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PROJECT COMPLETION REPORT

MEXICO

PIDER II INTEGRATED RURAL DEVELOPMENT PROJECT (LOAN 1462-ME)

June 30, 1986

Latin America and the Caribbean
Regional Office

Acronyms

BANPESCA	National Fisheries Bank
BANRURAL	National Rural Credit Bank
CFE	Federal Electricity Commission
CIDER	Research Center for Rural Development
CONAFRUT	National Fruit Development Commission
DGCSA	Directorate General of Soil and Water Conservation
DT	General Directorate of Rainfed Districts
FIRA	Guarantee Fund for Development of Livestock and Agriculture
GOM	Government of Mexico
PIDER	Investment Program for Rural Development
PRONDAAT	National Program for Extension in Rainfed Areas
SAHOP	Secretariat of Human Settlement and Public Works
SARH	Secretariat of Agriculture and Hydraulic Resources
SPP	Secretariat of Planning and Budget
SRA	Secretariat of Land Reform

THE WORLD BANK
Washington, D.C. 20433
U.S.A.

Office of Director-General
Operations Evaluation

June 30, 1986

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Project Completion Report on Mexico PIDER II Integrated Rural Development Project (Loan 1462-ME)

Attached for information is a copy of a report entitled "Project Completion Report on Mexico PIDER II Integrated Rural Development Project (Loan 1462-ME)" prepared by the Latin America and the Caribbean Regional Office. Under the modified system for project performance auditing, further evaluation of this project by the Operations Evaluation Department has not been made.

Attachment

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PIDER II INTEGRATED RURAL DEVELOPMENT PROJECT (LOAN 1462-ME)

PROJECT COMPLETION REPORT

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PIDER II Integrated Rural Development Project (LOAN 1462-ME)

PREFACE

This is a Project Completion Report (PCR) of the PIDER II Integrated Rural Development Project in Mexico, for which Loan 1462-ME was approved on June 16, 1977 in the amount of US$120.0 million and fully disbursed on September 23, 1983.

The PCR was prepared by the Latin America and The Caribbean Region, Agricultural Division C after a field visit in May 1985. The PCR is based upon a special report prepared by the Borrower, which was started in 1983, but not completed until March 1985. The PCR is also based on a review of the Staff Appraisal Report dated May 31, 1977, the Loan Agreement, Bank supervision reports, project-related Bank files and the Project Performance Audit Report of PIDER I, dated June 30, 1983.

The project was not selected for audit by OED as its most important findings and lessons are similar to those noted in the PPAR of the first project.

The PCR was sent for comments to the Borrower on April 18, 1986. Comments received have been attached to the PCR as Appendix 1.

The assistance provided during the preparation of this report by the Government of Mexico and the project staff is gratefully acknowledged.

MEXICO

RURAL DEVELOPMENT PROJECT - PIDER II

PROJECT COMPLETION REPORT

BASIC DATA SHEET

KEY PROJECT DATA

	Appraisal Estimate	Actual	Actual as % of Appraisal Estimate
Project Costs (US$million)	255.0	255.0	100%
Credit Amount (US$million)	120.0	120.0	100%
Date Board Approval		6/16/77	
Date Effectiveness		10/08/77	
Date Physical Components Completed	1/31/81	9/31/82	
Proportion then Completed	68%	100%	
Closing Date	7/31/81	1/31/83	
Economic Rate of Return	23.7	6.4	27%
Financial Rate of Return	20.7		n.a.
Number of Direct Beneficiaries	46,000	29,000	63%
Number of Credit Beneficiaries	12,000	10,000	83%

CUMULATIVE DISBURSEMENTS

	FY78	FY79	FY80	FY81	FY82
Appraisal Estimate (US$'000)	7.0	34.0	82.0	120.0	
Actual (US$million) 1/	9.5	20.8	30.8	82.0	120.0
Actual as % of Estimate	136	61	38	68	100
Date of Final Disbursement	September 23, 1983				
Principal repaid to (mo./day/yr.)(US$million)					

1/ As revised 1/31/83

MISSION DATA

Mission	Date (mo./Yr.)	No. of Persons	Mandays in Field	Specializations Represented 1/	Performance Rating 2/	Trend 3/	Types of Problems 4/
Identification	6/75	6	160	a,b,c			
Preparation							
Appraisal	8/76	9	231	a(4),b,j,k,g,l,n,o			
Supervision 1	7/77	2	20	a(2)	1	2	MP
Supervision 2	1/78	4	44	a(2),b,d	2	1	MP
Supervision 3	6/78	2	20	a(2)	1	2	MP
Supervision 4	12/78	3	36	a(2),b	2	2	MP
Supervision 5	6/79	5	50	a(3),b,c	2	2	MP
Supervision 6	12/79	4	56	a(2),b,c	2	2	MP
Supervision 7	7/80	1	8	a	2	2	PM
Supervision 8	4/81	3	30	e,b,a	2	1	MT
Supervision 9	8/81	3	33	e,b,a	2	1	MT
Supervision 10	5/82	3	45	e,b(2)	2	1	MT
Supervision 11	10/82	3	24	b(2),a	2	1	MT
Special Reviews/	6/78		30	Included in activities of PIDER I mid-term review mission			
Partial SPNs	12/78	1	56	f			
	10/80	1	5	a			
	10/81	4	16	e,g,h,a Review mission onfarm lending and M&E			
	6/82	1	12	i			
Total (SPN)			912				

Borrower	NAFINSA
Executing Agency	SPP
Fiscal Year	January 1 to December 31

Name of Currency (abbreviation)

Currency Exchange Rate:

Appraisal Year Average	US$ 1.00 = 23
Intervening Years Average	US$ 1.00 = 38
Completion Year Average	US$ 1.00 = 140

Follow-on Project:

Name	PDR Integrated Rural Development Project
Loan/Number	1462-ME
Loan/Amount (US$million)	120 m
Date Board Approval	6/16/77

a/ Economist
b/ Agriculturalist
c/ Agro-industry Specialist
d/ Sociologist
e/ Rural Development Specialist
f/ Rural Industries Specialist
g/ Livestock Specialist
h/ M&E Specialist
i/ Fisheries Specialist
j/ Highway Economist
k/ Highway Engineer
l/ Agricultural Credit
m/ Nutrition/Marketing Specialist
n/ Soil and Water Conservation Specialist
o/ Forestry

1 = Improving; 2 = Stationary; 3 = Deteriorating

F = Financial; M = Management; T = Technical; P = Political; and O = Other

1/ = Problem-free or minor problems; 2/ = Moderate problems; 3/ = major problems.

PROJECT COMPLETION REPORT

MEXICO

PIDER II Integrated Rural Development Project (LOAN 1462-ME)

EVALUATION SUMMARY

Introduction

The project, the second of a series of three, was part of one of th most ambitious integrated rural development programs to be supported by the Bank, through the seventies and eighties. The first PIDER project (Loan 1110-ME) was approved in May 1975 and closed in August 1980. The Project Performance Audit Report (PPAR) concluded that the productive investments of the project had marginal economic returns, but that better success was obtained with social and production-support investments. This second project was approved in June 1977 and closed in 1983; a third loan was approved in March 1982 and is expected to be fully disbursed in December 1987.

Objectives

The project was the continuation of a national rural development program and consisted of: (i) directly productive components (70% of project costs): livestock, small-scale irrigation, soil and water conservation, fruit production, rural industries and agricultural credit; (ii) production-support components (20% of project costs): feeder roads, rural electrification, agricultural extension, farmers' organizations and rural markets; and (iii) social infrastructure (10% of project costs): education facilities and water supply. Total project costs were estimated at US$255.0 million, to be disbursed over five years.

