

Report No. 18727

# Impact Evaluation Report

## Building Institutions and Financing Local Development: Lessons from Brazil and the Philippines

Municipal Development Project in the State of Paraná (Loan 3100-BR)  
Municipal Development Project in the State of Rio Grande do Sul (Loan 3129-BR)  
Municipal Development Project in the Philippines (Loan 2435-PH)  
Second Municipal Development Project in the Philippines (Loan 3146-PH)

**December 18, 1998**

Operations Evaluation Department



Document of the World Bank

## Currency Equivalents

*Currency Unit = Brazilian Reals (R\$)*  
(As of December 1998)  
US\$1.00 = R\$1.20

*Currency Unit = Philippines Pesos (P)*  
(As of December 1998)  
US\$1.00 = P39.1

## Abbreviations and Acronyms

### *Brazil:*

BANRISUL	RGS State Commercial Bank
FAP	Financial action plan
FUNDOPIMES	RGS State Urban Development Fund
FDU	Paraná State Urban Development Fund
ICR	Implementation Completion Report
MDP	Municipal development fund
OED	Operations Evaluation Department
PAR	Performance Audit Report
ParanáCidade	Paraná State Urban Development Fund (under IDB)
PEDU	MDP in the State of Paraná
PIMES	MDP in the State of Rio Grande do Sul
RGS	Rio Grande do Sul

### *Philippines:*

BLGF	Bureau of Local Government Finance
CPO	Central Project Office
DOF	Department of Finance
DPWH	Department of Public Works and Highways
IRA	Internal Revenue Allotment
LGA	Local Government Academy
LGU	Local Government Unit
LOGOFIND	Local Government Finance and Development Project
MDF	Municipal Development Fund
MDP	Municipal Development Project
RPTA	Real Property Tax Administration

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December 18, 1998

**MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT**

**SUBJECT: Impact Evaluation Report  
Building Institutions and Financing Local Development:  
Lessons from Brazil and the Philippines**

**Municipal Development Project in the State of Parana (Loan 3100-BR)  
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Sixty three of 75 countries with more than five million people are now pursuing decentralization policies that devolve functions and responsibilities to local governments, but the process of decentralization is severely constrained by a lack of institutional capacity among local governments, limited resource mobilization at the local level, and limited access to long-term financing for investment programs. Municipal development projects (MDP) aim at mitigating these constraints. Since early 1980s, 16 Bank-financed MDPs have been completed in 11 countries, and 19 more MDPs in 15 countries are currently being implemented with total lending reaching US\$2 billion.

This study assesses the impacts of MDPs on the institutional capacity building of local governments for fiscal and financial management and for planning and implementation of investment programs. It also assesses direct impacts on the beneficiaries as anticipated by the projects, and indirect side-effects on the development of local economies focusing on employment and income generation. The study evaluates the impacts of two successful MDPs each in the Philippines and Brazil. They provide a rich base for the study to extract lessons for ongoing and future projects. Three sets of data were collected and analyzed: municipal finance data of local governments, a sample survey of mayors on capacity building, and a survey of stall-holders in public markets. At both the municipal and the beneficiary levels, the study compared impacts on the participating municipalities with conditions of the non-participating municipalities, and the initial conditions with the impacts after the project implementation.

The Brazil and Philippines MDPs were almost identical in their objectives and design but had different implementation strategies. In Brazil, a statewide "wholesale approach" allowed as many municipalities as possible to participate in the fiscal reform program with a technically simple project such as street paving. In the Philippines, a more selective approach allowed a smaller number of eligible municipalities to finance revenue-generating projects such as public markets. In both countries, the programs had two main instruments: fiscal and financial reform and investment programs. To apply for a sub-loan, a municipal government had to submit a financial action plan with a comprehensive reform

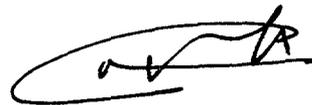
package. The preparation and implementation of investment sub-projects in turn enhanced institutional capacity by offering experience in every phase of a project cycle from feasibility study to construction work.

The analyses of the data produced the following results: MDP participating municipalities in Brazil and the Philippines outperformed non-participants on municipal financial autonomy. Furthermore, the deeper the MDP finance, the greater the MDP impact upon participants. Thus, participant municipalities relied upon their own revenues to a greater extent than non-participants and succeeded in mobilizing more of these revenues. Property tax collection responded well to the project. Participating municipalities also did much better in direct cost recovery through levying and collecting betterment charges. To remain creditworthy, participant municipalities were more successful than others in balancing their budgets. Thus, the extensive municipal finance data point to significant MDP impact on the strengthening of municipal fiscal and financial management.

The results of a survey of mayors in Rio Grande do Sul highlight their awareness of the improvements made under the MDP project. Participant municipalities valued most highly the institutional development interventions aimed at making resource management more efficient and improving the management of investment sub-projects, which included better procurement procedures. Professional training, information technology, and community participation were also highly valued. Municipality awareness of these advances had an important side-effect: successful participants openly promoted the MDP project and its principles among municipalities still not involved.

A case study of the MDP-financed public market in Pulilan in the Philippines shows that the project had significant impact on the development of the local economy. The project not only stimulated employment and income generation, it also triggered the development of a new business center near the public market, which had significant spill-over effects.

The study concludes that the MDP operations helped reform at the local level; municipalities are aware that participation is a commitment to reform; improved fiscal performance goes hand in hand with management strengthening that gives mayors a more entrepreneurial view of their administration; and municipalities are more sensitive to MDP impacts the deeper MDP funding goes. Based on these findings, the study recommends that MDP policy reform instruments be diversified to broaden project impacts; for successful impacts, good project design must be achieved as later course correction is difficult; and competition among municipalities should be promoted through disseminating success stories. The most important element for overall success with long-term sustainability, however, is in a sound policy and fiscal decentralization framework, since participating municipalities should eventually “graduate” from the MDP program, which is a transitory institutional mechanism, and should start borrowing from the capital market.

A handwritten signature in black ink, consisting of a large, sweeping initial letter followed by several smaller, connected letters.

# Contents

<b>Preface.....</b>	<b>v</b>
<b>1. Introduction.....</b>	<b>1</b>
Rationale for the Study .....	1
MDPs in Urban Lending.....	1
Objectives, Scope, and Approaches to the Study.....	2
Objectives .....	2
Scope.....	2
Approaches .....	2
Methods and Data .....	3
<b>2. Evaluation Logic: Instruments and Expected Impacts.....</b>	<b>5</b>
MDP Project Objectives and Components, and Key Institutions.....	5
Main Project Instruments and Expected Impacts.....	5
Fiscal and Financial Reform Package.....	6
Institutional Capacity Building through Investment Programs.....	6
Expected Development Impacts .....	6
<b>3. Impacts on Municipal Fiscal and Financial Management.....</b>	<b>9</b>
Introduction.....	9
Municipal Financial Autonomy Versus Revenue Sharing.....	9
Own Revenue Generation through Property Taxes .....	12
Direct Cost Recovery.....	14
Budget Surplus/Deficit.....	16
Financial Deepening .....	18
<b>4. Impacts on Local Government Capacity Building.....</b>	<b>21</b>
Introduction.....	21
Field Surveys .....	21
Direct and Indirect Cost Recovery.....	23
Local Financial Management.....	24
Sub-project Management and Implementation.....	25
Information Technology, Training, and Community Participation at the Municipal Level.....	26
Conclusions and Recommendations .....	28
<b>5. Impacts on Local Economic Development.....</b>	<b>29</b>
Introduction.....	29
The Public Market in Pulilan.....	29
Survey Results .....	30
Change in Sales and Income.....	30

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Commuting .....	31
Quality of Infrastructure Services.....	31
Indirect Impacts .....	32
Expanding Market Linkages with other Municipalities and Regions.....	32
Employment Side-Effects.....	33
Emerging Real Estate Market.....	33
<b>6. Agenda for the Future .....</b>	<b>35</b>
Changing Demand for Project Finance.....	35
MDP in Paraná.....	35
MDP in Rio Grande do Sul.....	35
MDP in the Philippines.....	35
<b>7. Conclusions and Lessons .....</b>	<b>37</b>
Conclusions.....	37
Lessons for Future Operations.....	38
<b>References.....</b>	<b>39</b>

## Annexes

<b>A. Data and Methodology.....</b>	<b>41</b>
<b>B. Additional Data Analysis of Municipalities-By Population Size Category.....</b>	<b>45</b>
<b>C. Performance Audit of the Brazil MDPs: Lessons and Recommendations.....</b>	<b>51</b>
<b>D. Performance Audit of the Philippines MDPs: Lessons and Recommendations.....</b>	<b>53</b>
<b>E. Public Market Survey Questionnaire.....</b>	<b>55</b>

## Tables

Table 3.1: MDP Project States/Provinces: Selected Indicators.....	9
Table 3.2: Impacts upon Financial Autonomy.....	11
Table 3.3: Impacts upon Own Revenue Mobilization .....	12
Table 3.4: Impacts upon Property Tax Collection.....	13
Table 3.5: Impacts upon Direct Cost Recovery (Brazil Only).....	15
Table 3.6: Impacts upon Municipal Budget Surplus/Deficit .....	17
Table 3.7: Impacts upon Own Revenues by Degree of Financial Deepening (Brazil Only).....	19
Table 4.1: MDP-sponsored Institutional Development Interventions.....	22
Table 4.2: Impacts upon Municipal Cost Recovery.....	23
Table 4.3: Impacts upon Municipal Financial Planning and Management.....	24
Table 4.4: Impacts upon Municipal Management of Investment Sub-projects.....	26
Table 4.5: Impacts upon Computerization and Training.....	27
Table 5.1. Characteristics of Stall-holders (average value).....	30
Table 5.2. Change in Sales and Income.....	31
Table 5.3. Commuting Distance and Travel Time.....	31
Table 5.4. Quality of Services at the Market (percent of respondents answering “excellent” or “good”).....	32
Table 5.5. Origin of Goods to be Sold at the Market (mean percentage for each cell).....	32
Table 5.6. Origin of Customers to the Market (mean percentage for each cell).....	33

## Figures

Figure 3.1: Impacts upon Financial Autonomy .....	10
Figure 3.2: Impacts upon Own Revenue Mobilization.....	11
Figure 3.3: Impacts upon Property Tax Collection.....	13
Figure 3.4: Impacts Upon Direct Cost Recovery in Brazil.....	15
Figure 3.5: Impacts upon Municipal Surplus/Deficit.....	17
Figure 3.6: Impacts upon Own Revenue by Degree of Financial Deepening.....	19
Figure 4.1: PIMES Institutional Development Interventions.....	22
Figure 4.2: Impact upon Municipal Cost Recovery.....	23
Figure 4.3: Impact upon Municipal Planning and Management.....	24
Figure 4.4: Impact upon Municipal Management of Investment Sub-projects.....	25
Figure 4.5: Impacts upon Computerization and Training.....	27



## Preface

This Impact Evaluation Report (IER) assesses the direct and indirect impacts of the municipal development projects (MDPs) implemented in the states of Paraná and Rio Grande do Sul, Brazil, and two MDPs in the Philippines. The purpose was to determine the impacts of Bank lending on the fiscal and financial performance and management capacity of municipal governments and on the development of local economies.

### Basic Loan Data (actual)

<i>Loan Number</i>	<i>Project Name</i>	<i>US\$ Million</i>	<i>Board Approval</i>	<i>Completion</i>
3100	MDP in the State of Paraná	100.0	06/22/89	12/31/95
3129	MDP in the State of Rio Grande do Sul	80.0	10/24/89	12/31/95
2435	MDP in the Philippines	35.9	06/05/84	06/30/93
3146	Second MDP in the Philippines	37.7	12/14/89	12/31/96

The Operations Evaluation Department (OED) conducted a performance audit of the two Brazil MDPs in December 1997. The preparatory work for this study was carried out during the audit mission. The OED study mission visited the Philippines in April 1998 to conduct a survey of selected public markets.

The kind assistance and cooperation of government officials at all levels is gratefully acknowledged. The staff of the Central Project Office and the Bureau of Local Government Finance in the Philippines and staff in the state governments of Paraná and Rio Grande do Sul provided invaluable contributions to the study. The survey of public markets in the Philippines was conducted by the Cirrus Research and Software in Manila.

Copies of the draft IER were sent to the borrowers for comments. Their comments were incorporated in the final revision.

## 1. Introduction

1.1 Sixty three of 75 countries with more than five million people are now pursuing decentralization policies that devolve functions and responsibilities to sub-national governments (Davoodi and Zou, 1998). Such decentralization is severely constrained, however, by (i) a lack of institutional capacity among sub-national governments, especially a lack of technical personnel to prepare and implement projects; (ii) limited resource mobilization at the local level; and (iii) limited access to long-term financing for investment programs. Municipal development projects (MDPs) are intended to mitigate these constraints. This study evaluates the extent to which MDPs have achieved these objectives based on recently examined cases in Brazil and the Philippines.

### Rationale for the Study

1.2 Since the early 1980s, 16 Bank-financed MDPs have been completed in 11 countries, including Brazil, the Philippines, Jordan, and Côte d'Ivoire. Nineteen more MDPs in 15 countries, including Georgia, Tunisia, and the West Bank and Gaza, are currently being implemented with total lending reaching US\$2 billion<sup>1</sup>. The MDP lending instrument has become popular in the Bank's urban sector because its project concept is consistent with the current Bank emphasis on demand-driven, bottom-up approaches with strong ownership and local participation.

1.3 OED commissioned this impact evaluation study to help disseminate the lessons of successful MDPs. The study grew out of recently completed performance audits of the first two MDPs in the Philippines (OED, 1997) and the second MDP in Paraná and the first MDP in Rio Grande do Sul in Brazil (OED, 1998). The Performance Audit Reports (PARs) covered implementation experiences and remaining issues. The agenda for the future that was identified regarding future policy and operational direction is summarized in Chapter 6, and the lessons drawn and recommendations provided in the PARs appear as Annexes C and D.

1.4 The PARs found that the Brazil and Philippines projects had significant impacts on improving the living conditions and the productivity of the residents in the participating municipalities. Moreover, their unintended indirect impacts on the local economy have been significant. The performance audit of MDP I and II in the Philippines showed that small, resource-poor municipalities could successfully complete a small revenue-generating sub-project such as a public market, and later, after they became more creditworthy and technically capable, could come back to the program to finance more complex infrastructure sub-projects. This experience shows the importance of sequencing project components according to the speed of institutional learning of the borrowers. As the Brazil PAR (OED, 1998, para. 5.2) points out, the participating municipalities should eventually "graduate" from the MDP program, which is a transitory institutional mechanism, and start borrowing from the capital market.

### MDPs in Urban Lending

1.5 The legacy of the World Bank's urban lending operations during the past two decades can be characterized as a sequence of paradigm shifts from (a) sites and services and slum upgrading projects for low-income areas, to (b) citywide infrastructure projects for selected cities, to (c) MDPs to reach numerous municipalities by encouraging competition among them. In the

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1. This study deals with only those MDPs that had a municipal (or urban) development fund as part of the project design.

1980s, the MDPs shifted the urban project design from a complex supply-driven (top-down) approach to a demand-driven (bottom-up) approach that provided a large number of municipalities with access to credit they could use to finance their own investment projects.

1.6 The Paraná Market Towns Development Project in Brazil (Loan 2343, approved in 1983), and the First Municipal Development Project in the Philippines (Loan 2435, approved in 1984) were the first group of MDPs approved in early 1980s. In both Brazil and the Philippines, the MDP programs have been successful during the past two decades. In Brazil, the Bank subsequently undertook an MDP for the state of Santa Catarina (Loan 2623, approved in 1985), and continued its operations in Paraná with a second MDP in that state (Loan 3100, approved in 1989) and an MDP in the state of Rio Grande do Sul (Loan 3129, approved in 1989). Three more states, Minas Gerais (Loan 3639), Ceará (Loan 3789), and Bahia (Loan 4140), are now implementing MDPs with loan amounts ranging from US\$100 to US\$150 million. More than 2,100 municipalities come under the purview of these five MDPs in Brazil.

1.7 In the Philippines, a second MDP (Loan 3146) was approved in 1989 and was followed by a third MDP (Loan 3455, approved in 1992) to meet the strong demand for financing among the municipalities in that country. A fourth project, called Local Government Finance and Development Project (LOGOFIND) is now in preparation in the Philippines with a proposed loan amount of US\$100 million.

