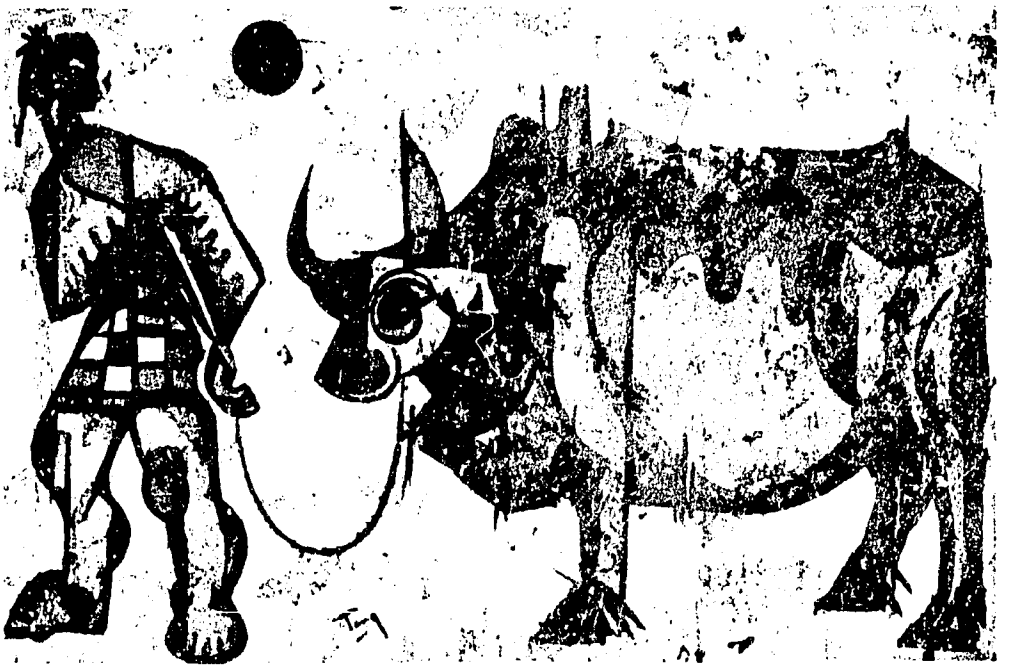
PN-AAN-214
ISN
10-H
AID/TA-PDA-8
931137

CORNELL UNIVERSITY

RURAL DEVELOPMENT COMMITTEE



Occasional Papers

MEASURING LOCAL GOVERNMENT PERFORMANCE: ASSESSING MANAGEMENT, DECENTRALIZATION, AND PARTICIPATION

Arthur R. Williams

OPS No. 11

BIBLIOGRAPHY SERIES

#1 **Participation at the Local Level: A Working Bibliography** John Cohen, Gladys Culagovski, Norman Uphoff and Diane Wolf, $4.50, 125 pp.

#2 **Tillers of the Soil and Keepers of the Hearth: A Bibliographic Guide to Women and Development** Louise Fortmann, $3.50, 53 pp.

LANDLESSNESS AND NEAR-LANDLESSNESS SERIES

#1 **Landlessness and Near-Landlessness in Developing Countries** Milton J. Esman, $3.50, 71 pp.

#2 **Landless Peasants and Rural Poverty in Selected Asian Countries** David Rosenberg and Jean Rosenberg, $4.00, 108 pp.

#3 **Landless Peasants and Rural Poverty in Indonesia and the Philippines** David Rosenberg and Jean Rosenberg, $4.00, 133 pp.

#4 **Landlessness and Rural Poverty in Latin America: Conditions, Trends and Policies Affecting Income and Employment** Cheryl Lassen, $4.50, 184 pp.

#5 **Distribution of Land, Employment and Income in Rural Egypt** Iliya Harik with Susan Randolph, $4.50, 166 pp.

#6 **Reaching the Assetless Poor: Projects and Strategies for Their Self-Reliant Development** Cheryl Lassen, $3.50, 68 pp.

SPECIAL SERIES ON RURAL LOCAL ORGANIZATION

#1 **Peasants, Officials and Participation in Rural Tanzania: Experience with Villagization and Decentralization** Louise Fortmann, $4.00, 136 pp.

#2 **Rural Organizations in South India: The Dynamics of Laborer and Tenant Unions and Farmer Associations in Kerala and Tamil Nadu** K.C. Alexander, $3.50, 95 pp.

#3 **Local Organization and Participation in Integrated Rural Development in Jamaica** Arthur Goldsmith and Harvey Blustain, $4.00, 140 pp.

#4 **Local Institutions and People's Participation in Rural Public Works in Nepal** Prachanda Pradhan, $3.50, 103 pp.

#5 **Local Organization Dimensions of Rural Development in Turkey: Socio-Economic Stratification Orientations Toward Participation, and Attitudinal Modernity** Halil Copur, $3.50, 77 pp.

MONOGRAPH SERIES

#1 **Making Green Revolution: The Politics of Agricultural Development in China** Benedict Stavis, $5.00, 287 pp.

#2 **Rural Development Participation: Concepts and Measures for Project Design, Implementation and Evaluation** John Cohen and Norman Uphoff, $5.00, 317 pp.

#3 **Feasibility and Application of Rural Development Participation: A State-of-the-Art Paper** Norman Uphoff, John Cohen and Arthur Goldsmith, $5.50, 338 pp.

OCCASIONAL PAPER SERIES

#1 **Panchayati Raj, Rural Development and the Political Economy of Village India** Norman Nicholson, $2.50, 61 pp.

#2 **The Political Economy of Peasant Family Farming: Some Anthropological Perspectives on Rationality and Adaptation** Davydd Greenwood, $3.50, 96 pp.

#3 **Small Farmer Credit - Cultural and Social Factors Affecting Small Farmer Participation in Formal Credit Programs** Cynthia Gillette and Norman Uphoff; and **The Political Economy of Distributing Agricultural Credit and Benefits** Harry W. Blair, $2.50, 57 pp.

#4 **Training and Research for Extended Rural Development in Asia** R.D.C. Working Group on Training and Research, $2.50, 119 pp.

#6 **Revolution and Land Reform in Ethiopia: Peasant Associations, Local Government and Rural Development** John Cohen, Arthur Goldsmith and John Mellor, $3.50, 127 pp.

#8 **Women and Participation in Rural Development: A Framework for Project Design and Policy-Oriented Research** Kathleen Staudt, $3.50, 77 pp.

#9 **Community-Level Research, Local-Regional-Governmental Interactions, and Development Planning: Strategy and Methodology for Baseline Studies** Davydd Greenwood, $3.50, 70 pp.

#10 **Development of Livestock, Agriculture and Water Supplies in Botswana Before Independence: A Short History and Policy Analysis** Emery Roe, $3.50, 56 pp.

#11 **Measuring Local Government Performance: Assessing Management, Decentralization, and Participation** Arthur R. Williams, $4.50, 95 pp.

MEASURING LOCAL GOVERNMENT PERFORMANCE: ASSESSING MANAGEMENT, DECENTRALIZATION, AND PARTICIPATION

Arthur R. Williams

Rural Development Committee
Center for International Studies
Cornell University

Copyright, Cornell University
Center for International Studies
Rural Development Committee 1981

Published by the Rural Development Committee, Center for International Studies
170 Uris Hall, Cornell University, Ithaca, New York 14853. July, 1981.
$4.50

PREFACE

In early 1978, the author of this report undertook to assess the performance of 214 rural Philippine municipalities. Since the New Society, proclaimed by President Ferdinand E. Marcos on September 21, 1972, was striving to build its legitimacy by strongly emphasizing its high performance relative to that of previous liberal democratic regimes, this assessment was considered a necessary part of an on-going study of central-local government relations. The official position of the President and his spokesmen was that constitutional authority was being used at the center to build the capacity or capability of existing local institutions for greater local self-government. The martial law regime, therefore, maintained that the use of central authority was consistent with Article XI of the new 1973 Constitution which mandated an increase in local autonomy through an expansion of local "powers, responsibilities, and resources."

It was initially thought that a subjective ranking of municipalities by the staff most familiar with their performance would be useful in establishing statistical and qualitative relationships between national policy initiatives and local responses, even if the basis of ranking municipalities was officials' impressions rather than systematic data. Of particular concern was the extent to which local governments were accomplishing the letter and intent of national policies. This would shed light on the degree to which political relationships in the Philippines were moving toward more or less centralized patterns of governmental relations.

A subjective performance ordering of 214 municipalities in eight provinces was obtained by asking local staff of the Ministry of Local Government and Community Development (MLGCD) to consider the municipalities in their respective provinces (listed on 3x5 index cards) and to rank them "from the most to the least active in trying to bring about positive changes in the community over the last five years (1973-1978)." The respondents were advised to consider the relative performance of municipalities on a wide array of activities and programs, including changes in values and attitudes. In all cases, several orderings of the cards were done before a ranking was recorded.

While this was being done, a large amount of data was also collected on the municipalities. By the end of the year, data on 385 variables were collected for each of the local governments and their chief executives, called mayors. In early 1979, a statistical and more objective measure of performance was calculated for each of the municipalities. This measure is the main subject of the largest part of this paper.

The objective measure was originally assumed by the author to be less satisfactory than the subjective one, since the statistical procedures used were rather simple and untested. Much of the literature on organizations argued or assumed that more-easily-acquired subjective measures were adequate for organizational analysis. In addition, the MLGCD respondents, in most cases, had ten or more years of experience in the province. Morever, the objective performance measures were designed to be consistent with stated MLGCD goals and objectives. It was thus believed that the objective measure would probably not be better than the subjective one, and might be less revealing, since cold statistics could not feel the pulse of community life as well as practicing community development workers.

By the middle of 1979, the author and his assistants found marked discrepencies between the subjective and objective rankings of the municipalities. Even though modest positive correlations existed, the rankings varied noticeably in the first and fourth quartiles. Many reversals were found i.e., a municipality placed in the first quartile subjectively would rank in the lower quartile objectively, and vice versa. Moreover, several systematic patterns appeared in these reversals. The most noticeable was the tendency of MLGCD respondents to rank larger, wealthy municipalities higher and to downgrade smaller, poorer municipalities.

By the middle of the year, the research team was preparing visits to sixteen representative municipalities, two in each of the eight provinces, i.e., a pair of communities in each province, one judged "more capable" and one "less capable". There was some question as to which of the rankings to use, but, in the end, it was decided to use the objective ranking for selecting the pairs. Fortunately, the field trips permitted a "test" of the adequacy of both methods of performance assessment. The statistical procedure proved to be highly representative of observed capacities, and the subjective measures much less so. It became obvious that the statistical procedures produced information which could be used for multiple purposes. There was a demand for such analysis within the Philippines, and possibly other LDCs could use the kinds of information which could be statistically generated in this manner without undue expense in time and resources.

This methodological paper describes the statistical measure and states the case for its validity and reliability. In addition, the reasons for the weaknesses of the subjective measure are outlined. Some findings obtained with the statistical measure are briefly discussed along with their policy implications, and suggested approaches for establishing management information and consultation systems based upon

"performance" measures are provided. The ensuing narrative description is given of two municipalities which were classified as "more capable" and "less capable" by the statistical method but which were consistently ranked in the reverse order by MLGCD respondents. This will give the reader a sense of what is meant by performance "capability" and of what policy and implementation errors would result from a misclassification.

A valid and reliable method for assessing local capability is needed to improve the effectiveness of government programs and donor-aided projects. This paper presents a method for assessing capability which has been used in one country, the Philippines. The methodology can be applied with appropriate modifications to the circumstances prevailing in other countries and with different data sets.

The methodology presented in this paper can best be seen as an effort to be systematic and objective in making judgments heretofore made by impressions and biased perception. The need for a more factual basis in making performance judgments is illustrated in the contrast between two municipalities which MLGCD staff and performance data disagreed on.

TABLE OF CONTENTS

Acknowledgements ix

I. A TALE OF TWO TOWNS: A BRIEF NARRATIVE 1

II. INTRODUCTORY ANALYSIS 8

Potential Contribution of Local Government 9

Local Capabilities and the Measurement of Performance 11

Formulating Useful Measures of Performance or Capability 14

III. DERIVATION OF A "CAPABILITY" INDEX 16

Operationalizing Measures of Performance 19

The Justification of Measurement Criteria 24

The Specification of Measures 26

Combining Measures into a Composite Score of Performance 29

IV. THE VALIDITY OF THE INDEX 33

Biases in Impressionistic Evaluations of Performance 39

V. DECENTRALIZATION, PARTICIPATION, AND PERFORMANCE 43

Capability, Management, and the Paradox of Performance 43

Local Capability and Support for the Regime 49

Participation and Performance 51

Previous Page Blank

VI. DEVELOPMENT OF A MANAGEMENT INFORMATION AND CONSULTATION (MIC) SYSTEM 57

Existing Organizational Weakneses and Evaluative Capacity 57

Characteristic Management Information Approaches and MIC 63

The Management Information and Consultation (MIC) System 64

The Management Information Group (MIG) 67

Some Reflections on System Costs 71

Appendix I: The Development of a Capability Index 75

Appendix II: Content Analysis of President Marcos' Speeches 92

Appendix III: Linear Discriminant Analysis 97

ACKNOWLEDGEMENTS

This monograph is based upon data collected for a larger study of central-local relations in the Philippines. Generous financial support came from the Ford Foundation and the Rural Development Participation Project, Center for International Studies, Cornell University. In addition, the Bureau of Local Government (BLG), Ministry of Local Government and Community Development (MLGCD), Philippines, provided additional financial and field support through its special projects funding. As usual, financial support should not be considered an endorsement of findings.

The author would particularly like to thank Minister Jose Roño and Director Gaudioso Sosmeña for their unfailing support during the more than two years of fieldwork. Over the last eight years, the author has done a number of studies for the Ministry, and no attempt was made at any time to influence either his findings or their presentation. In all cases, his work has been graciously and critically reviewed by ministry personnel, and has had, the author feels, some positive influence on policy.

Field investigations were undetaken with the help of some able researchers. Special mention must be made of Ulysses S. Musico and Tomas Taboado, both from the MLGCD, who went out to the field with the author, and of two research assistants, Julie Marquez and Lorna de la Peña, who worked from the beginning to the end of the project. Mayrose Pacis, Carmencita Manding, Bing Solano, Ofelia Echavez, and Leeca Labra were not only able interviewers, but made particularly insightful comments on mayor responses to the interviews.