Implementation Experience

Investments for livestock and irrigation were higher than anticipated while those for soil and water conservation, orchards, rural industries and agricultural credit were lower. More roads and electric systems than expected were constructed. Agricultural extension services were weak. Implementation of education facilities was satisfactory, while the water supply program was not completed. When the loan was closed in January 1983 (a 48% time overrun), the project was not fully completed, but total project costs were the same as expected at appraisal.

Results

Many of the productive components failed to become operative or operated poorly, mostly because of inadequate beneficiary participation and poor

extension and agricultural credit services. By contrast, production-support and social programs performed relatively well. The project ERR is now estimated at 6.4% (23.7% at appraisal). The project was more successful in achieving its institution-building objectives, by creating a decentralized framework through which the problems of rural poverty in Mexico could be addressed more effectively.

Sustainability

Based on past experience, the Secretariat of Planning and Budget (SPP) is taking a number of measures to redress the shortcomings of the PIDER program while retaining its positive aspects. The decentralization policy of the Government, actions taken by SPP to rehabilitate the productive investments which are not operating effectively and the technical assistance provided for production investments are part of the measures adopted by the Government to improve the sustainability of the project.

Findings and Lessons

A number of lessons have been drawn from this project and recently applied in new rural development projects in Mexico:

(a) The project was over-ambitious and too dispersed geographically. Coordination between numerous line agencies responsible for project execution proved more difficult than anticipated.

(b) The project confirmed the findings of other complex rural development projects in Mexico (Papaloapan Basin and Tropical Agriculture, OED Reports 5760 and 5997 of June and December 1985) that a series of smaller projects, implemented by different line agencies, might be more effective than one large, multidisciplinary project.

(c) Heavy Bank supervision (four man-years) was effective in detecting promptly the major shortcoings of the project, but was unable to bring about changes to remedy these shortcomings;

(d) The early establishment of an effective monitoring and evaluation system is crucial for this kind of project.

MEXICO

RURAL DEVELOPMENT PROJECT - PIDER II (LOAN 1462-ME)

PROJECT COMPLETION REPORT

I. BACKGROUND

1.01 In the early seventies a significant shift occurred in Mexico's agricultural policy with concerted efforts made by a number of Government agencies towards improving the lot of its large population of rural poor. Programs to accelerate the provision of essential infrastructure and social services, and to increase output from small farming lands were given much greater attention than before. The need to coordinate and focus these efforts soon became evident. A special Investment Program for Rural Development (PIDER) was established for this purpose in the President's Office and a goal set to develop 100 micro-regions 1/ for a capital expenditure of US$1.7 billion. With the change in presidential administration in December 1976, a new Secretariat for Planning and Programming (SPP) was formed and responsibility for executing the PIDER program was transferred to SPP.

1.02 In 1973, with the establishment of the PIDER program, the Mexican Government (GOM) turned to the Bank for assistance in the preparation of a PIDER project for Bank financing. In discussions with the Bank, the focus of the program was expanded from that of a basic rural infrastructure program to one with a directly productive emphasis. In May 1975, PIDER I (Loan 1110-ME) was signed.

1.03 In the early PIDER years, substantial amounts of basic infrastructure, primarily roads and electrification, were constructed in PIDER micro-regions, poor rural areas often untouched by prior public sector involvement. In addition, important advances were made in decentralizing the decision-making and implementation of PIDER activities from Mexico City to that of the federal agency representations at the state level. State and municipal governments, previously not included in such federal programs, also began to play a more active role.

1.04 Problems were identified early in the implementation of PIDER I. It was clear that credit and extension services required substantial improvement and PIDER's control over the various executing agencies was

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1/ Micro-regions comprised an average of 50,000 poor persons located in two to seven contiguous rural muncipalities within a state. They were selected using criteria that balanced poverty levels with potential for income increasing productive activities.

insufficient. Also, beneficiary participation, while greatly improved as compared with prior programs, was still inadequate. Nevertheless, program implementation seemed sufficiently positive to warrant optimism about the potential effectiveness of the PIDER program, particularly if the requisite changes could be made.

1.05 The project completion report for PIDER I (March 1982) and the project audit report (June 1983) indicated that the performance of the productive investments financed under PIDER I continued to be problematical. The reports differed, however, in their interpretations of the effectiveness of these investments. The absence of an adequate monitoring and evaluation system and the corresponding lack of good impact data left these differences essentially unresolvable in quantitative terms.

II. PROJECT FORMULATION

A. Identification, Preparation, and Appraisal

2.01 Following Board approval of PIDER I, a mission was sent to Mexico in June 1975 to begin preparation of a second PIDER project 2/. This project was appraised in July/August 1976 by a nine-member Bank mission. Although questions were raised in the Bank about proceeding with a second loan before the first one was properly under way the Bank staff responsible for PIDER argued that a second PIDER loan was important for two reasons: first, to consolidate, strengthen and assure the continuation of the program by the new Presidential administration which was to assume office in November 1976; and second to increase Bank participation in implementing the strategy evolved under PIDER I to reduce significantly investment in the construction of infrastrcuture *per se* in favor of integrated prodctive investments.

B. Board Approval

2.02 A major issue during negotiations was cost recovery, particularly regarding productive investments. The Agreements required beneficiaries to contribute to investment costs in accordance with their ability to pay and to meet all operating and maintenance costs through cash or in-kind payments. The Project was approved by the Board on June 16, 1977. The Board expressed concern about project risks because of the comprehensive nature of the project and the unreliable rainfall in many marginal areas.

2/ The first supervision of PIDER I was also carried out at the same time.

C. Objectives and Description

2.03 The principal objectives of the PIDER II project were to reinforce the PIDER program's efforts to raise incomes, production and employment levels, and to improve social services for the rural poor in the 20 PIDER II micro-regions and in PIDER micro-regions throughout the country. Other objectives were to consolidate and strengthen the overall PIDER program, help make improvements program-wide, and to assure the continuance of the program into the incoming Administration.

2.04 It was clearly recognized that for the project to be successful, extension, credit, and farmer organization services had to be improved and that the existing project infrastructure had to be properly operated and maintained. It was also assumed that the expected increases in farm incomes and improved services would slow urban population migration.

2.05 The project consisted of: (a) directly productive components (70%); (b) productive support components (20%); (c) social infrastructure (9%); and (d) monitoring and evaluation activities (1%).

2.06 PIDER, originally part of the Ministry of the Presidency but which became part of the Secretariat of Planning and Budget (SPP) following SPP's creation in early 1977, had overall project responsibility for coordinating the activities of the numerous line agencies which directly implemented the sub-projects financed under the project. The most important of these line agencies were Secretariat of Agriculture and Water Reources (SARH), Guarantee Fund for Development of Livestock and Agriculture (FIRA), National Rural Credit Bank (BANRURAL), the Secretariat of Land Reform (SRA), National Fruit Commission (CONAFRUT) and Secretariat of Human Settlements and Public Works (SAHOP).

D. Project Costs and Financing

2.07 Total project cost at appraisal was US$255 million. The US$120 million Bank loan covered the foreign exchange costs of US$46 million and local costs of US$74 million. Government's contribution amounted to US$129 million while the direct cash contribution of beneficiaries was about US$7 million.

E. Project Risks

2.08 Low and irregular rainfall was a risk which would be addressed by the project by: (i) introducing irrigation, pasture improvement and conservation works along with crops with lower water requirements; (ii) improved field demonstration; and (iii) intensified extension efforts.

2.09 The variable quality of staff and leadership, particularly at the State and micro-region level, was also perceived as a risk which the project proposed to solve through: (i) providing training for technicians and beneficiaries and (ii) emphasizing self help activities and the development of local leadership capabilities.