## **Objectives, Scope, and Approaches to the Study**

### ***Objectives***

1.8 This study has two objectives: (i) to assess impacts of MDPs on the institutional capacity building of local governments for fiscal and financial management and for planning and implementation of investment programs; and (ii) to assess both “direct” impacts on the beneficiaries as anticipated by the projects, and “indirect” (longer-term) impacts on the development of local economies focusing on employment and income generation in the participating municipalities.

### ***Scope***

1.9 The study evaluates the impacts of two MDPs each in the Philippines and Brazil: the first and second MDPs in the Philippines (Loans 2435 and 3146) and the MDPs in the states of Paraná and Rio Grande do Sul in Brazil (Loans 3100 and 3129). These four successful projects provide a rich base for the study and a rare opportunity to extract lessons about the institutional learning process over an extended period.

### ***Approaches***

1.10 This study assesses impacts at two levels: the municipal level and the beneficiary (firm and household) level. At the municipal level, it analyzes municipal finance data collected in Brazil and the Philippines and a sample survey of mayors in Rio Grande do Sul. It documents impacts on financial autonomy; local revenue generation; cost recovery; creditworthiness; planning, budgeting, and accounting practices; project preparation and implementation; and technical skills of staff. The historical data allow comparison of the conditions “before the project” with those “after the project.” The cross-section data for both participating and non-

participating municipalities allow comparison of fiscal and financial performance “with versus without” the projects.

1.11 At the beneficiary level, the study analyzes survey data from two case study municipalities in the Philippines to assess the impacts of an MDP-financed public market on employment creation and income generation, and to evaluate the indirect impacts on local economic development. Most participating municipalities in the Philippines financed public markets (OED, 1997). The data allow comparison of the conditions “before the project” with the impacts “after the project,” and comparison of the impacts “with the projects” with the conditions “without the project.” The impacts documented include: job creation; income generation; increases in land and real property values; changes in the quality of life from basic services such as street paving, water supply, and garbage collection; time savings from efficient commuting and access to services; and better access to infrastructure services.

### **Methods and Data**

1.12 The study uses six evaluation instruments: (i) review and analysis of project implementation data in the municipalities and implementation agencies; (ii) interviews with government officials and nongovernmental organizations; (iii) interviews with beneficiaries and site visits; (iv) municipal finance data collected for all municipalities in the two states in Brazil and two provinces in the Philippines; (v) a survey of mayors of 26 municipalities in Rio Grande do Sul regarding the project’s impact on local capacity building; and (vi) sample surveys of stallholders and shop owners in two municipalities in the Philippines constituting an experiment group and a control group. More details on data collection are in Annex A.

1.13 At both the municipal and the beneficiary levels, the study was designed to contrast and compare project impacts on the participating municipalities (experiment group) with the non-participating municipalities (control group)—a with versus without project evaluation approach. In addition, the data document the initial conditions and the outcomes and impacts after project implementation—a before versus after project approach.



## **2. Evaluation Logic: Instruments and Expected Impacts**

### **MDP Project Objectives and Components, and Key Institutions**

2.1 In Brazil, the second MDP in Paraná and the first MDP in Rio Grande do Sul were prepared concurrently by the same project team and using identical project objectives and design. The projects had four objectives: (i) to increase the institutional capacity of municipalities and state urban development agencies to plan, finance, and execute investment programs; (ii) to improve the fiscal and financial management capacity of municipalities; (iii) to provide basic economic and social infrastructure in urban areas; and (iv) to improve targeting of urban programs to lower-income populations. These objectives were to be achieved through three components: (a) creation of an Urban Development Fund providing a long-term line of credit to municipalities; (b) establishment of strict municipal creditworthiness and management improvement standards as conditions for allowing local governments to participate in the fund; and (c) on-lending to municipalities to finance infrastructure investments such as street improvements and community facilities such as health posts and day care centers.

2.2 In Paraná, the state government's Secretariat of Urban Development had overall project responsibility for Paraná MDP II (known locally as the PEDU project, the name used in the rest of the report). The Paraná Municipal Assistance Foundation handled day-to-day project management. In Rio Grande do Sul, the MDP (known locally as the PIMES project, the name used in the rest of the report) was executed by the RGS State Development Bank, which later merged with the State Commercial Bank.

2.3 In the Philippines, the second Municipal Development Project (MDP II) was an extension of the first (MDP I) for different regions with identical project objectives and design. The project had four objectives: (i) to establish an institutional mechanism, the Municipal Development Fund (MDF), to provide local governments with direct access to long-term development finance; (ii) to establish a national-level technical intermediary, the central project office; (iii) to strengthen local technical and financial capacity for project implementation and service management through a training program; and (iv) to improve local fiscal performance through the Real Property Tax Administration (RPTA) program. The project had five components: (a) improving basic infrastructure services such as water supply, sanitation, roads, drainage, public markets; (b) upgrading various maintenance activities; (c) upgrading real property tax records for improving tax collections; (d) training local government staff; and (e) technical assistance for project implementation and local budgeting and fiscal administration.

2.4 In the Philippines, the Department of Public Works and Highways (DPWH) was the lead agency for the projects. The central project office carried out project implementation under the DPWH. The Department of Finance managed the MDF, and the department's Bureau of Local Government Finance administered the RPTA programs. The Local Government Academy implemented the Municipal Training Program under the Department of the Interior and Local Government.

### **Main Project Instruments and Expected Impacts**

2.5 The MDPs in Brazil and the Philippines were almost identical in their objectives and design, with some variations in implementation strategy. In Brazil, the project implementation took a statewide "wholesale approach" to cover as many municipalities as possible in the financial reform program with a technically simple investment project such as street paving. Such

a simple investment project served as an “entry ticket” to participate in the reform program. In the Philippines, the project implementation took a more selective approach, focusing on a smaller number of municipalities that are eligible to participate in the program, and allowing revenue-generating investment projects such as public markets. But in both cases, the programs had two main instruments: fiscal and financial reform and investment programs.

### ***Fiscal and Financial Reform Package***

2.6 In both Brazilian states, OED’s performance audits confirmed that the project improved the fiscal and financial management capacity of participating municipalities. The project design required strict municipal creditworthiness and management improvement standards as conditions for allowing local governments to participate in the program. To apply for a sub-loan, a municipal government had to submit a financial action plan (FAP) analyzing the municipality’s debt-servicing capacity (with revenue and expenditure projections) and demonstrating the sub-project’s eligibility for financing based on required technical standards. The FAP also presents a plan for institutional development, including training and technical assistance needs (OED, 1998). The FAP has been the key instrument for financial and fiscal reforms. Also, the requirement for sequencing of institutional reform before allowing physical investments was an effective way of minimizing possible implementation delays and cost recovery problems.

2.7 In the Philippines too, OED’s performance audits confirmed that the participating municipalities improved their fiscal and financial performance significantly (OED, 1997). The projects in the Philippines also required an explicit financial reform package similar to the FAP in Brazil. In the Philippines, however, the RPTA program was implemented by a unit in the Department of Finance.

### ***Institutional Capacity Building through Investment Programs***

2.8 In both Brazil and the Philippines, the preparation and implementation of investment sub-projects financed by MDP served as a second major instrument for enhancing the institutional capacity of local governments. In both countries, OED’s performance audits confirmed that the projects achieved their objective of increasing the institutional capacity of municipalities and the government’s urban development agencies to plan, finance, and execute investment programs. The projects gave officials of participating municipalities opportunities to learn all phases of project preparation and implementation, from identification to appraisal to completion. In addition to improving their fiscal and financial management through the reform package (FAP), the participating municipalities had learned by experience in every phase of a project cycle, including the feasibility study for a sub-project; economic and financial analysis for cost recovery; and technical analysis for engineering design, procurement, and construction work. Furthermore, by using computers funded under the project, many municipalities were able to streamline payroll, cadastre, accounting, and budget operations and improve overall administrative efficiency.

### ***Expected Development Impacts***

2.9 The study documents empirically the impacts of MDPs on the following areas:

- Fiscal and financial performance of local governments, focusing on fiscal autonomy, local revenue generation, cost recovery, and budget balance as presented in Chapter 3.

- Local governments' institutional capacity for investment planning, budgeting, and accounting, and project preparation and implementation as presented in Chapter 4.
- Local economic development focusing on income and employment generation and the quality of urban services as presented in Chapter 5.



### 3. Impacts on Municipal Fiscal and Financial Management

*MDP participant municipalities in Brazil and the Philippines outperformed non-participants on municipal financial autonomy, direct and indirect cost recovery, and balancing the budget. Furthermore, the deeper the MDP finance, the greater the MDP impact upon participants. Thus, participant municipalities relied upon their own revenues to a greater extent than non-participants and have succeeded in mobilizing more of these revenues. Property tax collection—a focus of MDP conditionalities and technical assistance—responded well to the project.*

*Participant municipalities also did much better in direct cost recovery through levying and collecting betterment charges. To help them remain creditworthy, participant municipalities were more successful than others in balancing their budgets. Thus, extensive municipal finance data point to significant MDP impact on the strengthening of municipal fiscal and financial management.*

#### Introduction

3.1 This chapter reports the impacts upon municipal finances of financial reform programs introduced by MDP in Brazil and the Philippines. Table 3.1 summarizes key characteristics of the four project areas studied and their composite municipalities.

3.2 Altogether, the projects covered 850 municipalities. Then, as now, municipalities in Brazil were much smaller, more varied in population size, and much more numerous than their Philippine counterparts. Both states in Brazil are as urbanized as the country itself. The Philippines provinces—as part of metropolitan Manila—are more urbanized than the country as a whole. While the Brazilian states enjoy levels of GDP per capita similar to the national average, the levels in the Philippine provinces are above their respective national average. The Philippines' lower levels of income, nevertheless, have implications for municipal finances, as this chapter will show.

**Table 3.1: MDP Project States/Provinces: Selected Indicators**

Indicator	Brazil			Philippines		
	Paraná	Rio Grande do Sul	National	Bulacan	Laguna	National
Total population 1996 (millions)	9.0	9.6	157.1	1.8	1.5	71.9
Urban population as share of total (%)	77.9	78.6	78.4	69.7	75.4	54.9
GDP per capita PPP 1991 (US\$)	5,138	5,168	5,142	-	-	3,550
All municipalities 1996 (number):						
total	371	426	4,974	24	29	1,610 <sup>a</sup>
pop. >250,000	4	4	-	0	0	-
pop. 50,000-250,000	25	36	-	19	7	-
pop. 10,000-50,000	162	125	-	5	22	-
pop. 2,000-10,000	177	248	-	0	0	-
pop. <2,000	3	13	-	0	0	-
MDP project municipalities <sup>b</sup> (number)	364	152	-	17	4	-
Average pop. per municipality (number)	24,269	22,597	31,584	67,549	52,138	44,658

Sources: MDP IES database; Brazil census 1996; World Development Indicators 1998 CD-ROM; Philippines MDP study team.

a. Aggregate of "cities" (82) plus "municipalities" (1,528).

b. MDP project municipalities are defined as those that participated fully in both MDP investment and technical assistance component programs.

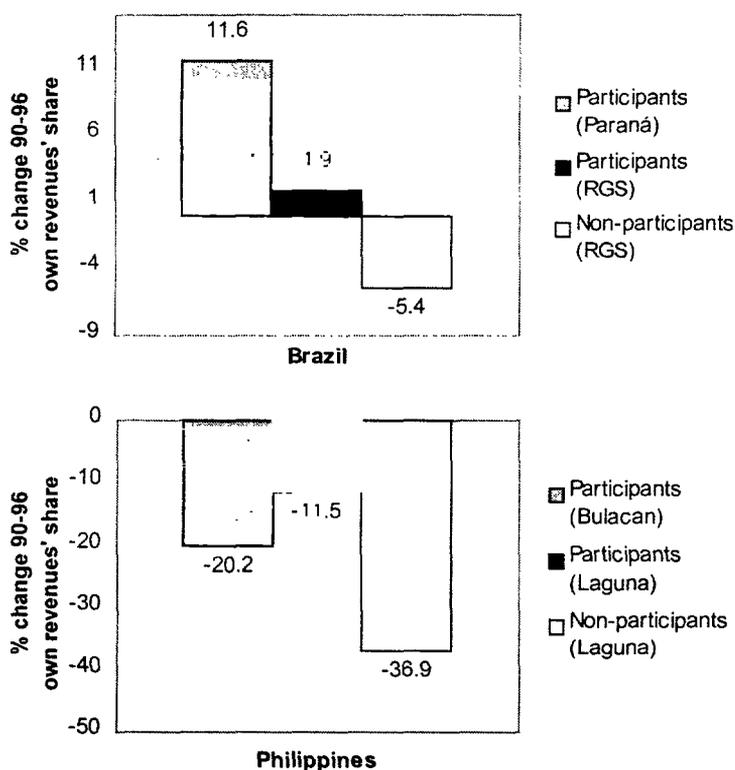
## Municipal Financial Autonomy Versus Revenue Sharing

3.3 This section and those that follow focus on two perspectives of impact evaluation. First, the performance of participant municipalities is compared with that of non-participant municipalities. Second, performance is reviewed before and after the projects. For the latter, 1990 is the “before-project” benchmark, and 1996 is the “after-project” year.

3.4 To evaluate MDP project impacts upon financial autonomy, the study team examined the performance of collections of current revenues whose sources are under the control of municipalities themselves. They are called “own revenues” in this text. Municipal own revenues come from levying and collecting local taxes, charges and making sales that municipalities themselves can control independently of higher levels of government. This evaluation compares a municipality’s own revenues with its total current revenues. The latter total is made up of the own revenues just mentioned plus current transfers that municipalities receive from higher levels of government as revenue sharing. As total current revenues can have only these two elements, conclusions about increased own revenues automatically imply declining current transfers and vice versa.

3.5 Using municipal own revenues’ share of total current revenues as an indicator of municipal financial autonomy, there is evidence that MDP municipalities in both countries performed better than their non-participant counterparts (Figure 3.1 and Table 3.2). In Brazil, participants’ own revenue shares rose, while non-participants saw their shares declined. In the Philippines, all municipalities’ shares declined as a direct result of government policy—the 1991 Local Government Code—that increased revenue sharing from 20 to 40 percent. Nevertheless, participant municipalities in the Philippines saw their shares erode less over the life of the

**Figure 3.1: Impacts upon Financial Autonomy**



Source: MDP IES database.

**Table 3.2: Impacts upon Financial Autonomy**

<i>Own revenues' share of all current municipal revenues (percent)</i>				
<b>Brazil</b>			<b>Philippines</b>	
	1990	1996	1990	1996
Participants (Paraná)	12.9	14.4	Participants (Bulacan)	56.0
Participants (RGS)	16.2	16.5	Participants (Laguna)	68.9
Non-participants (RGS)	14.7	13.9	Non-participants (Laguna)	42.8

Source: MDP IES database.

Notes: For details of participant and non-participant municipalities, see Annex Table A1.

Own (current) revenues = municipalities' own taxes, charges and sales.

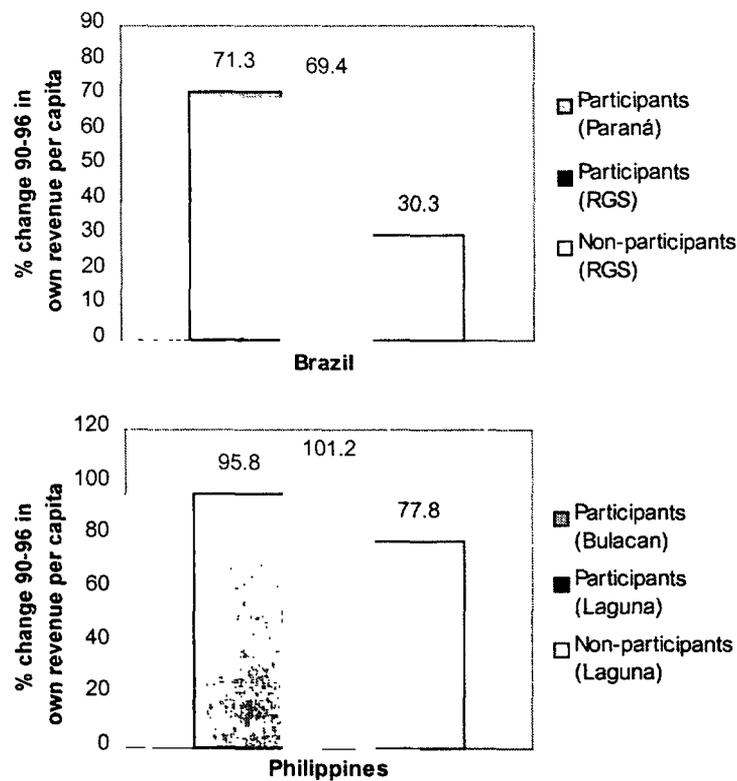
All current revenues = own revenues plus current transfers from higher levels of government. RGS = Rio Grande do Sul

projects. Of course, the MDP projects were designed and implemented to encourage and assist municipalities to mobilize more financial resources of their own. As a corollary, participant municipalities became less dependent upon fiscal transfers after the projects, unlike non-participants.

