

***A Regional Strategy for Business Growth{PRIVATE }
through Non-Financial Services:
the Case of Nueva Viscaya, Mexico***

Jacqueline Mazza

Manuel Parga Muñoz

January 1999

Executive Summary

The case of Nueva Vizcaya, Mexico represents an unusual and innovative response to an all too common problem. The problem has been repeated in nations and regions across the globe: a region loses its major industry due to changes in international markets, wide-scale unemployment and business closings result. Typically, the region never seems to be able to recover from the loss and regain its former prominence. Nueva Vizcaya, a region in the North of Mexico comprising portions of the states of Chihuahua and Durango, met a similar fate when it lost its major mining and forestry industries to price shifts in the early 1990s.

This paper describes the strategy being pursued by the former entrepreneurs of the affected industries in Nueva Vizcaya in partnership with the local University to revitalize and make internationally competitive the region's economy. In a country where the cost of credit is prohibitive for most small and medium-sized businesses, the Nueva Vizcaya strategy concentrates solely on growth through non-financial services. The regional strategy supports targeted, low-cost business services and human resources/training to new and developing businesses. The focus is largely on generating new micro and small businesses in targeted areas of the region's comparative advantage. The critical element of this strategy is the regional context: business services and training are delivered, new businesses are stimulated, and the region is promoted all around a sophisticated diagnosis and plan for the long-term development of the region around new growth sectors. . Rather than delivering services one-on-one to firms, many of the services are offered to firms on a group basis, either for firms within a particular sector/industry or for those located in a particular subregion

This is a project in its early stages. One of the more interesting lessons garnered to date is the advantages found in delivering services on a group, rather than individual firm basis. These informal groupings have facilitated new business interactions and cooperation – in joint marketing, investments, and promotion – that are important to catalyzing firm growth on a regional basis. The paper details the progress achieved to date in terms of employment expansion (600 jobs out of a five-year goal of 3,000), delivery of services to firms (900 reached to date out of a three-year goal of 600) and lessons learned in expanding business through a regional growth strategy. The paper is careful to emphasize, however, that this project is in just its first year of a major expansion and has yet to undergo a systematic evaluation. It is only through a more rigorous evaluation of the costs and outputs of the Nueva Vizcaya strategy, as is planned within the next year(s), that the efficiency, utility and applicability of this model can be assessed.

{PRIVATE }I. INTRODUCTION{tc \l 5 "Introduction"}

The case of Nueva Vizcaya in Northern Mexico represents an unusual and innovative response to an all too common problem. The problem can be found across the globe: an isolated region loses its principal industry due to market shifts and with it comes large scale job loss and the loss of business confidence and income. In many cases, towns decline, populations migrate and the area never regains its former position. This is what seemed to be happening in the first years of a crisis that hit the mining and forestry industry in Nueva Vizcaya, a region comprising parts of the Mexican states of Chihuahua and Durango, in the early 1990s.

But overtime, the community has built a broad and sophisticated regional strategy to revitalize and reconvert the region's economy. This strategy is based on using non-financial services to nurture and expand largely micro and small-sized businesses around emerging sectors of the region's identified comparative advantage. Non-financial services have become a particular focus in the Mexican context, in part because unusually high interest rates have effectively barred expansion via credit for most micro, small and medium firms. The community response was led by two key actors: the former entrepreneurs from the affected industries (metal mechanics, mining, and forestry, in particular) working with a newly-initiated International Economics department of the local University, the Autonomous University of Chihuahua at Parral. They created within the University, a business development center, *el Centro de Investigación del Desarrollo Económico y Tecnológico* (CIDEyT) which has led the regional initiative.

This case study is intended to present the model of regional development that evolved in Nueva Vizcaya: explaining the economic challenges faced by the region, describing the model that was developed based around a core of non-financial services, outlining the results obtained to date, and the lessons learned. Given the interest of this conference, the case study gives particular emphasis to the non-financial services provided, although it needs to be emphasized that the innovation of this case is in the regional strategy and context in delivering such services and promoting expansion on a regional and sectoral basis.

II. BACKGROUND: REGIONAL ECONOMIC CRISIS AND INITIAL RESPONSE

Nueva Vizcaya is a sparsely populated region in Northern Mexico, comprised of 21 municipalities in the Mexican states of Chihuahua (southern portion) and Durango (northern portion). Its principal city, Parral is small -- 120,000 people -- and highly isolated. From the capital city of Chihuahua it is a three hour drive south on a lone road without any residents in between. For over 100 years, the residents of Nueva Vizcaya region depended heavily on mining and forestry for their livelihood. Agriculture and milk production were other important sectors. The region had suffered from the swings of international metal prices a number of times before, but beginning in 1991, it suffered its worst crisis yet.