From 1976 through the present, the author has received the friendly, intellectual support of Norman T. Uphoff at Cornell University. In addition, friends in the Philippines at the School of Economics and also the College of Public Administration (CPA) of the University of the Philippines (UP) have shaped his thinking about the Philippines and some public policy issues. The author's interest in rural development was initially stimulated by Harry Oshima, Rockefeller Foundation Representative and Visiting Professor at the School of Economics, whom he met in 1974. When research related to this monograph was undertaken, the author was a Visiting Research Associate at the Local Government Center, CPA, UP. The author also wishes to acknowledge the assistance of Christian Haller, Cornell Computer Services, who helped with some "experimental" data analysis. Although this does not appear in the text, it was most useful in validating procedures described.

Support both intellectual and otherwise has come from Phoebe, Arty, Diane, and David. They have tolerated the author's frequent trips out of town and his occasional ill-humor around the house. This work is dedicated to the 214 mayors who gave unselfishly of their time during and after the interviews. It is appropriate that they be mentioned in the same paragraph with the author's family.

Chapter I
A TALE OF TWO TOWNS: A BRIEF NARRATIVE

In the Philippines, the main unit of local government is the municipality, similar to a township in the United States and smaller than most counties or districts as geographic and administrative entities. A municipality has a center of population, called in the Philippine vernacular the poblacion, which means a town or village settlement, and outlying villages or hamlets, referred to as barrios or barangay. The municipality is our main concern in this analysis, and the poblacion as its center will get most attention. But we will deal also with the associated barrios, as they all together make up the basic institutional structure for local development in the Philippines.

Our account begins with two municipalities located in the north of one of the Philippines' northern provinces. While the central and southern portions of the province are witnessing relatively rapid economic progress, improvements have been much slower in its northern tier, which borders on a province notorious for pre-martial law violence, including politically motivated murders. Some of this violence spilled over into the two municipalities which are the subjects of this narrative.

The municipality called Sakit, which was ranked high by MLGCD respondents, lies directly on the national road. While one would expect this to ensure greater prosperity, prior to martial law its major effect was one of ensuring the rapid spread of violence from the north. In fact, the town became a major arming and training ground for gunmen, "goons" who were hired by one or another northern faction.

Two years prior to martial law, the present mayor, Mayor Pakikisama who was then an employee of the Department of Justice was encouraged by the Minister, who was from this province, to campaign for mayor on a law-and-order platform. He was able to win due to the desire of citizens for change, his legal skills,[1] the strong backing of the Minister, and most importantly, he believes, to his ability to get along well with others "including my enemies."

The other municipality, Pasyon, ranked as a low performer, lies some six kilometers off the national road. While subject to similar external pressures, violence was less common. The town was not on important trading routes from the north, and its

---

[1] As an attorney of the Ministry he could use warrants and other legal devices against the lawless. He claims that he drove the lawless out of town before 1973 by the judicious use of "legal harassment." The mayor's wife is also an employee of the Ministry of Justice.

Previous Page Blank

chief executive, Mayor Agcoaili, was more vigorous than his contemporary, Mayor Pakikisama, in apprehending the lawless. His activeness was due in part to the support of barangay (village) captains. Their support was primarily one of "mobilization" which was possible since relatively strong peasant and rural organization characterized the town.

Both towns were visited for four days by the author and five research assistants. During this period, observations were made, unstructured and structured interviews were done with local staff, and 300 villagers were interviewed. After two days, the consensus of the group was that Pasyon was out-performing Sakit on a broad number of criteria. Examples of common observations are presented below.

In the formation of pre-cooperatives or Samahong Nayon (SN), Pasyon was clearly more active in encouraging farmers to join and in collecting dues. Mayor Agcoaili had taken several courses in cooperatives through the MLGCD, and had been active in encouraging farmers to join. Interestingly, although the formation of SN was initially successful, the "high" dues schedules and the misuse of funds discouraged him from continuing his efforts. In fact, he now encourages farmers to participate in the Ministry of Agriculture Farmers' Associations which require no dues. (More than 15 active associations exist in Pasyon, but these do not provide loans and other assistance which is theoretically made available through SN.)

Mayor Pakikisama in Sakit, on the other hand, knew nothing about SN except that they were a "dismal failure." He had not heard about the SN "for years," and he did not know if there were active farmer associations.

Significant, perhaps, is the fact that Mayor Agcoaili does not live in the poblacion, which usually dominates local affairs in the Philippines, but rather in one of the outlying barrios (hamlets). On the other hand, Mayor Pakikisama lives in a large house near the central plaza. Both admit that they own "small parcels" of land, but only Mayor Agcoaili occupies himself with a small business of vegetables and livestock.[2]

In Pasyon only two-thirds of the rice land is irrigated, compared with 100 percent of the rice land in Sakit. Thus, one might expect more progressive farmers to be found in Sakit. However, 100 percent of the irrigation in Sakit is organized and managed by

---

[2]Both are college graduates. Mayor Pakikisama has more years of education, and is a law graduate writing a MPA thesis. But Mayor Agcoaili is a graduate of one of the most prestigious schools in the country, and in terms of educational quality, Agcoaili is far ahead of Pakikisama.

the National Irrigation Administration (NIA) as part of a large system, while 80 percent of the irrigation in Pasyon consists of small, traditionally organized communal systems. No farmers complained to the researcher about the operation of these traditional systems except to suggest the need for their expansion and physical improvement, while numerous complaints were made in Sakit about the NIA system including "high fees" and "poor maintenance."

Since the allocation of national government agricultural efforts is biased toward irrigated areas, Pasyon is served by only one Ministry of Agriculture farm management technician (FMT), compared to four FMTs, one home management technician, one rural youth development worker, and three plant technicians in Sakit. Nevertheless, interviewed farmers were more likely to report increases in agricultural output in Pasyon; and they were more likely to say that they had seen an agriculturalist regularly than farmers in the neighboring municipality. These results from 150 field interviews in each municipality were supported by observations in the municipal buildings.

During the visit to Pasyon it was difficult to contact the FMT, who had set up a full schedule of appointments with farmers. In contrast, the desks of agriculturalists in Sakit were fully occupied during the hotter parts of the afternoon. Little local supervision and cooperation among local functionaries existed in Sakit, while the mayor and other local officials worked actively with the extension agent in the Pasyon. The agent's efforts were supplemented by those of the mayor, who considers himself a "self-taught agriculturalist," and an especially conscientious MLGCD barangay development worker (BDW) who is a recent graduate in agricultural education. In addition, the rural health unit (RHU) physician has used his five midwives to increase the flow of general as well as health information from the poblacion to the barangay.

Farm households in both communities earn a substantial portion of their income from off-farm activities. In Sakit these opportunities exist in handicrafts and some irregular commercial or service activities such as buy-and-sell, pedicab driving, and running errands. Handicrafts are dominated by only one industry, blanket weaving. In Pasyon, off-farm activities are restricted solely to handicrafts, but these include a wider range of activities: some blanket weaving, basket making, domestic and decorative, and bamboo crafts.

The effects of these activities on family income and labor allocation are quite different. Blanket weaving in Sakit allows for relatively large but irregular incomes and is solely restricted to women, while basket making and bamboo crafts involve some male labor and lead to lower average but less fluctuating incomes. The reasons for

these differences in income are due to both availability of raw materials and entrepreneurial costs.

The mayor of Sakit told the author of his attempt to help the weavers organize a cooperative. "The weavers needed help, so I obtained the old high school at the southwest corner of the town plaza for the weavers' cooperative. We were able to renovate the building for an office and display room at a cost of 140,000 pesos of which the National Cottage Industry Association (NACIDA) paid 100,000. The rest was paid by the municipality under our plaza improvement program." He was asked, "As you have described the weavers' problems, doesn't it seem that the establishment of a credit association or credit fund would have been more helpful." "I agree," he responded, "but the NACIDA promised to help only with building acquisition and renovation."

The author visited the building which contained a few dusty tables, some faded photos on paste board, and no weaving displays. Other informants described the weavers' association as "very inactive." It is the author's impression that at the time of building acquisition, Mayor Pakikisama was more interested in a highly visible improvement on the town plaza than he was in helping the weavers. (Indeed, the plaza is very visible; the national highway passes right through it.)

This incident is indicative of the contrast between the kinds of projects undertaken in the two towns and the mayors' different leadership styles. Sakit spends all its capital and development funds on the town plaza. In addition to the cooperative building, another substantial expenditure was on a large new meeting hall attached to the municipal building. With the notable exception of two fishing barangay, the other thirty-one barangay spent their limited funds on barangay halls, stages, and sound systems, visible (and audible) projects of low productive value.

On the other hand, Pasyon has a less elaborate but clean municipal building. The mayor does not believe in beautification projects or large expenditures for plaza improvements. Municipal funds have been used to purchase water-sealed toilets, medicines, nutrition packages, water pumps, water pipes, and some supplies to help communal irrigation systems. Barangay have spent their funds on the above programs and on school building, repairs and supplies. The mayor said, "I discourage expenditures on barangay halls and stages. The schools can also serve as meeting places."

Mayor Agcoaili can be classified as "management-oriented." He describes the mayor's job as one for the implementation of projects, while Mayor Pakikisama places a much higher emphasis on interpersonal relationships. "The mayor's job is one of bringing about unity and maintaining good public relations."

This contrast is even reflected in the kind of projects they like to talk about. A "triumph" of Mayor Pakikisama was the creation of a choral group (he sings with this group) which once serenaded several visiting cabinet officials. On the other hand, Mayor Agcoaili likes to relate his story of the water-sealed toilets. Due to the high incidence of water-borne diseases, he and the RHU physician organized a water-sealed toilet campaign. Two difficulties were immediately encountered: the lack of toilet bowls and the lack of compliance, partially due to the former. The first problem was solved by "stretching the law" to use municipal operating funds to purchase the bowls. These funds were gradually repaid in installments by the purchasers who otherwise could not have afforded the bowls.[3]

Compliance was obtained by RHU inspections and the arrest of those in noncompliance. Those arrested were required to do several days of work around the municipal building, on barangay roads, or on other local projects. Gradually, these threats, the availability of toilet bowls, and RHU information campaigns brought about great compliance. This town is one of the more distant ones in the province, but 90 percent of its dwelling units have water-sealed or other standard toilets—one of the highest ratios in the country. The incidence of gastro-intestinal diseases is among the lowest in the country, and the infant mortality rate is among the lowest in the province.

The RHU physician is all praises for the mayor. "We could not have succeeded in the campaign without the help of the mayor." Although the doctor has probably never heard about the economic theory of public choice, his description of municipal-RHU cooperation is a classic case of the theory. "We could talk to people forever about health needs, but a few always would not cooperate. Why should they cooperate, some felt, if only others downstream have to suffer from our pollutants? The enforcement of the law through the mayor's police powers could encourage these few exceptions to cooperate.[4] The shame of being caught has been enough to discourage lack of compliance with necessary health practices."

The RHU in Pasyon has such an exceptional reputation that it has become a training center for midwives. Five are now employed at remote substations. The

---

[3]Theoretically, the budget once approved by the Ministry of Finance could not have been altered to allow for these purchases which exceeded budgetary limitations on operating expenses. This municipality did not have enough money in its capital fund for this activity, since this fund was too small for the purchases required. The mayor and staff have forgone allowable salary increases to maintain budgetary balance.

[4]Interestingly, Mayor Agcoaili is an outspoken critic of martial law.

doctor volunteered that one of the midwives and two day-care workers were employed on municipal funds; but, he correctly added, "the mayor probably won't tell you that since the municipality may not have authority to do this."

This represents another strong contrast between the two mayors. Mayor Pakikisama feels that he must comply with the letter of national programs, while Mayor Agcoaili gives highest priority to meeting specific local needs. In most cases, such as those mentioned above, this leads to creative adaptations rather than to abandoning of the intent of those programs.

Another example: Sakit, with the encouragement of national ministries, has undertaken a program to do tax maps and upgrade the fiscal administration of the real property tax. A number of clerks and a land tax assessor, with no experience, have been hired to do this work in cooperation with a private consulting firm. The municipality borrowed money to undertake this project and also obtained additional funding from interested ministries. However, to date, there has been no increase in revenue or collection rates. The land tax clerks stay in their office typing up forms and waiting for taxpayers to eventually wander in. The mayor, reportedly, never participates in the treasurer's infrequent tax collection campaigns. Mayor Pakikisama was also unable to describe the tax mapping work to the author.

On the other hand, Mayor Agcoaili has not sought assistance for improving land tax administration or collection, since "the basic appraisal and evaluation data have not been transmitted from the province." He also pointed out that tax mapping might place a considerable strain on the budget for rather uncertain benefits. "The ministries promoting tax mapping have not convinced me that we could raise more revenue."

Is the mayor anti-tax? No. He accompanies the treasurer on regular tax collection campaigns and encourages the involvement of barangay captains. Pasyon, according to provincial treasury reports, ranks ninth out of twenty municipalities in tax collection efficiency, while Sakit ranks only fifteenth.[5] Moreover, although Sakit has twice the population of Pasyon, has a population with a higher average level of education, has substantial commercial property, and has more productive agricultural land, its revenue from real property taxation is barely 20 percent (4,000 pesos per year) more than Pasyon.

Outlying barangay residents in Pasyon are more integrated into local affairs than those in Sakit. Twice as many representatives of the rural barangays are members of

---

[5]The relative differences in ranking are even higher if statistically controlled measures such as those reported below are used.

the municipal council in Pasyon as in Sakit. In fact, Pasyon is one of the few of the 214 municipalities studied where barangay representatives outnumber those from the poblacion.

Mayor Agcoaili maintains contact with barangay officials through group and individual meetings, while Mayor Pakikisama prefers to send letters. In Pasyon the projects listed in development plans have been discussed and approved by barangay councils, but in Sakit council meetings are rarely held to discuss projects.

Additional contrasts between the two municipalities could be given. However, the narrative, so far, should be adequate to demonstrate that a major error was made in the MLGCD classification, putting Sakit high and Pasyon low in performance. On the other hand, statistical analysis not only made the proper identification on measured characteristics (to be discussed below), but the "more capable" municipality performed well on all activities including those not directly reflected in the statistical index, such as rural health.

Since the brief narrative above compares only two municipalities, generalizations about characteristics affecting the performance of all Filipino localities would be injudicious. The observations above while suggestive cannot be said to be typical of Philippine local governments. Rather, the procedures discussed below, which are based upon statistical data covering 214 municipalities, will permit more confident generalizations about factors affecting typical or atypical performance. Discussion later in this paper suggests why misclassifications of municipalities, such as those in the narrative, occur.

