforce, systematize and institutionalize efforts of the CNC to develop a ongoing training model for the industry that can be duplicated and transferred to other sectors of the economy.

III. THE PROGRAM

A. Objectives

- 3.1 The general objective of the project is to stimulate and expand the capacity of the private sector to manage its human resource development efforts more efficiently. The specific objectives of this pilot project are: (a) to enhance the capacity of construction firms to provide ongoing training for their workers; (b) to improve the quality and increase the number of training services suppliers to the construction sector; (c) to increase the incidence and quality of training for workers, particularly for laborers, in the construction industry; and (d) to lay the foundations for modernizing the national training system, by transferring experience from this project to other sectors of the Nicaraguan economy.

B. Goals and innovative aspects

- 3.2 By the time the project is completed, the following major goals should have been achieved: (a) establishment of a system within the CNC to articulate demand by companies; (b) a substantial increase in the training of workers in construction companies (3,430 workers trained in 70 companies); (c) an enhanced private supply of training, in terms both of quantity and quality (105 instructors trained for 15 training suppliers); (d) increased use of a new curriculum based on occupational skills (teaching materials developed for eight occupations and distributed to suppliers); (e) establishment of an accreditation system based on occupational skills in the construction sector (accreditation instruments developed and 1000 workers accredited); and (f) transfer of experience to other sectors of the economy.
- 3.3 Establishing a sector-wide system represents a major innovation that will help to meet the government's goal of modernizing the national training system. The project will take advantage of the leadership, technical capacity and extensive

know-how of the Construction Industry Association. For the first time, construction workers, including casual laborers, will be the focus of a training system directed by the construction companies themselves. The inclusion of casual laborers in company training programs will allow the project to help less-qualified laborers and microenterprises. The project is also innovative in its focus on establishing a regional training market for the construction industry, drawing upon experience and capacities in various Central American countries. In addition, the project represents the most ambitious effort yet undertaken in Nicaragua to establish a system of occupational skills.

C. Components

- 3.4 The project will have three components: (i) establishing the foundations for the system; (ii) a pilot program for training and accreditation; (iii) transferring experience, as described below

**1. Establishing the foundations for a system of ongoing training: design, curriculum development and expansion of supply
(MIF: US\$612,000 and CNC: the US\$44,940)**

- 3.5 The first component will lay the foundation for executing an ongoing training system within the construction industry. This component consists of three major subcomponents: (a) design and establishment of a ongoing training system; (b) development of new training and accreditation programs based on occupational skills; and (c) expansion and strengthening of supply.

a. Design and establishment of a ongoing training system

- 3.6 This subcomponent will finance the design of a ongoing training system within the construction industry and a strategy for implementing it. The design will include mechanisms to coordinate and articulate training supply and demand within a broad group of construction firms and training suppliers, new and existing.

The system will be directed by a new Training Coordination Unit, established within the CNC. This unit will in turn serve as the Project Coordination Unit (PCU). It will hire experts to design the system and develop a database that will, among other things, keep records on the supply of and demand for training.

- 3.7 In addition, the subcomponent will finance efforts to promote training and disseminate information on the new system and on use of the 50% refund of contributions to INATEC, within the construction industry. These activities will be directed at all potential company participants in the project, including those that are not members of the CNC. This will include promotion in CNC publications and the holding of awareness workshops aimed at employers and workers. The functioning of the system and the responsibilities of the PCU are summarized in section IV, and described in detail in Annex IV.

b. Developing new training and accreditation programs based on occupational skills

- 3.8 The project will finance a diagnostic study to identify eight priority occupation within the industry where new training and accreditation curricula are needed. The occupations identified by the CNC, on a preliminary basis, include: bricklayers, heavy equipment operators, topographers, construction foremen, accountants, and human resource managers. For each of these eight occupations, vocational skills will be defined and curricula will be developed, with teaching materials and instruments for accrediting workers on the basis of these skills. This process will be conducted with the collaboration of a technical committee formed by the CNC and INATEC. The project will support the CNC's technical contribution to the committee, by paying for a technical specialist in each occupation. The development of new programs is important for improving the quality of training and establishing models that can be used in other sectors. Training suppliers will receive instruction and materials for these curricula, under subcomponent c).

c. Expanding and strengthening the supply of training

- 3.9 The inadequate supply of training in the sector requires a specialized effort to improve the quality of existing instruction and to increase the number of suppliers. Under this sub component, existing suppliers will be inventoried and analyzed, and a comprehensive strategy will be designed and implemented for expanding and strengthening supply. This strategy will include a program of guidance and training for new suppliers, using the curricula developed under subcomponent b). The diagnosis will include identification of organizations and individuals that, while they are currently not providing training to the sector, have the capacity to create and implement new courses to meet the emerging demand of the industry, including current and potential suppliers from other Central American countries. A registry will be established of private suppliers whose services meet quality criteria. In this way, the registry will lay the basis for a more competitive market in terms of quality, price and geographic coverage
- 3.10 The strategy to develop the supply of training will include a number of incentives, beginning with training for the suppliers themselves. Through specialized courses, training will be provided for approximately 105 instructors, technicians and professionals in 15 training suppliers. This training will be based on new programs developed for the eight occupations. In addition, workshops will be held on the ongoing training model and on the skills-oriented training methodology. Other possible incentives offered by the PCU will include providing the teaching materials prepared under the project to other training institutions, access to premises for giving courses, and access to construction sites to conduct practical training.