3.6 Another indicator, municipal own revenues per capita, offers additional evidence of greater municipal financial autonomy achieved through MDP projects (Figure 3.2 and Table 3.3). These data show the following:

- *In both Brazil and the Philippines, MDP participants succeeded in increasing municipal own revenues per capita more rapidly than non-participants did. Project impact was greater in the Philippines where these revenues grew faster than in*

**Figure 3.2: Impacts upon Own Revenue Mobilization**



Source: MDP IES database.

**Table 3.3: Impacts upon Own Revenue Mobilization**

<b>Own revenues per capita (constant 1996 US dollars)</b>					
<b>Brazil</b>			<b>Philippines</b>		
	<i>1990</i>	<i>1996</i>		<i>1990</i>	<i>1996</i>
Participants (Paraná)	24.81	42.50	Participants (Bulacan)	4.51	8.83
Participants (RGS)	38.25	64.78	Participants (Laguna)	6.80	13.68
Non-participants (RGS)	36.96	48.15	Non-participants (Laguna)	3.24	5.76

*Source:* MDP IES database.

*Note:* See Table 3.2. Local currency values converted to US dollars using year average exchange rates.

Brazil. Nevertheless, the level of own revenues per capita in the Philippines—with its lower level of income—is still below Brazil's.

- *Before the MDP projects in 1990, and in both countries, participant and non-participant municipalities had similar levels of own revenue per capita. By project completion in 1996, participant municipalities had higher levels than non-participants (Table 3.3).* Besides confirming MDP project impacts, this points to a fairly even playing field for municipalities at the outset, a feature particularly striking in Rio Grande do Sul. It precludes the notion of self-selection that might have induced only better-performing municipalities to participate in the MDP projects. The results for Laguna may not be reliable, though, since the province had only four participants.

3.7 The data point to significant MDP project impacts encouraging and helping greater fiscal autonomy of participant municipalities. Evidence of this includes rising shares of municipal income coming from municipal own revenues and from municipal efforts to raise more of their own revenues from citizens. MDP projects provided important incentives for municipalities to move in this direction. Mayors understood that more municipal revenue meant greater access to MDP (and other) credit and greater ease in paying off loans. MDP project design included requirements that mayors make efforts in this direction in order to qualify for loans. MDP project technical assistance to encourage tax collection helped municipalities develop and strengthen instruments to raise more revenues (discussed further in Chapter 4).

### **Own Revenue Generation through Property Taxes**

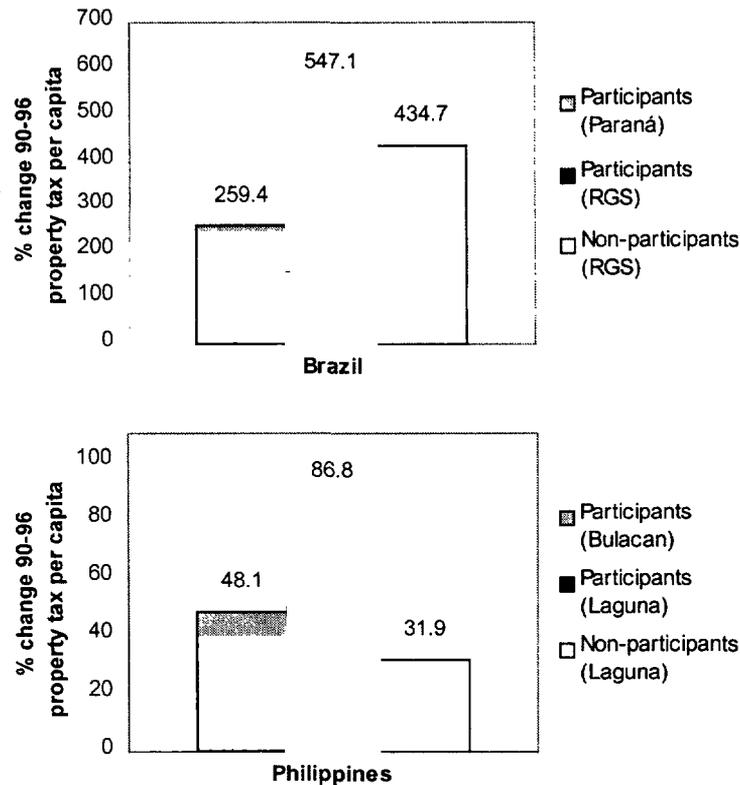
3.8 One of the main sources of municipal own revenue generation in both countries is from tax levied on residential, commercial, and industrial properties in urban areas. For the municipalities in Brazil, such property tax collections typically accounted for 15 to 25 percent of all municipal own revenues. In the Philippines, the equivalent range was 26 to 33 percent. MDP project design in both countries focused specifically and explicitly upon improving property tax collections and provided technical support for local administrations to improve property tax administration.

3.9 We therefore looked at the performance of property tax collection as an indicator of municipal effort to enhance fiscal autonomy and improve creditworthiness.<sup>2</sup> Through this

2. Evidence of improved property tax collection resulting from MDP improvements to property cadastres in Brazil was also examined, but little was found to support this link. Little cadastral improvement went beyond modernizing the register in city hall; much of it failed to lead to effective broadening or deepening of collections. More comprehensive packages of technical assistance—notably those including efforts to improve *collections*—were found to be more effective.

indicator per capita collection in both Brazil and the Philippines was found to respond positively to MDP project interventions. While property tax per capita increased for all municipalities in both countries during the 1990-96 period, it increased more rapidly in MDP participant municipalities—except for Paraná—than in non-participants (Figure 3.3 and Table 3.4).

**Figure 3.3: Impacts upon Property Tax Collection**



Source: MDP IES database.

**Table 3.4: Impacts upon Property Tax Collection**

<i>Property tax per capita (constant 1996 US dollars)</i>					
<i>Brazil</i>			<i>Philippines</i>		
(a)	1990	1996		1990	1996
Participants (Paraná)	1.87	6.72	Participants (Bulacan)	1.31	1.94
Participants (RGS)	2.63	17.02	Participants (Laguna)	2.43	4.54
Non-participants (RGS)	1.96	10.48	Non-participants (Laguna)	1.16	1.53

Source: MDP IES database.

Notes: See Tables 3.2 and 3.3

3.10 A review of property tax per capita as an impact indicator highlights the following:

- *Participant municipalities in both countries—except those in Paraná—improved property tax collections during 1990-96 more than non-participants did (Figure 3.3). The performance of participants in RGS, where property tax per capita increased more than fivefold over the life of the MDP, is outstanding. These results*

reflect work done through MDP financial action plans (FAPs) in Brazil that consistently emphasized improvements in property tax as a key to municipal eligibility to participate in the project. Similarly in the Philippines, the favorable results reflect the successful Real Property Tax Administration (RPTA) Program, supported by MDP.

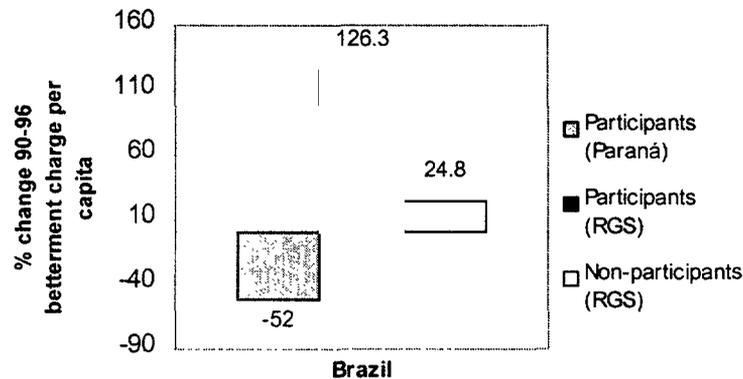
- The weaker performance of Paraná compared to RGS has three causes: (i) less rigorous control in Paraná than in RGS of project conditionalities that required improved tax performance through MDP Financial Action Plans (FAPs); (ii) participants in Paraná were second-time MDP participants and, in their eyes, FAP property tax conditions that the previous MDP did not require may have lacked credibility; and (iii) MDP project leverage in Paraná was weaker; the 100 percent coverage of municipalities precluded the possibility of excluding municipalities lacking compliance with FAP conditions.

3.11 Study findings thus point to significant MDP impacts upon property tax performance at the municipal level. This result was expected as it goes to the heart of the original designs of the MDP projects. In both countries, the MDP projects focused upon property tax as the principal instrument for raising local revenue and increasing the financial autonomy of municipalities. A challenge for the future will be to replicate this impact with other key items of revenue, such as the municipal service tax (ISS) in Brazil.

### **Direct Cost Recovery**

3.12 In addition to indirect cost recovery through stimulating and assisting the collection of local taxes, MDP projects also urged municipalities to pursue direct cost recovery from program investments themselves. In Brazil, this was through levying betterment charges upon families directly benefiting from the investments made. In the Philippines, MDP operations aimed at direct cost recovery through allowing municipalities to borrow and invest in revenue-generating services, such as local public markets. This section of the report discusses the Brazilian case. To evaluate MDP project impacts in Brazil, the study team examined the performance of betterment charges levied and collected per capita at the municipal level.

3.13 The cost recovery performance of participant municipalities in RGS was much better than municipalities that did not participate in the MDP project. For Paraná participant municipalities on the other hand, direct cost recovery performance weakened (Figure 3.4 and Table 3.5).

**Figure 3.4: Impacts Upon Direct Cost Recovery in Brazil**

Source: MDP IES database.

**Table 3.5: Impacts upon Direct Cost Recovery (Brazil Only)**

Betterment charge per capita (constant 1996 US dollars)		
	1990	1996
Participants (Paraná)	1.27	0.61
Participants (RGS)	1.37	3.10
Non-participants (RGS)	1.25	1.56

Source: MDP IES database.  
Notes: See Tables 3.2 and 3.3

### 3.14 Highlights from the evidence are as follows:

- *In levying and collecting betterment charges from beneficiaries, MDP participants in RGS significantly outperformed non-participants (Figure 3.4). On a per capita basis, betterment charges were at a similar level for both participants and non-participants in 1990, before the MDP project. By 1996, RGS participants were collecting twice the amount of betterment charge as non-participants. This outcome was helped by the enforcement of FAP conditions requiring municipalities to levy betterment charges where possible upon sub-projects financed through MDP.*
- *MDP participants in Paraná, on the other hand, had a weaker performance. After the MDP project, betterment charges per capita there were only half the level observed before the project. The three causes highlighted earlier for the weaker performance of Paraná municipalities also apply here (para. 3.10). Being the second operation in Paraná, MDP II could not have the same demonstration effect upon municipalities as a first-time MDP project in RGS did, especially when the first MDP project in Paraná did not have the same cost recovery conditionalities.<sup>3</sup> Among the specific results: 28 participant municipalities in Paraná, who used to collect betterment charges in 1990, stopped collecting them altogether by 1996.<sup>4</sup>*

3. Through the initial shock of contact with an MDP project, local mayors in RGS were more ready to embrace betterment charges which for many of them constituted a new financial instrument, but one which made access to MDP project finance easier.

4. By contrast, all MDP participants in RGS that collected betterment charges in 1990 still collected them in 1996 and were joined by 14 more municipalities by the latter year. Thus, by project completion in 1996, 83.3 percent of RGS participants collected betterment charges. The equivalent share for Paraná was 41.8 percent.

3.15 This evidence points to the achievement of significant MDP impacts upon increased direct cost recovery through betterment charges. A necessary condition for such achievements is for access to MDP funding to be explicitly conditioned upon a municipality's progress toward adopting and implementing direct cost recovery. The fulfillment of this condition also needs to be closely monitored by the MDP project team during implementation. The different performances of participant municipalities in Paraná and RGS point to the need to have these conditions correctly in place at the time of a municipality's first contact with an MDP project.

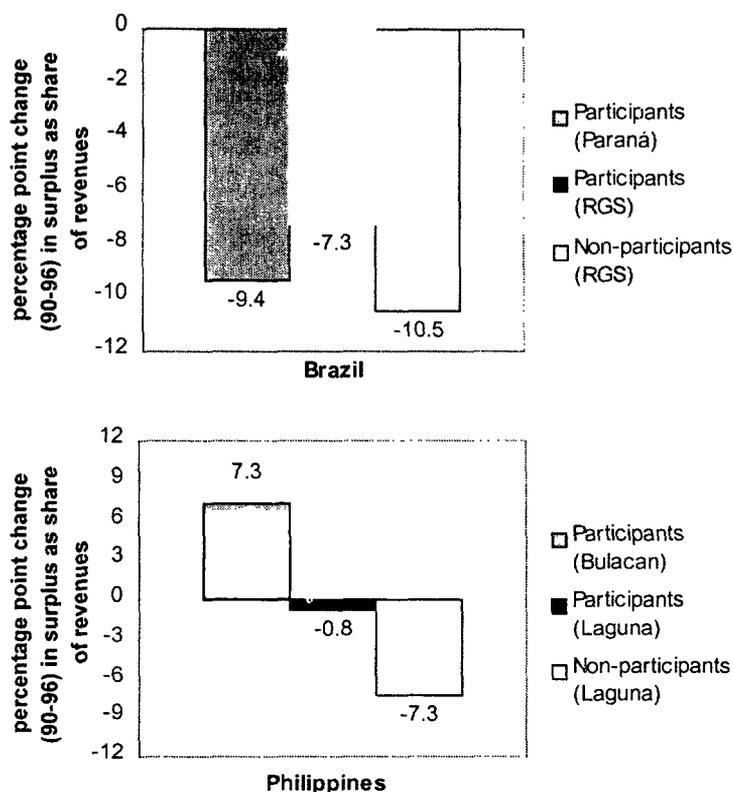
3.16 In leveraging improvements to direct cost recovery through MDP operations, project designers need to consider the political aspects of betterment charges in particular. Local mayors often complain that these charges are unpopular and difficult to administer fairly. Local councils must also formally approve them case by case, a process that can involve lengthy political negotiations with opposition councilors.

3.17 Even when success is obtained, there is an important caveat. When levied effectively, betterment charges still only account for a very small proportion of own revenues, not more than 5 percent on average. They can nevertheless be significant for recovering the investment costs of a particular project, up to 70 to 80 percent of the initial outlay, the remaining costs covered indirectly through property taxes.

### **Budget Surplus/Deficit**

3.18 Given that municipalities had to remain creditworthy for continued access to MDP project funding, a key study hypothesis was that participant municipalities would be more creditworthy than non-participants. The study team therefore looked for underlying evidence of changing debt capacity of municipalities, since this would affect their access to credit not only from MDP itself, but also from other sources. Nevertheless, it was not possible to construct a precise indicator of creditworthiness—such as a municipality's net savings or primary surplus—since separate data on periodic debt service payments were not available for all municipalities in the study population. For this reason, the study used a simpler proxy indicator, looking at municipal budget surplus/deficit data over time to capture the general direction of changes in the budget situation. This was defined as total municipal current revenues *minus* total municipal current expenditures that included debt service payments. Although not a complete and accurate indicator of creditworthiness—especially for municipalities with a previous history of borrowing—this budget surplus/deficit indicator nevertheless points to some evidence of municipalities trying to balance their books as a result of MDP projects.

3.19 The indicator shows clearly, for instance, that MDP participant performance concerning attempts to balance the municipal budget was better than that of non-participants (Figure 3.5 and Table 3.6).

**Figure 3.5: Impacts upon Municipal Surplus/Deficit**

Source: MDP IES database.