Chapter II
INTRODUCTORY ANALYSIS

The primary purpose of this paper is to suggest a procedure which can be used to assess the performance of localities in developing countries. Local government in terms of local political subdivisions with guaranteed autonomy and broad functional scope is extremely rare in developing countries. For this reason, the procedures suggested in this paper focus on the capability of localities rather than of local governments as such. This distinction is similar to that frequently made between local government and local governance.

The measurement of local capability focuses here on ascertaining the degree to which any specific locality has advanced toward the achievement of a number of goals important to the regime, local officials, citizens, and impartial observers. It is argued that a substantial commonality of interest exists for improving local performance which is frequently overlooked in literature which emphasizes central-local cleavages.

The measures of performance (or capability) used in this paper reflect the actions taken concurrently by existing local governments and field agents of ministries in any given locality. It happens in the Philippine situation, used here to demonstrate the methodology, that certain characteristics of the mayor are importantly related to local capabilities. This suggests that local governments, as support units to the mayor, play an active part in determining the degree to which policy and programs can be implemented. This may be less true of other countries, but this can not be determined until the capability of localities in them can be more accurately assessed.

The methodology described in this paper addresses five areas of concern: (1) allocation; (2) diagnosis; (3) evaluation; (4) training; and (5) communication. It is argued that more accurate identification of the most capable and least capable localities can improve the allocation of resources. In accordance with given policy goals and objectives, this information can importantly assist policy-makers in deciding which localities are eligible recipients of certain kinds of assistance. (Chapters III and IV describe procedures for measuring capability.)

Once the degree of capability is identified, it can be used for diagnosis of problems to be dealt with or advantages to be capitalized upon. Chapter IV of this paper outlines a number of findings which are most important diagnostically. For example, findings are reported which suggest that there is a substantial positive association between high levels of citizen participation and high local performance.

Knowledge of the degree of local capability can also be used for evaluation of programs and projects. Some kind of baseline capability must be considered in evaluations if program performance is not to be either overrated or underrated. For example, while lower program output might be expected in the less capable municipality, the program itself might have a strong, positive impact in raising local capacity to respond to future initiatives. Analytically, the evaluator would wish to know the effect of a given level of capability on program outputs as well as the extent to which that capability might have been raised or lowered by the program. An interesting case in point is the use of central government grants to localities. While these might have a strong positive impact on achieving program objectives, they might either raise or lower local capabilities. An understanding of relationships of this kind is crucial to development policy.

The last chapter of this paper briefly deals with some training and communication concerns. It suggests that diagnostic and evaluative findings based on an understanding of capability can be used to develop more appropriate training materials. Moreover, the effect of training programs on local performance can be more accurately assessed if measures of capability are available.

It is also argued in Chapter VI that the capability index and diagnostic and evaluative findings can be used to increase the quantity and quality of communication between the center and localities. It is further argued that existing communication imperfections importantly constrain the degree to which regimes in developing countries are willing to decentralize government activities and that more and better communication would enhance possibilities for decentralization and greater local participation in decision making and implementation.

Potential Contribution of Local Government

After the first two UN development decades (1960-1980), scholars, international agencies, and others concerned with development are giving increased attention to local government in the Third World. The obvious reason for concern is that respectable economic growth rates over the two decades contributed little to the alleviation of poverty among the lower income groups in the these countries. This suggests that linkages between the expansion of production, reflected in GNP growth rates, and the eradication of widespread poverty are more tenuous than anticipated in the 1950's.[1]

---

[1] A summary appears in Hollis Chenery and Moises Syrquin, Patterns of Development (London: Oxford, 1975).

An increasing number of studies are suggesting that the weakness of local institutions in the Third World importantly constrains both economic growth and improvements in equity.[2] That is, both higher economic growth rates and a more equitable distribution of income could be facilitated by the existence of viable local institutions, such as multifunctional local governments. In fact, accelerated rural development, the most frequently advocated development strategy for the 1980's, may require competent local government.[3]

The conditions requiring the heavy involvement of local government in a rural development strategy are numerous. Among the more important are the following:

(1) A rural development strategy requires the simultaneous expansion of government and private sector activities in thousands of localities widely scattered throughout a country. This severely burdens national governments, and requires the mobilization and efficient use of local resources--financial, political, and social. A successful strategy must rely heavily upon the capability of local governments and national field personnel to mobilize and manage resources effectively at the local level.

(2) Since a rural development strategy commits governments to activity over extensive land areas with differing resource endowments, some decentralization of decision-making and program implementation is necessary for policy and program effectiveness. Devolving greater authority and other resources to local govenments is one way of coping with this complexity in order to achieve greater effectiveness.[4]

---

[2]See for example, Norman T. Uphoff and Milton J. Esman, Local Organization for Rural Development: Analysis of Asian Experience (Ithaca, N.Y.: Cornell University, Rural Development Committee, November 1974). An ILO study notes that one of the major drags on development in the Philippines is the weakness of local institutions: "over-centralization of decision-making has, we believe, been a major constraint on sustained rural growth in the past." Sharing in Development: A Programme of Equity, Employment and Growth for the Philippines (Geneva: ILO, 1974), p. 66.

[3]For a concise statement of this position, see Philip Mawhood, "Decentralization for Development - A Lost Cause?" in Fred C. Bruhns et. al., Local Politics, Development, and Participation (Pittsburgh: University of Pittsburgh, 1974).

[4]The literature usually distinguishes between decentralization, devolution, and deconcentration. See Uphoff and Esman, pp. 75 - 81. An excellent historical study, S. Frederick Starr, Decentralization and Self-Government in Russia, 1830 -1870 (Princeton, 1972), uses "decentralization" to refer to ministerial decision-making and deals with localities by using the older term "self-government." Starr's study is a clear example of the light which historical inquiry can shed on rural development and local governance.

(3) A rural development strategy requires greater participation of its proposed beneficiaries. Although there are different kinds of "participation" and disagreement exists on the emphasis which should be given to them in development strategies, there is a growing awareness of the need for greater participation of rural people in the design and implementation of a viable rural development strategy.[5] A major reason is the high degree of voluntarism required to achieve change in rural areas.

(4) Hundreds of thousands of heads of farm households as well as those engaged in complementary economic activities outside of agriculture must make individual decisions consistent with both subsistence requirements and collective well-being. This requires a citizenry not only well informed about methods to increase individual welfare, but also it requires a citizenry capable of making decisions consistent with the welfare of larger collectivities. Eloquent and convincing arguments have been advanced that participation provides non-formal educational opportunities for citizens to discern their individual and collective responsibilities.[6] A potentially important participative institution is viable local government. The creation of more participative structures also enables large, previously excluded groups to benefit more equitably from the gains of economic growth.

Local Capabilities and the Measurement of Performance

To realize such potential and attain increased, effective local government involvement in a rural development strategy, attention needs to be directed to the improved management of resources, decentralization of decision-making, and broader participation, those main themes addressed in this paper. All of these are frequently assumed to be related to local performance or capabilities. Even though an increasing number of studies deal with these concerns individually, little empirical work has been done on their interrelationships.

---

[5] Cohen and Uphoff identify four kinds of participation: decision-making, implementation, benefits, and evaluation. See John M. Cohen and Norman T. Uphoff, Rural Development Participation: Concepts and Measures for Project Design, Implementation and Evaluation (Ithaca, N.Y.: Cornell University, Rural Development Committee, January 1977), pp. 27 - 83.

[6] Carole Pateman, Participation and Democratic Theory (London: Cambridge, 1970). Pateman reviews the writings of Rousseau, John Stuart Mill, and G.D.H. Cole.

A possible explanation for this is the paucity of attempts to measure local government performance in developing countries.[7] Until the capability of localities can be assessed with some accuracy, the testing of propositions relating to management, decentralization, and participation is not likely to be conclusive, because the most important policy concerns are tied to associations between performance (or capability) and these other concerns.[8]

For example, those designing and implementing a development strategy based on accelerated rural development through local institutions would find it helpful to have answers to the following questions:

(1) To what extent do different management improvement strategies contribute to increases in local output or performance?

(2) To what extent do more decentralized structures produce greater local output?

(3) To what extent does broader local participation promote or inhibit local productivity?

One might hypothesize that the degree to which local officials are management-oriented, the degree to which the locality is less constrained by central government direction and control, and the degree to which local inhabitants participate in local

---

[7]There have been a few attempts to assess the performance of organizations in developing countries, but these have been mostly qualitative, highly subjective, and not related to larger social issues. A notable exception is David K. Leonard, Reaching the Peasant Farmer: Organization Theory and Practice in Kenya (Chicago: University of Chicago Press, 1977) An attempt to assess the relative importance of local organizations as a channel for rural development in eighteen different settings appears in Uphoff and Esman, op. cit. But to my knowledge, there has been no attempt to assess the actual performance of localities in LDCs.

[8]The literature is replete with propositions assumed to be "facts" which can and should be examined empirically, such as the contentions by Kasfir: (1) "Participatory structures are weak partly because resources do not exist to make it possible for them to work." While we find most local organizations weak in financial resources, this does not mean they lack all resources; some of which are needed by the center, particularly information. The presence or potential availability of such resources makes local organization more viable than the cited pronouncement would allow. Further, (2) "Implementation of laws requiring even-handed application, such as the collection of taxes, would suffer if people were permitted to participate at that stage." This is contrary to fact; many Philippine municipalities which have been most successful in increasing real property tax collections have increased the involvement of barangay officials with municipal treasurers. The proposition itself is also contrary to that advanced by many experts in development finance, and it overlooks the possibility that greater participation may be required to guarantee equity. The statements are quoted from Nelson Kasfir, "Departicipation and Political Development in Black African Politics," Studies in Comparative International Development, 9:3, pp. 16 and 18.

programs and policies, all make a positive contribution to the level of local performance. However, answers to these and other propositions depend upon having some adequate measure or indicators of performance.

Although the measurement of organizational performance is not a new effort in the more developed countries, increasing attention has been given to performance measurement over the last two decades.[9] Evidence of this is the large number of economists and systems analysts who have been coopted into decision processes. Whether cost-benefit analysis, PERT/CPM, or a variety of other techniques are used, heavier demands are made for some quantification.

The increasing size of the public sector in all countries has also stimulated demands for more specific information on the use of funds and other resources. These demands have reached foreign assistance programs. These donor agencies are in a peculiarly exposed position, since they also face demands from their domestic constituencies for "measures" or assessments of effectiveness in aided programs and they are confronted with requests from foreign agencies interested in improving program performance.

The need for measures of performance is most acute when donor agencies and their foreign constituencies have to allocate their limited funds over a broad area geographically and programmatically. A major policy problem arises when attempts are made to assist local governments in developing countries. Potential recipients of central government aid number in the hundreds or even thousands, and decisions often have to be made to channel assistance to a few score of this number.

Obviously, any decision made concerning local government assistance will possess a substantial subjective political component, but some concern will also be present for allocating resources to optimize their effectiveness, efficiency, and equity. For this purpose, and regardless of whether there are measures or not, some judgments will be made about the relative capability of local units. How productive will it be to allocate resources to a particular local government? Further, what will be the corresponding effects for participation and equity?

---

[9] Among the earliest work on measuring municipal performance is that by Clarence E. Ridley and Herbert A. Simon, Measuring Municipal Activities (Chicago: International City Manager's Association, 1943). An example of more recent work is, Management Information Service, Measuring Effectiveness of Municipal Services (International City Management Association, August 1970). For discussions focused on productivity in LDCs, see Philippine Journal of Public Administration, 17:3, "Special Issue on Administrative Productivity," Norman T. Uphoff (ed.).

Formulating Useful Measures of Performance or Capability

At this point the decision process runs the risk of either joining a stampede toward the generation of huge and largely irrelevant masses of data for management information or shuffling along in the dull convicton that nothing can be relied upon more surely than intuition. The former has high pre-decision costs in wasted resources and delayed action, while the latter is likely to have high post-decision costs in wasted resources and unseen opportunities. The approach suggested in this report improves upon intuition or purely subjective reasoning, but at the same time avoids the high costs associated with conventional management information system approaches.

This methodological paper presents the possibility of improving decision-making processes by using a procedure designed to assess the "capabilities" of localities. This procedure has been successful in discriminating between "more capable" and "less capable" municipalities in the Philippines. The discussion, therefore, will be focused on the Philippines. While some different components of measurement would probably be selected in other countries, the discussion of procedures and approaches can be applied more broadly.

The procedures used offer a middle ground between quite "exact" economic measurements and crude measures of performance that identify a single measure with a single program output. The approach follows that proposed by Webb et. al. for the use of multiple measures in the social sciences.[10] Their argument, with which this analysis concurs, is that measurement in the social sciences is crude and inexact enough that multiple measures are needed to increase confidence in the results of <u>any</u> analysis.

In this paper, an index is constructed which appears to identify more capable and less capable localities in the Philippines with considerable confidence. The procedure used is a substantial improvement on the present, more subjective methods used to assess local performance in the Philippines.

Some results are also reported which demonstrate how the index can be used alone or in conjunction with other information to identify factors which contribute to high or low local performance. These results suggest that the procedures developed can be very useful to researchers and practitioners who desire an improved understanding of decentralization, citizen participation, and local level organization and management. As suggested above, these are matters of immediate concern to foreign donors and aid recipients as well as to academics.

---

[10] E. J. Webb et. al, <u>Unobtrusive Measures</u> (Chicago: Rand McNally, 1966)

This report closes with a discussion of how a management information and consultation (MIC) system might be developed around these measures. An effort is made to avoid problems previously encountered with management information systems by presenting an approach which begins small and is explicitly focused on performance evaluation. The proposal is also innovative in that procedures are suggested for increasing the involvement of local officials in policy processes through the use of such a system. The practicality of such an approach is suggested by the fact that some Philippine officials have already expressed interest in developing such a system there.

The main chapter of this report begins with a discussion of performance measures used and ends with a discussion of the derived "capability" index. A mathematical statement of the index and its derivation appears in Appendix I.

Chapter IV of this report briefly describes some "tests" of the validity and reliability of the capability index. A brief description of linear discriminant analysis, one of the methods of testing, is given in Appendix III.

Chapter V then explores some policy-relevant findings. Some of these argue strongly in favor of an improved system of managing and distributing certain kinds of information, if local government is to receive an appropriate policy emphasis.