In 1991, following a precipitous drop in world metal prices, the region's three large mines and over 100 small mines closed. Nearly 12,000 jobs were lost in the mining sector alone. The metal mechanics sector which depended heavily on the mines suffered greatly as well. The region's second principal sector, forestry, underwent a similar decline. Other sectors, retail and commercial felt the after shocks of the loss of income and jobs in the region's principal industries.

Total output per capita in Nueva Vizcaya fell 320% from 1988 to 1994, from 20,643 pesos per capita to 6,457.

Initially, the community was simply stung by the shock. Without work, young people migrated to Mexican cities and the United States. Out-of-work miners took to selling food and articles on the streets. The business community had had some history of initiative. Back in the early 1980s, a small group of entrepreneurs had pursued two strategies to try to combat regional economic swings: one, to attract foreign *maquilladora* plants as had so many other Northern Mexican states and two, to stimulate the growth of new businesses. With little luck attracting *maquilla* plants, the small group of entrepreneurs worked with local and state government to build new small businesses and were having some success in the 1989-91 period until the crisis hit. But with the crisis, the business community too was stung and, at first, was merely reactive.

III. EVOLUTION OF REGIONAL MODEL

Phase 1: The Development of an Institutional Base and Initial Diagnostic/Plan

As business and employment conditions deteriorated in Nueva Vizcaya in first years of the 1991 crisis, there was no major response either from the government or the community. But piece by piece, key elements of a business-led community response and regional strategy emerged and took shape by the mid-1990s. These key elements described below constituted a first phase of development of the regional approach. They were: one, creation of key relationships between the local university and the business community; two, the conduct of a sophisticated regional diagnostic and strategy; and three, creation of a regional development center. These elements provided the basic institutional framework for a regional strategy, a specific plan, and then initial experiences to build confidence and a track record in a regional approach. These initial actions came largely through the initiative of a small group of entrepreneurs in the affected industries, predominantly in the metal mechanics sector.

Development of Business-University Collaboration

One of the first activities that can be noted in creating the regional approach was the development of a new relationship between key local entrepreneurs and the local university, the Autonomous University of Chihuahua (UACH), Parral Campus, a state institution. The economic crisis was seen to pervade the whole community from the retention of young people to the business climate for every sector. A key group of local entrepreneurs from the affected industries worked with the university to create a major and a School of International Economics. The intention was a school of practical economics that would help focus on pragmatic regional economic needs.

Regional Diagnostic

The next step undertaken, again with the collaboration of the core group of entrepreneurs and now the International Economics school, was a sophisticated diagnostic of the region's assets and comparative advantage to provide a road map for future growth. This diagnostic used sophisticated economic modeling to assess the likely growth sectors for the regional economy based on its physical, economic and geographic attributes. The diagnostic was prepared by the

faculty of the Economics School with the support of external consultants. Rather than broadly identify sectors for the whole region, the diagnostic identified growth industries at a very local level, at the level of municipalities. Particularly for a region as diverse as Nueva Vizcaya, and one in which local economies have evolved around key natural resources, this level and depth of diagnostic was particularly important. Growth sectors were identified region-wide and at very local levels. There were eight key growth sectors identified on a regional basis: agroindustry, plastics, wood products, livestock production, commerce, tourism, banking services, and metal mechanics (more at an artisan level). The diagnostic provided a key input to local entrepreneurs now displaced from their former industries and looking to start-up new businesses. It also provided an organizing framework for the direction of a regional strategy.

Creation of Center-CIDEyT

The third initial step that provided the institutional and intellectual basis for launching a regional initiative was the creation of a business development center affiliated with the new International Economics School at UACH-Parral. The *Centro de Investigación del Desarrollo Económico y Tecnológico* (CIDEyT) was created with the direct participation of a core group of local entrepreneurs. Like many business development centers affiliated with local universities, this was to be a low-budget operation. But CIDEyT has many distinctions from other such centers which need to be stressed. First, the business community was the heart-and-soul of its creation and insured its practical "hands on" approach. The director, Manuel Parga Muñoz, was himself a metal mechanics entrepreneur as well as professor at the International Economics school. The governing board of CIDEyT was comprised of major business and labor groups in the region. Third, the Center was located in the center of town (Parral) for accessibility for the business community, but it was really the associates of the Center who went out actively into the business community visiting firms. Fourth, the Center would draw on the resources of the University in innovative ways. Students pursuing an international economics course of study at the University would serve as associates of the Center and work directly with a partnered businesses in providing them an initial firm diagnostic, information on potential growth areas, and technical support for firm operations. Being students, this could be accomplished at extremely low cost with a fairly advanced level of computer analysis.