3.20 The highlights of study findings concerning municipal budget surpluses and deficits are:

- *Despite deterioration of the financial balance of all municipalities in Brazil, there is evidence that the MDP projects helped slow the decline. Thus, RGS participants did not suffer such serious setbacks as non-participants; neither did Paraná participants, but to a lesser degree. Thus, MDP projects helped participant municipalities relieve the negative trend toward increased deficits.*
- *In the Philippines, the contrasting trends of participant and non-participant municipalities are clearer still. Participants there moved out of deficit into surplus over the 1990-96 period, while non-participants reported a sharp fall in the average budget surplus they reported at the start of the MDP project. Bulacan participants actually moved out of deficit and into surplus between 1990 and 1996. On the other*

**Table 3.6: Impacts upon Municipal Budget Surplus/Deficit**

<i>Budget surplus(+) or deficit(-) as share of total revenues (percent)</i>					
<i>Brazil</i>			<i>Philippines</i>		
	<i>1990</i>	<i>1996</i>		<i>1990</i>	<i>1996</i>
Participants (Paraná)	+0.1	-9.3	Participants (Bulacan)	-5.5	+1.8
Participants (RGS)	+0.8	-6.5	Participants (Laguna)	+5.3	+4.5
Non-participants (RGS)	+2.8	-7.7	Non-participants (Laguna)	+8.9	+1.6

Source: MDP IES database.

Notes: Budget surplus/deficit = total current revenues minus total current expenditures (including debt service payments).

hand, the large surplus of Laguna non-participants was almost completely wiped out by 1996. These results reflect efforts by participant municipalities to remain creditworthy in order to gain access to further MDP and other funding.

3.21 We therefore find that participating in MDP projects can help a municipality reduce its deficit, if not develop a fiscal surplus. MDP projects provided an important incentive in this direction.

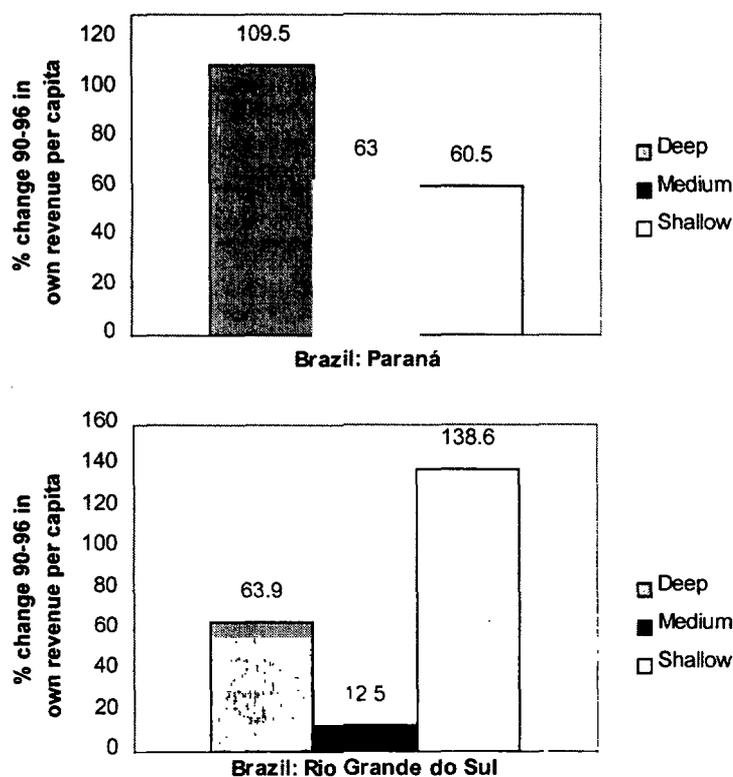
### **Financial Deepening**

3.22 For municipalities in Brazil the study examined how different levels of MDP capital investment in relation to total municipal investment at the initial phase of project implementation affected financial performance of participating municipalities. A lack of data on total investment prevented a similar analysis for the Philippines' municipalities. Applying a simple concept of project *leverage* to the case of Brazil, it was hypothesized that the *degree* of MDP project impact would rise with the share of MDP funding in a municipality's total investment program. Thus, a municipality more dependent upon MDP funding would be expected to be more responsive and subject to the requirements of the MDP reform program and show stronger impacts, and vice versa.

3.23 To measure the degree of municipal participation in MDP, a "financial depth" indicator was constructed. This indicator measured MDP investment funding at the municipal level as a share of a municipality's total 1990-92 investment (funded from all sources, including MDP and own revenues). From empirical estimates of this indicator, participant municipalities were grouped into three categories of financial depth: deep, greater than 50 percent; medium, 25 to 50 percent; and shallow, less than 25 percent.

3.24 In search of possible MDP project impacts, the study team examined the own revenue performance of municipalities—all participants, of course—by the degree of "financial depth." With one important caveat, discussed below, participants with greater MDP financial depth performed better than participants with more shallow participation in the MDP projects (Figure 3.6 and Table 3.7).

**Figure 3.6: Impacts upon Own Revenue by Degree of Financial Deepening**



Source: MDP IES database.

**Table 3.7: Impacts upon Own Revenues by Degree of Financial Deepening (Brazil Only)**

	Own revenues per capita (constant 1996 US dollars)			
	Paraná		Rio Grande do Sul	
	1990	1996	1990	1996
Deep	20.44	42.82	32.04	52.51
Medium	26.61	43.38	42.70	48.03
Shallow	26.28	42.18	36.36	86.75

Source: MDP IES database.

Notes: See Tables 3.2 and 3.3.

Financial depth is defined as the share of total 1990-92 municipal investment accounted for by MDP project funding. Three groups as follows: deep = > 50%; medium = 25-50%; shallow = <25%.

### 3.25 The highlights of the study findings are:

- *As measured by the increase in the average level of municipal own revenues per capita, "deep" participant municipalities in both Paraná and Rio Grande do Sul performed better than "medium" ones. This is because deep participant municipalities are more subject to the policy influence of MDP projects and are more likely to play according to the rules than medium or shallow participant municipalities. This outcome is a product of the leverage an MDP project can exercise over a municipality that is more dependent upon the project as its main source of funding.*

- *The contradictory outcome for “shallow” participant municipalities in RGS, which appear to have outperformed all others, results from a skewed distribution in which a few small municipalities reported very high levels of own revenues per capita in 1996, which significantly raised the mean observation for that year. Own revenues per capita is, nevertheless, a particularly important impact indicator to use in this analysis given its demonstrated robustness in the earlier “with/without-project” evaluation.*

3.26 Evidence gathered by the study team therefore points to greater project impacts where participant municipalities are more closely engaged in the respective MDP projects. This finding coincides with a widely perceived notion—across many lending sectors within the Bank—that greater project leverage can lead to more significant impacts upon project outcomes. The result observed is consistent with the hypothesis that the more closely involved with and dependent upon an MDP project a municipality is, the more likely that municipality will respond to and adopt MDP precepts. It should worth noting that the federal government of Brazil provided no subsidies to the participating municipalities. In the Philippines, the property tax improvement component (RPTA) was part of the national government assistance program implemented by the Department of Finance independent of the MDP sub-loans.

## 4. Impacts on Local Government Capacity Building

*Direct observation of selected municipalities highlights their awareness of the improvements made under the MDP project. Nearly half of PIMES's institutional development interventions were to strengthen local tax administration. Among the different kinds of intervention, participant municipalities valued most highly those aimed at making resource management more efficient and improving the management of investment sub-projects, which included better procurement procedures. Professional training was highly valued. In terms of techniques and procedures, municipalities reported that the PIMES project helped them better handle information technology and community participation. Municipality awareness of these advances had an important side effect: successful participants openly promoted the project and its principles among municipalities still not involved.*

### Introduction

4.1 This chapter reports the findings of impact evaluation “case studies” of participant municipalities in the MDP project—called PIMES—in Rio Grande do Sul that was carried out by the PIMES team in Porto Alegre as part of this evaluation study.<sup>5</sup> The studies were implemented in two stages: (i) field visits by team members to 26 municipalities during August-December 1997; and (ii) a follow-up telephone/fax survey of the same municipalities during January-March 1998. These municipalities do not constitute a random sample; they were selected from those that had completed all aspects of sub-loan agreements.

4.2 The PIMES team selected municipalities for these studies by taking into account the following factors: (i) representation of different population size groups; (ii) wide range of MDP institutional development actions adopted by them; and (iii) broad geographical coverage across the state of Rio Grande do Sul. The aim was to evaluate a group of municipalities that had participated effectively in the MDP project's institutional development (ID) component, but which were also representative of municipalities throughout Rio Grande do Sul state as a whole. Twenty-six were chosen as the maximum number of municipalities that could be visited in the field, given the study's budget constraint.

### Field Surveys

4.3 Members of the study team made 1-2 day visits to each municipality to meet with local officials and collect basic data on the following: (i) municipal administration; (ii) urban planning; (iii) local taxes; and (iv) municipal infrastructure. To compile the data, the team had prepared standard checklists to apply to all municipalities. In addition, a study team member sat down with

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5. This chapter is based upon a report prepared by Jeanette Lontra in March 1998 as part of this study under the supervision of Aurelio Simon (PIMES, 1998). The terms of reference for the telephone/fax survey was prepared during the audit mission in December 1997. Roy Gilbert coordinated the survey work and did translation and editing. Sextilio Giacomini, Aldino Dick, Janise Benneet, and Neusa Cunha of the PIMES team participated in earlier stages of this work. This task was undertaken fully by the PIMES team without any financial support from the Bank.

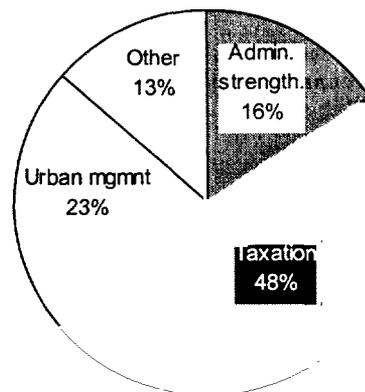
6. The municipalities were: Alegrete, Arroio dos Ratos, Bento Gonçalves, Boa Vista do Buricá, Butiá, Cacique Doble, Campinas do Sul, Candido Godoy, Caseiros, Carazinho, Chapada, Constantina, Dois Irmãos, Dom Feliciano, Doutor Mauricio Cardoso, Erebangó, Erechim, Farroupilha, Independência, Jacutinga, Nova Hartz, Novo Hamburgo, Parobé, Santa Rosa, São Borja, São João da Urtiga.

municipal officials to go over a questionnaire with some 70 open-ended questions on the following topics:

- profile of the city;
- real estate cadastre;
- computerization;
- municipal tax code;
- urban master plan; and
- training and technical assistance.

4.4 Altogether, the study identified 126 institutional development (ID) interventions sponsored by PIMES in these municipalities. Figure 4.1 and Table 4.1 summarize the breakdown.

**Figure 4.1: PIMES Institutional Development Interventions**



Sources: PIMES field impact evaluation survey.

**Table 4.1: MDP-sponsored Institutional Development Interventions**

Type of ID	Means of Delivery							
	TOTAL		Training		Technical assistance		Computer hardware and software	
	number	%	number	%	number	%	Number	%
Admin. strengthening	20	15.8	7	20.0	9	18.0	4	9.7
Taxation	60	47.5	16	45.8	20	40.0	24	58.6
Urban management	29	23.2	6	17.1	21	42.0	2	4.9
Other	17	13.5	6	17.1	-	-	11	26.8
<b>TOTAL</b>	<b>126</b>	<b>100.0</b>	<b>35</b>	<b>100.0</b>	<b>50</b>	<b>100.0</b>	<b>41</b>	<b>100.0</b>

Source: PIMES field impact evaluation survey

4.5 The PIMES survey identified taxation as the single most common type of PIMES ID intervention. Technical assistance was the most widely used means of delivery. Details of each type of ID offered by PIMES are identified in parentheses:

- Administrative strengthening (human resource training; internal regulations; payroll, organization chart)
- Taxation (accounting; cadastres; control of assets; tax reform; tax collection; tax legislation; tax inspection)
- Urban management (land use legislation; limits of urban area; building codes; land use zoning; aerial photography; mapping; database management)

- Other (mostly computer hardware and software)

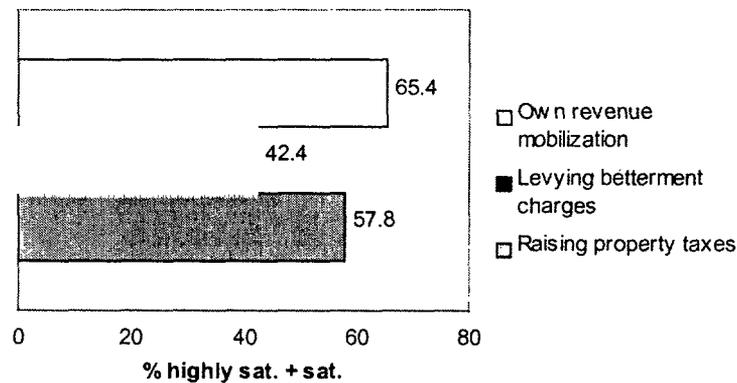
4.6 In order to update information already provided and to survey municipalities' own perceptions of MDP project impacts upon their administration and operations, the PIMES team followed up with a simple questionnaire faxed to each one of these 26 municipalities. To complement the earlier approach of open-ended questions, the fax questionnaire, prepared jointly with the audit mission (December 1997), asked municipal respondents to rate the quality—through five categories ranging from highly satisfactory to very poor—of MDP impacts in 13 areas. Among other things these covered local tax collection, betterment charges, procurement practices, computerization, and community participation.

4.7 The remainder of this chapter summarizes the impacts of the MDP projects as seen from the perspective of participant municipalities themselves. Each section deals with a distinct area of MDP project intervention.

### Direct and Indirect Cost Recovery

4.8 The PIMES' survey asked participant municipalities to give their opinions about the quality of the impacts of the MDP project upon: (i) their ability to mobilize their own revenues more efficiently; (ii) the effectiveness of levying betterment charges for direct cost recovery; and (iii) the effectiveness of property taxation as an indirect means of recovering the cost of MDP sub-projects. The results are summarized in Figure 4.2 and Table 4.2.

**Figure 4.2: Impact upon Municipal Cost Recovery**



Source: PIMES impact evaluation survey.

**Table 4.2: Impacts upon Municipal Cost Recovery**

Municipal rating	% of all municipal respondents per category					
	highly sat.	sat.	modest	fair	poor	No opinion
Own revenue mobilization	11.5	53.9	23.1	-	3.8	7.7
Levying betterment charges	3.8	38.6	46.2	3.8	3.8	3.8
Raising property taxes	15.4	42.4	30.8	3.8	3.8	3.8

Source: PIMES impact evaluation survey of 26 MDP municipalities

4.9 Among the highlights are the following:

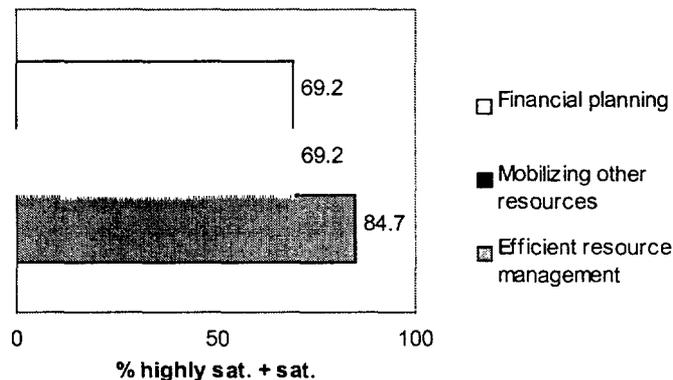
- Near unanimity that the impacts of the MDP project had been positive.
- The majority of municipalities thought the project had a very positive impact (highly satisfactory or satisfactory rating) upon their own revenue mobilization and upon property tax collections.
- Municipalities reckoned that project impacts upon betterment charges were positive but slightly more modest.

4.10 Overall, these results indicate a satisfactory MDP project impact upon cost recovery in the eyes of municipal participants. This finding applies to municipalities of all size categories, although small and medium-sized municipalities are more likely to report highly satisfactory impacts than larger ones. These results are particularly significant given that the MDP project was implemented during a period of intensive financial change as monetary stabilization took hold in Brazil. Within this difficult context, MDP municipalities made efforts to increase their own revenues.

### Local Financial Management

4.11 MDP municipalities were asked to rate the MDP project impact upon their capacity to (i) undertake financial planning; (ii) mobilize funding from other sources apart from the MDP project itself; and (iii) manage their own resources more efficiently (Figure 4.3 and Table 4.3).