The final chapter discusses the development of a management information and consultation system. Emphasis is placed upon providing policy-relevant information to local units in a non-threatening, non-coercive way. Consideration is given to how local officials might be more closely linked to national and provincial policy discussions.

Chapter III
DERIVATION OF A "CAPABILITY" INDEX

Most measures of performance, often called measures of efficiency and effectiveness (MOE), have attempted to find a single "best" measure for a single attribute.[1] For example, tons of waste collected per unit of expenditure is used as a measure of efficiency in waste collection. These kinds of measures are commonly used in program budgets and cost-benefit analyses. Such measures, if valid, permit an improvement in the allocation of resources among program categories, but do not provide sufficient guidance on where to make expenditures in the first place. This requires efforts beyond evaluation to policy analysis.[2]

Ideally, expenditures should be made where there is likely to be the greatest output per unit of expenditure over all program areas. This requires not only a weighting of different areas and categories, e.g. waste collection versus waste disposal, or even more complex apple-and-orange comparisons between waste disposal and educational skills training, but also some judgments about the capabilities of the organizations being allocated funds. Objectively speaking, it makes little sense to allocate funds to educational skills training if no technology exists for producing the desired results or if a given organization possesses too little capability to produce these results despite additional expenditures.[3]

Yet, even when political decision makers believe they are formulating policy on objective criteria, they frequently succumb to their hopes and fears. There are many reasons for this. Inadequate information is a contributor, but perceptual biases and social-psychological commitments are probably more important.[4] The analysis of these

---

[1] See Management Information Service, Measuring Effectiveness of Municipal Services, pp. 11-14.

[2] A good discussion of differences between evaluation and policy analysis appears in Kjeld Møller Pedersen, "A Proposed Model for Evaluation Studies," Administrative Science Quarterly, 22:2, (June 1977).

[3] This statement does not rule out the possibility of subjective strategies--expenditures on programs designed to make the decision-maker or public feel better.

[4] A useful discussion of perceptual conflict appears in Kenneth R. Hammond, "The Cognitive Conflict Paradigm" in Leon Rappoport and David A. Summers (eds.), Human Judgment and Social Interaction (New York: Holt Rinehart, 1973). A book suggesting ways to lower the level of psychosocial barriers in situations of conflict is Rensis and Jane Likert, New Ways of Managing Conflict (New York: McGraw-Hill, 1976).

psychosocial phenomena is beyond the scope of this paper. It is clear. as many studies suggest, that having an objective data base available neither guarantees that it will be used nor that subtle perceptual and psychosocial influences on policy will be greatly lessened. Nevertheless, the converse of this is not true, as critics of technical rational analysis often suppose; that is, the existence of irrational or nonrational impulses in policy making does not mean that objective criteria will be totally ignored. The use of objectively-derived measures or indices can at least serve as a check or constraint on the biases of those willing to consider them.

An interesting parallel exists between policy analysis and security analysis. The purchase of stocks and bonds on security markets is frequently dominated by the "psychology of the crowd." When individuals strongly believe that certain events will influence the prices of securities, bull and bear markets begin on the basis of these speculations. The fluctuations of security prices in these markets most frequently have little to do with the real value of assets on which the securities are based. The problem which confronts the analyst is whether to buy or sell at these times. It turns out that objectively speaking, the best policy is one of holding the securities one has and purchasing contrary to the market, i.e. when the market goes down buy and when it goes up sell. Unfortunately, especially for university trust funds in the 1960s, analysts have too frequently joined the crowd and gotten crushed in the stampede.

Over the last forty years a large body of literature on securities has produced dozens of indicators for measuring the real value of an asset. It turns out that analysts who use these procedures have been considerably more successful than those who play the market.[5] The reason for this appears to be not that these measures of value are exact but that they constrain the impulse to follow the crowd at the wrong time.[6]

Analogously, Irving Janis, an eminent social psychologist, has found that political decision making is frequently dominated by the prevailing attitudes of an in-group, a phenomenon which he calls "group-think."[7] His investigations of the Kennedy cabinet and other decision-making groups of various sizes led to a number of prescriptions most

---

[5]David Dreman, Contrarian Investment Strategy (New York: Random House, 1979), pp. 83-101; and Burton Malkiel, The Inflation Beater's Investment Guide (New York: W. W. Norton, 1980) pp. 161-164. Both books report findings of academic research in a highly readable way.

[6]Dreman, pp. 152-153, and also Benjamin Graham, The Intelligent Investor (New York: Harper and Row, 1973).

[7]Irving Janis, Victims of Groupthink (Boston: Houghton Mifflin, 1972).

of which can be briefly summarized as that of establishing procedures for seeking information external to or independent of the opinions of the group.

One way of looking at the capability index is that it is a procedure for appraising the capability of localities with information external to that of existing in-groups. It serves as a signal or warning when subjective appraisals may be far off the mark. (As pointed out earlier, the index also has uses in addition to those directly related to policy-making.)

The procedure for constructing a capability index suggested below (1) uses a number of performance measures (multiple indicators) and (2) screens out the effects of some variables which might influence performance but not be reflective of the actual capability of local institutions by introducing statistical controls. (3) It then weights these controlled performance measures which might be called "capability" measures, and then (4) aggregates these measures to produce an index number by which localities can be ranked according their relative capabilities. This index number, as mentioned above, can best be viewed as a composite estimate of "capability" not as an empirically exact measure of that variable.

The procedure may appear somewhat involved, but is actually fairly simple and avoids some problems of earlier approaches. A 1971 study of a number of countries, for example, attempted to measure community "activeness," which theoretically should be related to capability. Unfortunately, a number of the social and economic indicators used were strongly correlated with income and wealth.[8] Correlations of the dependent variable "activeness" were then calculated with a number of independent variables, including scales measuring different values, to determine factors underlying activeness. An unfortunate aspect of this work was that since activeness was defined by a set of variables which had strong correlations with income and wealth, those communities with greater wealth and incomes became by definition "active." Tautologically, the study findings suggested that activeness and wealth are strongly related.

Aside from the tautology, the use of a dependent variable measure strongly related to income and wealth is undesirable for several reasons. First, income and wealth may be the product of previous generations and, therefore, inadequately reflect current efforts and conditions. Accumulated wealth can generate high incomes for a substantial period of time. Second, and more important, if "activeness" is intended to describe the ability of a local organization or power structure to respond to new

---

[8] International Study of Values in Politics, Values and the Active Community (New York: Free Press, 1971).

conditions, which is an implicit definition throughout the 1971 study, then income and wealth, which implicitly became part of the definition of activeness, may in fact be the most important of all independent or causal variables. In short, by not controlling for income and wealth in the operational definition of "activeness," the study short-circuits its analysis, fixating on explanatory variables of inflated importance.

Third, by using measures closely related to conventional definitions of economic growth or development, the analysis gives heavy weight to only one kind of indicator.[9] While the study cited above may not explicitly have given such a one-dimensional meaning to activeness, it implicitly defines activeness on a narrow range of program areas and policy objectives. The capability of the local power structure to respond to change is more likely to be reflected across a number of dimensions, however.

The procedures suggested below are multi-dimensional. They permit a more accurate assessment of the importance of income and wealth-related variables; and they generally involve immediately accessible measures of policy output. The procedures have some limitations which will be pointed out below, but these do not seem to undermine critically the results.

Operationalizing Measures of Performance

Initially, choices had to be made about the selection of units of analysis, program areas to be included in the index, and measures of program outputs and policy objectives.

Unit of Analysis. The municipality, which was taken as the unit of analysis, is the basic unit of local government in the Philippines, and the primary unit to which most field personnel of national ministries are assigned. The smallest unit of government is the barangay (or village) but so far they have no real governmental functions. A municipality is composed of a number of barangay, and provinces are composed of a number of municipalities. Legally, provinces can exercise a degree of supervision over municipalities. However, political realities have, at least until recently, left many provincial governors politically weaker than some municipal mayors who were allies of powerful Congressmen prior to martial law. Twenty-three provinces,

---

[9]That is, one could suggest that there is an underlying economic development factor. Unless this factor is partialled out, measures of "activeness" will always be higher in the more economically developed communities. One might prefer to define "activeness" as related to high achievement within given resource constraints. Unless this definition is used, one could argue that "activeness" is uninteresting conceptually since those more developed communities are "active" by definition.

comprising about 57% of the population, were divided into two or more Congressional districts. Congressional influence and weak provincial institutions made many governors the odd-man-out in Philippine politics.

While legally and structurally Philippine government can be said to be four-tiered (the center, provinces, municipalities, and barangay), functionally it has been a two-tiered system (the center and municipalities). Chartered cities which have some urban characteristics are exceptions, combining the legal authority of provinces and municipalities. Again the relationship is clearly two-tiered—the center and chartered cities.

Evidence suggests that these relationships may be changing. A level of regional government is in nominal existence; though in reality, regional governing bodies have been formed only in the Islamic areas, which include less than 7.5 percent of the population of the Philippines. However, most ministries are assigning personnel to regional offices, and regionalization probably will continue. One indication is that members of the National Assembly were elected on a regional basis in 1978.

Most important for the changing pattern of national-subnational relationships was the elimination of Congress after the declaration of martial law on September 21, 1972. This had the effect of strengthening the position of many provincial governors by eliminating Congressional rivals. Provinces were frequently divided into two or more Congressional districts thereby weakening the authority of governors. The elimination of these Congressional brokers between the center and periphery has accordingly strengthened the power of some governors. At this time, one can see a potential five-tiered governmental structure including the center, regions, provinces, municipalities, and barangay. However, the stability or permanence of any of these structures is unclear. Whatever the future may hold, though, it is highly probable that municipalities will remain the basic intermediary between citizens and government.

Since most of these citizens, some 70 percent, live in rural areas, it is logical to give most attention to rural municipalities. Moreover, it is these areas which are the focus of change under both nationally and internationally-sponsored rural development efforts. The data reported in this paper or used in analyses are from 214 rural municipalities or a sampling of that number. These are divided among areas which are more supportive of the regime (the northern Philippines—Ilocos Norte, Ilocos Sur, and La Union), less supportive (the Visayas—Cebu and Bohol), and neutral (Central Luzon—Pampanga, Tarlac, and Nueva Ecija).

The selection of the Philippines as an appropriate setting in which to study central-local government relations, including the performance of localities, can be

justified on a number of grounds. The choice was due in part to the author's eight years of residence in the country and the close associations he had established with national ministries and local governments; however, more objective justifications also exist.

The structure of Philippine local government is typical of that of most local governments in the Third World. Philippine local governments have very limited formal authority and financial resources. The doctrine of residual powers is not accepted under Philippine laws of local government.[10] Therefore, authority is limited to only explicit legal grants. In addition, local governments rely heavily on various forms of national financial aid to the extent of 20-80 percent of their budgets, depending upon size, wealth, political connections, and how "aid" is defined.[11] Moreover, many of the activities normally considered "local" in developed countries are either handled by agents of national ministries or by officials who have undifferentitiated responsibilities to both national and local government.[12]

However, as in many developing countries, common agreement exists that it is difficult or impossible to achieve results at the local level without the support of the local chief executive called the mayor.[13] While the national government appears to have an overwhelming preponderance of resources, a local executive can mobilize some, if limited, local economic resources, and other resources are at his disposal. These give more de facto power than is formally stated.

---

[10]The legal and structural design of local government prior to martial law is succinctly covered in Raul P. De Guzman and Proserpina D. Tapales (eds.), Philippine Local Government (Manila: College of Public Administration, 1972).

[11]In this study, "aid" is defined to include all financial transfers from the center to local governments. This includes internal revenue allotments, rebated taxes on fuels, and discretionary grants. It does not include assistance provided outside the budget or by ministries to local governments. However, observations indicate that these other kinds of assistance are generally accompanied by increased discretionary budgetary aid.

[12]An example of this in the Philippines are municipal treasurers who draw half their salaries from the municipal government and half from the national. They are agents of the national government, but close relationships with the mayor are essential. Another example is the MLGCD locally-assigned Municipal Development Officer (MDO) who draws his salary from the ministry but relies on the municipality for office space and most supplies and equipment. In some municipalities, the MDO is locally provided with a travel allowance, representation allowance, and in certain cases may even find his salary supplemented.

[13]The importance of the mayor in the Philippines is still best identified in Mary R. Hollnsteiner, The Dynamics of Power in a Philippine Municipality (University of the Philippines: Community Development Research Council, 1963), pp. 164 - 178.

The mayor has high status in the community, both among residents and officials of national ministries assigned to the locality. He has opportunities to confirm or deny social status to others.[14] In addition, the mayor and his close associates also possess more information about the community than any other group of persons. He can transmit, deny, or purposely distort information to others, including national officials.

While mayors do possess limited force or coercion under the present governmental system, the option of its use is still open, particularly to the less scrupulous. Many mayors retain body guards and some control over local police forces.[15]

Mayors are also the primary local wielders of authority. In fact, no other figure in Philippine localities is as frequently identified as having a right to speak for the locality or as being responsible for the issuance of declarations of public policies.[16]

Clearly, despite the apparent lack of officially-sanctioned resources vis-a-vis the national government, localities in fact possess substantial resources of their own. When these are used by a mayor who has considerable entrepreneurial skills, the locality can wield substantial power over the implementation of policy; and when localities are united in opposition to any policy, the policy will be changed.[17] This situation is not

---

[14] This is best observed in the field. In one community, a group of citizens wanted to donate some equipment to the municipality. This would have raised the status of certain members of this group in the eyes of local residents. Since several of these persons were potential political rivals, the mayor declined to accept the donation arguing that the maintenance of the equipment would have been costly without providing a corresponding benefit to citizens.

[15] Scandalous operations of local police led to their nationalization two years after martial law. Mayors have continually tried to regain direct control over the police. At this time, local officials have "supervisory" responsibilities but no authority. However, as in many other matters in the Philippines, control over the police depends very largely on personal relationships. Many mayors still direct their policemen.

[16] See Hollnsteiner, op. cit, where empirical evidence is provided. The author tried a similar approach almost twenty years later in Cebuano municipalities and got exactly the same results. This discussion of resources available to mayors follows Hollnsteiner, op. cit., and Warren Ilchman and Norman Uphoff, The Political Economy of Change (University of California Press, 1969).