2. Pilot project for training and accreditation.
(MIF: US\$70,700 and CNC: US\$484,370)

- 3.11 The pilot program to be implemented under this component will be used to test the training system and methodology developed under the first component, and will ensure not only that it is viable in the construction sector but that it can be applied in other sectors as well. The PCU will serve as a catalyst in promoting training and accreditation and in helping companies to identify their needs and to contract for courses.

a. Worker training

- 3.12 Training under the project will be aimed at three levels of workers: laborers, middle-level technicians and managers, with a particular emphasis on laborers, for whom companies now provide no training. The goals set for the three-year project are to train 2,450 laborers, 700 middle-level technicians and 280 managers and senior technicians. Beneficiaries will be workers employed in construction companies; casual workers will account for at least 50% of the laborers trained. Courses will be short, averaging 30 hours, and will combine theoretical and practical elements. Wherever necessary and possible, training will be provided on-site. In the case of laborers, courses may include new brickwork finishing techniques and the operation of modern equipment. For middle-level technicians, including project foremen, warehouse managers and supervisors, training will include instruction methods for improving continuous on-the-job training. For senior technicians and administrators, training may include new project management and accounting technologies. All courses will cover issues relating to the environment, gender, occupational safety and ethics.
- 3.13 Two different models will be used for contracting courses. Under the first, the PCU will organize courses in which several companies can participate, or in which a company can ask for support from the PCU to contract a specialized course. Contracting for these courses will be done through a bidding process, and suppliers will be selected from a pre-qualified list. The second model calls for the companies to contract directly, in coordination with the PCU. For training in the operation and maintenance of heavy equipment, the PCU will coordinate efforts among construction companies, national distributors and international equipment manufacturers.² In all cases, the PCU will keep records of the courses conducted and the refunds received from INATEC. Companies will pay for nearly all courses with the proceeds of these refunds, and will allow their workers to participate and make their construction sites available for training.

² Negotiations for a coordinated training approach for heavy equipment have already begun with the Caterpillar Company and its distributor in Nicaragua.

- 3.14 Training under the project will be financed for the most part through the refund of company payroll levies, rather than with MIF resources. The MIF contribution will only be used to support courses directly targeted at human resource managers. The objective of these courses is to improve the way in which companies organize and develop their human resources. This is essential for fostering a greater appreciation of the advantages of investing in human resources and ensuring that companies provide in-house training on a continuous and integrated basis. This is a special focused that is not covered by the INATEC refund, and represents the only training activities that will be financed by the MIF.

b. Worker accreditation/occupational qualification

- 3.15 One of the long-term challenges is to develop a system where skills are certified and recognized in the market. This requires the broad use of curricula based on occupational skills and independent certification of training to demonstrate that workers have the capacity to perform the tasks defined for specific trades. To help develop the system, the project will support accreditation for 1000 workers, using performance tests developed under the first component³. Accreditation will be done through courses financed by the project, or through a separate process of individual qualification. Accreditation is a relatively new field of activity for INATEC, and it is still at the preparation and definition stage. The division of responsibilities for accreditation, as between the public and private sector, still has to be worked out.

3. Systematizing and transferring experience for modernizing the National Training System.

(MIF: US\$59,500 and CNC: US\$1000)

- 3.16 This component will transfer experience from the pilot project to the public and private sectors, thereby helping to modernize the national training system. To facilitate this process, experience under the project in the last year will be systematically analyzed, and public-private debate will be encouraged with a view to promoting specific efforts to modernize the system. Experience under the project will be documented with analysis, conclusions, recommendations and a short- and medium-term action plan for transferring experience to businesses and training providers in other sectors. Arrangements will be made to refund half of INATEC contributions to a broad group of private businesses beyond the construction industry, in this way encouraging an expanded role for the private sector in the field of training. The CNC will meet with various industry associations to publicize information about the project, and will hold workshops in two sectors, where experience can be discussed more thoroughly.

³ Certification refers to compliance with all skills requirements (standards) within an trade. Accreditation measures compliance by specific skill, and is thus the most appropriate level at which to initiate the system.

- 3.17 As of the first year of project execution, an Advisory Committee will be established, with participation by private entities including industry associations, training providers and public sector entities such as INATEC, the Ministry of Labor and the Ministry of Education. This committee will serve as a forum for examining international experience in the modernization of training systems, as well as specific issues relating to the project in Nicaragua, such as experience with developing occupational skills.

IV. EXECUTION

A. The executing agency

- 4.1 The Nicaraguan Construction Industry Association (CNC) is one of the most solid and dynamic industry associations in Nicaragua. It embraces 70 horizontal and vertical construction firms, and 20 construction equipment suppliers. It is legally constituted as a nonprofit entity, and is endowed with an organizational structure that is suitable for meeting the sector's needs. It has sufficient human and logistic resources to carry out the activities proposed under this operation on behalf of its members and the construction industry in general. Among other things, it has lines of communication and information, both formal and informal, with other associations and with government entities.
- 4.2 Given the large number of new construction projects now or soon to be underway in Nicaragua in the wake of hurricane Mitch, the CNC has taken the initiative to organize efforts to identify training needs more closely and to upgrade the labor force of the CNC's member firms. The industry's commitment is clear from the actions it has already undertaken with its own resources. In addition, the CNC is seeking other mechanisms to encourage training. For example, it is taking advantage of the review of regulations on public works contracting to propose that the government include criteria in its calls for tender to give preference to firms that run training programs for their own workers.