Phase 2: Initial Activities to Expand Regional Economy

It was CIDEyT, backed by strong local business support, which launched the first operational phase of the regional strategy providing initial business services and support to the start-up and expansion of local firms and undertaking activities to promote a regional identity and strategy.

Initial Support to New Firm Start-Up and Expansion

In its second phase, CIDEyT assisted 100 area firms in new start-ups and expansion. Nearly 90% of these firms were micro and small. Each firm was provided an initial diagnostic, and, as appropriate, was assisted in acquiring additional training and services for their firm. This included marketing assistance, identification and application of new technologies, and strategic planning for select firms. New firm expansion was stimulated around 18 specific municipal business plans. These new business clusters included: organic honey production (Valle de Allende); wood

furniture (San Francisco del Oro); integrated fish farming (five municipalities in Durango); glass lamp shades (Santa Barbara); and agriculture (Ciudad Jiménez).

More than just one-on-one technical assistance provided to firms within the same region, there were a series of initiatives to bring firms together and to stimulate regional development. This included the creation of business incubators and facilitation of joint business ventures between regional firms in the same sector. One effort in particular was to create a consortium of five metal mechanics firms (*Integradora Metal Mecánica de Parral*) to bolster local industry and save jobs in failing industries.

Firms purchased technical assistance and training from either CIDEyT, outside consultants, or other area institutions. CIDEyT served to coordinate assistance via the Mexican Government's national program of the Ministry of Labor, *Programa de Calidad Integral y Modernización* (CIMO). CIMO partially subsidizes training and technical assistance to small and medium-sized businesses through the use of local promoters who seek to match business needs with appropriate providers. CIMO is a program for one-on-one assistance to firms, but it was used by businesses in the Nueva Vizcaya region to support individual growth within the context of the regional strategy. Firms have defined limits for the use of CIMO resources and it was soon clear that the regional approach was creating more demand than any national program could satisfy.

Efforts at Regional Promotion, Identity

Beyond firm expansion and creation on an individual and regional basis, CIDEyT also undertook efforts to develop a greater regional identity, improve the business climate, and promote the region for investment. With limited resources, these were smaller efforts in this second phase. They developed initial materials to promote the region, meet with foreign investors, and develop plans for an industrial park. Two automobile plants started up in the region, employing 2,000 workers. They were able to attract one *maquilladora* plant in clothing assembly in 1995.

It is important to point out that Nueva Vizcaya was not the name first attached to this region or the initiative, it was arrived at later. The regional initiative first grew out of the principal city, Parral, and surrounding areas. The municipalities to be involved stretch over two Mexican states and did not necessarily perceive of themselves as one region, although there were important economic and geographic linkages between them that lay at the heart of international competitiveness. The challenge to regional revitalization and effective economic linkages is also to get the business and larger community thinking as a region. Nueva Vizcaya was the name decided on since it evoked an earlier colonial period in which the province, then named, Nueva Vizcaya, was one of the most important economically in the country.

Phase 3: Scale-Up and Expansion of Regional Model

The results from the initial phases looked very promising in terms of new business development and a change in business climate. But with such limited resources, there were clear constraints to the overall impact of the regional approach. In its third phase of development, Nueva Vizcaya has received financial support from the Inter-American Development Bank as well as the continued support of the Mexican government's CIMO program to greatly expand the numbers of firms

reached with more uniform geographic coverage and to measure and study the model itself.

In this third phase, begun in early 1998 and to continue for three years, the intention is to scale-up to reach from the initial 100 to 600 regional firms and to meet and measure goals in terms of the impact on firms of income, sales, and employment. The project retains its focus on development through improved human capital investment and business production utilizing non-financial services and training. This non-financial services and training approach to expansion reflects both the approach and the dictates of a business environment where high interest rates have effectively reduced credit access to most micro, small, and many medium-sized businesses. In this expanded phase, there is expected to be more attention to regional investment promotion. In addition, the project will undergo a mid-term evaluation and specific analytical study about its impact on regional employment. The following section describes the goals and specific program for regional development in Nueva Vizcaya as it has evolved to today in its third phase.