[17] This is true even under martial law. An example is the police integration mentioned in footnote 15. The national government has been receding on this policy decision over the last six years in the face of almost unanimous opposition of mayors. The mayors wish to continue national responsibilities for payment of the police and equipment purchased, but they wish to make decisions on assignments, promotions, and work schedules. Ironically, if they get what they want, they will be better off than before integration. They will make operating decisions with little financial responsibility!

unique to the Philippines, but appears to be true to some degree throughout the Third World.[18]

Also illuminated by the Philippine case is the fact that if local governments or officials possess power in the sense used above, it is primarily negative. Local resources are more frequently used to stop things from being done than to initiate higher-level policy discussions about what should be done. The fourth section of this report discusses how an information and consultation process might lead to a more positive and productive use of both local and national resources.

One characteristic of the Philippines which distinguishes it from many, but not all, Third World countries and which makes the setting an interesting one for the study of central-local relations is that since September 21, 1972, it has shifted from a liberal democratic political process to one labelled "constitutional authoritarianism."[19] At the same time, the Constitution of 1973 guarantees increased autonomy to local governments under its Article XI. While this raises a number of issues which cannot be handled in this brief report,[20] it is important to note that the change in constitutional settings has given an increased importance and urgency to performance at all levels. Claims to have outperformed past governments are conspicuous in the regime's efforts to establish its legitimacy. In this setting, relationships among performance, decentralization, participation, and management assume an urgency in policy discussions quite different from that in Western liberal democracies secure in their legitimacy. This situation in the Philippines is thereby representative of that often found elsewhere in the Third World.

Objects of Analysis. After it was decided that rural municipalities in the Philippines would be an appropriate unit of analysis, the following program areas were used to construct the capability index: (1) local finance; (2) local-level service delivery or administration; (3) local agricultural development; (4) local-level planning; and (5) local community interest articulation. The choice of these five program areas is justified below.

---

[18] A brief discussion appears in Ann Schulz, Local Politics and Nation-States (Santa Barbara, Cal.: Clio Books, 1979), pp. 45 - 55.

[19] Ferdinand E. Marcos, Notes on the New Society of the Philippines (Manila: Marcos Foundation, 1973), pp. 180 - 183.

[20] Among the more interesting is the extent to which central control and supervision can be used to build viable, more autonomous local governments.

These five program areas were examined across three policy objectives: (a) adequacy, which was viewed in terms of higher levels of output, assuming inadequate initial levels; (b) efficiency, which was viewed as the minimization of resources used per unit of output; and (c) equity, which was viewed as the provision of greater opportunities to those who have less.[21] The use of these criteria is also justified below.

The combination of program areas and policy objectives can be described in a 5 x 3 matrix such as that below:

FIGURE 1: The Performance Matrix

	Adequacy	Efficiency	Equity
Local Finance	a_{11}	a_{12}	a_{13}
Local Services	a_{21}	a_{22}	a_{23}
Local Agricultural Development	a_{31}	a_{32}	a_{33}
Local Planning	a_{41}	a_{42}	a_{43}
Local Articulation	a_{51}	a_{52}	a_{53}

There is the problem of selecting measures (or a's) for this matrix which adequately reflect program areas and policy objectives. For example, one would like to find a measure which accurately represents an adequate level of local finance (a_{11}), or an efficient delivery of local services (a_{22}), or an equitable degree of local agricultural development (a_{33}), and so forth.

The Justification of Measurement Criteria

The choice of program areas and policy objectives needs some justification. The choice of local-level finance appears self-evident, since the mobilization of financial and other resources has been a traditional function of government since time

[21] There is, of course, another important policy objective: the degree of control exerted across these policy areas by outside forces, particularly the regime. However, conceptually, we can conceive of the above mentioned set of policy areas and policy objectives as a set of performance dimensions, and low outside control across these program areas corresponds closely to what is conventionally called "local autonomy." Devolution then can be seen as a combination of local autonomy and capability measured on these performance dimensions and policy objectives; decentralization policies consist of attempts to accommodate local capability and control to other regime objectives.

immemorial, and it is used more often than any other single measure to represent local government capacity. Likewise, the case for local service delivery is clear; however, one might argue that this is a program area which should be further disaggregated. The level of disaggregation of program areas is limited by data availability. Service delivery could be further disaggregated into peace and order, health, education, and so forth; but as disaggregation proceeds the difficulty of finding suitable, independent measures is multiplied by a factor of three, as each new program area would need to be assessed in terms of the three policy objectives. There was no apparent need to construct a more detailed measure in this respect.

Local-level agricultural development could be considered as part of local service delivery. But it is singled out for closer examination for two reasons. The first is its importance to a primarily rural populace, and the second is the lack of attention generally given this as a local-level activity or function. It seems reasonable, in view of the importance of agriculture to the rural majority, to expect local governments to play a greater role in agricultural development.

Local level planning has also been little touched upon in the economic development literature which, with a few exceptions, deals with planning in either its national or regional aspects. The term planning, as used in this report, is closer to what Wilensky calls "organizational intelligence" than that of traditional socio-economic planning.[22] Of primary concern is the extent to which local government officials and residents can receive and process information relevant to the future growth and development of their community.

Local community interest articulation is considered an important program area since its participative and communicative aspects are considered important for their intrinsic worth as well as for their contribution to more satisfactory goal attainment. It will be argued below that certain aspects of "participation" are likely to be associated with more capable municipalities. There is some danger of tautology here, since articulation is a component of "capability" which will be associated with independent measures of participation. However, the measures of articulation used in the index are largely measures of the establishment of conditions for wider participation, while the independent measures of participation are measures of the outcomes of such conditions.

---

[22] Harold L. Wilensky, Organizational Intelligence (New York: Basic Books, 1967).

The three policy objectives dealt with here—adequacy, efficiency, and equity—appear in almost all speeches of Third World leaders. It is clear that a common goal of most of these countries is adequacy in the sense used above, the expansion of the output of goods and services up to some level of meeting all reasonable needs and demands. Less clear is the amount of attention being given to efficiency and equity. Nevertheless, each of these policy objectives recur continually in policy statements, so we can reasonably accept them as criteria.

In addition, important and influential discussions of organization theory have made distinctions between the level of program outputs (adequacy) and the efficiency with which these outputs are provided.[23] Over the last ten years, increasing attention has been given to equity as a policy objective, including the distributional impact of program outputs.[24] Therefore, the simultaneous consideration of the three policy objectives mentioned above can be justified by positive theory as well as normatively.

The Specification of Measures

After the brief justification of the choice of program areas and policy objectives, a specification of the actual measures (the a's in the above matrix) is required. It should be said that not all the cells in the matrix can be filled in a particular analysis or need to be filled. The measures reported and discussed below represent compromises between the ideal and what the author feels are the most reliable, cost-effective measures available. An assessment of the appropriateness of these measures is based upon the author's eight years of experience in the Philippines, previous research[25] and knowledge of data availability and reliability, including statistical consistency.

---

[23] Particularly noteworthy is Herbert A. Simon, Administrative Behavior (New York, 3rd. ed.: Free Press, 1976), chapter IX, pp. 172 - 197, which was first published in 1945. Parts of the discussion were developed earlier in Ridley and Simon, op. cit.

[24] See, for example, Albert Breton and Anthony Scott, The Economic Constitution of Federal States (Toronto: University of Toronto Press, 1978) who discuss federalism, one form of a decentralized political system, using a matrix format.

[25] The related research done previously by the author for the MLGCD: (1) A Tax Base Study of Selected Local Governments in Cebu (Manila: MLGCD, 1976); (2) A Survey of Citizen Attitudes Toward Revenues and Expenditures in Metropolitan Cebu (Manila: MLGCD, 1978); (3) In the Eyes of the Mayor: A Report on the Mayors of Pampanga (Manila: MLGCD, 1980); (4) In the Eyes of the Mayor: A Report on Interviews with Two Hundred Fourteen Philippine Mayors (Manila: MLGCD, 1980); and (5) Planning Capabilities and the Provincial Development Assistance Project (PDAP). The last was done jointly for the MLGCD and USAID in 1980.

The indicators used in this study and suggested as useful for other efforts to assess the performance of local government are listed below. In other situations, some of these may not be available or relevant, so other indicators would have to be developed or that cell left open. Nevertheless, the proposed matrix specifies relevant measures which, taken together, are a good representation of local performance for rural development. Similar data sets could be put together fairly easily in other countries, making any appropriate modifications. The dates in parentheses are the years for which the data were available in the Philippines as of 1978-1979.

Local Finance

Adequacy - local tax collections per capita (1976)
Efficiency - cost of local tax collection operations (1976), measured by the ratio of total local treasury expenditures divided by gross revenue and receipts
Equity - real property tax collections as a percentage of total collections (1976)

Local Services or Administration

Adequacy - local government economic development expenditures per capita (1976)
Efficiency - non-personnel expenditures of local government as a percentage of total expenditures (1976)
Equity - no measure readily available

Local Agricultural Development (Development of Samahang Nayon)

Adequacy - membership of Samahang Nayon (SN) divided by the number of farm heads of household (1978)
Efficiency - total SN financial collections per member (1974-1978)
Equity - no measure readily available

Local Level Planning

Adequacy - number of reported plans (Municipal Capital Improvement Plans, MCIP) (1974-1978)
Efficiency - ranking of plans on the degree to which planned municipal and other expenditures were designed to achieve greater potential output per peso.
Equity - percentage of planned municipal expenditures directed outside the poblacion (central area) to the surrounding more rural barangay (1974-1978)

Local Community Interest Articulation

Adequacy - the ranking of the level of barangay activities in the municipality by a panel of informants in each province (1978)
Efficiency - cost of municipal council operations (1972) divided by the cost of Sangguniang Bayan (SB)[26] operations (1976)
Equity - ratio of SB members from the barangay (hamlets) to those from the poblacion (municipality center).

---

[26] The Tagalog name given to the new, expanded membership municipal councils.

These measures are all consistent with the stated goals and objectives for central-local government relations in the New Society which are:

1. an increase in local tax collections and a gradual reduction of local government reliance on national government aids or transfers;

2. an increase in real property tax collections;

3. a reduction in the high administrative costs of tax collections;

4. a more equitable distribution of the local tax burden;

5. an increase of capital expenditures as well as those on social welfare;

6. a reduction of excessive government expenditures on personnel;

7. a higher provision of government services to those in most need;

8. the development of systematic plans for local expenditures;

9. the use of the Samahang Nayon as a means for mobilizing farmers as well as rural savings and investments;

10. an improvement of equity in rural areas;

11. the use of barangay to broaden participation (articulation) beyond that possible under the previous municipal councils;

12. a reduction of spending, which was excessive, on members of local councils.[27]

The President and members of his administration not only have claimed that these goals are consistent with local autonomy but also that they are essential parts of a process of building local capabilities which are required before any local government can exercise any significant degree of independence from the national government.

The emphasis in public statements of the Marcos administration is on the building of local capabilities and on the gradual withdrawal of central control. Elsewhere, however, the author argues that this is unlikely to occur. If the national government continues or intensifies its development efforts, it is more likely that both local capabilities and central control will grow simultaneously as the responsibilities of both

---

[27] These can be found in Presidential Decrees. A comprehensive collection of those related to local government is Antonio Orendain, Local Governments in A New Setting, 2 volumes (Manila: Alpha Omega, 1977). This collection is complete only through 1977. Later decrees were obtained from the Cacho Hermanos series distributed through National Bookstores in Manila.

central and local governments expand.[28] This is necessary to assure implementation of development programs. The measures suggested above are consistent with the twelve stated goals and objectives of the New Society, the building of local capabilities, and the simultaneous extension of both central and local influence patterns on each other and individual citizens. Justification and explanation of the specific measures is important, but need not intrude at this point. In Appendix I, the reader will find more detail on the specific measures used for assessing Philippines local capability. As stated before, a different set of measures could be used in other situations. But the matrix described above, or a close approximation of it, would constitute a framework for selecting any alternatives and fitting them into the overall index.

Combining Measures into a Composite Score of Performance

In the study from which the data in this report are taken, 214 municipalities in the eight provinces were measured on the thirteen "performance" indicators. Within the time and resource constraints of the study, it proved impossible to find suitable measures of equity in local administration and in SN development; therefore, only thirteen of the fifteen cells in the earlier matrix can be considered filled.

The thirteen crude performance scores were then regressed on variables which would influence performance, such as the level of economic development already attained and the resource base of the community. (These are reported in Appendix I.) Each of the actual performance measures was then divided by its predicted value derived from regression equation "predicted" value. This produced thirteen "capability" measures which are performance measures statistically controlled for variables considered extraneous to the actual capability of a locality.

For example, one variable which greatly affects the ratio of SN members to farm heads of household (a measure of adequacy in local agricultural development) is the percentage of landless tenants in a locality. This is because landless tenants, the prime targets of land reform, must be members of SN to acquire land under land reform. A measure of SN performance uncontrolled for this would give higher marks to localities in which it was easier for fieldworkers to recruit SN members. The statistically controlled capability measure permits a better assessment of this ratio measure by holding this land reform element, among others, constant across all municipalities.

---

[28] This is being examined at length in the author's study, Center, Bureaucracy, and Locality (in preparation). This point is succinctly made in Mawhood, op. cit.

In each of the eight provinces, municipalities were grouped as being either the upper or lower half on each of these thirteen controlled, capability measures. Scores of 1 were given to those in the upper half; 0 to those in the lower.

These thirteen scores were then weighted and summed, giving a single capability index. The weights used were derived from a quantitative content analysis of the public policy statements of President Marcos, a refinement of analysis fitting it to the stated policy objectives of the regime. (See Appendix II) The weights used for each program area were local finance .245, local administration .291, local level planning .127, local community articulation .301, and local agricultural development, represented by Samahang Nayon efforts, .036.

This method of weighting permitted the performance assessment to be made according to the expressed priorities of the government rather than solely that of the researcher. In situations where the empirical derivation of these weights is impractical or too costly, weights could be used which are considered to approximate those reflected in current legislation or policy discussions. Another approach is to use weights reflecting the normative concerns of those studying policies. If time and resources permit, it would be useful to study the effects of different weighting systems on the capability rankings. (This issue is discussed in more detail in Appendix II.) In general, results are refined by weightings, but are not terribly senstivie to the shadings introduced by different weightings.