B. Organization

- 4.3 Project execution will be the responsibility of the Training Coordination Unit within the CNC, which will serve as the Project Coordination Unit during the three years of the project. The unit's principal functions will include organizing, coordinating and providing information on training supply and demand, promoting the merits of training for the sector, identifying needs within the industry, matching emerging demand with the supply of training, facilitating contracting for training, promoting new training providers, and maintaining dialogue and information exchange with various entities in Nicaragua and beyond. Annex II contains details on the costs of each proposed activity. Procurement of goods and the contracting of services with funds from this technical cooperation will be conducted in accordance

with Bank procedures. The project will finance the design of a computerized system for keeping records on training suppliers, the demand for courses, the use of the one-percent refund, and other statistics. The system will also maintain indicators to be used for monitoring and evaluating program. In addition, MIF funds will be used to establish a documentation center with teaching materials, books and technical journals in the training field.

C. Environment and social impact

- 4.4 The Committee on Environment and Social Impact considered this operation at its meeting of June 11 (TRG 22-99), and recommended that the curriculum and teaching materials developed under the project should incorporate issues relating to environment and occupational safety, and that the project should also encourage participation by micro and small enterprises. In addition, issues of gender and workplace ethics will be covered in all courses.

V. COST AND FINANCING

A. Costs

- 5.1 The cost of the project has been estimated at US\$1,677,500. The MIF will contribute 60% of the required financing (US\$1.022 million), on a non-reimbursable basis, and the companies themselves, through the CNC, will provide the remaining 40% (us\$655,500). Following is a summary of the project budget. A detailed budget is found in Annex II.

Table V-1

Activities	MIF	CNC cash	CNC in kind	Total
Component 1: Establishing the system	612,000	9,600	35,340	656,940
1.1 Design and orientation activities	49,800	9,600	31,500	
1.2 Development of new training programs	491,000	0	3,840	
1.3 Expanding and strengthening supply	71,200	0	0	
Component 2: Pilot training and accreditation program	70,700	481,800	2,570	555,070
2.1 Worker training	68,200	451,800	0	
2.2 Accreditation/qualification	2,500	30,000	2,570	
Component 3: Transferring experience	59,500	0	1,000	60,500
Administration	49,710	89,190	36,000	174,900
Evaluation and monitoring	110,000	0	0	110,000
External audit	40,000	0	0	40,000
Contingencies	80,090	0	0	80,090
Total	1,022,000	580,590	74,910	1,677,500

B. Financial sustainability

- 5.2 The project will seek to make its activities financially sustainable at two levels: continuation of the training program established within the construction industry, and the transfer of experience to other sectors, thereby helping to modernize the national system. The sustainability of the Training Coordination Unit within the CNC, the costs of which are relatively small, will depend on companies' commitment to continue investing in training and to use the services offered by the CNC. This commitment, and the steps already taken by the CNC, are a good indication of the industry's intention to persevere with the training process. In addition, the INATEC refund system provides a significant incentive for companies to continue investing in training, on the foundation that will be laid by the project. To ensure sustainability, the project will include analysis and recommendations of alternatives approaches to cost recovery and to insuring the financial sustainability of the Unit.

VI. JUSTIFICATION AND RISKS

A. Justification

- 6.1 The project offers an opportunity for the Bank to support modernization of the national training system in Nicaragua. The government has made major efforts to facilitate private sector participation in the training system. This project will represent a pilot phase for taking advantage of new policies and testing methods for expanding private sector participation. The construction industry was selected for this phase because it has the organizational capacity to manage a training system, and because it has the potential for sustainable growth over the medium and longer term. In addition, the industry is regarded as one of the keys to developing, reconstructing and reviving the economy in the wake of the devastation caused by hurricane Mitch. The construction companies, and their Association, have already begun to invest their own funds in preparation for the project, and have demonstrated a strong interest and capability for undertaking the project. MIF support will help to reinforce industry efforts and will lay the basis for a broader training system serving a greater number of companies.

B. Risks

- 6.2 The principal risk to the project is the limited private supply of training that now exists. The project will depend on a significant expansion of that supply if it is to meet the new demand for training. To mitigate this risk, the project calls for specific efforts to increase supply: it will look to training suppliers in other countries, in particular elsewhere in Central America; it will include a broad range of Nicaraguan suppliers (universities, technical schools, NGOs, construction companies themselves); it will encourage the formation of new consortia to take

advantage of capacities in various organizations; and it will use incentives including special courses for training providers, and the offer of teaching materials and classroom facilities.

- 6.3 Encouraging construction companies to invest in training is a challenge for the project, since companies have a poor record of such investment, especially for laborers. Nevertheless, this risk is reduced by the fact that companies now have access to a refund of one-half of their contributions to INATEC, and the activities to be implemented under the project to promote and encourage training will also be helpful in this regard. The availability of the INATEC refund means, in effect, that training will not require new investments, but can be funded through the recovery of outlays already made.