III. IMPLEMENTATION

3.01 The loan was approved in June 1977. It became effective in October of the same year. A supervision was carried out just prior to effectiveness in July 1977 and the first post-effectiveness supervision mission was mounted in January 1978. The SAR assumed a four year implementation period, with project completion expected by July 31, 1981. Actual project implementation was about 5½ years. The project was closed on January 31, 1983. Fifteen supervisions and one special performance review were carried out over this period involving about 912 field mandays. Table 3.1 shows estimated targets and actual accomplishment by major project components. Investments for major categories by years are shown in Annex I.

A. Project Components

3.02 Livestock. Some US$34.3 million were invested in livestock activities (about double the appraisal estimate). These included investments for beef, dairy and dual purpose cattle, pigs, sheep, goats, poultry and bees. Until very recently, performance was generally poor. Based on a 1984 sample survey (Annex II), about 50% of all livestock enterprises financed under the project either did not operate or operated poorly. The completion mission generally confirmed these findings, but noted recent improvements.

3.03 The mission found that beneficiaries from areas with a tradition of livestock grazing were more successful than those with no previous livestock experience. A further problem was that many investments created intensive animal production units normally operating with slim profit margins which required significant management capability. Because success was closely related to the quality of preinvestment planning and the level of technical assistance provided, the best units were those for which the credit institutions were directly involved in planning and execution. Technical assistance provided by consultant Production Directors financed through the credit component of the program (para 3.20) seem a particularly effective recent development. Even with direct involvement from the credit institutions, however, performance of these intensive livestock units was generally still only fair. There were problems associated with involving beneficiaries in the management of their units as many viewed the unit merely as a source of employment. A sense of ownership was lacking and many considered the government or the banks as the owner. Also, insufficient attention was given at the planning stages to the importance of feed supplies

Table 3.1

MEXICO

LOAN 1464-ME (PIDER II)

PROJECT COMPLETION REPORT

PROJECTED AND ACHIEVED GOALS

	Unit	Physical			Beneficaries			Investment (US$)		
		Projected	Achieved	%	Projected	Achieved	%	Projected	Achieved	%
I. PRODUCTIVE INV.										
(a) Irrigation	ha	34,000	17,300	51	14,000	7,500	54	33.9	27.7	82
(b) S&W Conser'a	ha	80,000	89,000	112	na	286,000	-	10.4	13.4	129
(c) Livestock					10,000	12,000	120	17.6	31.4	178
(i) Cattle	no units	142	106	74	-	-	-	-	-	-
(ii) Pigs	"	27	30	111	-	-	-	-	-	-
(iii) Goats/ Sheep	"	12	11	92	-	-	-	-	-	-
(iv) Poultry	"	36	19	53	-	-	-	-	-	-
(v) Bees	"	189	114	60	-	-	-	-	-	-
(vi) Fruit, Forestry	ha	7,900	6,100			88,00		9.2 1/	7.3 1/	7.9
II. PRODUCTIVE SUPPORT INV.										
(a) Rural Roads	km	2,010	4,140	206	131,000	265,000	202	15.9	20.7	79
(b) Electrical Installation	villages	300	148	49	131,000	na	-	7.3	9.1	125
(c) Grainstores	silos	65	56	86	-	-	-	0.8	3.4	425
(d) Agric. Exten	ha	125,000	116,000	93	-	-	-	10.0	18.5	185
(e) Producer Org	Ejidos	1,000	1,200	120	50,000	48,000	96	5.5	6.4	116
(f) Studies	-	-	-	-	-	-	-	3.6	3.5	97
III. SOCIAL INVESTMENTS										
(a)Education	Classrooms	1,500	1,080	74	60,000	51,000	85	5.3	5.4	102
(b)Rural Water	Villages	-	-	-	214,000	96,000	45	10.3	7.2	70
(c) Self Help	People	92,000	78,600	85	-	-	-	3.9	3.3	85

1/ Includes fisheries

and prices, marketing outlets and product prices. As a result, many units, particularly pig and poultry, operated with very precarious margins or were forced to close down partially, further eroding beneficiary participation and confidence.

3.04 Early in the implementation period, both PIDER and the Bank recognized that the livestock component required serious improvement. It was not until December 1981, however, that an agreement was reached that rather than continue to invest in new livestock infrastructure, emphasis was to be given to assuring the operation of the existing units. The completion mission noted a marked improvement, apparently the result of such changes, in the last three years.

3.05 Aside from the issue of performance, neither PIDER nor the Bank explicity questioned the suitability of such livestock units for achieving rural development equity aims. Except for bee units, investment costs per unit were high and the number of direct beneficiaries relatively few. Except during the construction phase, the amount of labor generated was not large. Also the selected beneficiaries when successful, stood to become relatively much wealthier than their peers. Nevertheless, many examples of highly productive and profitable large units were noted by the completion mission. The completion mission, using very conservative assumptions (50% of units operating and low technical coefficients), calculated the component rate of return at approximately 9%.

3.06 Irrigation. Some US$35.8 million were invested in small-scale irrigation (about 8% above the appraisal estimate). However, the area irrigated was only about 50% of the appraisal and per beneficiary costs (US$3,400) and per hectare costs (US$2,100) were considerably above the appraisal estimate. By late 1984, sample survey data indicated that slightly less than 50% of all units were operating satisfactorily with the operation of another 28% considered fair (Annex II). The main reasons for the unsuccessful subprojects were: (a) inadequate planning, particularly with respect to agronomic aspects; (b) inadequate extension services; (c) inadequate production oriented research and demonstration; (d) poor land leveling; (e) insufficient credit and failures to provide credit in a timely manner; (f) poor coordination in the installation of electrical power and; (g) lack of commitment of beneficiaries. The completion mission, using very conservative assumptions (full development incremental income of US$401 per hectare on 75% of the hectares irrigated under the project) calculated the rate of return on irrigation investments at just below 10%.

3.07 Soil and Water Conservation. Although appraisal estimates were exceeded for areas covered and funds invested, sample survey data (Annex II) show that the performance of 60% of the investments in two of the major activities, subsoiling and destoning, was unsatisfactory. With respect to the third activity, raised terrace construction, the effectiveness of significant number of subprojects was low due mainly to design errors and the lack of maintenance. Bank supervision missions questioned the appropriateness of these activities in many situations. Much subsoiling and

destoning was considered unncessary or of marginal benefit as was the selection of costly raised terracing in preference to cheaper broad terraces. The Directorate General of Soil and Water Conservation (DGCSA), had sufficient experienced staff to enable it to carry out the program envisaged at appraisal but this was not done. PIDER management, however, lacked the expertise to question the execution of the program.

3.08 Fruit, Forestry and Fisheries. Of these three activities, more than 85% of investment were for the development of fruit production operations by the National Fruit Development Commission (CONAFRUT). PIDER was an important source of funds for CONAFRUT accounting for some 25% of CONAFRUT's budget. These funds helped expand national fruit production and provid opportunities for some 8,800 new small scale producers. Over the first few years of project execution, performance of this activity was generally unsatisfactory. CONAFRUT resources were insufficient and it was not able to provide enough technical assistance to ensure success. There were also major problems with credit which was often insufficient and not provided when required. Also, no credit was available for short term activities to provide farmers interim income from intercropping for the first three to four years until their orchards started to produce. Although these problems were never completely solved, a marked improvement was achieved in subsequent years and by December 1985 only about 30% of the investments were either not operating or operating poorly (Annex II).

3.09 A small number of reforestation programs were implemented satisfactorily. The small, but important, fishery program, located in a number of coastal micro-regions, was generally unsatisfactory. Supervision missions found that planning was weak, technical assistance lacking and most of the equipment financed was either repossessed by the fisheries bank (BANPESCA) or became inoperative due to lack of maintenance.