Since this study used more than one measure in each of the program areas, the weights were equally divided within each of the program areas, e.g. each of the three policy objectives of local finance was given a weight of .082 (one-third of .245). This implies the equal weighting of adequacy, efficiency, and equity aspects within each of the program areas. This is not empirically grounded, but lacking any more convincing way of weighting these indices within program areas this approach is acceptable, avoiding any weights not based on some evidence.[29]

---

[29]The overall effect is to decrease somewhat the weight of adequacy and increase that of efficiency. That of equity is modestly increased. The weights of different sectors can be compared to that of the regime by comparing data from interviews and other sources. Sensitivity analysis could be done to study how changes in weights affect "capability" scores. (The procedure of classifying localities into high and low groups described below appears not to be particularly sensitive to modest changes in weights.)

The low weight for the Samahang Nayon is due to the fact that the weight has been reduced over time as local officials have, by letters of instruction, been excluded from formal participation in SN. (In some cases, this still continues informally.) The

The procedure used also implies that the highest score any municipality can obtain was 100 (the sum of all weights multiplied by 100) and the lowest is 0. In fact, the highest score actually obtained was 80.6, and the lowest was 12.6.

Municipalities within each province were then ranked according to their capability index scores. Those in the upper quartile were considered "more capable," and those in the lowest quartile were considered "less capable." The half in the middle were considered as "average." This procedure is justifiable on two grounds. First, there were fairly clear breaks in the distribution of the index scores in each province about these quartiles. Second, the suggested procedure guards against other procedures which may be even more arbitrary, such as selecting cut-off points, either intentionally or unintentionally, which systematically exclude certain localities from "high" or "low" rankings. The use of quartiles establishes a comparatively objective standard for identifying municipalities or localities as members of any of three categories--the more capable, the average, and the less capable.[30]

What is being measured by the capability index? Clearly, the index is not an evaluator of performance in any one program area or of performance across any single policy objective. It is a composite measure of the ability of a "locality" to produce a number of outputs which conform to specific program and policy objectives adjusted to screen out effects of wealth and other biasing variables. These objectives correspond

---

reason for these instructions was to protect the SN from manipulation by local elites. The level of SN development as well as their usefulness varies markedly from one locality to another. The author believes that many of the deficiencies of the program are associated with the attempt to spread one kind of organization nationwide without a careful consideration of specific local conditions. Nevertheless, it is felt that the "controlled" SN measures used in this study are valid ones of local rural mobilization. (See Appendix I.) However, a discussion of this matter may be more academic than policy relevant due to the low weight assigned to SN efforts in the aggregation procedure.

[30]The analysis below concentrates on the two extreme groups which should be particularly sensitive to changes in the independent variables. The use of quartiles is strongly recommended as is an increase in the number of indicators used for each program area and policy objective if analysis of each a in the matrix is of primary concern. The use of the fiftieth percentile as the cut-off point before summation of the a's during the construction of the capability index can be justified since it leads to a more even dispersion of scores. If quartiles would have been used, there would have been a heavy concentration of scores toward 0. This is undesirable if multivariate procedures, such as multiple regressions, are to be used on the scores. The procedure described seems to obtain the best results: a fairly clear break occurs at the upper and lower quartiles on the index scores, and the scores are suitably tractable to further multivariate analyses.

to the stated objectives of the regime but, as suggested above, they are also supported more broadly in the literature on evaluation.

The index is not a pure measure of the achievement of local government as a governmental unit. In the Philippines, as in many developing countries, functions which are frequently considered "local" are performed also or instead by national ministries. This means that some of the outputs measured are results of the combined efforts of national agents, local functionaries, and community leaders. Therefore, the capability measure cannot be interpreted as an evaluator solely of the performance of local government. Rather it is a measure of the extent to which high performance (or low performance) is more or less consistently attained in a specific locality, which is defined according to the boundaries of existing Philippine municipalities.

Indeed, one of the objectives of the study for which these measures were developed is to identify characteristics of the locality which lead to very high or very low capability. To study this, a number of governmental and non-governmental variables were analyzed with "capability" as a dependent variable. Consistent with the literature, we found that certain characteristics of the mayor appear to be influential, and some characteristics of the local government are also important.

It can be argued that the index broadly reflects capabilities beyond those actually measured across the selected program areas and policy objectives. Some empirical evidence of this is offered below. The theoretical justification for this assertion is that the array of measures is broad enough and the statistical controls used in developing these measures were adequate enough to produce an index which validly and reliably reflects "capabilities" not merely performance outputs.

What this implies predictively is that policy outputs for a given input of resources are likely to be greater in the high scoring rather than the low scoring localities. This is something which governments and agencies should be very interested in knowing. To the extent the index can be used for policy research which explains the differences in capability and points out measures that can be taken to increase capability, it offers remedial as well as allocative guidance.

Chapter IV
THE VALIDITY OF THE INDEX

Several methods were used to test the validity of the index. The author and a team of researchers selected one high performing and one low performing locality in each of eight provinces for visits. During these field trips of four to five days each, additional data were collected, field observations were made, and 150 barangay residents were interviewed in each of the municipalities. On the basis of these visits, it was possible to assess whether correctly matched pairs of high and low performers had been identified by the index in each province.

Later, to test and validate the contrast, linear discriminant analyses were done (see Appendix III) on the groups of high and low performers using sixty-two independent variables drawn from three sets of variables. These variables represented differences among the mayors who are the principal representatives of the local power structure, differences in the socio-economic structure of the communities, and differences in the political processes operating at the grassroots. The major objective of this effort was to identify independent variables affecting "capability." However, the results can also be used to judge the reliability of the capability index for the classifying of municipalities into "high" and "low" groups. If the linear discriminant analysis produces results which are plausible without resort to counter-intuitive reasoning, high internal consistency—one aspect of reliability—is suggested.[1]

It was later discovered to be possible to appraise the validity of the results through matching selected "high" and "low" municipalities with descriptions of them in published and unpublished reports. This was done with great care, since the reports usually covered time periods removed by three to five years from the data base used to develop the capability index. Nevertheless, quite diverse published sources gave results which confirmed the more rigorous analysis produced by the methods described here.

Attempts were made to assess the validity of the results by obtaining opinions on the index scores from informed persons. The results here were mixed. These efforts are reported below, followed by comments on what have been the observable consequences of using less valid methods of appraising performance in the Philippines.

---

[1]This, of course, is not an ideal procedure, but in the absence of external evidence it may be the only one available. A similar approach has been used to evaluate the results of content analysis. See Ole R. Holsti, Content Analysis for the Social Sciences and Humanities (Reading, Mass.: Addison-Wesley, 1969), pp. 142ff.

In the first approach mentioned, where the author and a team of researchers visited eight matched pairs of municipalities in the provinces, the pairs were not selected randomly, but efforts were made to find pairs which were roughly similar ecologically. All pairs were (a) geographically contiguous, (b) rural rather than urban or satellites of more urban places, and (c) roughly similar in population and land area. These criteria were necessary for the studies to be undertaken in the municipalities during the visit,[2] but these were not necessary for judging the validity of the capability index. The restrictions on choosing the pairs visited are pointed out here to emphasize the fact that a perfectly random procedure was not used, but the procedure is quite adequate for checking the validity of categorization into two groups.

If a random selection procedure had been used, or if the above procedure is viewed as an acceptable approximation, the probability of correctly identifying eight matched pairs, one pair—high and low—in each of the eight provinces, would be only .011.[3] That is, the likelihood that all eight pairs would be correctly identified in the eight provinces by chance alone is only about one in one hundred.

The author and his research assistants during field trips observed marked differences in the predicted direction between the high and low performers in all eight pairs visited. The fact that field observations confirmed the statistical findings suggests that the index is valid, since the identification of eight correctly matched pairs on the basis of the index is most unlikely to have occurred by chance alone.

Moreover, the data collected in the field suggest that "capability" is being broadly measured and represented by the index. That is, the more capable municipalities tended to be more capable in many ways beyond the performance measures used in constructing the index. Some evidence of this is offered in the four tables below.

Table 1 shows that in six of the cases, crimes against property were more prevalent in the low performers. In most cases, the differences were markedly in favor of the high performers.

---

[2] Interviews were done with barangay residents, so it was necessary that municipalities with roughly similar characteristics be selected if the respondents in paired municipalities were to be comparable.

[3] Assuming that randomness is approximated and the pairs independent, this probability is obtained by partitioning the set of all possible pairs into those of high-high and low-low. One less the sum of these probabilities will give the probability of finding a suitably matched (high-low) pair in each province. This figure for each of the provinces multiplied together gives the probability of identifying eight pairs (high-low) to be approximately .011. For a discussion of partitioning, see Frederick Mosteller and Robert Rourke, Sturdy Statistics (Reading, Mass.: Addison-Wesley, 1973), pp. 12 -15.

TABLE 1: Crimes Against Property Per Thousand of Inhabitants (1978)

Pair	High Performer[4]	Low Performer
1	0	19
2	2	29
3	50	29
4	20	48
5	3	13
6	1	2
7	3	2
8	0	4

Source: Local Police Blotters

Table 2 shows that in all but one case the low performers had higher levels of first degree malnutrition or could not produce data which were supposed to have been collected during the year.

---

[4]The figure for the high performer in the third pair is due to unusual circumstances. The public market of this municipality is on the national road which is the only route north and south. Two times a week, the market is exceptionally congested, since it is the major terminal for the garlic trade in the Philippines. During these periods, traffic accidents frequently occur, and this greatly inflates the number of crimes against property recorded on the local police blotter.

The municipality has requested the Ministry of Public Highways, without success so far, to build a diversion road. However, the municipality has taken the initiative by having plans drawn for the road, and these are prominently mentioned in its comprehensive development plan. (This municipality is one of the few in the nation to have drawn up a development plan.)

TABLE 2: Percentages of First Degree Malnutrition Among Groups of Children Sampled in 1978

Pair	High Performer	Low Performer
1	70	72
2	41	no data
3	58	67
4	68	no data
5	no data	62
6	61	66
7	56	59
8	75	no data

Source: Rural Health Units, Operation Timbang

Table 3 also shows that low performers had either higher child mortality rates or no data could be produced.

TABLE 3: Mortality Rates Per Thousand of Children Six Years of Age and Under (1978)

Pair	High Performer	Low Performer
1	62	77
2	no data	no data
3	65	91
4	94	no data
5	no data	no data
6	15	53
7	16	19
8	59	64

Source: Rural Health Units

Table 4 concerning family planning acceptance shows in each case the "high" performers were higher or the "low" performer could not produce adequate data.

TABLE 4: Family Planning Acceptors As A Percentage of Eligible Recipients (1978)

Pair	High Performer[5]	Low Performer
1	24	no data
2	21	no data
3	100	74
4	37	no data
5	65	64
6	45	39
7	46	no data
8	29	29

Source: Records of Local Population Commission Representative

More important than these numerical results is the general evidence that "high" localities out-perform the "low." This evidence is configurative rather than statistical. Part of the evidence is that the low municipalities simply could not produce requested data even if the keeping of that data was mandated by law (mortality rates), required by domestic and international funding sources (family planning data), or demanded by important political figures such as the First Lady (malnutrition data). Other evidence, not reported here due to lack of space, is the field observations of the author and his research assistants; one set of examples was given in Chapter I.

These observations considered the degree to which mayors were actively engaged in work activities, the knowledge of local and national field personnel of conditions in the municipality, the number and quality of projects which could be seen inside and

[5]The figure of 100 percent for the high performer in the third pair is not a doctored statistic. The municipalities in the third pair were contiguous and on the national highway. The rural health unit in the low locality was so poorly run that residents of that municipality went to the unit in the "high" locality to obtain birth control information and devices. This traffic is so large that it continuously puts this unit over 100 percent acceptors. In 1976, this rural health unit was awarded a trophy for being the most outstanding unit in the region.

outside the poblacion, the general attitude of respondents—both officials and citizens—and so forth. It might seem difficult for four or five persons to reach agreement on the level of community performance, but the differences were so marked that agreement was usually reached after two or three days. In fact, it is the marked observable differences we found which initially convinced the author that the statistically derived capability index produced valid results.

As stated earlier, a linear discriminant analysis was done on the two groups of municipalities. The independent variables selected through the discriminant analysis turned out to be an internally consistent set. That is, nonsensical relationships such as high wealth being associated with low land concentration, a low knowledge of national government programs or policies being associated with high "national orientation," and so forth do not emerge from the statistical analysis. (The results appear in Appendix III.) This is not strong evidence for the validity of the capability index classification, since the "evidence" is statistically generated on the cases under analysis. However, it does demonstrate that internally consistent results were generated by the classification on a large and varied number of potential discriminators.[6]

After the classification of municipalities into high or low groups, it was possible to compare the results with descriptions of twelve municipalities in written sources. This was done very cautiously, since with a few exceptions the descriptions of municipalities were three to five years behind the data base used to construct the capability index. Also, the heterogeneity of the sources—mimeoed reports, newspapers, and published materials—required a cautious approach.[7] In addition, many descriptions focused on only one program or only one of the program areas used in constructing the capability index. Nevertheless, it was possible with a high degree of confidence to

---

[6]Sixty-two independent variables were used in the discriminant analysis. The analysis was done twice, once on the entire set of variables. During the second run, insignificant variables were removed from the analysis. This did not appreciably lower the canonical correlation, and it increased the loadings or weights of the more significant variables. The final canonical correlation was .683, and the classification table showed that 79 percent of the localities were correctly classified on the weighted independent variables.

[7]The author had access to some USAID reports and some reports of the Philippine Rural Reconstruction Movement (PRRM). He also had access to narrative reports submitted by MLGCD fieldworkers. Two newspapers were surveyed: the Daily Express and the Bulletin Today. The latter has a regular section on agriculture and provincial affairs. Eight of the municipalities which could be unambiguously classified as "high" or "low" were in Central Luzon, relatively close to Manila.

place twelve municipalities in either the "high" or "low" categories. According to written accounts, ten of these twelve were judged to belong in the same category using either the capability index or the independent written evaluation. The possibility that such an outcome could have occurred by chance alone is small (p .032).[8] This finding again suggests rather high validity of the capability index.

Biases in Impressionistic Evaluations of Performance

Discussion of the respective municipalities with knowledgable informants produced no consistent results. It was possible to question specific informants about specific localities. While these assessments and the index results tended to agree, major disagreements appeared in overall rankings. For reasons discussed below, the informants' views do not appear to allow for differences in the resource levels of communities and thus do not appear to be as valid as the index.