**Figure 4.3: Impact upon Municipal Planning and Management**



Source: PIMES impact evaluation survey.

**Table 4.3: Impacts upon Municipal Financial Planning and Management**

Municipal rating	% of all municipal respondents per category					
	highly sat.	sat.	modest	fair	poor	no opinion
Financial planning	34.6	34.6	30.8	-	-	-
Mobilizing other resources	19.2	50.0	30.8	-	-	-
Efficient resource management	38.5	46.2	11.5	3.8	-	-

Source: PIMES impact evaluation survey of 26 MDP municipalities

4.12 Among the highlights from the evidence are the following:

- A large majority of municipalities report very positively about MDP projects on all three aspects of municipal financial planning and management.
- Impacts upon improved management of municipal resources were the best rated, with 84.7 percent reporting highly satisfactory or satisfactory.

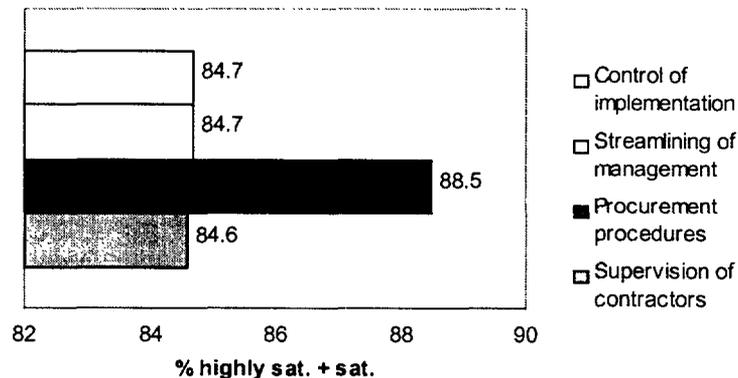
4.13 These results point to a change in the old image of municipalities as mere public service providers, toward being modern administrations seeking to promote and leverage local economic development. As examples of steps toward better management, municipalities most often mentioned:

- more reliable management reports resulting in better internal controls;
- streamlining of information flow through management information systems, enabling better-informed management decisions;
- better understanding of taxation laws and regulations and hence better municipal relationship with its regulator (“tribunal de contas”); and
- greater emphasis upon municipal planning.
- rigorous control over revenue collection.

### Sub-project Management and Implementation

4.14 Concerning their ability to manage investment sub-projects, participant municipalities rated the impacts of MDP technical assistance upon (i) the implementation of routines of management control of project implementation and (ii) modernizing and streamlining municipal management. Municipalities were also asked to rate the impact of MDP requirements and conditionalities upon (i) procurement procedures and (ii) supervision of contractors. Figure 4.4 and Table 4.4 summarize the findings.

**Figure 4.4: Impact upon Municipal Management of Investment Sub-projects**



Source: PIMES impact evaluation survey.

**Table 4.4: Impacts upon Municipal Management of Investment Sub-projects**

<i>Municipal rating</i>	<i>% of all municipal respondents per category</i>					
	<i>highly sat</i>	<i>sat</i>	<i>modest</i>	<i>fair</i>	<i>Poor</i>	<i>no opinion</i>
Control of implementation	46.2	38.5	11.5	-	-	3.8
Streamlining of management	38.5	46.2	11.5	-	-	3.8
Procurement procedures	26.9	61.6	11.5	-	-	-
Supervision of contractors	34.6	50.0	15.4	-	-	-

Source: PIMES impact evaluation survey of 26 MDP municipalities.

#### 4.15 Among the highlights:

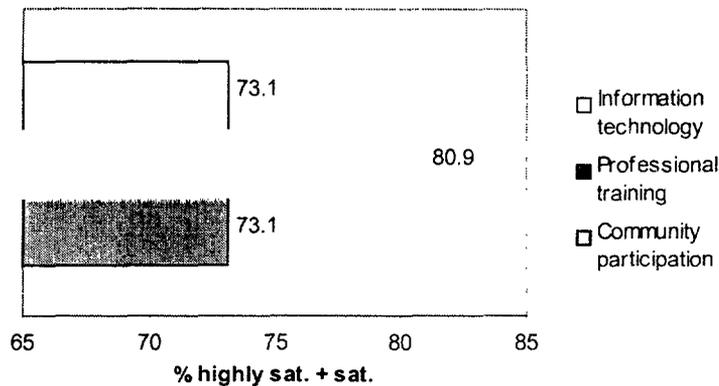
- Most municipalities give high ratings (highly satisfactory and satisfactory) to MDP impacts on all aspects of municipal management of investment sub-projects.
- The strongest impact was felt by municipalities upon the control of sub-project implementation. Through the MDP project, many municipalities learned to apply control systems to monitor the physical and financial progress of their sub-projects for the first time.
- Municipalities reported favorable MDP impacts upon how they learned to supervise private contractors and the works undertaken by them better.
- Finally, special attention should be drawn to procurement procedures; although the top rating (highly satisfactory) did not score as high as others, only 11.5 percent of respondents reported that MDP impact on procurement was modest or less.

4.16 These results confirmed what the PIMES team had observed during its day-to-day management of MDP project implementation. All participant municipalities, small ones in particular, underwent a major “on-the-job” learning experience as they took advice directly from PIMES staff or hired consultants to help them manage their investment projects more effectively. The MDP strategy in this regard was to provide as much information as possible to municipalities, including model procedures and techniques that they could use to help overcome their shortcomings.

4.17 Regarding the specific issue of procurement procedures, evidence of favorable MDP impacts comes also from routine reports of the municipalities’ controllers, tribunal de contas. Tribunal reports (over the 1990-96 period) indicate that the incidence of errors by municipalities in procurement practices diminished significantly among participants of the MDP project.

### **Information Technology, Training, and Community Participation at the Municipal Level**

4.18 The survey sought municipal opinions upon three other aspects related to the *instruments* of MDP impacts in a more general sense, rather than to a specific branch of municipal management. Thus, municipalities were asked their opinions about the effectiveness and the quality of the MDP impacts through: (i) the use of information technology in the municipality; (ii) professional training provided under the MDP project; and (iii) community participation in decision making about investment projects. The answers are summarized in Figure 4.5 and Table 4.5.

**Figure 4.5: Impacts upon Computerization and Training**

Source: PIMES impact evaluation survey.

**Table 4.5: Impacts upon Computerization and Training**

<i>Municipal rating</i>	<i>% of all municipal respondents per category</i>					
	<i>highly sat.</i>	<i>sat.</i>	<i>modest</i>	<i>fair</i>	<i>Poor</i>	<i>no opinion</i>
Information technology	42.3	30.8	26.9	-	-	-
Professional training	27.0	53.9	3.8	3.8	-	11.5
Community participation	15.4	57.7	23.1	-	-	-

Source: PIMES impact evaluation survey of 26 MDP municipalities

#### 4.19 Among the key findings are the following:

- Municipalities were very enthusiastic about innovations in information technology provided through the MDP project; nearly half of them rated MDP impact in this area as highly satisfactory.
- Municipalities also rated MDP training impacts positively, but less so in the highest category.
- Regarding community participation, all municipalities held positive but more varied views about MDP impacts.

4.20 With rapid innovation in computer hardware and software, the PIMES team encountered a strong demand by municipalities for assistance in this area. In many cases, the introduction of information technology even led to behavioral changes among municipal staff. Accustomed to traditional and obsolete procedures and routines, many of them were obliged to upgrade their skills to retain a valid professional role within the administration. This in turn led to increased demand for training programs, many of them provided under the MDP project. The project offered a wide range of courses and programs, which were highly appreciated by municipal administrations and their employees.

4.21 The positive results achieved in community participation took different forms. Sometimes participation was through local community associations, while at other times nongovernmental organizations were involved. In cases of community facilities—day care centers and health posts, for instance—financed through the MDP project, a project requirement called for stakeholders to set up “sectoral committees” and help manage these facilities. For other projects, consultation more often took the form of merely keeping citizens informed of works planned and in progress. More still has to be done in this area, but the PIMES team believes that

important first steps were taken under the MDP project. OED's performance audit in December 1997 was conducted as a "participatory audit," which provided opportunities for the beneficiaries, including community representatives, to meet and discuss with those from state and local government agencies the project experiences in Paraná and RGS (OED 1998; Gonzalez and Gonzalez 1997; Osorio 1997). As documented in the PARs, sub-projects such as street paving, day care centers, and health posts were implemented in poor communities, and their impacts on the welfare of the inhabitants were significant. These conclusions were confirmed at the participatory audit workshops.

### **Conclusions and Recommendations**

4.22 This survey was stimulated by the premise that the PIMES project had a major impact in promoting sustained institutional development in the municipalities of the state of Rio Grande do Sul. The PIMES project became a major development partner of municipalities during the 1990-96 period. It also became their only reliable source of funding as alternative sources through ad hoc transfers from the federal and state governments practically dried up.

4.23 Through this survey, the following advances made in strengthening municipalities have been identified:

- fiscal adjustment and increasing own revenues at the municipal level;
- more intense contacts between municipalities, private companies, and the community;
- municipal administrations became more entrepreneurial;
- municipal employees became more highly valued as staff; and
- more attention given to the environment.

4.24 Apart from these favorable results, the survey demonstrated that municipalities were *aware* of the progress made thanks to the support of the project. More generally, *awareness* at the municipal level helped local administrations seek new initiatives and elaborate successful projects. This finding was true independent of city size or location within the state.

4.25 Municipal awareness itself had an important side effect. Successful participant municipalities, whose officials were conscious of progress being made under PIMES, became staunch promoters of the project concept among municipalities that had yet to sign on.

4.26 The achievements of the PIMES project came at a time of major changes and difficulties for municipalities in the state of Rio Grande do Sul. The logical conclusion is that by helping municipalities to stabilize, PIMES contributed to a more balanced approach to economic development at all levels.

4.27 As a development program, the PIMES project in Rio Grande do Sul has reached adulthood and today constitutes a reliable source of funds for municipal development. Moreover, the project has been the object of study as a model for similar programs elsewhere in Brazil—the states of Minas Gerais and Bahia—and in other countries.

## 5. Impacts on Local Economic Development

*MDPs in the Philippines financed numerous revenue-generating sub-projects such as public markets. The case study of the MDP-financed public market in Pulilan shows that the project had significant impact on the development of the local economy. The project not only stimulated employment and income generation, it also triggered the development of a new business center near the public market, which had significant spill-over effects.*

### Introduction

5.1 Most of the sub-projects financed by MDP in the Philippines were revenue-generating—economic enterprises such as public markets, bus terminals, and slaughterhouses. Under MDP I 36 out of 42 participating municipalities financed a public market; under MDP II 30 out of 35 participating municipalities did so. OED's performance audits of these two projects confirmed that the impacts of such sub-projects on the local economy were significant (OED, 1997), especially for the small poor municipalities. For example, Pulilan, a municipality in Bulacan province, was in the lowest (sixth) income class of municipalities before it financed a public market through MDP. By 1995, when the MDP project was completed, the municipality had moved up to the second income class, and the living standard of its 60,000 people had risen significantly. During 1991–95, the income of the municipal government rose fourfold from 7 million pesos to 25 million pesos.

5.2 This chapter reports the results of a study<sup>7</sup> that compared the impacts of an MDP-financed public market in Pulilan with conditions in Guiguinto, a municipality in the same province which did not participate in the MDP program. The study compared a random sample of 60 stall-holders in the Pulilan public market (experiment group) with a random sample of 60 stall-holders from several locations in Guiguinto (control group). Each sample included stalls selling meat, poultry, and fish; fruits, vegetables, and grains; and manufactured goods. Cirrus Research and Software, a consulting firm in Manila, administered the field survey, prepared the data, and produced the statistical results. A comprehensive but simple questionnaire (Annex C) was used to gather information about location history, extent of markets, employment characteristics, commuting, sales, expenses, income, and the quality of infrastructure services at the market. The questionnaire was designed to capture changes over time from 1993 when the market opened to 1998 when the survey was conducted. The survey also included the owners of 15 shops near the market to capture the project's indirect impacts on the development of the local economy. The findings reported below highlight the differences between Pulilan's experience and that of Guiguinto. Also reported are the results of statistical tests conducted between the two groups regarding increases in sales and income and improvements in the quality of infrastructure services at the market.

### The Public Market in Pulilan

5.3 Until 1992 when the MDP-financed public market was established, Pulilan had a traditional market (called "talipapa") near the municipal hall with about 20 vendors. When the public market opened in 1993 (in the Cutcot area), local entrepreneurs quickly occupied its 170 stalls. Most of the vendors in the old market also moved there. Only two years later, using its own

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7. This chapter is based on the results of a survey of public markets conducted by Cirrus Research and Software under the direction of Mari-jo Luciano and under the overall supervision of Millie Villar and Vic Ignacio of the Central Project Office. The questionnaire (Annex E) was designed jointly by the study teams in Washington and Manila.

resources, the municipal government added 32 stalls to the market to meet increasing demand. In 1997, a second MDP sub-loan<sup>8</sup> financed 92 more stalls. As of August 1998, when the survey was conducted, the market had a total of 294 stalls. Besides these fixed stall-holders, on Saturdays about 300 ambulant vendors come to the market grounds to conduct business.

5.4 The public market area has rapidly become a new business center in Pulilan. More than 40 new small enterprises have opened near the market since its opening, including large restaurants, drug stores, a gas station, rural banks, gift shops, and others. The market's adjacent lot has become a busy transport center with a large fleet of tricycles for shoppers and other types of vehicles. The market not only had direct impact on the welfare of the stall-holders and Pulilan's inhabitants but also had significant indirect economic impact, creating transport and commercial linkages with the rest of the province and other parts of the country. The survey findings reported below support this conclusion.

5.5 Guiguinto, which never participated in MDP, has no markets comparable to the one in Pulilan. The municipality has one privately established market and several small, informal markets. Conditions in the municipality today are similar to those of Pulilan before the MDP project.

### Survey Results

5.6 Of the 60 stall-holders in each sample, 16 (27 percent) relocated to the public market in Pulilan while only 5 (8 percent) moved in Guiguinto, indicating that the Pulilan project triggered changes in location that may not have otherwise occurred. The stall-holders in Pulilan were comparable to those of Guiguinto in employment size, number of female workers, hours worked, and monthly salary (Table 5.1). On average, at each stall about two people worked (with one female) for 11 hours a day, and the owner's monthly salary was about 18,000 pesos (about US\$430).

**Table 5.1. Characteristics of Stall-holders (average value)**

	Pulilan	Guiguinto	All
Number of workers (persons)	1.97	1.70	1.83
Number of female workers (persons)	1.17	1.20	1.18
Hours worked per day	11.30	10.60	10.95
Owner's salary per month (pesos)	18,138	17,525	17,832

### *Change in Sales and Income*

5.7 Table 5.2 shows that monthly sales and net income (after expenses) of stall-holders in Pulilan more than doubled since they started business in the public market. The stall-holders in Guiguinto, by contrast, had only a slight increase in sales and net income. This large disparity could have been influenced by the age distribution of the stall-holders in two groups. Twenty

8. The first MDP sub-loan for the public market was for 6.7 million pesos; the second was for 4.5 million. The public market project has been self-financing and has a perfect record for meeting its loan repayment schedule. The mayor would like to pay off the loan balance in advance if allowed. The market has generated net income (after expenses) of more than 2 million pesos per year since 1994 and contributed to municipal revenues. In 1997, the public market operation had a budget surplus of 3 million pesos (total revenue of 6 million less total expenditure of 3 million). According to estimates produced by the Central Project Office, as of 1995 its financial rate of return was 27 percent and its economic rate of return was 29 percent. The latter would have been higher had the indirect benefits to the stall-holders been taken into account.

stall-holders in Guiguinto started their business at the present location in 1997<sup>9</sup>, which implies that they are vendors without fixed business locations. Taking into account this possible bias, the change in sales and net income was substantially different the two groups.

**Table 5.2. Change in Sales and Income**

	Pulilan (average)			Guiguinto (average)		
	First year	1998	% change	First year	1998	% change
Monthly sales (pesos)	45,083	93,551	107.5	82,458	87,075	5.6
Monthly net income (pesos)	10,921	23,783	117.8	17,382	22,726	30.7

5.8 To statistically test this difference without such a bias, the average value of sales and average net income for each age subgroup were calculated and the average annual increases in sales and net income were estimated. Based on this constructed data, the null hypothesis—that the average annual increases in sales and net income (in real terms) were the same between the stall-holders in Pulilan and those in Guiguinto—can be rejected. The “t” values were 2.7 and 2.0, respectively, at a 5 percent level of significance.