3.10 Rural Industries. Although this was considered an innovative component at appraisal and considerable effort as made by project management to prepare a rural industrial pre-investment plan, no funds were disbursed under this category. Efforts by SPP to coordinate the execution of investment activities were not successful and no line agency appeared willing to accept responsibility for this component.

3.11 Agricultural Credit. Development credit to complement PIDER financed on-farm investments was considered essential for the success of the productive components. As with PIDER I, a specific credit component was included in the project. FIRA was the agency responsible for channelling project funds to farmers through public and private banks, as in the Bank financed general credit projects. The objective was to: (a) ensure effective coordination between FIRA and PIDER; (b) have FIRA review PIDER subprojects with respect to their financial feasibility; and (c) have FIRA guarantee that credit (long and short-term) would be made available as and when needed.

3.12 At project initiation, coordination between PIDER/SARH and FIRA was weak but in mid-1978 through Bank intervention a formal agreement was reached between PIDER and FIRA. Under this agreement, FIRA was to give priority to providing credit to project beneficiaries for approved on-farm investments. In addition, FIRA could also claim reimbursement under the loan for subloans made to all low income producers in the project area irrespective of whether they received assistance from PIDER/SARH. As a consequence more than 50% of project funds disbursed by FIRA were for operations unrelated to specific PIDER investments. Although the 1978 agreement led to improvement in project credit, the level of coordination at the working level between PIDER/SARH and FIRA varied considerably between states. Problems relating to credit remained one of the most important reasons for poor performance of about 35% of all productive investments financed under the project. The principal problems were: (a) insufficient long-term credit; (b) no provision for short-term credit; (c) poor timing; (d) ineligibility of borrowers; and (e) insufficient training of borrowers.

B. Productive Support Components

3.13 Feeder Roads. In physical terms the feeder roads program was very successful with 4,140 km constructed compared to an appraisal estimate of 2,010 km (Table 3.1). Furthermore this doubling of the original target was achieved for an additional cost of only US$5 million (i.e., some 33% of the appraisal cost estimate of US$15.9 million). This achievement is even more striking considering the difficult terrain in the isolated areas where much of the work was done.

3.14 Because annual budget funds were generally not allocated until May or later, there was intense pressure to complete the program to ensure that all funds allocated were spent by the December 31 cut off date. Also, the availability of funds generally coincided with the onset of the wet season when on-farm labor demands were high. Thus, in order to simplify and accelerate road construction there was a trend to use capital intensive instead of labor intensive methods although it had been envisaged that labor intensive methods would be used whenever possible.

3.15 Rural Electrification. The performance of this category was also satisfactory with actual investments being about 35% above those originally programmed (Table 3.1). The Federal Electricity Commission's (CFE) long experience in rural electrification development was responsible. With respect to electricity charges, a Bank supervision mission (June 1978) noted that while 96% of individual consumers paid regularly, public lighting was often not paid. This situation persisted over the life of the project.

3.16 While the project was successful in expanding electrical coverage to the rural population, problems were experienced in the provision of power to newly developed small-scale irrigation systems. In many cases, there were

long delays before irrigation systems became operative. These delays were frequently due to poor coordination between CFE and SARH, the agency responsible for the small irrigation program.

3.17 Extension and Field Demonstration. The key role of effective extension was recognized at the inception of the project. To improve the quality of extension, the project proposed to continue with the PRONDAAT 3/ methodology adopted under PIDER I and that full PRONDAAT extension coverage to all 20 project micro-regions would be achieved by 1980. However, this never materialized. In 1977 a new General Directorate of Rainfed Districts (DT) was established with responsibility for providing extension services countrywide in rainfed areas. The DT considered the PRONDAAT methodology too costly and it was dropped, while the National Extension General Directorate was also disbanded with DT assuming responsibility for extension. Under the DT each District Chief was responsible for extension in his district (including PIDER activities). The quality of extension was thus directly related to the capabilities and previous experience of the District Chief and varied widely between districts. PIDER extension programs soon lost any distinct characteristics in servicing the poorest farmers. The extension personnel funded by PIDER ceased to work specifically on PIDER activities. They were merged into the general operations of the DT, under the District Chief and were financed through a block budget allocation each year to SARH from SPP.

3.18 The Bank, while expressing concern that these changes might be insufficient to meet the special extension services needed in the project micro-regions, had little option but to accept the assurances that the DT would provide adequate extension services in the project areas. With few exceptions, however, agricultural extension services provided under PIDER II by DT were weak. There was generally no shortage of staff. However, they were poorly organized, trained, equipped and paid, and inadequately backstopped. This was a major reason why some 40% of all productive investments made under the project never became operative, or operated badly (Annex II).

3.19 Although project management was aware of the lack of effective extension in most project micro-regions it was unable to influence SARH to take measures to improve the situation. Moreover, SARH tended to give priority to those programs funded through its normal budget over PIDER activities. PIDER was generally regarded by SARH field staff as merely a source of funds (often of last resort). However on the positive side, there were a number of successful efforts in providing technical assistance to ejidatario groups receiving credit. Banks (both private and public) provided

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3/ PRONDAAT was an extension methodology developed by Mexican technicians in the mid-70's based upon the highly successful PLAN PUEBLA experience. The system integrated field demonstration cum research to the delivery of technology to farmers who were organized to take full advantage of the new technology.

assistance to help the groups draw up viable investment programs and for follow-up assistance, to ensure the programs were implemen ed. In some instances full-time technical directors were financed as part of the credit package. Unfortunately the number of such programs was insufficient to have a significant impact on project outcome.

3.20 Farmers Organization and Land Titling. This component provided finance to expand SRA operations in PIDER micro-regions for two purposes: first, to provide project beneficiaries with organizational and development assistance; and second, to resolve land tenure and ejido organization disputes, a prerequisite for the provision of both short and long-term credit. PIDER expected that SRA would orient communities to development opportunities, to reorganize ejido committees, and to ensure beneficiary participation in a jointly agreed development program. While some 1,172 ejidos received assistance under the project, most assistance was for land tenure issues and for the resolution of internal ejido problems. Organizational assistance was sporadic and farmer groups were often ill prepared to maintain and manage the various on-farm investments. Beneficiaries often felt that the projects belonged to the executing agencies, and were not their own, and thus simply waited for the agencies to make investments operate. It should be noted that in the recent pre-PIDER past, public sector investments tended to be operated by the agencies or by public banks, with beneficiaries limited to serving as laborer employees in the project.

3.21 It should also be noted, however, that PIDER made unprecedented efforts to try to get agencies to incorporate beneficiaries in the programming and executing process. Because SRA was seen as the responsible agency, however, no other agency actively took responsibility, even in the face of SRA inaction. The Bank continually raised these matters and considerable staff time was directed at bringing about greater participation. In spite of these efforts, and those of CIDER, a Mexican consultant group, participation remained more a goal than a reality.

3.22 Rural Marketing and Nutrition. There was little activity in this component of which only 20% of projected funds were spent, mainly because there was no agency (inside or outside of SPP) prepared to take responsibility for approving the execution of this component.

C. Social Investments

3.23 The implementation of this component was satisfactory for education facilities and self help programs both of which achieved only slightly less than appraisal goals. However, it was less satisfactory for rural water supplies for which only about 60% of the planned target was achieved. SAHOP which assumed responsibility for rural water supplies in 1977 proved to be less effective in organizing these activities than it was with rural roads. Some 30% of the water points established became inoperative after a few years

due to inadequate follow-up maintenance because the beneficiaries' orgarizations failed to collect funds from the users. Little follow-up information is available on how the social infrastructure, completed under the project, was put to use. It appears that most schools were constructed and teachers being appointed on time.

D. Monitoring and Evaluation

3.24 During negotiations, considerable emphasis was given to the establishment of an effective monitoring and evaluation (M and E) system. It was envisaged, at appraisal, that CIDER, the independent evaluation and research unit set up concurrently with PIDER I, would undertake evaluation of the project. However, before the project started the role of CIDER was changed and it ceased to be responsible for project evaluation and by late 1977 PIDER had established an in-house M and E unit.