IV. DESCRIPTION OF REGIONAL MODEL AND CURRENT STRATEGY

Objective

To increase the competitiveness, employment, and economic performance of the region of Nueva Vizcaya through business reconversion that permits the different productive sectors to maintain sustainable growth and increase the quality of life of the population.

Specific Goals

- * Within three years, the regional strategy seeks to integrate **600** firms within the project, supporting them with technical assistance and training. These 600 would be drawn from diverse sectors and municipalities, with the vast majority being micro and small firms;
- * Increase by **10%** production in 80% of the (600) firms supported;
- * Increase sales by **10%** in 80% of the firms served; and,
- * Create **3,000** new jobs in the region with salaries above the minimum wage.

Key Strategies

- * To increase the human resources capacity in the region through actions elaborated in firm strategic plans and supported through: human capital formation, training, technical assistance, and improved management;
- * To increase the technological base of regional firms through management actions; and,
- * To create opportunities for firms to be more sustainable, competitive and profitable.

Institutional Framework

The regional effort continues to be led by CIDEyT, a business development center affiliated with the International Economics School of the Autonomous University of Chihuahua-Parral with strong business participation. CIDEyT and its board works closely in cooperation with local organizations, institutions, and governments in key partnership arrangements that are critical to the project's functioning as a regional effort.

The project defines itself as being run through a strategic alliance of the University, Government and Productive Sector (managers and workers). For each of the municipalities in the region, there is a strategic plan in which local businesses and governments participate. Local governments -- through limited financial support and integration of key local development activities with the regional plan -- and the national government -- through its participation through the Ministry of Labor's CIMO program -- are important partners in the effort.

The governing board of CIDEyT is comprised of both business and worker organizations and the key productive sectors of the regional economy. The organizations comprising CIDEyT's Social Council or Board are: Servicios Corporativos Parral, S.A. de C.V.; Integradora Industrial de Parral, S. de R.L. de I.P y C.V.; Unión de Crédito Agroindustrial de Jiménez, Nuevo Frente Campesino del Norte de Durango, and COPARMEX (business association). CIDEyT has a full-time director, administrator and financial accountant, five coordinators (one for each of the major programs of the Center: marketing, strategic planning, finance, training, and financial management) and a network of associates affiliated with UACH. The Center also draws on established business consultants, particularly in the technology-related fields.

Non-Financial Services and the "Critical Route"

The crux of the regional effort lies in providing non-financial services and training to new and expanding firms within a defined regional strategy. CIDEyT has developed a series of six services that are provided according to firm need and willingness to finance. The service provided to all participating firms is an **initial diagnostic** of firm needs and their market potential. This is done typically on-site at the business by one of the Center associates. The firm initially pays the full cost of the relatively inexpensive diagnostic, and receives a reimbursement up to 70% of the costs. The diagnostic also provides a screening device for the readiness of the firm to move to more specialized services, the most central being a strategic plan.

The **strategic plan** is the second and core service provided to a participating firm. Strategic planning is provided on a more selective basis to enterprises ready and willing to undergo more through extensive internal analysis and planning. The strategic plan looks more in depth at the strengths, weaknesses, and challenges of the firm and lays out a medium-term plan for business development. From the strategic plan comes demand and use of four other types of non-financial services. The third of these is **technology management**. This form of technical assistance works with firms to help define the function of technological development within the enterprise, particularly in guiding how to shift or advance production lines in line with international competitiveness. A fourth service is **financial management** which is more of a learning service to train firm management in financial simulation of alternative financial policies and in financial analysis methods. A fifth area of technical assistance is in **market studies**. This assistance helps analyze the potential market for each firms' products, assist in firm marketing plans, and

construct an information system to monitor market changes. A fifth service is **design assistance** which provides technical assistance to firms to improve their use of packaging, processes, and publicity in line with improving the sale and competitiveness of their products in international markets.