VII. PROJECT MONITORING AND EVALUATION

A. Monitoring

- 7.1 Monitoring of the project will be based on a Monitoring and Evaluation System. Within the first two months of the project, and on the basis of no objection from the Bank, the PCU will contract a specialized firm to conduct the following tasks: (a) design and implement a monitoring and evaluation system; (b) analyze the computer system to ensure that the database designed for the project includes the information needed for monitoring and evaluation; (c) training PCU personnel in the use and maintenance of the system; (d) reviewing the system regularly and making necessary adjustments.

B. Reports

- 7.2 In order to ensure proper control and monitoring for the project during its execution, the CNC will prepare and submit annual reports to the Bank, on a no objection basis. These reports will detail progress against the work schedule, highlighting and analyzing important issues and offering suggestions for the revision of goals, if this is necessary.

C. Evaluation

- 7.3 The project calls for two evaluations, an intermediate one and the final one. The intermediate evaluation will provide an occasion to examine results of the pilot training program and the operation of the training system, and for recommending the necessary adjustments. The intermediate evaluation will be conducted once 40% of the training goal has been achieved (this is expected to occur 18 months into the project following the first disbursement), or at a time agreed between the Bank and the executing agency. The final evaluation will be done upon completion of project activities. The two evaluation reports will include an assessment of the efficiency of the project and its effectiveness. The efficiency assessment will

include an analysis of: (i) PCU operations, in terms of productivity and internal capacity; (ii) the quality of service and the level of satisfaction among companies and workers; (iii) achievement of the goals as set forth in the logical framework; and (iv) specific recommendations for improving execution and ensuring subsequent continuity after MIF financing ceases. The effectiveness evaluation will measure the impact of the training program on the productivity of workers and companies. The final evaluation will be supported by an independent consultant, to ensure its objectivity. The data gathered through the monitoring system will be used for the evaluation and will allow the PCU to monitor project activities, and thereby support its execution. With respect to workers, the impact will be measured in terms of pay increases, particularly in light of the wage scales in the industry, where laborers are paid according to their productivity instead of the number of hours worked.

VIII. SPECIAL CONTRACTUAL CONDITIONS

- 8.1 Prior to the first disbursement, the CNC will submit evidence to the Bank that the Executing Unit has been constituted in accordance with Bank procedures.

NICARAGUA: PRIVATE INITIATIVE FOR HUMAN RESOURCE DEVELOPMENT
LOGICAL FRAMEWORK

Objective summary	Verifiable indicators	Means of verification	Assumptions
Develop training for workers, with quality and adapted to their own needs and productivity and quality of industry.	1.1 Increased number of workers trained as proportion of those insured under the INSS.	1.1 Records of the National Training System and insurance rolls of the INSS.	1. The government will continue policy of promoting private participation and leadership in national training system. 2. Businesses and workers are aware of the impact and importance of training for production, incomes and working conditions.
Develop a modern and continuous training system for the construction industry, replicable in other sectors. This will help to improve: (i) capacity and productivity; (ii) construction work and (iii) adaptation to new technologies; and (iv) living conditions for workers.	1.1 Ongoing training system operating and documented.	1.1 Documentation and records on project results achieved.	1. Businesses are committed to developing the system and support workers who seek training.
Establish a foundation for a ongoing training system: design, curriculum development and expansion of	1.1 Ongoing training system organized and operating in the construction industry. 1.2 70 construction companies training their own workers (with emphasis on laborers and middle level managers and technicians;) 50% of goal achieved after 18 months, and 100% at the end of the project.	1.1 CNC reports and quarterly reports of the PCU. 1.2 Statistical records of the PCU and databases.	1. The CNC and construction unions support organization of training system.
Develop a training system designed	1.1.1 Models and mechanisms established for: (i) promoting the quality and coverage of training; (ii) coordinating and articulating training supply and demand.	1.1.1 Training model documents. Project reports.	2. The CNC and construction unions provide counterpart funding for project and ensure its financial sustainability.

ative summary	Verifiable indicators	Means of verification	Assumptions
	<p>1.1.2 CNC-INATEC agreements established for using the 1% payroll tax share, improving use of training installations and investments, and cooperative work on educational technology issues.</p> <p>1.1.3 Construction firms participating in the project using the INATEC refund system to train their workers.</p>	<p>1.1.2 Agreements signed between CNC and INATEC. Annual reports of INATEC and CNC newsletters.</p> <p>1.1.3 CNC reports</p>	<p>3. INATEC implements its policy to refund 1% share of business for worker training.</p>
ational-skills based accreditation programs	<p>1.2.1 CNC-INATEC Technical Committee for accreditation of construction skills operating systematically and guiding the corresponding activities (DACUM, validating general and specific skills, curricula, training materials, occupational testing, etc.).</p> <p>1.2.2 Training and skills accreditation plan developed on the basis of an industry needs analysis.</p> <p>1.2.3 Tests to qualify and accredit workers' general and specific skills prepared and validated in 8 construction trades.</p> <p>1.2.4 Curricula, teaching materials and methodologies for training courses defined, applied and validated in the construction industry, on the basis of general and specific skills.</p>	<p>1.2.1 Technical Committee reports and minutes. Working reports from subcommittee formed by the Committee.</p> <p>1.2.2 PCU reports. Results of the diagnosis and training plan.</p> <p>1.2.3 Annual reports of the PCU.</p> <p>1.2.4 PCU annual reports</p>	<p>4. The CNC-INATEC Advisory Committee provides guidance on strategic advice.</p> <p>5. INATEC provides technical and educational resources for implementing occupational certification, in cooperation with CNC.</p> <p>6. Technicians and skilled workers in construction companies participate actively in preparing, validating, applying curricula and teaching materials.</p>