3.25 The Bank, keen to see that this new unit was fully functional, paid close attention to its activities. However, for about three years, little success was achieved in broadening the units focus from measuring progress of current investments to include impact evaluation. In 1981 some positive steps were taken to correct this. A centralized data gathering system had been created and a local consultant firm was hired to help PIDER design a monitoring system for measuring project impact, which by 1982 SPP proposed to introduce gradually into all of the 140 PIDER micro-regions. However this did not occur and at project closing, no data were available to enable an assessment of project impact. This situation was exacerbated during 1983 as a result of the change in presidential administration and the consequent extensive organizational and staff changes in SPP. In May 1984, after prompting by the Bank, consultants were employed to assist SPP staff to monitor and evaluate project impact, using a stratified sampling technique. This study, which was completed in February 1985, formed the basis of the completion report.

E. Disbursements

3.26 The loan of US$120 million was fully disbursed by the revised closing date of January 31, 1983 (Annex III and Basic Data Sheet). Although this was 18 months later than the appraisal estimate, GOM disbursement procedures were generally satisfactory.

3.27 Disbursements were 136% of the appraisal estimate over the first six months of the project. They slowed significantly however from early 1978 to mid-1980 to 38% of appraisal estimates. The main reasons for this were:

(a) The planning and execution of project activities in the newer, more isolated, micro-regions took much longer to initiate than anticipated;

(b) There were serious delays in authorizing project funds by SPP during 1978-79 because change in economic policies and investment priorities, brought about by the new government administration that took office in 1978; and

(c) A change in policy by SPP to concentrate on consolidation of existing activities rather than expansion during 1979-80.

3.28 In complying with the Loan Agreement, the Bank agreed to a request in July 1981, to extend the closing date to July 31, 1982 and in mid-1982, to a further six-month extension to January 31, 1983 to allow time for disbursement requests to be finalized by GOM.

F. Procurement

3.29 International competitive bidding (ICB) was not applied to any procurement since all packages were less than the minimum US$250,000 set under Schedule 2 of the Guarantee Agreement. Individual project activities were too small, too diverse and too dispersed, making bulking impractical. Because local contracting resources were often limited, and contractors outside the immediate area were generally too busy to be interested in the predominantly smaller scale works financed under the project, most works were done through direct negotiation or force account with an undetermined smaller number executed under local competitive bidding (LCB) procedures. At least three Bank supervision missions were satisfied with these arrangements, which were in conformity with local law (Ley de Obras Publicas 1980), and commented favorably on the quality of the documentation. It was considered also, that the costs of works done were more than reasonable by Mexican standards.

3.30 ICB was clearly not appropriate for this project. There is not evidence on file, however, that LCB could have been applied more widely. No contracts were sent by GOM to the Bank for review in spite of a requirement to do so for all contracts as a condition for Bank disbursement (Guarantee Agreement Schedule 2 para D2). However, in this respect the final supervision mission noted that, while this was a technical breach, the condition was unreasonable given the large number of small works involved. Also, since previous missions had checked bidding/procurement procedures and were satisfied with them, the review of all documents by the Bank would have achieved little other than to delay disbursements.

G. Reporting and Audit

3.31 Project reporting procedures were the same as for PIDER I. Reports were sent on a quarterly basis, but were not satisfactory. Physical progress was given in financial terms and it was not possible to compare these readily with the physical goals (areas, numbers, units etc.) established at appraisal. The failure to keep a continuous account of physical progress was an important reason for the long delay in preparing the PCR. Although most of the physical and financial data was available, particularly at the state level, SPP did not assign high priority to reporting. However, this appears to have been ignored by the Bank since SPP continued to not provide this information over the projects entire disbursement period.

3.32 Project Accounting. Separate accounts for PIDER II were not kept. This was noted by various Bank supervision missions, but no changes were made by SPP. SPP was nevertheless able to account for project related expenditures for reimbursement purposes. Similarly, each participating agency recorded their respective PIDER II activities only within the framework of their general accounts and failed to maintain separate accounts. Although SPP and the other executing agencies accounts were audited internally according to local procedures acceptable to the Bank, no audit reports were sent to the Bank specifically on the PIDER project in spite of repeated requests to do so.

3.33 With respect to credit, FIRA did maintain a separate project account and audit reports were sent to the Bank regularly. However, data were inadequate to enable determinating of what portion of FIRA operations in the micro-regions were linked to PIDER financial investments (see para 3.12).

H. Adherance to Covenants

3.34 Apart from procurement, credit, reporting and evaluation requirements, the Guarantee Agreement included a number of clauses which warrant comment. Their implications and compliance by the Borrower can be summarized as follows:

(a) Cost Recovery. Water charges for operation and maintenance costs of small irrigation works (Section 3.05 and Section 3.15) were satisfactory once the works became operative. The specific recovery of a minimum of 10% of investment costs of irrigation subprojects specified under section 3.05 of the Guarantee Agreement was met as beneficiaries did contribute about 30% to the investment activities in the form of labor and credit. In the case of rural potable water supplies problems were frequently encountered with users being reluctant to pay anything towards operation and maintenance of the systems. As a result many systems were inoperative after a few years;

(b) Rural Industries. Although a general plan for rural industries development was submitted by PIDER and reviewed by the Bank (Section 3.09) only a minor part of the plan was carried out; and

(c) Agricultural Extension. Under section 3.13 GOM agreed to extend its sucessful PRONDAAT technical assistance program to all project micro-regions by 1980. However, with the creation of rainfed districts (DT), the Directorate General of Extension was abandoned in 1978 and all extension, including that for PIDER activities, was channeled through DT. The DT decided to drop PRONDAAT and give assurances to provide an equally effective technical assistance in the project micro-regions. As noted in Section 3.19, this was not done.

IV. ECONOMIC AND AGRICULTURAL IMPACT

A. Project Benefits and Incremental Output

4.01 Data provided by PIDER, by sample surveys, and by Bank Supervision and Completion missions indicate that while overall project production has been less than expected at appraisal, it still has been quite significant in terms of both incremental output and incremental income. Direct economic benefits resulted primarily from: (i) small-scale irrigation (17,320 has.), livestock development (96 beef and dairy units and numerous smallstock units), soil and water conservation (89,373 has.), fruit development (6,083 has.) and development credit ($23 million); (ii) increased employment; and (iii) substantial agricultural (115,000 ha) and livestock extension. Indirect benefits resulted primarily from the development of access roads (4,140 km), rural electrification (148 communities), as well as land tenure, marketing and nutrition, and social (e.g., education, drinking water) services. (see Table 3.1).

4.02 Incremental output from increased yields and from new project-related production, net of farming expenses, is the measure of direct project benefits used in this report. Given the large number of individual sub-projects and the wide geographic dispersal of project investment and activities, precise data on incremental income was not available. However, on the basis of extensive sample surveys, data on pre- and post-project yields and production coefficients, as well as data regarding the operational status of project investments, have been obtained providing the basis for making incremental benefit estimates. On this basis, the following full development annual incremental income has been assumed: (i) for irrigation, on 75% of the area irrigated under the project (12,990 has. of 17,300 has.) at US$401 per ha., or US$5.2 million; (ii) for rainfed production, on 25% of the rainfed area reached by extensionists (24,420 has. of 97,680 has.) at US$50 per ha., or US$1.2 million; (iii) for livestock, incremental income was assumed on 50% of completed project cattle and dairy units. For the assumptions made in estimating net incremental benefits, see Annex V.