Appendix II provides a graphic of the "critical route" that firms and the project pass through in moving through the various stages of development. This graphic shows as well the numbers of each service that have been provided to firms in Nueva Vizcaya as of March 1998 and the per service cost. Any of these forms of technical assistance or non-financial services can be provided either through courses or one-on-one assistance by CIDEyT, independent consultants or firms. Although too date, most firms under the project work through CIDEyT, particularly as its costs are relatively low and it has assumed a leadership role in regional recovery. As shown in Appendix II, the unit cost for services has varied from \$36 for the initial diagnostic profile to \$1,442 for technical assistance in technology management which is a service usually requiring an expert from outside the region. By using local providers and University faculty, unit costs have been kept quite affordable for local businesses. For most services, the firm is eligible for partial reimbursement from 40%-70% from either the Mexican government's CIMO program or the BID project.^{1/} The reimbursement schedule for non-financial services is intended to give greater incentives to those services firms may be the least willing to invest in. Strategic plans, in particular, are exceptional in that firms are permitted up to 90% reimbursement. The initial diagnostic profiles have a very low unit cost and often the University pays a greater share of its cost to order to introduce a greater number of firms into the regional project.

Training

The regional initiative also supports training for both workers and managers in enterprises in Nueva Vizcaya. It is envisioned that such training is provided and identified under the initial diagnostic and strategic plans for each participating firm. Firms in the region may participate as well in training courses under open invitation. This training has an important emphasis on incorporating and learning new technologies and skills for international markets. The majority of management training is conducted via short courses (*diplomados*) using more open invitations. Courses include those on specific business skills, creation of new businesses, technological management, and quality control.

Worker training to date has been conducted on a more sectoral basis within firms, for example, in hotel management, metal mechanics, commercialization, language skills, or wood processing. Worker training has been the most limited of all the training and non-financial services undertaken to date and may indicate a need to examine whether additional actions (e.g. promotion/orientation among managers and workers, curriculum development is needed) are needed to expand the impact of the regional model.

Financing for worker and manager training is similar to that of non-financial services. The firm (or manager) pays 100% up front for the training and receives a partial reimbursement later from either the Mexican government's CIMO program or the BID depending on a specific schedule and the type of training covered. Reimbursement rates vary from 40 - 70%, and for training, reimbursement rates are more generous for micro and smaller firms.

Outreach

The project is undertaking a series of outreach activities both internal and external to the project, with additional activities planned for the second and third years of the current three-year expansion. An important internal objective in the expansion phase of the project is to increase both the number of firms served and the geographic reach of the project beyond its concentration around the principal city of Parral. This has involved active efforts to promote the regional strategy among smaller and more outlying communities in Nueva Vizcaya and to stimulate business development and the entrepreneurial community in key sectors in these outlying communities. The project has also undertaken a number of efforts at external promotion – promotion of the region and its products at international trade shows, promotional activities to potential investors, and efforts to link regional producers with international suppliers and partners. These external promotion efforts are still in their early stages with more extensive activities planned for the second and third years.

Evaluation and Study

With IDB financing, a series of studies and reviews are planned to more carefully analyze and evaluate the regional model being pursued in Nueva Vizcaya. A mid-term evaluation will be conducted near the end of 1999, and a final evaluation six months following the termination of IDB assistance (projected for early 2001). These studies will look at the efficiency and utility of each of the services, the administrative mechanisms, and the ability of the project to meet project goals (e.g. employment, income growth and other goals). In addition, a separate study will be financed looking more closely at the employment impact of the model and tracing, to the extent possible, the specific profile and type of employment generated. This study will investigate more closely the sectors, income level, and skill level of the employment generated as well as the profile of those workers and managers in new employment. Specifically, the employment study will examine whether the regional strategy actually absorbed workers displaced from the affected industries by downsizing, or if another category of labor actually benefited. The employment study and the mid-term evaluations are intended to help in refining and redirecting the project as needed.

Financing

The initial two phases of the Nueva Vizcaya project were accomplished largely based on local resources. This was comprised of contributions from firms and the University (particularly for administration and studies), and very limited local government funds. The national government reimbursed firms for technical assistance and training at the levels provided to any firm under the Ministry of Labor's CIMO program. While this support through the CIMO program was important, it needs to be emphasized that this was not specific support to the Nueva Vizcaya project, but support open to any micro, small or medium business in Mexico that worked through a CIMO local promoter and met national guidelines.

It is in the third phase of development that the Nueva Vizcaya project will be receiving grant resources from the Inter-American Development Bank's, Multilateral Investment Fund. The BID/MIF will provide up to \$1.4 million in grant resources over three years (56%) as long as \$1.1

million is offered in counterpart from the combination of entrepreneurs (25%) and the University (12%) and a limited contribution from CIMO (7%). The BID/MIF contribution is intended to facilitate a major expansion of the Nueva Vizcaya project in terms of firms served, support greater regional outreach and promotion, more extensive study and evaluation, and in the final year, the transfer of experience to other communities in Mexico and Central America. Appendix II provides a summary chart of the projected budget of the Nueva Vizcaya project and expenditures to date.