As a test, senior staff members of the Ministry of Local Government and Community Development (MLGCD) provincial offices were asked to rank the performance of municipalities in their own provinces. These rankings of the staff members were then averaged to give a ranking which could be compared with those produced for each province by the capability index. Results reported below are from one of the eight provinces in which interviews were done. The results are essentially the same in the other seven provinces.

Forty-one municipalities in this province were rank-ordered from highest to lowest on the capability index and the MLGCD assessments. The Spearman's correlation was only .39 ($p < .05$) which indicates a non-chance but modest association between the two rankings.

When the MLGCD assessments were correlated with a ranking of the municipalities on their gross revenue and receipts (municipal income), on the other hand, the correlation was .65 ($p < .001$) which indicates a strong non-chance and substantial association between the two rankings. In short, the MLGCD ranking was more strongly related to municipal income which in turn is related to individual incomes and wealth. On the other hand, the correlation between the capability index ranking and that on municipal gross revenue and receipts was only -.03, which could have easily occurred by chance and implies no association between the two rankings.

---

[8] This figure comes from a straightforward application of the binominal theorem. The classifications were judged as either right (the same) or wrong (different). The probability is $\frac{12!}{10!2!} (.50)^{10} (.50)^{2}$ which equals .032.

These findings indicate:

(1) The procedures used in constructing the capability index, particularly the use of multiple regressions for "control," successfully screened out the influence of municipal income, which is strongly correlated with wealth and personal income.

(2) The subjective rankings of MLGCD personnel are systematically related to municipal income levels and, consequently, to personal incomes and wealth. This implies that any government decision to allocate resources based upon MLGCD evaluations of local performance would tend to be systematically biased in favor of wealthier localities.

(3) A substantial portion of the difference between the capability index ranking and the MLGCD ranking is due to the heavy weight given in the latter to municipal income or implicitly to wealth and personal income.

(4) In almost one-third of the cases, the differences between the capability index ranking and the MLGCD ranking were twenty or more ranks apart in the upper and lower quintiles. Such large differences occurred in fewer than one-tenth of the cases in the two middle quintiles. This shows extreme divergence in the two systems of ranking, not just minor differences.

These results, while not finally demonstrating the validity of the index, show that at least one important source of bias is controlled by its use. They also show that the two rankings tended to differ most strongly in the upper and lower quintiles, which are likely to be the ranges of greatest policy interest. A policy of central-local cooperation to encourage and maintain better performance is most likely to concentrate on the upper quintile. A "compensatory" policy or one oriented to strengthening central supervision is most likely to place an emphasis on the lower quintile.

Unfortunately, since MLGCD assessments of municipal performance are presently based upon subjective appraisals conveyed in provincial narrative reports, they are subject to biases similar to those in the "experimental" card rankings. In fact, the procedures now used in constructing the provincial reports consist of informal, implicit rankings by the same staffs which did the card rankings.

Since the present MLGCD reporting system is likely to produce results similar to those in the experimental design, the ability of the Ministry to assess existing local capabilities accurately must be questioned. The last chapter of this report will deal with this problem in some detail, and certain procedures will be suggested to improve information flows. This problem, of course, is not unique to the Philippines, and the suggestions in the final chapter should have some relevance to other countries.

Meanwhile, a look at what the consequences of distorted information flows have been in the Philippines demonstrates why systematic evaluation is necessary. Several specific examples will suffice.

In 1973 - 1974, a Presidential Decree was discussed and issued which mandated local governments to set aside 20 percent of their internal revenue allotment, which they received annually from the central government, for a separate fund called the local development fund. This fund was to be expended only for developmental purposes, and development projects were to be planned annually by each municipality. The intent of the decree was that this would lead to an increased allocation of municipal funds to economically viable development projects which would stimulate rural development and improve equity.

The research which the author has undertaken indicates that only an average of 16 percent of planned municipal expenditures are targeted outside the poblacion, i.e., in the barangay areas. This concentration of expenditures within the poblacion works against equity. Moreover, even the criterion of economic viability is not often met for the projects undertaken.

Municipal development plans frequently list large, conspicuous, centrally located projects of little economic or social value. Examples are $100,000 cultural centers, new or renovated municipal buildings,[9] flashy public markets, reconstruction and beautification of town plazas, sports centers, and so forth. Despite numerous speeches and urgings by the President, this situation continued over a four-year period.[10]

When mayors were asked why this happened, their answer was that they tended to be evaluated both by their constituents and national officials on what could be seen in the problacion. ("The poblacion is the show place of the municipality," said one mayor.) While it is unlikely that all their constituents evaluated them this way, the data indicate that the mayors' explanation of government evaluation is valid. In most cases when national officials were questioned about positive accomplishments of particular municipalities, they tended to mention highly visible projects in the poblacion.

---

[9] A ban was issued on the use of these funds for municipal buildings, but this has been circumvented by attaching acceptable construction projects to municipal buildings. (Sakit in the earlier narrative is a case in point.) In a number of cases, the ban has simply been ignored.

[10] Most recently, the regime itself has begun to abuse these funds by requiring municipalities to use some of the fund for locally implemented but nationally organized training of barangay residents.

Communal irrigation projects among others were overlooked at the provincial and regional levels. In Ilocos Norte, for example, not one national agent identified a recently completed communal irrigation project as a noteworthy accomplishment of a particular municipality in question. Field investigations revealed that the mayor of this municipality not only had supervised the planning and construction of the project (when I met him he was wading in mud up to his ankles—the visit was unannounced) but he had applied for and received support from a Dutch agency for the improvement and extension of the project even before it was completed.

In another example in Cebu, farmers had constructed and built with modest assistance from the mayor (less than 2,000 pesos) a communal system which irrigated sixteen hectares. The local MLGCD fieldworker had never visited the site of the project. These are just two examples of small projects which are not officially noticed; many more examples of such "invisible" development exist, passed over by current subjective assessments. Even if the objective index is not designed to include such development in its calculation, we found that our set of measures correlated in fact with such initiative as reflecting a generalized local capacity.

Clearly, both evaluation procedures and thinking about performance have to be changed. One approach to this problem is a systemization of evaluation procedures and constant exposure to the idea that thinking small is thinking big.

Before discussing how an improved evaluation procedure could be instituted and how this could be tied to broadening participation in policy decisions, the next section will discuss briefly how the capability index can be used to analyze some issues related to performance. These are important because of their direct policy implications as well as the linkages which can be shown to exist between practical and theoretical concerns.

Chapter V
DECENTRALIZATION, PARTICIPATION, AND PERFORMANCE

In this chapter, diagnostic uses of the index are emphasized. The index can be used along with other evidence to gain an understanding of influences affecting local performance, the nature of central-local government relations, and the extent of local level participation. The findings presented here are illustrative; they do not by any means exhaust the ways in which the index might be used in policy research. The last chapter of this report deals with use of the performance index for training and communication.

Capability, Management, and the Paradox of Performance

The technical aspects of linear discriminant analysis have been discussed more fully in Appendix III. The aspects of the procedure most relevant to the results reported here are that it selects a number of variables from a larger set in such a way that the differences between two groups, "high" and "low" localities, are maximized. During the process of selection, those variables which are significantly related to the differences between the two groups are weighted so that those most strongly associated with the differences between the two groups receive greater weights.

The 22 variables selected from among the sixty-three originally used in the analysis are described in Appendix II. This discussion will focus on the implications of the findings rather than on technical aspects. Among the more interesting results are:

(1) Despite the statistical efforts to "control," to separate the capability measures from the total size of municipal budgets and other income and wealth-related variables, noted in the previous chapter, personal wealth appears to be importantly associated with high capability. The highly capable municipalities have a higher proportion of dwelling units of heavy construction and the ownership of land is more concentrated. However, the highly capable municipalities also possess poorer land—the value of agricultural output per hectare is lower. This suggests that these localities have substantial off-farm employment, and this is supported by differences between group means and field observations. Much of this employment is generated in handicrafts and in seasonal activities such as carpentry.

One of the more remarkable aspects of these high municipalities is that despite the higher concentration of landownership, field observations suggest that wealth appears not to be highly concentrated. This is due to lower population growth rates,

reflecting less pressure on land and the tendency for surplus labor to migrate, and also to the availability of off-farm employment opportunities. It also may be due to income remittances from provincial centers, Manila, and abroad, which appear to be substantial.

These municipalities are clearly not mere appendages to high economic growth areas. This is reflected partially by the relatively low population growth rates and also by the fact that many are geographically isolated from the main national roads. In short, it seems that despite a narrow economic base, the people of these localities have been very active in generating economic opportunities for themselves.

The results suggest that variables related to wealth are important but very imperfect indicators of "activeness" and "capability". More necessary from a policy perspective is a better understanding of the processes or behaviors which generate greater income and wealth as well as the relationships between these factors and capability. Although the analytical procedures suggested in this report cannot provide this understanding, they can be used to pinpoint localities for further in-depth investigations. Economic anthropology and local history could be helpful at this point once "deviant cases" have been identified.

(2) Although it receives a small weight in the discriminant analysis, it is important to note, in view of the heavy emphasis on local organization in the rural development literature, that the number of community organizations which seek to be consulted on local decisions is greater in the high performing localities than the low. In fact, the mean in high localities is 3.4, and in the low only 2.7.

Mayors in high capability localities are likely to perceive more intense socio-economic cleavages in their community. However, neither this nor indicators of political fragmentation or group activeness proved to be good discriminators. One should not conclude that high performance localities are more politically competitive than are low ones. There is evidence that mayors in higher performance municipalities <u>perceive</u> themselves as functioning in more competitive environments, but further data analysis is required to study the degree of actual or perceived competitiveness.

Field observations suggest that the <u>structure</u> of competition or conflict may be as important or even more important than its <u>degree</u>. For example, three active community organizations existed in one of the Boholano municipalities chosen for field observation. One organization was rabidly anti-mayor, the second was as vigorously pro-mayor, and the third was church-related and supportive of a young, social-activist priest. This third group served as a social balancer through which members of the other

two groups made contact concerning social and civic projects. The existence of this group made it possible for a very able and active mayor to obtain wide-spread community support for his projects and programs despite the underlying polarized and familial nature of conflict in the community.

These results suggest that rural organization is associated with high capability. That the statistical association is not great, however, suggests that its influence is felt in conjunction with other clusters of variables, or is more a matter of qualitative relations (e.g. configurations or coalitions) than pure quantitave differences.

(3) The discriminant analysis results indicate that mayors in high performing municipalities tend to come from relatively advantaged backgrounds compared to mayors in the low municipalities. They are less likely to be from families of farmers, fishermen, or vendors; and they have significantly higher levels of education. Their average level is a bachelor's degree with some post-graduate work, while that of the low group is less than that of a B.A.

The high group mayors, however, are less likely to reside in the poblacion (or center) of the municipality which suggests that, they are not so frequently members of traditional local elites. Nevertheless, they have developed a place for themselves in the local power structure, since they are considered among the more influential mayors in their respective provinces. Their influence appears to be both an effect and cause of performance.

(4) The mayors in high performing localities appear to be intensely "development oriented" or, perhaps they may be described more precisely as "management oriented." That is, they are intense believers in building effective local organizations by emphasizing program implementation and management.

When asked what aspect of the mayor's job they liked best, sixty percent of them mentioned—in response to an open-ended question—implementation and management. Furthermore, although other answers did not appear significant in the discriminant analysis, the group means show that these high performance mayors were less likely to value involvement in social-civic affairs and were more likely to mention the implementation of agricultural improvements as gratifying than did the "low" group.

When asked what strategies a mayor could employ to obtain greater resources for municipal programs and projects, the mayors in high performance communities were much more likely, by almost a two-to-one margin, to mention an intensification of local tax collections. They were also less likely than mayors in low capability municipalities to mention self-help projects. It should be said that neither group of mayors showed a

strong commitment on a value scale to citizen participation.[1] (No differences existed between the two groups on this scale.)

The mayors in high localities tended to score higher than the other groups on a scale measuring commitment to "honesty" in public affairs.[2] However, when asked what are the most important qualities for a mayor to possess, they were much less likely to mention honesty. These results suggest that mayors in the high localities are more likely to assign greater absolute weight to honesty than mayors in the other group, but honesty is somewhat lower than other values in their value hierarchy.

Clearly, the mayors in the highly capable municipalities are more management-oriented. They also possess some of the same characteristics which would be expected of technocrats. This surely eases interactions with national officials, and it is a substantial base of their own influence within provinces. Moreover, one can predict that as the national regime becomes increasingly performance- and administrative-oriented, the potential influence of these local officials will continue to increase. This prediction, however is contingent upon how national and local officials work out important conflicts between national and local interests.

(5) One of the more remarkable results of the analysis is that despite the management or technocratic-orientation noted above, the mayors in highly capable localities tended to be very localistic in their orientation. In the discriminant analysis, one of the greatest weights was given to an observed negative relationship between high performance and national orientation on the part of mayors. In other words, on a scale measuring national orientation versus localism, the mayors in high performing localities tended to be "localistic."[3]

Despite their higher educations, the discriminant analysis also shows that the "high" group of mayors possessed less knowledge about national government programs and policies related to local governments than the other group of mayors. Group means also show that the "low" municipalities, rather than the "high" ones, tended to obtain greater financial aid from the national government.

---

[1]The scale used was based upon that of the International Study of Values in Politics, pp. 74 - 75.

[2]See International Study of Values in Politics, pp. 77 - 78.

[3]The scale is again a modified version of one used in the International Study of Values in Politics, pp. 76 - 77.

These results suggest what may be called a Paradox of Performance. It is the more localistically-oriented mayors who are likely to produce results consistent with nationally-articulated policy objectives.[4]

A considerable body of literature has argued for the need to obtain greater homogeneity of political beliefs and behavior in developing countries.[5] The results here suggest that such a policy could be self-defeating, however. Higher local capability is associated with mayors who are both localistic and management-oriented. Some literature argues either explicitly or by implication that localism is inconsistent with a technocratic or management orientation.[6] The data collected for this study indicate that high capability exists precisely in those localities where the mayor has successfully bridged the gap between localism and technocracy.

In summary, the above results suggest that localities with greater personal wealth and income tend to be more "capable". However, the association between wealth and local capability is much less than officials tend to believe. Wealth and capability are generated by dynamic processes within and outside specific localities.