B. Economic Rate of Return

4.03 The completion mission calculated economic rates of return (ERR) using both current dollar and constant peso flows. Despite high levels of inflation and major devaluations, the rates were similar: 6.3% and 6.4% respectively (See Annex IV). The SAR estimate was 23.7%. The ERR was low because only a relatively small number of productive sub-projects operated in a fully satisfactory manner. With very little additional investment, however, most of these could still become fully operational, which would have a considerable positive economic impact. Two important actions have been taken recently by GOM which improve the prospects for this to materialize: (i) SPP has decided, with Bank support under PIDER III, to give priority to rehabilitation of old productive subprojects which are not operating effectively instead of investing only in new works and (ii) SARH is in the process of reorganizing and improving its extension services country-wide with particular emphasis on assisting low income farmer groups.

4.04 Production models, representative of project ejidos, were constructed for 11 of the 20 original project micro-regions. The rates of return (financial) for these models varied from negative to 30% and average 15.6%. At appraisal, the financial rate of return calculations were based on similar data from representative ejido models for each project micro-region. The average rate of return for these models was calculated to be approximately 23.0%.

V. INSTITUTIONAL PERFORMANCE

5.01 The PIDER program was highly successful in developing an institutional framework through which the problems of rural poverty could be more effectively addressed. It pioneered the decentralization of rural development planning and developed an effective budget process to fund social and productive packages in target areas, countrywide. This framework has been a key element in the implementation of the new decentralization policy of GOM, in which the states have been given major responsibility for the inter-sectoral public investment programs funded by GOM. In addition, the project, was important in ensuring continuity of the program. The institutional developments which occurred under PIDER have also contributed significantly in the formulation of various complementary rural development programs (e.g., COPLAMAR, SAM, etc) as well as the 1985-88 National Plan for Integrated Rural Development (PRONADRI) which has been developed by SARH and recently initiated by the President of the Republic.

5.02 On the other hand, PIDER was less successful in ensuring that its funds were put to the most effective use. It failed to establish and M and E system and thus had no means of measuring the impact of its investments of knowing the operational status of these investments. Equally important, PIDER was not able to achieve the close collaboration and coordination with the line agencies, responsible for execution and supervision of these investments, which was initially envisaged. This lack of coordination had a serious effect on the implementation of the production investment program, with the result that 38% of productive components failed to become operative or operated poorly (Annex II).

5.03 In retrospect it is clear that the initial concepts about the role of PIDER as the overall coordinator were overly optimistic. The line agencies directly involved with project execution had their own normal programs to implement, and PIDER activities generally tended to be given lower priority. This made it extremely difficult for SPP to resolve in its favor any differences of opinion on project strategy it might have with the line agencies. In particular, the lack of an effective extension service to replace PRONDAAT, which was discontinued by SARH, inadequate beneficiary coordination involving SRA and SARH, and insufficient focus by FIRA and BANRURAL on the special credit needs of the project were the main institutional shortcomings over which SPP was able to exercise little control.

5.04 Based on past experience, the SPP is taking a number of measures to redress the shortcomings of the PIDER program while retaining its positive assets, as follows: (a) it has established a national Program for Regional Development (PDR) combining PIDER to other SPP poverty-oriented programs to make the SPP Regional Development program more responsive to the needs of the states under the decentralization policy of GOM; (b) measures are being taken to rehabilitate the productive investments which are not operating effectively; (c) technical assistance for productive investments is to be given as part of credit packages; (d) the establishment of effective M and E has been given priority; and (e) SPP is now making budget allocations directly to the States, rather than to the central executing agencies.

VI. BANK PERFORMANCE

6.01 Bank performance was mixed. Important contributions were made both in PIDER I and PIDER II in giving a production emphasis to what had been originally a basic infrastructure program. The Bank also actively supported GOM efforts to decentralize rural development efforts through PIDER and in other programs throughout the country. In addition, the Bank was sensitive to the political reality that a second PIDER loan was crucial for assuring the continuance, consolidation, and improvement of the PIDER program in the context of a change of Presidential Administration. As such, the Bank made a major contribution to the institutionalization of rural development and played an important role in focusing the attention of GOM on the issue of rural development.

6.02 Despite a substantial field supervision effort of about four man-years (see Basic Data Sheet), Bank performance was less successful in significantly improving execution of the key components. (See para 5.03). The overall quality of the investments suffered from a lack of in-depth supervision of particular subprojects or micro-regions, and in retrospect, it is hard to see how this could have been done effectively with so many components spread out over such a large area. Because of this Bank missions concentrated upon assisting PIDER coordination teams develop a project supervision capability rather than working directly with the line agencies. However, the Bank did not change its supervision strategy when it was apparent that SPP was not achieving the close level of coordination needed with these agencies to ensure effective implementation.

VII. CONCLUSIONS AND RECOMMENDATIONS

7.01 The project was part of one of the most ambitious integrated rural development programs to be supported by the Bank through the seventies. It is likely that without PIDER II the incoming administration in 1977 would have either ceased to support the PIDER program or reduced its scope significantly. By involving itself in the appraisal and negotiation of the project, the new GOM had a better opportunity to look closely at the PIDER program early in its administration than it might have done otherwise. As a result it recognized early the value of PIDER which it adopted as part of its overall policy.

7.02 However the project was overly ambitious given the technical and institutional inexperience. While this may vindicate those in the Bank who raised these points during appraisal and loan processing, it should be realized that the administration before 1977 (which identified and prepared the project) was not interested in accepting a smaller, less ambitious, pilot project. It was proceeding rapidly to extend PIDER to target areas country-wide and it had requested considerable support from the Bank. If this support had not have been forthcoming GOM would have "gone it alone". In this context the decision by the Bank to proceed with the project was on balance correct. Although implementation was less effective than it could have been, the project did increase production and brought about social and economic changes to the benefit of a large number of low income families. A major feature was that it helped SPP build a decentralized institutional framework which now forms the basis for all major rural and regional development programs in SPP and elsewhere.

7.03 The Bank's supervision was effective in that it detected promptly the major shortcomings in project execution. However, it was generally unable to bring about changes to remedy these shortcomings. Too much time was spent working directly with SPP and not enough with the executing agencies. The Bank should have focused more sharply on implementation

including the operational status of productive investments, credit, extension, beneficiary organization and M&E.

7.04 However, it is doubtful if there would have been enough resources to permit a fully effective and continuous supervision of each project activity even if the Bank had so desired. The project was too dispersed geographically, and given the large number of productive, productive support and social investment categories, it is clear that the Bank would have had to allocate considerably more to it than the large amount of time it did, to supervise the program effectively provided to be optimistic. While the complexity of supervision was discussed during the appraisal process, the Bank should have looked more seriously into the possibility of having a number of Bank project divisions involved in the program. A series of smaller projects, with each division responsible for its own field of expertise, might have been more effective than one large multi-disciplinary project. With each Project Division responsible for its own subproject, and with Mexican executing agencies having direct responsibility and accountability for the project, it would be easier to focus on the organizational and technical aspects of each project component and to influence the executing agencies to make appropriate and timely changes and reforms. Recently, the Bank had adopted this approach in assisting GOM in financing regional developments in the state of Chiapas.

7.05 A number of lessons listed below can be drawn from this project which can be reflected in future rural development programs:

(a) project design should be simplified to include only similar or complementary support components; this would make the project more transparent to the borrower, improve clarity of goals and responsibilities, and facilitate supervision;

(b) the early establishment of an effective M and E System is crucial to focus project management on project impact as well as to measure regular physical and financial progress; and

(c) supervision which concentrates on organizational policy matters may be ineffective in ensuring efficient implementation by paying less attention to technical goals that need to be achieved.

7.06 The experience gained by SPP with PIDER projects is being used in its regional programs to simplify subproject designs, improve coordination among executing agencies at the field level, and to establish an effective M and E System for investments. Furthermore, first priority has been assigned to rehabilitation of productive investments which are not operating effectively and to train beneficiaries to take full responsibility for the operation and maintenance of those investments.