ative summary	Verifiable indicators	Means of verification	Assumptions
oly of training increased d.	1.3.1 15 training service providers (consultants, centers or businesses) for the industry, most of them working on the basis of trades-oriented curricula and teaching materials. Five per year. 1.3.2 Private training providers working efficiently and effectively with company experts and teachers trained in the Training System, training management and/or training methodologies.	1.3.1 PCU annual reports. 1.3.2 Statistics and results indicators from the PCU.	7. There are private training interested in expanding the services. There are persons interested in offering private services within the sector.
am for training and on for general and specific	2.1 Pilot plan for training and certification/accreditation for construction workers conducted during the project period.	2.1 Statistical records and indicators from PCU.	
ning.	2.1.1 3430 construction workers trained, including: (i) permanent management staff and middle-level technicians, (ii) regular short-term workers , (iii) high-turnover casual workers. 2.1.2 At least 50% of laborers trained under the project have increased their incomes.	2.1.1 Statistics and results indicators from the training system (PCU) 2.1.2 Evaluation report on impact of training for laborers.	
on of workers' skills by	2.2 1,000 workers accredited by general and specific skill, 45% in year 2 and 55% in the following year. High proportion of workers accredited have taken training courses under the project (70%).	2.2 PCU Statistics.	
ation and transfer of for modernizing the raining System	3.1 Training system documented and available as a model for replication in other industries. 3.2 Public-private dialogue on the Continuous Training System developed by the CNC during project.	3.1 CNC reports. 3.1 CNC reports.	

Initiative summary	Verifiable indicators	Means of verification	Assumptions
Under component 1.			
1.1: Designing a ongoing training system			
Providing technical assistance for Continuous Training	1.1.1 External consultant selected and working with the PCU to define the Continuous Training System and its processes, and to prepare standards and regulations for the models, according to the level of the workers.	1.1.1 Consulting contract and reports on results of consulting services. Budget executed.	
Designing the overall system and training models by occupational	1.1.2 Models approved and in operation for training: (i) construction laborers, (ii) middle level technicians, (iii) senior technicians and managers.	1.1.2 PCU reports. Documentation on models approved.	
Developing standards, regulations and operating the system (national and by level)	1.1.3 Standards, regulations and instruments prepared and approved.	1.1.3 PCU reports. Documentation on standards, regulations and others. Budget executed.	
Obtaining approval of the Training System by the CNC	1.1.4 Operating procedures for the system adjusted and applied, in accordance with the needs of workers at each level.	1.1.4 Agreement by the CNC Executive Board.	
Disseminating the system's features and models in the construction	1.1.5 Announcements published in CNC information bulletins and newsletters; brochures and fliers distributed among CNC affiliates and construction unions.	1.1.5 CNC newsletters and information bulletins. Copies of brochures and fliers distributed. Budget executed	
Obtaining INATEC agreements.	1.1.6 Agreements established between CNC and INATEC on: (i) the 1% refund for companies, (ii) use of under-utilized capacity by INATEC, (iii) mutual cooperation in validating and accrediting worker skills, and (iv) coordinating and executing the educational process.	1.1.6 CNC-INATEC agreements documented	
Engaging construction firms to INATEC refunds. Sensitize labor circles to the training.	1.1.7 Promotional events conducted during the project's first year: at least four meetings with companies, 2 conferences and 6 publications in the CNC newsletter or other means of communication.	1.1.7 PCU reports. Budget executed	

Objective summary	Verifiable indicators	Means of verification	Assumptions
and dialogue with industry road, international agencies institutions in other countries.	1.1.8 Cooperation agreements negotiated for developing the training system.	1.1.8 PCU reports	
CNC-INATEC Technical skills accreditation in the sector.	1.1.9 CNC-INATEC Technical Committee constituted and operating regularly with representatives of both entities and of private training providers (analysis, support, promotion and decision-making on DACUM workshops, course curricula, teaching materials, vocational tests, etc.).	1.1.9 PCU reports. Advisory Committee minutes	1. The CNC-INATEC Advisory Committee works systematically the establishment and development a ongoing training system sector.
and approve mechanisms ty centers for the skills process.	1.1.10 Processes and responsibilities approved by CNC and the Bank.	1.1.10 PCU reports	
Int 1.2: New training and accreditation programs developed			
needs diagnosis	1.2.1 Diagnosis performed for about 200 construction firms: 70 CNC members and 130 non-members, and validated by CNC and unions. First 3 months of project.	1.2.1 Plan prepared	
of training priorities	1.2.2 Training priorities defined for preparing accreditation/validation instruments and pilot plan for the project. First 3 months.	1.2.2 Document on training priorities	
pilot training and accreditation plan for 3 years	1.2.3 Indicative 3-year plan prepared on basis of training needs diagnosis, with stress on priorities identified.	1.2.3 Three-year plan	
annual adjusted pilot plans	1.2.4 Annual plans and budgets approved, including adjustments pursuant to monitoring and evaluation indicators (continuous analysis: annual feedback for making adjustments).	1.2.4 Annual plans and budgets estimated	