Results Obtained to Date

The goals of the project in its current phase of development are to reach 600 firms with diagnostic, technical assistance and training services within three years, and in doing so, raise production by at least 10% in 80% of the firms, raise sales by at least 10% in 80% of the firms, and create 3,000 new jobs within five years. Ever present, of course, are national and macroeconomic constraints to achieving these goals which include exchange rate, growth and interest rate trends.

In less than one year of the three year expansion, the project has recorded a net new job creation of 600 jobs. This appears particularly promising compared with the five year goal of 3,000 new jobs and an interest rate environment which has effectively barred most small firms from expansion through credit. The project has served more than 900 firms, 300 more than the total projected for three years in less than one year. The most concentrated work to date has been with 60 firms who have developed strategic plans and participate more comprehensively in a firm revitalization or expansion plan. Appendix I provides the three year goals for the provision of each of the services and the amount of services provided to date. Initial firm promotion (orientation to project, etc.) and diagnostic profiles are already at the three-year goal level, indicating an ability to now concentrate on more targeted growth strategies for each firm. Strategic plans are moving faster than anticipated as well. As noted earlier, training for workers and market studies are being requested by firms at lower levels less than anticipated.

Another important interim result has been that unit costs for non-financial services provided has been significantly lower than anticipated. Appendix I displays the difference between the budgeted and actual cost per service for each non-financial service. The cost per service has varied between \$36 per initial diagnostic to \$1,442 for technology management assistance. The principal reason that costs are being kept low is that firms are choosing to use CIDEyT or local providers more often. (Remember that firms choose the provider and receive a partial reimbursement of the costs). Importantly, CIDEyT has been offering more services in seminar/class format, rather than one-on-one assistance. This again keeps unit costs low and CIDEyT has found that firms are much more willing to participate in services this way. There has been an important added benefit of using the seminar format as it is providing a ready forum for business networking and for building support for the regional initiative.

There have been a number of less quantifiable, but no less important results from the project to date. Evident is an improved business climate and positive portrayal of the region and its growth prospects. More and more business and government leaders perceive themselves as working within a common project and common strategy. This in turn encourages wider business participation in the training, services, and regional promotion activities of CIDEyT. The project has

been able to reach more effectively outside of the main city of Parral and the immediate surrounding areas to become a more truly regional project.

Business expansion simply through collaboration/joint business activities that resulted from the meeting of business leaders while undertaking non-financial services is perhaps the most exciting outgrowth of the experience to date. Specifically, the delivery of non-financial services and training to groups of firms on a municipal and sectoral basis, the greater opportunities for networking within the regional plan, and the positive business climate engendered by the regional initiative have provided a stimulus to more firms to expand together in manifold ways. This includes cases of joint marketing between firms, joint business ventures, business incubators, and cooperatives. This "multiplier effect" of the regional project was the least quantifiable from the outset, but has been particularly significant as firms search for new ways to expand in more highly competitive international environment.

Sustainability.

Sustainability of a regional project such as this one comes in a number of ways: one, in developing the regional reputation and demonstration effect among area firms to reduce the need for external financing (including that firms more and more purchase such services with their own resources); two, in graduating, over time, firms from project support, concentrating scarce resources to those firms need it; and three, in medium-term and more stable growth that reduces the need for a large-scale impulse to regional development.

In most cases around the globe, training and technical assistance to small and medium firms reflects some level of subsidy. This comes from the public benefits that cannot be captured by individual firms (particularly for investments in labor), public interest in the outcome, and perceived underinvestment by firms at the small and medium level. The sustainability of this project does rely, in part, on the continuation of national subsidies but at rates no more favorable than provided to any other firm in any other region of Mexico.

The project has demonstrated its sustainability with low levels of external support in its initial phase of serving 100 firms. As demonstrated in Appendix I, the unit cost for non-financial services has been much lower than anticipated as firms are relying principally on local providers. The next challenge will be to assess, after the three-year initial investment to greatly widen the project's reach, what level of continuation of the project is both necessary and sustainable. It is expected that the regional project, after its initial expansion, will be able to sustain itself with the combination of local resources, fees for services, and utilizing, as appropriate, CIMO support.