Annex I

MEXICO

PIDER II

PROJECT COMPLETION REPORT

Project Investments ($000,000)

Investment (1984 Mex$)	1977	1978	1979	1980	1981	1982	Total
Irrigation	909.3	1,120.0	1,433.0	1,370.9	1,296.1	424.8	6,554.1
Soil & Water Conserv.	572.2	632.1	511.7	396.9	725.3	239.0	3,077.2
Livestock	597.4	1,135.7	1,583.2	2,169.3	527.9	654.2	6,667.7
Roads	879.5	967.8	936.1	821.2	556.8	150.6	4,312.0
Electrification	336.0	369.1	541.1	424.8	346.5	149.3	2,166.8
Extension	321.1	299.4	204.0	168.7	147.6	240.5	1,381.3
Agrarian Reform	206.4	278.8	267.7	258.1	232.3	120.6	1,363.9
Marketing	51.6	51.0	77.5	57.1	32.9	56.6	326.7
Total Investment (1984 Mex$)	3,873.5	4,853.9	5,554.3	5,667.0	3,865.4	2,035.6	25,849.7
Total Investment (current Mex$)	337.8	494.5	680.6	893.7	775.4	658.4	
Total Investment (current US$)	14.9	21.8	29.9	38.4	29.6	6.8	141.4

MEXICO

LOAN 1462-ME PIDER II

PROJECT COMPLETION REPORT

OPERATIONAL STATUS OF SAMPLE OF PRODUCTIVE INVESTMENTS

(December 1984)

Activity	Satisfactory (1)	Fair (2)	Poor (3)	Not Operating (4)	Total (5)	$\frac{3+4}{5}$
(I) Small Scale Irrigation	27	16	6	8	57	25
(II) Livestock						
(a) Dairy	3	3	4	-	10	40
(b) Beef	6	6	7	2	21	43
(c) Dual purpose	2	1	4	-	7	57
(d) Pig	3	2	4	3	12	58
(e) Poultry	1	-	1	3	5	60
(f) Sheep	2	2	1	2	7	43
(g) Goats	-	-	-	2	2	100
(h) Bees	3	2	2	-	7	28
Subtotal Livestock	20	16	23	12	71	50
(III) Fruit, Forestry and Fishery	12	12	9	2	35	28
(IV) Soil Conservation	3	2	6	1	12	58
TOTAL	62	46	44	23	175	38

MEXICO

LOAN 1462-ME (PIDER II)

PROJECT COMPLETION REPORT

Schedule I - Withdrawal of Proceeds of the Loan

	Amount of the Loan Allocated (US$ Equivalent)	Amount Actually Disbursed (US$ Equivalent)	Actual Disbursment Amount Allocated
(1) Irrigation	21,100,000	18,257,500	86
(2) Soil and Water Conservation	7,770,000	8,007,100	103
(3) Livestock	11,000,000	17,493,400	159
(4) Ag. Credit	23,900,000	26,611,400	111
(5) Ag. Ind. Credit	4,300,000	6,100	71
(6) Family Industries	500,000	496,500	99
(7) Technical Assistance and Training for Industries	30,000	30,100	100
(8) Fruit, Forestry and Fisheries	7,000,000	7,092,600	101
(9) Feasibility Studies	3,700,000	3,803,300	103
(10) Rural Roads	11,800,000	11,671,800	99
(11) Agr. Extension	6,400,000	7,432,900	116
(12) Farmer Organization and Land Titling	3,700,000	3,640,100	98
(13) Rural Electrification	5,700,000	5,602,800	98
(14) Storage Marketing and Nutrition	900,000	889,700	99
(15) Education Facilities	3,600,000	3,092,600	86
(16) Rural Water Supplies	4,200,000	3,954,000	94
(17) Self Help	2,100,000	1,917,900	91
(18) Unallocated	2,300,000	-	-
TOTAL	120,000,000	120,000,000	

Annex IV

MEXICO

PIDER II

PROJECT COMPLETION REPORT

Rate of Return Analysis

(Constant 1984 Mex$000,000)

	Total Investment	Net Incremental Irrigation Benefit	Net Incremental Livestock Benefit	Net Incremental Rainfed Benefit	Net Incremental Benefits (ton)
1977	(2,783)				(2,783)
1978	(3,655)			40	(3,615)
1979	(4,346)	71		60	(4,215)
1980	(4,638)	172		120	(4,346)
1981	(3,085)	328		180	(2,577)
1982	(1,668)	545	520	220	(383)
1983		785	720	240	1,745
1984		874	920	240	2,034
1985		950	1,000	240	2,190
1986		1,032	1,060	240	2,332
1987		1,042	1,080	240	2,362
1988-1996		1,042	1,100	240	2,382

ERR = 6.4%

MEXICO

PIDER II

COMPLETION REPORT

Assumptions for Benefit Analysis

In estimating incremental income streams, technical coefficients are taken from sample survey data. In addition, the following assumptions are made.

(1) Rainfed Production. Of the 97,680 rainfed has. estimated in the sample survey to have been reached by agricultural extension services under the project, agricultural change, and hence incremental income, is assumed on only 25% of that area. Incremental income is assumed exclusively from increases in corn yields.

(2) Irrigated Production. Production increases are assumed on 75% of newly irrigated areas. This is to account for the estimated 25% of irrigation works not properly operating. Benefits from these areas are phased in accordance with the rhythm of irrigation investment. Further assumptions are that: (i) net incremental income begins in year 3 of operation of each irrigation unit; (ii) for the first three operational years of each unit, half of the producing hectares are planted to one cycle of corn, with the other half planted to cash crops (note: cotton, a moderate value crop, is used as a proxy for the average cash crop); (iii) beginning in the fourth operational year, the assumed mix moves to 25% corn and 75% cash crop; (iv) labor is shadow priced at 50% of the official minimum wage. Note that neither double cropping nor full cash crop production is assumed. The rate of return for the irrigation component was calculated to be 9.8%.

(3) Livestock. It is assumed that 50% of beef and dairy units produce no net incremental income. For funtional units, no net incremental income is assumed until year 3 of the unit's operation (year 6 since construction on the unit was begun). It is further assumed that it takes 6 years, following the completion of construction, to reach the levels observed in the 1984 sample survey. These levels are considered to be "full development" for the purpose of calculating incremental income. It is expected that over time, with increased experience and improved technical assistance, more units would enter production, and already producing units would become more efficient and more productive. These expectations are however not assumed in this analysis. All other livestock units (e.g., chickens, pigs, bees, etc.) are assumed to make no contributions to net incremental income (i.e., investment costs are included, but there is assumed to be no incremental income stream).

(4) Other. The annual amortization of development credit is taken into account in the calculation of the net incremental benefit streams. For soil and water conservation, no net incremental income is assumed (i.e., investment costs are included). Fruit and forestry development data were not available. While qualitative observation indicates that the net incremental income streams are positive, the lack of data makes any estimates difficult.

(5) ERR Investments. All productive and productive support investments were included in the investment flows in the ERR calculation, however, adjustments were made for roads, electrification, extension and SRA expenditures: (i) 25% of road expenditures were included as much of the benefit accruing to the project area from the road investments were not included in the benefit streams (i.e., benefits to persons other than those receiving livestock or irrigation infrastructure or other productive support under the project); (ii) 50% of electrification expenditures were included as much of the electrification was of social, rather than productive utility; (iii) 50% of extension was included, as under the DT system much of the extension expenditure was for actions outside of the project area; (iv) 50% of SRA was included as substantial parts of SRA activities were either outside the specific micro-region or for purposes with no directly productive result.