Activity summary	Verifiable indicators	Means of verification	Assumptions
DACUM workshop for two construction laborers.	1.2.5 Products obtained from DACUM: general and specific skills, and tasks defined	1.2.5 Documents from DACUM. Budget executed	1. INATEC and CNC make effort to carry out the technical educational activities of the subcomponent.
Contract international experts to prepare curricula and teaching materials for training courses	1.2.6 Specialists in 8 construction trades contracted (3 months specialized training in each trade, total 24 months).	1.2.6 Activity reports from specialists. Budget executed.	2. Companies and their experienced workers participate in validation instruments.
Develop training curricula in selected trades and specific skill and	1.2.7 Curricula established, printed and distributed to private training providers.	1.2.7 PCU reports. Budget executed.	
Develop teaching materials.	1.2.8 Teaching materials prepared for training courses (upgrading, specialization) on basis of information supplied by DACUM.	1.2.8 PCU reports. Budget executed.	
Develop curricula and teaching materials	1.2.9 Curricula and teaching materials validated with the cooperation of construction companies.	1.2.9 PCU reports	
Develop master lists of equipment, materials for course	1.2.10 Master lists used to evaluate equipment available in companies providing training services.	1.2.10 PCU reports. Budget executed.	
Develop teaching materials abroad.	1.2.11 Contracts signed with at least six foreign agencies or entities to obtain training course materials for construction workers at different levels. Teaching materials adapted and used for training.	1.2.11 PCU reports. Budget executed.	
Develop and contract international experts for validation and accreditation tests for occupational skills.	1.2.12 International experts contracted (eight months expertise in total, one month for each expert) to help prepare skills validation and accreditation tests in eight trades.	1.2.12 PCU reports. Budget executed.	
Develop theoretical and practical validation and accreditation tests abroad.	1.2.13 Materials prepared and adjusted. Battery of skills validation and accreditation tests established for 8 construction trades.	1.2.13 PCU reports. Budget executed.	
Develop tests for qualification and accreditation	1.2.14 Tests validated	1.2.14 PCU reports. Budget executed.	

Objective summary	Verifiable indicators	Means of verification	Assumptions
Occupational skills.			
1.3: Private supply of training increased and strengthened			
on the supply of private (ers).	1.3.1 Data on the situation, volume and type of training offered for the sector nationwide incorporated into PCU database.	1.3.1 PCU databases	
Strategies to increase and supply of private training	1.3.2 Strategy approved for strengthening and expanding the private supply of training.	1.3.2 PCU reports	
Selection criteria and stimulate private training.	1.3.3 Selection criteria and incentives defined and approved by CNC (premises, curricula, teaching materials and training).	1.3.3 Activity documentation provided by the PCU	
the supply of private	1.3.4 Two calls for proposals to supply integrated training courses and programs published (first-year). Fifteen private training providers for training construction workers established and working on the basis of general and specific occupational skills.	1.3.4 Newspaper clippings. Budget executed.	1. There are individuals, groups, private associations or NGOs interested in offering training to the sector.
of suppliers	1.3.5 Training suppliers registered with the PCU (continuous registration system).	1.3.5 Report from the PCU database and records.	
ion to providers of private s.	1.3.6 Two workshops held on the Continuous Training System Model, for company managers and existing training agency personnel (one in first-year, and one in second year).	1.3.6 Report on workshops. Budget executed.	
on of human, material and es for training staff of companies.	1.3.7 Resources available for training the technical and teaching personnel of private training suppliers.	1.3.7 PCU reports. Budget executed.	
training courses for staff of suppliers.	1.3.8 Thirty technicians or managers and 75 teachers from private training suppliers trained in the methodological and management aspects of training: 10 technicians or managers and 15 teachers in the first year; 10 technicians or managers	1.3.8. System statistics. Budget executed.	

Initiative summary	Verifiable indicators	Means of verification	Assumptions
	and 30 teachers in each of the following years. 40% for existing training suppliers and 60% for new suppliers.		
Other component 2			
2.1: Worker training			
and technical assistance in development for companies.	2.1.1 Construction companies have the capacity to prepare and develop flexible and timely training plans, with the help of 140 managers and senior personnel trained under the project in planning and managing training (note: personnel included in the project training target for the management and senior technical level).	2.1.1 PCU reports. Budget executed	
demand for training supply.	2.1.2 Direct contacts, newsletters, brochures and other means used for articulation. Construction companies using the Training System.	2.1.2 PCU reports. Budget executed.	
invited for courses operating plan and bids of companies.	2.1.3 Two tenders published and bid per semester, beginning with second semester of project.	2.1.3 Calls for tenders published. Budget executed.	
of bids and award of	2.1.4 Contracts awarded to bidders included in the PCU registered (private, NGOs, public etc.)	2.1.4 PCU reports	
wards to bidders registered	2.1.5 Courses awarded directly to companies in the training supply registry.	2.1.5 PCU reports	
ce and support to arranging refunds for from INATEC.	2.1.6 INATEC refunds paid to companies that provide training for their workers.	2.1.6 PCU reports	
training courses.	2.1.7 3430 workers participate in courses during three years of project (2450 laborers, 700 middle-level technicians and 280 managers and senior technicians): 15% in first year, 40% in second year, and 45% in third year.	2.1.7 Project indicators and statistics	