5.9 For those 16 stall-holders in the Pulilan sample that moved to the public market from another location, the difference between their mean income at the previous location and that at the present location was statistically tested. The null hypothesis—that the mean income level was the same at the two locations—was rejected. The “t” value was 2.4 at 5 percent level of significance.

5.10 Therefore, the impact of the MDP-financed public market in Pulilan on the increases in sales and income of the stall-holders was significant compared to those in Guiguinto, and also compared to the level of income at the previous location for those stall-holders who relocated to the public market from another location.

### *Commuting*

5.11 Table 5.3 shows the median commuting distance from home to the market and the median travel time for stall-holders in Pulilan and Guiguinto. Although the travel distance in Pulilan is twice that in Guiguinto, the travel time was about the same for the two groups. This resulted from more efficient transport modes such as a large fleet of tricycles in Pulilan than in Guiguinto.

**Table 5.3. Commuting Distance and Travel Time**

	Pulilan	Guiguinto	All
Median commuting distance (kilometers)	3.0	1.5	2.4
Median travel time-one way (minutes)	12	12	12

### *Quality of Infrastructure Services*

5.12 The survey asked respondents to rate the quality of 12 infrastructure and municipal services (listed in Table 5.4) at the time of the survey (1998) compared with the first year the

#### *9. Age Distribution of Stall-holders (Number of stall-holders)*

Year started	Before 1993	1993	1994	1995	1996	1997
Pulilan	11	17	7	8	10	7
Guiguinto	16	4	4	5	11	20

stall-holder started business at the market. Four quality criteria were used: excellent, good, fair, and poor. Table 5.4 shows for each type of services the proportion of the respondents who rated its quality as "excellent" or "good." For all items but telephone, the quality of services in the first year at the market was better in Pulilan than in Guiguinto. In the case of the Pulilan public market, all services improved substantially over time except for the public toilet. Any improvements in facilities in Guiguinto were small and the quality of water supply, public toilet, ventilation, storage, and parking space declined during the period.

**Table 5.4. Quality of Services at the Market (percent of respondents answering "excellent" or "good")**

	Pulilan		Guiguinto	
	First year	1998	First year	1998
Electricity	58	80	49	55
Water supply	70	87	30	28
Telephone	27	48	27	35
Police protection	65	75	38	42
Fire protection	70	82	30	32
Garbage collection	87	91	32	32
Sewerage and drainage	80	83	28	34
Public toilet	73	65	22	20
Ventilation	80	82	45	42
Storage	38	43	22	20
Parking space	85	90	39	35
Driveway	88	91	38	42

Note: The response rate was 100 percent for the sample of 60 in both municipalities.

5.13 We tested the differences between proportions and rejected the null hypothesis that the proportions of quality ratings in Pulilan are the same as those of Guiguinto. The "t" values range from 2.8 to 8.6 at the 5 percent level of significance (1.5 for telephone service, which was equally poor in both municipalities).

## Indirect Impacts

### *Expanding Market Linkages with other Municipalities and Regions*

5.14 To evaluate the impact of the public market on the creation of transport and commercial linkages with other municipalities and regions, the survey asked where the goods stall-holders sold had originated and where their customers come from. Tables 5.5 and 5.6 report the origins of goods and customers by three categories: from the municipality, from the province, and from outside the province.

**Table 5.5. Origin of Goods to be Sold at the Market (mean percentage for each cell)**

	Pulilan	Guiguinto	All
From municipality	22.3	14.3	18.3
From province	28.4	55.1	41.8
From outside province	49.3	30.6	39.9

**Table 5.6. Origin of Customers to the Market (mean percentage for each cell)**

	Pulilan	Guiguinto	All
From municipality	79.6	90.9	85.2
From province	15.3	7.0	11.2
From outside province	5.1	2.1	3.6

5.15 About half of the goods sold in the Pulilan public market come from outside the province, while a little over half of the goods sold in Guiguinto come from within the province. More than 90 percent of the customers in Guiguinto markets are from the municipality, while in Pulilan 15 percent come from the province and 5 percent come from outside the province. The findings show that the public market in Pulilan established wider transport and commercial linkages with locations outside the province than Guiguinto did.

#### *Employment Side-Effects*

5.16 Twenty eight percent of stall-holders in Pulilan and 17 percent in Guiguinto said that they began having a housemaid after they started business at the markets and pay 1,500 pesos per month for the service. This shows that the public market had an indirect side-effect on employment generation in addition to the jobs created at the market.

5.17 The survey included 15 small business enterprises near the public market in Pulilan and 15 near the informal markets in Guiguinto to capture indirect impacts. In Pulilan 14 out of 15 enterprises were established since 1995, indicating rapid expansion of economic activities in the public market area. The types of businesses included car services (gas station), banking, tiles, restaurants, clothing, electronics, and drug stores. The average size of employment at these enterprises was 3.3 persons in Pulilan and 2.3 in Guiguinto.

#### *Emerging Real Estate Market*

5.18 According to the municipal government staff in Pulilan, the land price in the public market area was 55 pesos per square meter in 1992 before the market was established. The residential area nearby sells at more than 12,000 pesos per square meter in 1998. The survey found that 10 of the 15 small enterprises interviewed in Pulilan were renters with an average floor space of 76 square meters, indicating an active real estate market emerging in the public market area. The average floor space of the small enterprises interviewed in Guiguinto was much less, only 41 square meters.



## **6. Agenda for the Future**

### **Changing Demand for Project Finance**

6.1 International experience shows that municipalities have different financing needs depending on their size and their stage of socio-economic development. In the Philippines MDP program, which is demand-driven without any restriction, small, resource-poor municipalities tend to finance rather simple, low-risk, revenue-generating projects first, such as public markets. After successfully completing such a sub-project, they can enhance their creditworthiness with the increased revenues coming from the project. Then they can expand their investments in public infrastructure projects such as roads and drainage (OED, 1997). As municipalities grow, they have an increasing need to finance economic infrastructure for production activities such as manufacturing and commerce as well as social infrastructure for household consumption. They are eventually ready to “graduate” from the MDP program and start borrowing from the private capital market. Experiences in both the Philippines and Brazil show such progress. This catalytic role is analogous to the role of the World Bank in helping developing countries until they “graduate” from the Bank.

### **MDP in Paraná**

6.2 ParanáCidade (the ongoing Urban Development Fund project financed by the Interamerican Development Bank) has been expanding its operations as a self-financing private financial intermediary. ParanáCidade has entered a new phase of providing more diversified financial services and types of sub-loans. Diversifying the sub-loan product mix to include revenue-generating sub-projects (with positive externalities such as public markets) could come sooner than diversifying financial services since the latter would depend on the speed of overall capital market development in Brazil. New financial services could include managing bond issues for selected municipalities, introducing risk guarantee functions, and developing mechanisms for the private sector participation through build-operate-transfer, concessions, and management contracts for specific services such as certain maintenance functions. As a “best practice case” ParanáCidade is ready to take these challenges and is pushing the frontier of the MDP program. It will continue to provide useful lessons for MDPs in Brazil and elsewhere.

### **MDP in Rio Grande do Sul**

6.3 This MDP program regained its momentum and enthusiasm with the return of its original “champions” in the state government in 1995. In 1998, the fund’s operations expanded in response to high demand and strengthened its financial position. The continued state government protection of the organizational integrity of PIMES within BANRISUL will be crucial for the sustainability of FUNDOPIMES as it pursues further institutional growth. As in Paraná, the future will require diversification of the loan product mix to include revenue-generating sub-projects and eventually diversification of financial services.

### **MDP in the Philippines**

6.4 To meet the strong demand for MDP financing from LGUs, the Central Project Office prepared a follow-on project, MDP III, which was approved by the Board in March 1992. MDP III was a continuation of MDP I and II to strengthen the institutional development process being

achieved under the program and to expand development assistance to more LGUs. MDP III was also very timely as it was to help the national government develop and carry out its decentralization program after the Local Government Code was revised in 1991. The design and components of MDP III were similar to those of MDP I and II, but it did not target any particular regions.

6.5 The fourth follow-on project (LOGOFIND) has been appraised and will be negotiated early in 1999. Within a broad policy reform framework (Llanto, et al., 1996), LOGOFIND will address the issues associated with the down side of the bottom-up, demand-driven project design. The self-selection process tends to generate competition among LGUs and only those that are creditworthy and capable of making necessary policy changes are able to participate in the MDP and have access to credit. Many LGUs that are poor and non-creditworthy have been left out, widening interregional income disparities. LOGOFIND intends to implement a policy framework aimed at “graduating” more successful LGUs to the private financial markets while providing assistance to weaker LGUs.

## 7. Conclusions and Lessons

*The study concludes that MDP operations help reform at the local level; municipalities are aware that participation is a commitment to reform; improved fiscal performance goes hand in hand with management strengthening that gives mayors a more entrepreneurial view of their administrations; and municipalities are more sensitive to MDP impacts the deeper MDP funding goes. Based on these findings, the study recommends that MDP policy reform instruments be diversified to broaden project impacts; for successful impacts, good project design must be achieved as later course correction is difficult; competition among municipalities should be promoted through disseminating success stories; MDP projects should be tried even when macroeconomic and political change is rife as the projects have been shown to have favorable impacts in such circumstances. The most important element for success, however, is in a sound policy and fiscal decentralization framework.*

### Conclusions

7.1 The principal findings of this study are as follows:

- *MDP operations help reform at the level of local government.* Participant municipalities increase their fiscal autonomy through collecting more of their own revenues—especially property taxes—than non-participants. In a fiscal sense, autonomy helps municipalities have better chances of access to further MDP funds and to other loans. It also helps them pay off existing obligations. In a political sense, more autonomy gives municipalities a greater role in decentralized decision-making. Local project authorities at the state/provincial level see MDP as an instrument of reform. Its effectiveness is assured when there are no competing sources of finance on easier terms for municipalities. Detailed design of MDP projects is crucial in determining direction of impacts. The MDP projects studied here focused upon property tax improvements, precisely the area of municipal finance where the project impacts were strongly felt.
- *Municipalities consciously perceive MDP participation as a process of reform.* Municipalities are not just passive agents of MDP. Best practice municipalities of all sizes consciously buy into MDP's reform program. They are acutely aware of the improvements planned, conditions attached, what they have to do to take part and, of course, the final achievements made. They associate successful MDP participation with innovations in their own administrations and their ability to plan and implement successful sub-projects.
- *Improved fiscal performance goes hand-in-hand with management strengthening.* The MDP projects evaluated here started with a level playing field as far as fiscal performance at the municipal level was concerned. By many indicators—fiscal autonomy, own revenues per capita, budget balance—the performance of participant municipalities was better than that of non-participants. As part of the overall improvement, technical assistance provided through MDP operations helped municipalities become more entrepreneurial, think more about fiscal adjustment, value their staff more highly, interact more closely with private companies and the local communities, and be more environmentally conscious.

- *MDP impacts are sensitive to project leverage.* The more closely involved municipalities were in MDP projects, as measured by the share of all their investments funded by MDP, the greater the project impacts upon municipal own revenue generation. Being more closely bound up with—and dependent upon—an MDP operation makes a municipality more likely to follow project policy prescriptions and be successful in doing so.
- *MDP in the Philippines attracted revenue-generating projects.* Because of the strictly demand-driven approach followed in the Philippines, MDP first attracted revenue-generating sub-projects such as public markets. These presented minimum risks for implementation delays and cost recovery. With the revenues from such projects, the participating municipalities were able to enhance their creditworthiness with a stronger financial base. This in turn allowed them to expand their investments to infrastructure projects such as roads, drainage, water supply, and sanitation.

### Lessons for Future Operations

7.2 The MDP project experience offers many lessons. The most important are as follows:

- *MDP policy reform instruments should be diversified.* It is important to replicate the success of improving property taxes to other revenue items that make up the remaining three-quarters of municipal own income in both Brazil and the Philippines. In the case of Brazil, for instance, future MDP attention might focus upon the widespread Local Service Tax, an increasingly important source of municipal revenue. Designs of future MDP operations should directly address how to help improving the performance of big-ticket items such as these. As in the case of the Philippines, MDP financing of revenue-generating projects such as a public market can play a catalytic role in the development of local economy.
- *Good design at the outset is crucial to satisfactory MDP impacts.* As a municipality's first encounter with an MDP program is crucial, setting the tone for future participation, it is important to carefully calibrate the designs of future MDP operations at the outset. Conditions and requirements also should be very transparent and easily understood by new municipal participants. Experience shows that an initial misconception by a municipality—that direct cost recovery is not an MDP project requirement, for instance—can prove very difficult to correct later on in a follow-on operation. It is important to try to get everything right and clear at the outset.
- *It is important to promote competition through disseminating success stories.* Best practice municipal participants are an MDP operation's own best promoters. Project managers should take advantage of this important MDP side effect by disseminating the experiences of these municipalities, especially among non-participants.
- *MDP projects can have satisfactory impacts even when change and volatility are rife.* The experience of the MDP projects in both Brazil and the Philippines—implemented at a time of major macroeconomic adjustment and political change—demonstrates that MDP projects can succeed even when macro conditions have yet to stabilize. MDP projects were implemented during the period of severe macro instability in early 1990s in Brazil and after the “People’s Revolution” of 1986 in the Philippines.

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## Data and Methodology

### Data Collection

#### *Local Finance Data: Brazil and the Philippines*

1. The study designed and developed a database with detailed unpublished data on the finances of 427 municipalities in the State of Rio Grande do Sul, 323 municipalities in the State of Paraná in Brazil, and 53 municipalities in two provinces, Bulacan and Laguna, in the Philippines. The database design focused upon 15 selected variables of municipal revenues and expenditures for each state in Brazil and each province in the Philippines. A very large body of data was available for each country's municipalities, covering in Brazil up to 75 detailed variables at the municipal level for every year during 1990–96, the period of project implementation.

2. For this reason, the study had to be selective and use only data immediately relevant to measuring the impacts of these projects. More than 300 analytical tables were produced to obtain the results reported in this study. The availability of the data for all municipalities in individual states and provinces made it unnecessary to draw samples, since analysis could include the entire population of municipalities. Very small (population <2,000) and very large (population >250,000) municipalities were excluded from the data analysis to keep possible outliers from distorting observations of the average performance of municipalities. At the design stage of the study, specific hypotheses of impact were used to help select key variables for evaluation from among the vast array of data available.

#### *Survey of Mayors: Rio Grande do Sul*

3. A sample survey of mayors was conducted for 26 municipalities in Rio Grande do Sul to evaluate the project's impacts on municipal capacity building in the areas of financial management and administration including planning, budgeting, and accounting practices; investment project preparation and implementation; and technical capability of staff. The questionnaire was drafted jointly with the Bank's audit mission, and the study was coordinated by a Bank consultant.

#### *Public Market Enterprise Survey: Philippines*

4. To evaluate the impacts of MDP-financed public market on the development of the local economy, Pulilan in Bulacan province of the Philippines was selected as the project municipality. A random sample of 60 stall-holders in the Pulilan public market were selected as the "experiment group" and they were asked about their location history, employment characteristics, commuting patterns, the extent of the markets, changes in sales, expenses, and income during 1993–98, improvements of services, and their potential for further growth. In addition, 15 small shop owners (retail, services, finance, and manufacturing located near the public market) were interviewed to document indirect effects of the project on the development of the area covering employment creation, land price changes, and the emerging business district. To contrast and compare the "experiment group," Guiguinto was selected as the non-project municipality in the study, and a random sample of 60 stall-holders in several privately organized informal markets and 15 shop-owners in Guiguinto were selected as a "control group." The same questionnaire

used in Pulilan was used in Guiguinto to collect the data for a total of 120 stall-holders and 30 shop-owners in the study sample. The questionnaire used is reproduced as Annex E.

### Additional Points of Methodology for Chapter 3

5. Because of the rigorous reporting requirements of official controllers of local government in both countries, a very large body of information on the finances of municipalities is collected and made available in Brazil and the Philippines. This allowed the gathering of detailed time series and cross-sectional data on all municipalities in all four states/provinces where the MDP projects were implemented. Table A1 details the universe of the study at the level of groups of municipalities.