V. LESSONS LEARNED

One should always be cautious in providing lessons learned from a case that is still in progress and has not been subjected to final or even mid-term evaluation. Nevertheless, the progress achieved in Nueva Vizcaya both since the creation of CIDEyT in 1993, and in this last year (1997-98) of expanded operations is notable enough to offer important insights concerning this emerging model of regional development and its use of non-financial services. The reader, however, should take into consideration that these lessons are preliminary ones, and should and will be deepened

and refined as the model develops.

Important to the subject of this conference, is that **non-financial services can play an important role in stimulating business growth even in the absence of external credit.** The context of Mexico provides a near perfect laboratory for testing whether businesses can be created and expanded without relying on external (bank) credit. Over the last eight months, CIDEyT estimates that 600 new jobs have been created in firms created or expanded with direct services provided or supported by the Center. There is little doubt that **business growth would have been higher and likely faster had businesses been able to borrow for expansion,** but non-financial services alone were able to make a notable contribution.

Particularly interesting is the contrast of the Nueva Vizcaya case to the more typical trend of providing non-financial services to businesses on a highly-tailored, one-on-one basis. While some of the services provided by CIDEyT and local consultants are provided on a one-to-one basis, there have been **important benefits to delivering more generalized courses and training to groups of firms in order to initiate and strengthen regional business relationships and partnerships and build support and participation in the regional strategy.** CIDEyT has found that their management seminars (*diplomados*) are a highly effective vehicle for bringing together business leaders, and that from these personal connections entrepreneurs are building partnerships, agreements for joint marketing, investments, and other initiatives to jointly expand their businesses. These courses provide as well an important way to build support and confidence in the regional strategy which is essential for turning around the business climate in the region. As well, management training in small groups was cheaper, and thus more readily available for smaller businesses.

The **larger regional strategy and associated actions serves as the essential framework under which non-financial services are designed and delivered in a more productive and catalytic way.** This model goes well beyond delivering a set of non-financial services, with heavy emphasis on new technologies, to a group of firms in the same region. Underlying the operational plan, is a sophisticated diagnostic of the region's assets and a municipality-by-municipality strategy for emphasizing growth sectors and new sectoral partnerships. Without the benefit of a larger regional strategy, efforts to promote the strategy and the region among emerging entrepreneurs, and a large web of partnerships between firms, with local and federal government, and external experts, the non-financial services could not have as great a contribution to firm growth or employment.

The case of Nueva Vizcaya reinforces as well the importance of **an emerging local leader who helps forge local partnerships** by both bringing about the change in attitudes and laying out an alternative vision. The Director of CIDEyT, both a professor and local entrepreneur (metal mechanics) played a critical role in bringing together the former entrepreneurs from the affected industries in partnership with the local University.

This case demonstrates as well **an innovative use of local University students and resources to both keep the cost of services down and build and retain younger business talent in the region.** There are many ways in which local Universities have become more "pro-active" in regional and business development, but the CIDEyT model goes well beyond the more common

university-based, business assistance center. CITEyT functions more in a much more highly integrated fashion as a regional center -- an integral part of the international economics curriculum of the local university as well as integrated in the daily operations of local businesses. As part of their studies, students from the local university provide market studies, initial diagnoses of firm needs, and other assistance (computer software, marketing via the Internet, etc.) directly to local businesses through CIDEyT. This keeps costs low to the businesses, while helping make connections between the students and local firms. Given the knowledge of the young in computers and other technologies, the advantages to a small business can be quite substantial. A number of businesses have hired students upon their graduation, having discovered the advantages of having an economist in their firm. This is particularly important to a region that is vitally concerned with the migration of the young to the United States or larger Mexican cities. The use of the University provides a continual pool of young talent which serves and infuses the local business community. CIDEyT goes further in building a culture of regional entrepreneurship by holding courses for teens whose parents run local firms in which the teens study their parents' firms. All of this reinforces a regional strategy based on reconverting the local workforce and economy toward new more competitive, sectors.