Executive summary	Verifiable indicators	Means of verification	Assumptions
Volume of workers trained by...	2.1.8 100% of training conducted under the project is recorded. 70% of training volume contracted directly by construction companies, without intervention by PCU, recorded (training by companies in their own facilities or in public and private entities not included in the system).	2.1.8 PCU records	1. Companies are ready to inquire about the volume of work by means other than the system.
2.2: Accreditation/certification of workers			
Occupational accreditation of companies and workers (within companies).	2.2.1 Messages broadcast by network or cable during two weeks of each semester throughout the project. Promotion in CNC newsletters and bulletins. Meetings with unions and business association about the skills-based accreditation plan.	2.2.1 PCU reports. Budget executed	1. A high proportion of workers interested in occupational certification or accreditation. The companies encourage its workers to seek certification or accreditation.
Accreditation/validation tests in trades.	2.2.2 1,000 construction workers accredited in one or more general or specific skills: 450 in second year and 550 in third year.	2.2.2 INATEC records. PCU statistics	
Component 3			
Project experience. Project...	3.1. Project experience documented, with conclusions, analysis, recommendations and a short and medium-term action plan. Levels of analysis: (i) applying model by level and type of workers; (ii) articulating supply and demand; (iii) efficiency and effectiveness of training and of skills certification and accreditation; (iv) INATEC refund system; (v) private training providers; (vi) adoption of system by businesses; (vii) role of labor organizations; (viii) others.	3.1. Project technical report, prepared on the basis of records, annual reports and project reports.	
Use of INATEC refunds in associations.	3.2 At least the following events have been conducted in the last semester of the project: 4 meetings with business associations, and 8 publications in industry newsletters and other media.	3.2 PCU reports. Statistics on participation in events. Budget executed.	1. INATEC employs a flexible and timely system for refunds.

ative summary	Verifiable indicators	Means of verification	Assumptions
project experience in other tions	<p>3.3.1 Three workshops held between the CNC and other industry associations to analyze project experience and encourage them to implement it.</p> <p>3.3.2 Two workshops held with private training providers, dealing with project experience.</p> <p>3.3.3 Technical assistance plan prepared by the Coordination and Administration Unit of the CNC for associations interested in adapting the Continuous Training System to their needs.</p>	<p>3.3.1 PCU reports. Statistics on participation in events. Budget executed.</p> <p>3.3.2 PCU reports. Statistics on participation in events. Budget executed.</p> <p>3.3.3 Technical assistance plan approved. PCU report</p>	<p>2. The success of the project interest in other industries replicating the experiment</p>
ate dialogue on the g system, its results and	<p>3.4.1 Advisory committee constituted and meeting regularly, to generate dialogue, with participation of private entities (industry associations, training providers) and public (INATEC, Ministry of Labor, Ministry of Education and others).</p> <p>3.4.2 Two conferences held on the subject, with participation by educational authorities, Ministry of Labor, union and industry association representatives, and private training providers (one conference in year 1, one in year 2). Analysis of experience in private training systems and in accrediting occupational skills in other countries.</p>	<p>3.4.1 PCU reports</p> <p>3.4.2 PCU reports. Budget executed.</p>	<p>3. The government is interest continuing its support for t Continuous Training System active private sector involv</p>
ivities:			
n and planning activities			
administrative standards, d regulations for the	<p>1.1 Project operating standards approved. Manuals and regulations applied.</p>	<p>1.1 Standards, manuals and regulations approved in the first three months by the Bank and CNC.</p>	<p>1. The Technical Secretariat Presidency helps to promote implement the project.</p>

Brief summary	Verifiable indicators	Means of verification	Assumptions
Establishing the PCU: personnel, computer and office	2.1 PCU established and operating.	2.1 CNC report prepared. Budget executed	
Establishing a documentation unit for the PCU.	3.1 Teaching materials, books, brochures and technical journals in support of training acquired and registered in the first semester of the project, for a value of US\$ 15,000, available for use in the system.	3.1 PCU reports. Budget executed.	
Budget modifications	4.1 Budget modifications approved	4.1 Planning documents in place. Budget executed.	
Mid evaluation			
Assistance for the project management, communication and system	5.1 National consulting firm contracted to: (i) design and implement system for monitoring, registering and evaluating the project and its activities; (ii) monitor the project on a systematic basis; (iii) conduct the mid-term project evaluation; (iv) conduct the final project evaluation 5.2 Quarterly indicators prepared and used for supervision, control and decision-making.	5.1 PCU reports. Reports, documents, evaluations etc. prepared by the consulting firm. Budget executed. 5.2 PCU reports	
Computer systems (software and personnel training for the PCU)	6.1 Software in use for: (i) statistical records, (ii) preparing progress and evaluation indicators, (iii) databases, (iv) INATEC refund records, (v) others. Activity conducted by hiring technical services of a national company.	6.1 System products computerized. Database established. Budget executed.	
Impact of training on sample of	7.1 Information obtained on the impact of training on labor output and incomes.	7.1 Impact study report. Budget executed	
Impact of training on quality and productivity of labor in a sample of enterprises	8.1 Information obtained on impact of training on quality and output of workers within their company.	8.1 Impact study report. Budget executed	

ative summary	Verifiable indicators	Means of verification	Assumptions
of the financial ty of the Continuous ystem.	9.1 Realistic and applicable options for system sustainability. Decisions taken in this regard by CNC.	9.1 Sustainability study. CNC reports	
dits	10.1 External audit of the project completed at the end of each year.	10.1 Audit reports	
roject evaluation	11.1 Evaluation completed at end of second project year.	11.1 External evaluation report. Budget executed.	