**Table A1: Municipalities Evaluated**

State/province	Number of study municipalities per cohort			
	All	Large <sup>a</sup>	Medium <sup>b</sup>	Small <sup>c</sup>
<b>Brazil</b>				
Participants (Paraná)	316	24	156	136
Non-participants (Paraná)	-	-	-	-
Participants (Rio Grande do Sul – RGS)	132	24	52	56
Non-participants (RGS)	185	12	67	106
<b>Total:</b>	<b>633</b>	<b>60</b>	<b>275</b>	<b>298</b>
<b>Philippines</b>				
Participants (Bulacan)	17	14	3	-
Non-participants (Bulacan)	-	-	-	-
Participants (Laguna)	4	4	-	-
Non-participants (Laguna)	15	-	15	-
<b>Total:</b>	<b>36</b>	<b>18</b>	<b>18</b>	<b>-</b>

Source: MDP IES database

a. population 50,000 – 250,000

b. population 10,000 – 50,000

c. population 2,000 – 10,000

RGS = Rio Grande do Sul.

Very large (pop. >250,000) and very small (pop. <2,000) municipalities were truncated from the population of all municipalities evaluated by this study.

6. Thus, the finances of 669 municipalities, 78.7 percent of the total, were reviewed. Excluded from the study were 140 newly created (and mostly small) municipalities in Brazil for which time series data did not go back to 1990.<sup>10</sup> The Brazilian sample was also truncated by excluding eight very large municipalities with more than 250,000 inhabitants each and 16 very small ones with fewer than 2,000 inhabitants each. Besides eliminating “outliers” from the study, this also gave each country’s group of municipalities a similar demographic distribution helping to make comparative observations across countries more robust. Finally, 17 municipalities were excluded from the Philippines that had participated only in MDP technical assistance without borrowing under the program; they qualified neither as MDP participants nor as members of a control group of non-participants.

7. A central feature of the evaluation design is a comparison of the performance of MDP municipalities with the performance of a control group of similar municipalities that did not participate in MDP. In Rio Grande do Sul, 185 municipalities—represented in all three population cohorts—did not participate in MDP and provided a natural control group. Paraná had no similar control group, as MDP had covered 100 percent of the municipalities. A second-best

10. Most new municipalities were very small. There were 48 such new municipalities in Paraná (average pop. 8,090). In Rio Grande do Sul, 20 participated in the project (average pop. 5,545) and another 72 did not (average pop. 3,929).

solution to evaluate the performance of Paraná participant municipalities was to compare it with that of the control group of non-participants in Rio Grande do Sul. A similar design was used for the Philippines, where Laguna province offered the best control group since MDP coverage in Bulacan, as in Paraná, had been nearly 100 percent.

8. Comparisons were made using a series of indicators of municipal fiscal performance. Empirical observation of the values of these indicators permitted identification of two kinds of differences: (i) those between MDP participants and non-participants; and (ii) those between the performance of MDP participants before the project and the same participants after the project. The values of all indicators were tabulated by estimating mean values across groups of municipalities. For property tax per capita, for example, the mean value of all municipalities was estimated across analytical categories (for example, all participants RGS, large non-participants Laguna). In other words, the estimates were mean values for the indicators of each municipality within the category; the estimates do not represent the mean value for the category as a whole. By focusing upon estimates of average values of these indicators across individual municipalities, the evaluation could more effectively meet its objective of highlighting the effects of MDP impacts at the level of individual municipalities.

9. Strictly speaking, within an experiment design, data analysis should be limited to comparisons between 132 participating municipalities (as the experiment group) versus 185 non-participating municipalities (as the control group) in the state of Rio Grande do Sul (see Table A1), since the policy environment and the implementation strategy were different between Paraná and RGS. Nevertheless, the study team decided to report the results of the Paraná data together with those of RGS to evaluate the general patterns of the project impacts across states because the project design was identical in the two states. In the Philippines, all municipalities in the province of Bulacan participated in MDP, so Laguna, where a large number of municipalities did not participate in MDP, was chosen as a control group. Therefore, in the empirical results reported in this document, the focus of analysis should be given to the comparison between the control and the experiment groups in RGS and other results should be viewed as being supplementary.



## Additional Data Analysis of Municipalities By Population Size Category

### Introduction

1. This annex presents additional details of the evaluation of MDP project impacts upon municipal fiscal and financial management reported in Chapter 3. Here the same indicators are analyzed, but disaggregated by municipal size according to population cohorts. In this annex, the cohorts are defined as follows: (i) large municipalities are those with 50,000–250,000 inhabitants; (ii) medium municipalities with 10,000–50,000 inhabitants; and (iii) small municipalities with 2,000–10,000 inhabitants.

### Municipal Financial Autonomy Versus Revenue Sharing

2. As in Chapter 3, the analysis here looks at two indicators of financial autonomy at the municipal level: (i) municipal own revenues as a share of all current revenues; and (ii) municipal own revenues per capita. Tables B1–B3 summarize the data regarding the first indicator by population size of municipality.

**Table B1: Impacts upon Financial Autonomy – Large Municipalities (pop. 50,000-250,000)**

Own revenues' share of all current revenues at municipal level (percent)							
Brazil				Philippines			
	1990	1996	% change	1990	1996	% change	
	(A)	(B)	(B/A)	(D)	(E)	(E/D)	
Participants (Paraná)	27.5	32.4	+17.8	Participants (Bulacan)	43.9	55.4	+26.2
Participants (RGS)	24.8	23.7	-4.4	Participants (Laguna)	68.9	61.0	-11.5
Non-participants (RGS)	20.2	19.7	-2.5	Non-participants (Laguna)	-	-	-

Source: MDP IES database.  
Note: See Tables 3.2 and 3.3

**Table B2: Impacts upon Financial Autonomy – Medium Municipalities (pop. 10,000-50,000)**

Own revenues' share of all current revenues at municipal level (percent)							
Brazil				Philippines			
	1990	1996	% change	1990	1996	% change	
	(A)	(B)	(B/A)	(D)	(E)	(E/D)	
Participants (Paraná)	14.1	15.8	+12.1	Participants (Bulacan)	55.8	45.1	-19.2
Participants (RGS)	17.6	19.1	+8.5	Participants (Laguna)	-	-	-
Non-participants (RGS)	15.1	16.1	+6.6	Non-participants (Laguna)	42.8	27.0	-36.9

Source: MDP IES database.  
Note: See Tables 3.2 and 3.3

**Table B3: Impacts upon Financial Autonomy – Small Municipalities (pop. 2,000-10,000)**

Own revenues' share of all current revenues at municipal level (percent)							
Brazil				Philippines			
	1990	1996	% change	1990	1996	% change	
	(A)	(B)	(B/A)	(D)	(E)	(E/D)	
Participants (Paraná)	8.8	9.3	+5.7	Participants (Bulacan)	-	-	-
Participants (RGS)	11.2	11.1	-0.9	Participants (Laguna)	-	-	-
Non-participants (RGS)	13.8	11.8	-14.5	Non-participants (Laguna)	-	-	-

Source: MDP IES database.  
Note: See Tables 3.2 and 3.3

## 3. Among the highlights:

- In Brazil, MDP participants in all size categories outperform non-participants. Participants' financial autonomy improved over the 1990–96 period.
- On average, the own revenue shares of large participants in RGS fell, but not by so much as large non-participants. The evidence points to MDP having arrested further undermining of autonomy.
- Among all size categories in Brazil, small non-participants report the poorest performance, while small participants did much better. This finding is consistent with the idea that MDP projects can be beneficial in stalling the erosion of fiscal autonomy of small municipalities especially.

4. Tables B4–B6 present data pertaining to the second indicator of municipal financial autonomy; namely amounts of own revenue collected per capita.

**Table B4: Impacts upon Own Revenue Mobilization – Large Municipalities (pop. 50,000–250,000)**

Own revenues per capita (constant 1996 US dollars)							
Brazil			Philippines				
	1990	1996	% change		1990	1996	% change
	(A)	(B)	(B/A)		(C)	(D)	(D/C)
Participants (Paraná)	44.05	80.92	+83.7	Participants (Bulacan)	4.48	8.63	+92.6
Participants (RGS)	49.60	56.64	+14.2	Participants (Laguna)	6.80	13.68	+101.2
Non-participants (RGS)	30.30	32.92	+8.6	Non-participants (Laguna)	-	-	-

Source: MDP IES database.  
Notes: See Tables 3.2, 3.3 and 3.7

**Table B5: Impacts upon Own Revenue Mobilization – Medium Municipalities (pop. 10,000–50,000)**

Own revenues per capita (constant 1996 US dollars)							
Brazil			Philippines				
	1990	1996	% change		1990	1996	% change
	(A)	(B)	(B/A)		(C)	(D)	(D/C)
Participants (Paraná)	24.38	45.82	+87.9	Participants (Bulacan)	4.65	9.79	+110.5
Participants (RGS)	40.48	58.33	+44.1	Participants (Laguna)	-	-	-
Non-participants (RGS)	31.81	51.93	+63.3	Non-participants (Laguna)	3.24	5.76	+77.8

Source: MDP IES database.  
Notes: See Tables 3.2, 3.3 and 3.7

**Table B6: Impacts upon Own Revenue Mobilization – Small Municipalities (pop. 2,000-10,000)**

Own revenues per capita (constant 1996 US dollars)						
	Brazil			Philippines		
	1990	1996	% change	1990	1996	% change
	(A)	(B)	(B/A)	(C)	(D)	(D/C)
Participants (Paraná)	21.80	31.45	+44.3	Participants (Bulacan)	-	-
Participants (RGS)	31.31	74.27	+137.2	Participants (Laguna)	-	-
Non-participants (RGS)	40.97	50.62	+23.6	Non-participants (Laguna)	-	-

Source: MDP IES database.

Notes: See Tables 3.2, 3.3 and 3.7

#### 5. The highlights:

- The best performance among large municipalities in Brazil is that of Paraná participants. Large participants in RGS also did better than RGS non-participants. Since large municipalities in both states similarly share strong administrative capabilities to improve own revenue mobilization, the study team looked for different project impacts to explain the contrast. Being second-timers in MDP projects, Paraná municipalities had more time than their RGS counterparts to learn that access to credit is helped by own resource mobilization. For this reason, large Paraná municipalities may have been quicker to respond to respond to MDP incentives.
- The less favorable performance by small municipalities in Paraná reflects the difficulty of monitoring the reform process (with FAP) for a large number of participating municipalities as confirmed by the performance audit (OED, 1998).
- Smaller municipalities in RGS were more sensitive to the initial MDP shock impact—when gaining access to credit for the first time—which will be sustainable in the long run only if they succeed in permanently consolidating their administrative capacity.
- Data for the Philippines reveal that participating municipalities in Bulacan did better than non-participants in Laguna in the medium size category.

#### Own Revenue Generation through Property Taxes

6. Tables B7–B9 present data on the performance of municipalities by size category in mobilizing property tax revenues per capita.

**Table B7: Impacts upon Property Tax Collection – Large Municipalities (pop. 50,000-250,000)**

Property tax per capita (constant 1996 US dollars)							
Brazil			Philippines				
	1990	1996	% change	1990	1996	% change	
	(A)	(B)	(B/A)	(C)	(D)	(D/C)	
Participants (Paraná)	3.82	15.85	+314.9	Participants (Bulacan)	1.31	1.93	+47.3
Participants (RGS)	3.11	15.52	+399.0	Participants (Laguna)	2.43	4.54	+86.8
Non-participants (RGS)	3.61	9.56	+164.8	Non-participants (Laguna)	-	-	-

Source: MDP IES database.  
Notes: See Tables 3.2 and 3.7

**Table B8: Impacts upon Property Tax Collection – Medium Municipalities (pop 10,000-50,000)**

Property tax per capita (constant 1996 US dollars)							
Brazil			Philippines				
	1990	1996	% change	1990	1996	% change	
	(A)	(B)	(B/A)	(C)	(D)	(D/C)	
Participants (Paraná)	2.20	7.79	+254.1	Participants (Bulacan)	0.95	0.91	-4.2
Participants (RGS)	3.99	18.35	+359.9	Participants (Laguna)	-	-	-
Non-participants (RGS)	2.06	11.57	+461.7	Non-participants (Laguna)	1.16	1.53	+31.9

Source: MDP IES database.  
Notes: See Tables 3.2 and 3.7

**Table B9: Impacts upon Property Tax Collection – Small Municipalities (pop. 2,000-10,000)**

Property tax per capita (constant 1996 US dollars)							
Brazil			Philippines				
	1990	1996	% change	1990	1996	% change	
	(A)	(B)	(B/A)	(C)	(D)	(D/C)	
Participants (Paraná)	1.08	3.75	+247.2	Participants (Bulacan)	-	-	-
Participants (RGS)	1.16	16.43	+1,316.4	Participants (Laguna)	-	-	-
Non-participants (RGS)	1.71	9.89	+478.4	Non-participants (Laguna)	-	-	-

Source: MDP IES database.  
Notes: See Tables 3.2 and 3.7

#### 7. Among the highlights:

- In the large population cohort in Brazil, both Paraná and RGS participants improved property tax collections per capita much more than non-participants did. This reflects the willingness and administrative capability of larger local government units to respond to MDP requirements and technical assistance to collect more property taxes.
- This finding reflects the earlier conclusion in this annex about own revenue generation and indicates that larger municipalities are able to respond more effectively to MDP incentives and undertake the complex and politically unpopular business of raising more property taxes from their citizens.
- In the Philippines too, larger participants report the strongest property tax performance.

- The ability of small participants to improve property tax collection in Brazil was varied. Small participants in RGS did substantially better than non-participants, thanks to intense MDP project supervision and the credibility of a program in which they were participating for the first time. Small participants in Paraná, on the other hand, were less supervised by an MDP project with 100 percent coverage.

### Direct Cost Recovery

8. Table B10 reports, for Brazil only, municipal direct cost recovery through levying and collecting betterment charges on investment projects.

**Table B10: Impacts upon Direct Cost Recovery (Brazil only)**

	Betterment Charge per capita (constant 1996 US dollars)								
	Municipalities by population cohort								
	Large			Medium			Small		
	1990 (C)	1996 (D)	% change (D/C)	1990 (E)	1996 (F)	% change (F/E)	1990 (G)	1996 (H)	% change (H/G)
Participants (Paraná)	1.84	1.63	-11.4	1.36	0.62	-54.4	0.84	0.40	-52.4
Participants (RGS)	0.88	0.95	+8.0	1.62	2.46	+51.9	1.34	4.62	+244.8
Non-participants (RGS)	0.36	0.11	-69.4	0.98	1.44	+46.9	1.53	1.81	+18.3

Source: MDP IES database.

Notes: See Tables 3.2 and 3.7

- Behind the weaker performance of Paraná is the fact that 26 participant municipalities stopped collecting any betterment charges at all by 1996, so that by project completion 58.2% of all participants did not collect betterment charges. By contrast in RGS, an additional 14 participant municipalities were collecting betterment charges by 1996, so that by project completion only 16.7% of participants collected no betterment charges.

9. Among the highlights:

- In RGS, participants did much better than non-participants in all categories. The best relative performance of participant over non-participant municipalities is found in RGS in the small category. Small participant municipalities there responded strongly and positively to MDP conditionalities and technical assistance provided under the project. This evidence is consistent with the shock effect and leverage of first time contact with an MDP project that was discussed earlier in this report.

### Budget Surplus/Deficit

10. Table B11 presents municipal budget surplus/deficit data by population size category:

**Table B11: Impacts upon Municipal Budget Surplus/Deficit**

	Budget Surplus(+) or Deficit(-) as Share of Total Revenues (percent)								
	Municipalities by population cohort								
	Large			Medium			Small		
	1990 (C)	1996 (D)	Change (D-C)	1990 (E)	1996 (F)	change (F-E)	1990 (G)	1996 (H)	Change (H-G)
<b>Brazil</b>									
Participants (Paraná)	-0.6	-7.8	-7.2	-0.5	-9.4	-8.9	+0.4	-9.4	-9.8
Participants (RGS)	+2.3	-7.2	-9.5	-0.4	-5.2	-4.8	+1.2	-7.4	-8.6
Non-participants (RGS)	+2.3	-15.3	-17.6	+1.5	-6.6	-8.1	+3.6	-7.5	-11.1
<b>Philippines</b>									
Participants (Bulacan)	-6.1	+2.0	+8.1	-2.6	+0.5	+3.1	-	-	-
Participants (Laguna)	+5.3	+4.5	-0.8	-	-	-	-	-	-
Non-participants (Laguna)	-	-	-	+8.9	+1.6	-7.3	-	-	-

Source: MDP IES database.