(6) Dollar and Real Peso Calculations. In calculating dollar and real peso flows, current peso investment and income streams were converted to real 1984 pesos using GDP deflators as follows:

Pesos

1980 = 100

1977	55.3
1978	64.6
1979	77.7
1980	100.0
1981	127.2
1982	205.1
1983	394.1
1984	634.1

Dollars

(US$1.00 = No. of Mex$)

1977	22.7
1978	22.7
1979	22.8
1980	23.3
1981	26.2
1982	96.5
1983	
1984	200.0

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Subdirectorate of International Organizations
CEC-938-VI-86

June 11, 1986

Mr. Otto Maiss
Acting Director
Operations Evaluations Department
World Bank
1818 H Street, N.W.
Washington, DC 10433

Dear Sir:

I refer to your letter of April 17 requesting comments on the Project Completion Report on the PIDER II Integrated Rural Development Project (Loan 1462-ME).

The report contains most useful observations which will most certainly help to improve the execution of future programs undertaken in the rural sector with World Bank participation.

I should point out that the report was very largely based on the Project Completion Report prepared by the executing agency, which in a thoroughly self-critical spirit drew attention both to achievements and to shortcomings, as well as their causes.

In general terms the document prepared by the World Bank covers all aspects of the implementation of the project. Nonetheless, in order to clarify certain issues and enrich the content of the report I have annexed to this letter certain observations which we think could usefully be included in the final version.

These observations represent the comments and opinions of the executing agency, the borrower and the guarantor of the project, who jointly reviewed the report. Yours, etc.

(signed)

Arturo Galan de la Barreda
Subdirector

Attachment

cc: Pedro Saenz Zepeda - Director of Projects, Regional Programming and Budget Directorate.
Jose Luis Flores Hernandez - Director for International Financing Organizations
Raul Obregon del Corrall - Director for International Affairs and Finance
Hector Flores Santana - Director for World Bank Financing

Comments on Project Completion Report for the PIDER II Integrated Rural Development Project (Loan 1462-Me)

1. Page ii states: "The experience gained with PIDER was adopted widely by the Bank in many countries in which integrated rural development projects were established." "The project was successful in achieving its institutional-building objectives by creating a framework through which the problems of rural poverty could be addressed more effectively."

The Government of Mexico is particularly pleased that the experience obtained by the Bank through PIDER has been used in other countries, which confirms that the developing countries share certain common problems.

It should also be stressed that the project did indeed help to resolve the difficulties facing the rural sector in Mexico in those years, by substantially increasing agricultural production and producer's incomes.

See paragraph of results, page iii and iv. The estimated ERR does not support a statement of substantially increasing agricultural production and producer's income.

PIDER in fact assisted a wide range of rural communities, which because of their size could not obtain access to other sources of funds, and which thus benefited considerably from the production, support and social components. This should be stressed when we consider the project in the context of the rural sector in Mexico, which faces very complex structural problems.

2. Page ii states: "The project was innovative but ambitious given the technical and institutional experience in running such a project," while paragraph 5.03 states: "in retrospect it is clear that the initial concepts about the role of PIDER as the overall coordinator were over optimistic."

Here it must be observed that project preparation began before the first stage had been set on the proper course and therefore before any initial evaluation of that phase could establish the executing agency's capacity to coordinate all the activities satisfactorily. Furthermore, during the appraisal mission for this second phase the Bank's own staff also agreed that the project should be executed under the above-mentioned circumstances.

However, and as noted in the report, the experience gained during implementation enabled the Secretariat of Programming and Budget to ad .. various measures designed to overcome the shortcomings of the program, including the establishment of the Regional Development Program and of a monitoring and evaluation unit exclusively responsible for project-related activities, which have invariably had beneficial results.

See page iv, paragraph of sustainability

3. Paragraph 5 on page iii states: "However, it has recently applied this lesson in its financing of only part of the Chiapas Rural Development Plan...."

This new approach, i.e., toward more specific and homogeneous activities, as in the Chiapas Rural Development Plan, has already been used in the PIDER III loan, in which US$10 million will be reassigned to support the establishment of citrus fruits in the State of Yucatan, as part of its Henequen Reorganization Program.

4. In paragraph 3.06 the main reasons for the lack of success with subprojects are identified as, among others, inadequate credit, planning, extension services, research, etc.

On this point, which is closely linked to our observations in paragraph 5, it should be noted that steps are currently being taken under PIDER III to make the works operational. For instance, the strategy adopted by the current management attaches top priority to the rehabilitation, completion and complementing of unfinished works.

New paragraph 7.06 in page 18

5. Paragraph 3.12 states: "As a consequence of weak coordination more than 50% of project funds disbursed by FIRA were for operations unrelated to specific PIDER investments."

It must be recognized that better coordination is needed between FIRA, PIDER and SARH, in order to finance eligible operations; to this end the Government is taking the necessary measures to ensure that financing targets in the project area are met. Furthermore, it should be pointed out that there are no documents or records establishing the accuracy of this figure, for which reason the reference to 50% should be eliminated.

This is not a correct interpretation of paragraph 3.12. It states that coordination between PIDER/SARH and FIRA improved after the formal agreement of mid-1978; although problems related to credit affected about 38% of productive investments.

6. An examination of the table on page 8, regarding projected and achieved goals, shows that the investment program was very satisfactorily completed; although the works in some of the sub-components fell short of the targets, in others these targets were largely exceeded, as in the case of rural roads.

Leaving aside the economic impact of the project in increasing agricultural production and raising the incomes of beneficiaries, the Government of Mexico has begun to use funds from the third stage of the loan to improve the effectiveness of works which currently are not performing adequately.

Mentioned in paragraphs 5.04 and 7.0

7. Paragraph 3.26 states: "The loan of US$120 million was fully disbursed by the revised closing date of January 31, 1983. Although this was 18 months later than the appraisal estimate ....."

It should be pointed out that the agreements themselves provide for the closing date to be postponed so that the full amount of the loan may be disbursed; this was what occurred in this case.

See changes in paragraph 3.28 in page 12

8. Paragraph 3.27 states: "....disbursements ..... slowed significantly, however, from early 1978 to mid-1980 ..."

It should be noted that this slowing down was also due to: (1) a change in administration, which entailed a review of investment priorities, in order to adjust them to the new government's economic policy; (2) the devaluation of our currency in 1976 and the budgetary restrictions to which this gave rise.

See changes in part (b) of paragraph 3.27 page 12

9. Paragraph 3.27(b) states: "There was serious delay in authorizing project funds by SPP during 1978-79 ..."

This paragraph must be eliminated, since an observation of this kind is an internal matter and therefore one for the Mexican authorities only.

See new part (b) of paragraph 3.27

10. Paragraph 3.30 states: "ICB was clearly not appropriate for this project." It also notes "The review of all documents by the Bank would have achieved little other than to delay disbursements."

Bidding competitions always complied strictly with the regulations laid down by the Government of Mexico, as the Bank was able to verify whenever it wished to do so. It would be useful for the flexible approach used by the Bank in this case to be applied to other projects with similar features, since this would accelerate disbursements and therefore implementation.

11. Paragraph 3.31 states: "...SPP did not assign high priority to reporting. However, this appears to have been ignored by the Bank...."

Although there were no annual reports on the physical progress of the project, preparation of the PCR was made possible by the study produced for this purpose by the executing agency between 1983 and 1985. It should also be pointed out that the consultants who helped SPP personnel to identify and evaluate the repercussions of the project can confirm the veracity and objectivity of the said study.

Mentioned in the preface page i

12. Paragraph 5.02 states: "Lack of coordination ..... unsuccessful project."

On this point, we believe that the phrase "disappointingly large" should be eliminated since it does not in any way reflect reality.

See changes of paragraph 5.02 in page 16