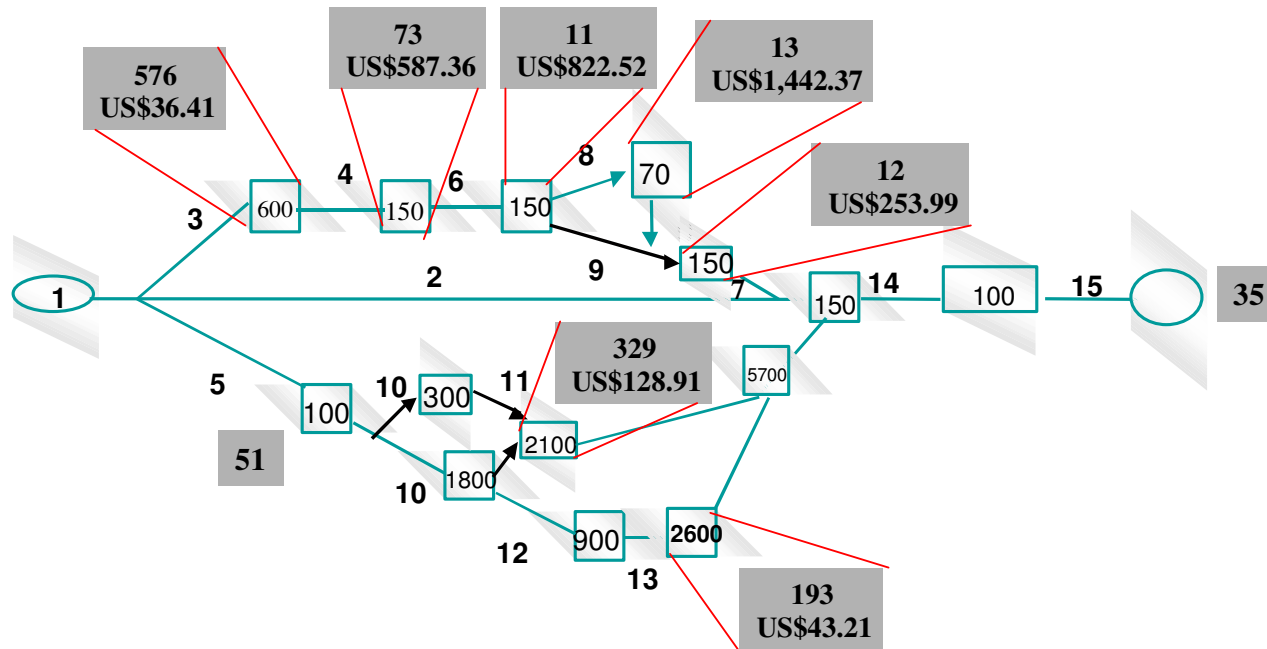
Nueva Vizcaya: Budget and Project Goals

(1992- March 1998)

CATEGORY		BUDGET		PROJECT GOALS				COST PER SERVICE (\$US)	
NUM	DESCRIPTION	TOTAL	AMT. SPENT	GOAL	NUM. INDICATOR	TO DATE	ACH. (%)	BUDGETED COST	ACTUAL COST
1.1.1	Management Training	221,935.00	42,412.77	2100	<==Managers==>	329	16%	105.68	128.91
1.2	Worker Training	332,013.00	8,340.00	2600	<==Workers==>	193	7%	127.70	43.21
2.1	Profiles	8,750.00	20,971.76	600	<==Firms==>	576	96%	14.58	36.41
2.1.1	Strategic Plans	161,250.00	42,877.62	150	<==Firms==>	73	49%	1,075.00	587.36
2.2	Market Studies	200,000.00	9,047.73	150	<==Firms==>	11	7%	1,333.33	822.52
2.3	Technology Management	268,000.00	18,750.80	70	<==Firms==>	13	19%	3,828.57	1,442.37
2.4	Financial Management	117,750.00	3,047.93	150	<==Firms==>	12	8%	785.00	253.99
3.3	Firm Promotion	113,462.00	50,082.60	600	<==Firms==>	1057	176%	189.10	47.38
4	Administration/Project Promotion	169,114.00	99,220.93	36	<==Months==>	9	25%	_____	_____

Source: CIDEyT

Nueva Vizcaya: Critical Path Delivery of Services and Training Cost



Non-Financial Services

- | | |
|---------------------------------|--------------------------|
| 1. Start of Project | 8. Technology Management |
| 2. Promotion | 9. Design |
| 3. Diagnostic Profiles | 10. Seminars |
| 4. Strategic Planning | 11. Informatics Courses |
| 5. Diplomados | 12. Workshops |
| 6. Market Analysis and Study | 13. Worker Training |
| 7. Financial Analysis and Study | 14. Resource Management |
| | 15. Business Incubators |

Note: Shaded boxes indicate number of services delivered and average cost per unit.