Notes: See Table 3.2. Budget surplus/deficit = total current revenues minus total current expenditures (including debt service payments).

## 11. Among the highlights:

- Large participants in both Paraná and RGS outperformed non-participants. Large participants in Bulacan reported a significant improvement as, on average, they moved out of deficit into surplus. These findings demonstrate a similar administrative strength of larger municipalities in the Philippines reported earlier for the case of Brazil.
- Medium-sized RGS participants also performed better than non-participants, as medium-sized participants also did in the Philippines.
- For small municipalities, the differences of performances by participants and non-participants were not very large, participants performed better over time.

**Financial Deepening**

12. For the case of Brazil only, the data in Table B12 report municipal level performance by degrees of involvement in the MDP projects:

**Table B12: Impacts upon Own Revenues by Degree of Financial Deepening (Brazil only)**

	Own revenues per capita (constant 1996 US dollars)								
	MDP participant municipalities by population cohort								
	Large			Medium			Small		
	1990	1996	%	1990	1996	%	1990	1996	%
	(C)	(D)	change	(E)	(F)	change	(G)	(H)	change
			(D/C)			(F/E)			(H/G)
<b>Paraná</b>									
Deep	36.42	87.91	+141.4	19.61	38.65	+97.1	18.06	39.72	+119.9
Medium	43.91	76.54	+74.3	27.79	43.75	+57.4	19.92	32.96	+65.5
Shallow	49.29	80.63	+63.6	26.15	52.83	+102.0	23.70	28.24	+19.2
<b>Rio Grande do Sul</b>									
Deep	28.65	46.35	+61.8	39.95	63.60	+59.2	20.75	37.52	+80.8
Medium	63.91	67.39	+5.4	33.49	48.66	+45.3	41.39	38.32	-7.4
Shallow	56.25	56.18	-0.1	36.83	46.77	+27.0	30.00	116.14	+287.1

Source: MDP IES database.

Notes: See: Tables 3.2 and 3.7. Financial depth defined as the share of total 1990-92 municipal investment accounted for by MDP project funding. Three groups as follows: (a) "Deep" = > 50%; (b) "Medium" = 25-50%; and (c) "Shallow" = <25%.

## 13. Among the results:

- The effects of MDP project leverage can be found among all size groups of municipalities. This means that project leverage can affect MDP impacts within all three categories of municipalities studied here, large, medium, and small.
- Apparently, there are two exceptions: (i) unexpectedly medium-sized "shallow" participants in Paraná perform as well as "deep" ones; and (ii) small "shallow" participants outperform all others within their size category. Both are the consequence of the exceptional performance of a few municipalities creating bias in the category means reported here.

## Performance Audit of the Brazil MDPs: Lessons and Recommendations

1. Following are the lessons drawn and recommendations made at the project level in the Performance Audit Report (OED, 1998).
2. In April 1997, a policy seminar was held in Curitiba, Paraná, to draw lessons from the past urban operations for the future work. The lessons were succinctly summarized as follows: “Current trends in political, fiscal, administrative and operational decentralization entrust the provision of typically local services to local authorities. The Municipal Development Program of Paraná has greatly reduced local dependence on State grants through a mechanism that is increasingly self-financing. This relieves the State of some responsibilities and helps reduce social tensions by offering a direct response to local needs. It also stimulates municipal tax collection as a means to improve creditworthiness...” (Secretariat of Urban Development, 1997, p. 41). The overall findings of the audit support this statement. More specific lessons follow.
3. *Demand side.* The Financial Action Plan, with its stringent conditions for sub-loans, was an effective incentive for municipal reform. This design, with follow-up monitoring at the time of subsequent sub-loan applications, enabled a “wholesale” approach that covered a large number of municipalities.
4. *Supply side.* The MDP program in Paraná demonstrated the institutional evolution of an urban development fund from a government-operated disbursement mechanism to an independent, self-financing, private financial intermediary for providing long-term credit to municipalities. ParanáCidade is a “best practice” case for the MDP program; it can be replicated in other states in Brazil and in other countries.
5. *Sequencing of project components.* The project design, which aimed at setting the institutional framework right and putting financial reform in place before undertaking physical investments, reduced the risks for implementation delays and cost recovery.
6. *Champions and political support.* During implementation, the MDP program in Paraná was not affected by government changes. The MDP program in RGS did suffer from such changes and was on the verge of collapse until the original “champions” (those who prepared the project) returned to power in 1995. Continued political support over time is crucial for successful project implementation.
7. *The dynamics of municipal development.* The MDP program was most effective in assisting smaller, less creditworthy municipalities in remote regions of the states. Large cities had access to alternative sources of financing and better technical capacity. As in the Philippines, in Brazil too, the urban (municipal) development fund is catalytic in helping smaller, resource-poor municipalities become more creditworthy and financially strong, and in helping them to make a transition to “graduating” from the MDP program and eventually participating in the capital market. But international experience shows that direct participation of municipalities in the capital market has been slow in most developing countries.
8. *MDP as an instrument for rural development.* The project’s financial and institutional impacts were most significant for small and medium-size municipalities in remote regions.

Enhancing the efficiency and productivity of these market towns should contribute significantly to the economic and social development process of rural regions. As an important side-effect, this process would reduce regional income disparities between large urban centers and rural areas.

### Recommendations

9. *Diversify the types of subprojects to be financed.* Both ParanáCidade and FUNDOPIMES should expand the scope of the lending program by allowing revenue-generating projects (with positive externalities) where the private sector can participate.
10. *Diversify financial services.* ParanáCidade has reached a phase where it could consider diversifying its financial services to include credit guarantee service; debt financing; and a catalytic role for build-operate-transfer, concessions, contract management, or other services for private sector participation. FUNOPIMES could soon follow ParanáCidade's path.
11. *Emphasize training.* The MDP program in Brazil lacks a continuing training program with a formal training institute. Since the Brazil MDP is implemented in a "wholesale" manner for numerous municipalities, it may be useful to explore the feasibility of establishing a training institute (possibly jointly by several states) to build municipal capacity. This in turn would enhance the local capacity to generate high-quality sub-loans and lessen the need for close supervision by the state's implementation agencies.
12. *Streamline municipal administration and management.* Computerizing the accounting and budgeting systems and updating financial data would enhance the efficiency of municipal administration and management. It would also make it easier for ParanáCidade and FUNDOPIMES to monitor continuously the financial health of participating municipalities by sharing a common database. ParanáCidade is heading in this direction by adopting sophisticated data management and operations simulation systems.
13. *Use the betterment tax effectively for direct cost recovery.* This tax for a new infrastructure service is a one-time "connection fee" to the service. Studies show that low-income households and small enterprises tend to have a greater willingness to pay at the margin for reliable services than high-income households and large firms (Lee, Anas, and Oh, 1999; Lee and Anas, 1992). Therefore, this tax measure could be an effective means of direct cost recovery if the government commits itself to its implementation.
14. *Protect PIMES and FUNDOPIMES from political interference.* With a healthy cash position and the high demand for sub-loans, the PIMES program is entering a critical phase for institutional growth and financial stability. Therefore, it is important to protect its organizational integrity, financial independence, and its highly dedicated staff in a period of ongoing state reform.
15. *Monitor the creditworthiness of municipalities in Paraná.* Ninety-nine percent of municipalities are participating in Paraná. For such a large number of participants, more stringent monitoring of the Financial Action Plan will be desirable to maintain healthy financial conditions of both municipalities and the fund.
16. *Disseminate lessons learned.* The evaluation coordinator of the Federal Ministry of Planning participated in the audit mission. He suggested that, upon completion of OED's ongoing impact evaluation study, a dissemination seminar be held in Brasilia for the Brazilian local government officials involved in MDPs.

## Performance Audit of the Philippines MDPs: Lessons and Recommendations

1. Following are the lessons drawn and recommendations made at the project level in the Performance Audit Report (OED, 1997).
2. *Demand-driven approach, participation, and ownership.* A “bottom-up,” demand-driven program approach to project financing is more efficient and effective for project implementation than the “top-down,” pre-selected, project-specific approach. Beneficiary local governments perform better and show greater commitment to the project when they have primary responsibility for project preparation, management, and implementation.
3. *Sequencing project components.* The institutional framework for project financing (MDF) was put in place before undertaking physical investments. Because of the demand-driven approach, MDP attracted revenue-generating sub-projects that presented minimum risks for cost recovery. This outcome showed that sequencing of project components in response to the preference of the beneficiaries can avoid implementation delays and cost-recovery problems that often occur in a complex urban development project prepared in a “top-down” manner.
4. *Piloting to mainstreaming analogy.* After the participating municipalities complete a rather simple, low-risk, revenue-generating project such as a public market, they tend to enhance their creditworthiness with a stronger financial base, and expand their investments to infrastructure projects (such as roads, drainage, water supply, and sanitation). The logic of the “New Project Cycle” (Picciotto and Weaving, 1994) is supported by the experiences of the MDP program.

### Recommendations

5. *Local government finance reform and changing role of MDF.* The MDF attracted mainly revenue-generating projects with a minimum risk. The LGUs were initially reluctant to finance social/infrastructure projects with cost-recovery features. These experiences suggest that segmenting the demand side of the market, that is, targeting particular types of LGUs for particular types of sub-projects, should be avoided. Even under LOGOFIND, the credit window for the first-time borrowers (poor and less experienced) should continue to be open for simple revenue-generating projects, while the loan product mix with more complex projects should be offered to more mature LGUs.
6. *Expanded role of local government academy.* The role of LGA for training municipal officials should be expanded from training at the project level (preparation, financing, and implementation) to building LGU capacity building for planning and implementing a city-wide infrastructure investment program and managing rapidly expanding urban areas. For example, Santa Rosa faces a tremendous challenge to meet a sharp increase in demand for residential and non-residential land and all types of infrastructure services as the city is attracting large multinational firms. The LGA should also expand its dissemination program whereby the experiences accumulated by the LGUs graduating from MDP can be shared with the newcomers. Mayors and senior officials of Bauan and Pulilan, for example, are already serving as lecturers in the LGA seminars, but a more proactive program such as “twinning” could be effective.

7. *Reducing disincentives for local revenue generation.* The increase in the IRA (revenue sharing) ratio to 40 percent as part of the revised Local Government Code dampened the incentives to generate local revenues. To reduce this disincentive, the audit recommends: (i) the introduction of matching grants above the standard allocation of IRA tied to the extent of local revenue collection or of successful cost recovery; (ii) continued support of the RPTA program to capture tax revenues from the rapidly rising property values, in particular, from the expanding non-residential tax base in rapidly growing LGUs; and (iii) the introduction of a “presidential” award system according to the level of financial autonomy measured by the ratio of IRA receipts to the total municipal revenue. For the four cities the audit mission visited, this ratio was: Bauan, 16 percent; Santa Rosa, 23; Pulilan, 49; and Butuan City, 79.

8. *Private sector participation in maintenance and contract management.* To make the project achievements sustainable in the absence of recurrent budget funds for maintenance and technical personnel, LGUs should consider farming out the maintenance activities to private firms or resort to contract management based on user fees. To protect the financial viability of the MDP-financed economic enterprises (public markets, bus terminals, and slaughterhouses), contract management or other forms of private sector participation could be adopted. Mandaluyong City in Metro Manila has been using a management contract arrangement for its public market, and Santa Rosa is considering such an arrangement for its market.

## Public Market Survey Questionnaire

Time and Date: \_\_\_\_\_

Name of Interviewer: \_\_\_\_\_

### IMPACT EVALUATION OF MUNICIPAL DEVELOPMENT PROJECTS IN THE PHILIPPINES

#### PUBLIC MARKET SURVEY QUESTIONNAIRE OF STALL HOLDERS AND SMALL ENTERPRISES

##### A. CLASSIFICATIONS

- A1. Identification Number: *[to be pre-coded.]*  
*[First number is for municipality, followed by the serial numbers.]*      ////  
1. Pulilan; 2. Guiguinto
- A2. Classification by business type:      //  
*[First three categories are for stall-holders.]*  
1. Meat, poultry, and fish  
2. Fruits, vegetables, and grains (rice, corns, etc.)  
3. Manufactured goods (clothing, toys, kitchen wares, etc.)  
4. Business enterprises outside the market
- A3. Name of stall-holder or business enterprise: \_\_\_\_\_  
Stall number: \_\_\_\_\_      ////  
Telephone number, if any: \_\_\_\_\_  
Name of respondent: \_\_\_\_\_  
Position of respondent, *if not owner*: \_\_\_\_\_

##### B. LOCATION CHOICE

- B1. When did you start conducting your business at this location?      19///
- B2. Did you move here from another location?      1. Yes; 2. No      //
- B3. If yes, where was your previous business located?  
Name of the subdivision (neighborhood): \_\_\_\_\_      ////\*<sup>1</sup>
- B4. Why did you choose this location?  
*[Pick the most important reason.]*      //  
1. Availability of space  
2. Accessibility to customers  
3. Close to your residence

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1. \*Codes to be prepared.

4. Good transport access
5. Safety
6. Others, please specify: \_\_\_\_\_ \*

### C. PRODUCTS AND SERVICES

- C1. ***For stall-holders:*** what goods do you sell? \_\_\_\_\_ ///\*  
***For business enterprise:*** what kind of business is your enterprise engaged in?  
***[for example, gas station, bank, restaurant, taxi company, pharmacy, etc.]***

- C2. If you sell goods, where do your goods come from?  
***[Please give a rough percentage distribution.]***

- |                           |               |
|---------------------------|---------------|
| 1. From this municipality | <u>////</u> % |
| 2. From this province     | <u>////</u> % |
| 3. Outside this province  | <u>////</u> % |
| Total                     | 100 %         |

- C3. Who are your customers?  
***[Please give a rough percentage distribution.]***

- |                                      |               |
|--------------------------------------|---------------|
| 1. Residents of this municipality    | <u>////</u> % |
| 2. Residents of this province        | <u>////</u> % |
| 3. People from outside this province | <u>////</u> % |
| Total                                | 100 %         |

### D. EMPLOYMENT

- D1. How many people are working here including yourself? //// persons

- D2. How many are member of the owner's family? //// persons

- D3. How many are female workers? //// persons

- D4. How many hours do they work per day? Owners /// hours  
 Helpers /// hours

- D5. On average, how much do you pay per month?  
 1. For manager/Caretaker/owner //// pesos/month  
 2. For helper //// pesos/month

- D6. How much do you spend in kinds (meals, transportation and others) per person per month?  
 1. For manager/caretaker //// pesos/month  
 2. For helper //// pesos/month







- I4. Do you belong to a market vendor's association? //  
1. Yes; 2. No
- I5. How much fees do you pay to the association per month? ////  
pesos/month
- I6. What services does it provide for you ?  
*[List three in order of importance.]*
- a. \_\_\_\_\_ //\*  
b. \_\_\_\_\_ //\*  
c. \_\_\_\_\_ //\*

**NOTE: SECTION "J" IS FOR BUSINESS ENTERPRISES ONLY (OUTSIDE THE MARKET).**

*J. CAPITAL INVESTMENT*

*[Questions J6 through Questions J14 are for business enterprises only.]*

- J6. How large is the total floor space? ////// square meters
- J7. Do you own this place or rent? 1. Own; 2. Rent //
- J8. If you own the place, how much did you pay for this space when you moved here?  
*[The year in Question B1]* ////// 1000 pesos per square meter
- J9. How much will you get if you sell it now? ////// 1000 pesos per sq. m.
- J10. If you rent, how much do you pay per month? ////// pesos per month per sq. m.
- J11. How much did you spend to set up your business and improvements (i.e., investment for facilities, equipment, etc.) since you moved here? ////// 1000 pesos.
- J12. Do you have a plan to expand your business at this location? 1. Yes; 2. No //
- J13. What is the price of land at this location now (1998) per square meter?  
////// pesos per square meter
- J14. How much was the land price when you moved here? *[The same year in Question B1]*  
////// pesos per square meter

**K. OTHER GENERAL COMMENTS ON PROBLEMS, AND SUGGESTIONS FOR IMPROVEMENTS REGARDING ANY ASPECTS OF YOUR BUSINESS CONDITIONS OR SURROUNDING AREAS.**

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**K. COMMENTS BY INTERVIEWERS ON ANY PROBLEMS ENCOUNTERED OR ANY UNUSUAL INFORMATION TO BE NOTED.**

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