QUARTERLY SCHEDULE OF ACTIVITIES

[illegible]

[illegible]

[illegible]

**NICARAGUA: PRIVATE INITIATIVE FOR HUMAN RESOURCE DEVELOPMENT
INDICATIVE TERMS OF REFERENCE FOR THE PROJECT COORDINATION UNIT**

I. PROJECT MANAGER

Qualifications:

Engineer with experience in project management and a knowledge of training issues. Preferably will have experience in working with multilateral organizations and with the construction industry.

General responsibilities:

As project manager, to direct the Project Coordination Unit (PCU) within the Nicaraguan Construction Industry Association (CNC). Organizes, coordinates and controls all project-related activities. Supervises the PCU team and all consultants contracted under the project.

Responsible to the Bank and CNC on progress under the program. Presents annual reports to the IDB.

Administer project resources in a timely and efficient manner. Maintain an internal financial surveillance program to ensure that sufficient funds are available in special accounts allocated to this purpose. Ensure availability of counterpart funding required from the CNC and its members.

Establish the PCU with an efficient technical, financial and administrative structure, with qualified personnel who can ensure flexible, efficient and timely execution of project activities.

With the help of an external adviser, participate in designing the ongoing training system and in developing all operating procedures for that system.

Coordinate each of the project components, and ensure that the agreed annual operating plans are executed in an efficient and timely manner, providing funding, services and other logistic inputs as needed by the CNC technical units in carrying out their management duties and preparing impact indicators as agreed in the legal documents.

Conduct, supervise and participate as a voting member in committees for evaluating the processes of procurement and contracting for services and training, with due regard to IDB operating standards.

Maintain and safeguard documentation and electronic files on the project.

Coordinate and integrate the demand for training within the construction industry, by contracting the analytical work called for under the project and maintaining the systems

established within the PCU to help companies with the continuous identification of training needs.

Organize all activities required to execute the project, including the various workshops, consulting services, and training courses for private training providers.

Promote the project within the sector and at the national level. Participate in dialogue with the public sector on modernizing the national training system.

II. TRAINING AND ACCREDITATION PROMOTERS

Qualifications:

University degree in related areas, with a minimum of two years experience. The position requires good personal relations and the willingness to take the initiative and to motivate other people. Will preferably be familiar with the construction industry and training issues.

General responsibilities:

Serves as a member of the PCU team, in the position of Promoter of Training and Accreditation. Reports to the project manager.

Participate, with an external adviser and the project manager, in designing the ongoing training system, and particularly in preparing an action plan for the Pilot Program for Training and Accreditation to be implemented under component 2 of the project.

Participate in organizing awareness workshops for businesses and workers.

Promote training and accreditation courses, with a view to achieving project goals.

Monitor all courses, ensuring that participants attend, that courses are paid for, and that all data required by the project monitoring and evaluation system are recorded.

III. ACCOUNTANT AND CONTRACT MANAGER

Qualifications:

University degree in related areas with a minimum of five years experience in accounting and procurement of goods and services. Preferably will have two years experience in working with procurement rules and procedures of international agencies.

General responsibilities:

Serves as a member of the PCU team, in the position of Accountant and Contract Manager. Reports to the project manager.

Prepare the Rules and Procedures Manual for PCU budgetary execution and accounts, on the basis of IDB rules and procedures and those established in the project agreement.

Prepare the Rules and Procedures Manual for contracting by the PCU and construction firms under the Pilot Program for Training and Accreditation. Rules must be based on IDB rules and procedures and those established in the project agreement.

Prepare bidding documents for contracts, invitations for proposals for training services, contracts and the respective annexes, for firms or individuals.

Support the project manager in dealing with technical problems relating to procurement and contracting.

Conduct technical monitoring of compliance with the commitments established in the contracts.

Prepare budget documents with their respective execution reports, to be included in the annual reports for submission to the IDB by the PCU manager.

Keep up-to-date accounts on the project for each component and subcomponent. Maintain a payments file by expenditure item.

Support the project manager in dealing with technical problems relating to budget and accounts.

Conduct technical monitoring of compliance with the financial commitments established in the PCU budget program and in the contracts.

Conduct technical monitoring of compliance with the commitments established in the PCU disbursement program.

PROPOSED RESOLUTION

NICARAGUA. NONREIMBURSABLE TECHNICAL COOPERATION FOR A PRIVATE INITIATIVE PROGRAM FOR THE DEVELOPMENT OF HUMAN RESOURCES: PILOT PROJECT IN THE CONSTRUCTION SECTOR

The Donors Committee of Multilateral Investment Fund

RESOLVES:

1. That the President of the Inter-American Development Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Multilateral Investment Fund, to enter into such agreements as may be necessary with the Cámara Nicaragüense de la Construcción, and to take such additional measures as may be pertinent for the execution of the donors memorandum described in document MIF/ AT- with respect to a Private Initiative Program for the Development of Human Resources: Pilot Project in the Construction Sector.

2. That up to the amount of US\$1,022,000, or its equivalent in other convertible currencies, is authorized for the purpose of this resolution, chargeable to the resources of the Human Resources Facility of the Multilateral Investment Fund.

3. That the above-mentioned sum is to be provided on a nonreimbursable basis.