The emphasis on rural organization in current rural development literature is supported by the discriminant analysis. However, the results suggest that the impact of organization is felt mostly in relation to a cluster of other variables. Additional analyses could be done with the data collected for this study and additional data could

---

[4] Joel Samoff, Tanzania: Local Politics and the Structure of Power (Madison: University of Wisconsin, 1974), p. 172, notes a similar paradox which he calls the Paradox of Local Leadership. Louise Fortmann, Peasants, Officials and Participation in Rural Tanzania (Ithaca, N.Y.: Cornell University, Rural Development Committee, 1980), p. 46, also notes the possibility of such a paradox. However, neither author presents any quantitative evidence of its existence.

An article by William G. Ouchi, "Coupled Versus Uncoupled Control in Organizational Hierarchies," in Marshall W. Meyer et. al, Environments and Organizations (San Francisco: Jossey-Bass, 1978) provides quantitative evidence of such a paradox in an organizational setting. He also suggests an explanation: Hierarchies can control the output of organizations with which they are "coupled"; however, they cannot control the behavior used to obtain that output.

[5] Perhaps, the best known example is Samuel P. Huntington, Political Order in Changing Societies (New Haven, Conn.: Yale, 1968). This literature is critiqued with references in Donal Cruise O'Brien, "Modernization, Order, and the Erosion of a Democratic Ideal," Journal of Development Studies, 1:4.

[6] See Raul P. de Guzman and Ma. Aurora A. Carbonell, Development-Orientedness of Filipino Administrators (NSDB-UP Integrated Research Program, Quezon City: University of the Philippines, 1976), pp. 13 - 14.

be collected in other studies to examine carefully the nature of these clusters. Several leads can be suggested. First, the interactions between local organizations and mayors who are both localistic and management-oriented requires closer scrutiny. Second, relationships between personal wealth, community resources, and the apportionment of the costs of organization as well as benefits is an area requiring further research.

The socio-economic background of mayors in highly capable municipalities raises interesting issues. Some literature attempts to categorize Philippine mayors either as "professionals", defined to be "new men" who operate within a "populist" framework, or as "traditionalists", those operating within a less mobile local elite structure.[7] Populism is often seen as a bridge between traditional and modern political systems. However, how should the mayors in high performing or highly capable localities be described? They share characteristics of both populists and traditionalists: they come from more advantaged families but not necessarily from the traditional local elite; they frequently do not reside in the poblacion; they are not extremely wealthy but they are well educated; and they are localistic in their thinking, but they do not place populist values over those of performance. Possibly, it is this incongruity of values and the emphasis on performance and collective well-being which represents a viable path toward a less traditionalistic political system rather than "populism"? These are issues requiring further empirical and speculative inquiry.

The finding that mayors in more capable municipalities are management-oriented raises some important issues. Did these officials bring this orientation to the job or are there community factors which influence their thinking and behavior? A clearer understanding of how management-oriented mayors obtained office in the Philippines is required. Also, why does there appear to be such a strong relationship between education and management-orientation? Another study will examine the relationships of these mayors with the martial law administration of the New Society; however, further studies are required on political recruitment at the local level.

The Paradox of Performance noted last among the findings raises the most profound issues concerning decentralization. It suggests the importance of operating in a more decentralized or less authoritarian and controlled pattern if high performance is to be attained locally. The association usually assumed to exist between management-orientation and national-orientation does not hold empirically. A local executive can be

---

[7]Kit G. Machado, "Changing Patterns of Leadership Recruitment and the Emergence of the Professional Politician in Philippine Local Politics," Philippine Journal of Public Administration, (April 1972).

both localistic and management-oriented. In fact, the findings strongly suggest that the most successful mayors are.

Local Capability and Support for the Regime

It is essential to know to what extent "capability" or local performance is an important political factor in and of itself. More bluntly, is high capability or performance good politics? On a number of occasions, President Marcos has maintained that high local performance is not only crucial for development but for the stability of his regime.

In fact, the data show that the vote for the regime's official candidates during the National Assembly elections in April, 1978, was higher in the "high" municipalities than in the low.[8] This, in fact, is a reversal of previous voting experience, since the "low" performance municipalities tended to give President Marcos higher votes in the 1965 and 1969 Presidential elections. This does suggest that local capability has had some impact on support for the regime under the New Society.

While the high localities are providing a more favorable vote for the regime, the mean difference between the two groups is small, only one percent. That the previous pattern of voting is reversed, as noted in the previous paragraph, is more significant than the absolute turnovers involved. This suggests that performance is a factor, but not the most significant one in generating support for or opposition to the regime.

There does appear to be some significant spillover from local performance to the appraisal by opinion leaders and citizens of national government performance. This would probably be even stronger if the bureaucracy were more successful in channeling resources in response to local needs. The tendency to design countrywide programs

---

[8]The voting statistic used here was the sum of all votes for official party (KBL) candidates divided by the product of the total number of persons 18 years of age and older times the number of KBL candidates. This gives the average percentage vote for KBL candidates. The major advantage of this measure is that any substantial number of persons failing to register and vote is captured in the statistic. Although the election was managed to some extent, this statistic should still give evidence of support for the regime. For the use of a similar measure see Jerome M. Gilison, "Soviet Elections As a Measure of Dissent," American Political Science Review, 62:3. The author's observations in the provinces suggest that the election was much less managed than many commentators in Manila or abroad reported. There was little need; most rural residents approved of "stability." Voting also followed well established historical patterns: Ilocanos backed an Ilocano president, Visayans dissented, and Central Luzon was contested. In the latter area, vote fraud was most extensive, but this is also nothing new in Philippine politics.

emphasizing a standard set of services or projects works against the satisfaction of specific local needs.[9]

In short, President Marcos' belief that local performance affects attitudes toward the national government receives some support from the data. If these statements are presumed to represent a normative judgment of the way a political system should work, the regime should move away from centrally-dictated programs toward ones designed to meet specific local demands. Evidence exists that the regime is trying to do this.[10]

Considerable literature emphasizes the importance of patron-client ties in Philippine politics.[11] It is commonly suggested that central-local linkages are maintained via resource transfers from the center to the periphery.[12] It is important to reemphasize, however, that the highly capable municipalities tended to receive less financial assistance per capita from the national government than the low performing municipalities. (The average for such financial assistance was higher for the latter group than for the former.) This suggests the potential importance of capability in generating electoral support for the regime.[13] Greater regime support in high

---

[9]The author's 1978 survey of citizen attitudes toward expenditures, op. cit., shows diverse preferences among citizens in different Cebuano municipalities for certain public goods and services. Preferences were municipality-specific: citizens in a given locality tended to have a homogeneous preference but these varied between localities.

[10]Regionalization is one example. Another is that the President has generally backed away from the harsh posture toward mayors taken by the regime from about August 1973 through December 1975.

[11]The literature is large and unanimous on this point. An interesting article is Thomas C. Nowak and Kay A. Snyder, "Clientilist Politics in the Philippines: Integration or Instability," American Political Science Review, (September 1974); however, this article uses census data on Philippine cities. The authors did not do extensive interviews with local officials.

[12]Nowak and Snyder, op. cit. Also Thomas C. Nowak, "The Philippines before Martial Law: A Study in Politics and Administration," American Political Science Review, (June 1977).

[13]This also suggests that providing what economists call "collective goods" is good politics. Some political bosses noticed this at the turn of the century in the United States. Municipal reform and efficiency were not opposed by all bosses. See Martin J. Schiesl, The Politics of Efficiency: Municipal Administration and Reform in America, 1800 -1920 (Berkeley: University of California, 1977). A major effort by those working in the theory of political and economic development should be devoted to elaborating and describing the conditions under which the provision of col-lective goods becomes "good politics." Thoughts on this appear in C.L.G. Bell, "The Political Framework," in Hollis Chenery et. al., Redistribution With Growth (London: Oxford, 1974).

performing municipalities was generally not accompanied by higher direct financial transfers from the center.

Participation and Performance

We are concerned here also with any connection between participation and capability. Some of the literature in political science has argued that substantial trade-offs exist between participation and political development.[14] Further, we find writing in both political science and administration theory which has suggested that substantial trade-offs exist between performance, or organizational effectiveness, and participation.[15]

Cohen and Uphoff note that the concept of "participation" has not been well-defined and that four kinds of participation should be distinguished: participation in benefits; participation in implementation; participation in decision-making; and participation in evaluation.[16] An attempt was made by the author and his assistants to assess how participation in each of these aspects was associated with capability.

In order to do this, questionnaires were administered to 150 barangay residents in each of the sixteen municipalities which were visited during field trips. The questionnaires were translated into the major languages of the area and administered by research assistants who were native speakers of the primary language of the area and who also possessed facility in any secondary languages.

An attempt was made to approximate a random sample by using several stratification procedures. A sample of fifty persons was taken from three barangays within each municipality. These were selected such that one was within the poblacion (center), one ten minutes away by the most frequently used means of travel, and one

---

[14] See Huntington, op. cit; also Samuel P. Huntington and Joan Nelson, No Easy Choice (Cambridge, Mass.: Harvard, 1976) which updates earlier work. Kasfir, op. cit., calls for "departicipation" in the Third World.

[15] A review of work in the 1950s and early 1960s appears in James L. Price, Organizational Effectiveness: An Inventory of Propositions (Homewood, Ill.: Irwin, 1968). Later work is briefly reviewed and a "contingency approach" to organization is discussed in Jay W. Lorsch and John J. Morse, Organizations and Their Members (New York: Harper and Row, 1974). Harry Eckstein and Ted R. Gurr, Patterns of Authority (New York: John Wiley, 1975), pp. 462 - 463, argue for controlled political participation from a contingency viewpoint; they use the term "congruence".

[16] Cohen and Uphoff, pp. 30 - 58.

twenty minutes away. This assured representation of degrees of remoteness from the poblacion.[17]

Within the barangay, the interviewers were instructed to visit every nth house—where n was the approximate number of houses divided by the required fifty respondents. If a respondent were not present, interviewers were instructed to visit the adjacent dwelling.

Quotas were then set requiring the interviewers to interview 25 males and 25 females in each barangay. These procedures permit analyses of the data on the distance factor and the involvement of women in rural development.

Of most immediate interest are associations between kinds of participation and capability. The results below are based upon preliminary analysis of the data. Because of the small number of municipalities involved in the analysis—eight each in the "high" and "low" categories—the results are suggestive rather than statistically significant. (Later analysis could increase the N to forty-eight or twenty-four matched pairs by doing the analysis by barangay.) When relevant, the results are reported for aggregate comparisons of respondents in "high" and "low" municipalities in the same province.

Participation in benefits might be viewed as a rather rudimentary kind of participation, since benefits of some programs can be obtained with little if any real involvement. The capability index itself should be systematically related to benefits, and it was shown above that high scores on the index appear to be associated with a broader range of program outputs than those explicitly reflected in the index.

It should not be suprising, therefore, that capability and participation in benefits are related. What is somewhat surprising is the strength of the relationships between capability and some imperfect indicators of participation in benefits. For example, seven of the eight matched pairs indicated that farmers in "high" municipalities saw agricultural extension agents more often than those in "low" municipalities. (The Eta squared was .25.)[18] But, this is only a measure of program input. How about output?

---

[17] Later analysis will be done on the structure of participation in municipalities. An important variable is distance. Does participation monotonically increase or decrease with distance? Or does a U-shaped pattern exist? Preliminary analysis suggests a U-shaped pattern. One possible explanation is that poblacions tend to dominate barangays unless the latter are some distance from the poblacions.

[18] Eta-squared in a multivariate measure of variance which can be given an interpretation similar to that of a coefficient of determination. In this case, 25 percent of the variance can be "explained" by the locality in which a respondent was interviewed.

Five of the eight matched pairs showed that more farmers in high localities than low perceived gains in agricultural productivity over the last three years. This is not a strong confirmation of increases in productivity in the high municipalities, but two of the three deviant cases can be explained by special circumstances. In one case, damaging typhoons over the last two years had done considerable injury to crops and the irrigation system. In another case, a flood damaged the harvest prior to interviews. The other municipalities were exposed to more favorable climatic conditions. These two indices suggest that participation in benefits and capability are associated.

Participation in implementation is an objective of many national agencies in developing countries. Frequently, the rationale behind this objective is ambiguous: Does it indicate centralized manipulation or is it evidence of a concern to build broader local-based involvement in government programs and policies? Often participation in implementation is simply manipulative, focused on extracting resources from rural people to implement programs or policies decided upon in metropoles. To be sure, it should be recognized that there is the potential for broader based involvement even in situations which initially appear manipulative. Lower level participants, for example, can occasionally exert some leverage by threatening to deny or withdraw resources.[19]

Two approximate indicators of participation are the number of projects which respondents in the high and low municipalities could identify and the percentage of respondents who said they gave help on the projects which they mentioned. No differences existed between the aggregates on these indicators nor did matched pairs show any differences; in four cases the paired comparisons were in favor of the high localities, in the other cases they were not. One might have expected more projects to be identified within the "low" municipalities, since they received greater financial aid from the national government. These results suggest either no differences between the two groups of municipalities or differences in favor of the high group in view of its relatively lower access to outside resources.

Participation in decision-making probably fits most closely to what has become the common meaning of the term in political discourse. Rough indicators of participation in decision-making are the frequency of village (barangay) meetings attended and whether respondents identified themselves as having been involved in discussions of projects. In six of the eight pairs, the respondents in high municipalities identified themselves as attending more barangay meetings. (The Eta squared was a

---

[19] Examples appear in Fortmann, pp. 85 - 93

substantial .28.) In four out of six pairs, the "high" respondents identified themselves as being involved in discussions of projects more frequently than low respondents. (The other two pairs were tied.)

It is difficult to judge the importance which one might attach to these findings as signifying greater participation in decision-making, since the quality of the discussion is not measured. Field observations, however, did suggest that the discussion of projects in the high groups involved more persons and the respondents were more likely to give unsolicited but specific comments about what they had said during meetings.

Furthermore, respondents in five of the eight high groups were more likely to be able to identify members of the municipal council (Sangguniang bayan) than respondents in the low. The evidence suggests that participation in decision-making is certainly not lower in the highly capable municipalities than in the less capable ones; in fact, some evidence suggests that participation is greater.

Cohen and Uphoff point out that an ignored aspect of "participation" is participation in evaluation.[20] The barangay interviews done by the author attempted to assess the extent to which local residents were involved in eval-uation by asking them whether their opinions were sought on the outcome of a project. As Cohen and Uphoff note, consultation or opinion seeking is only one aspect of evaluation. Others equally important include setting criteria for evaluation: deciding what will be evaluated, when, and by whom. Nevertheless, the seeking of citizen opinions on outcomes of a project or program is a necessary requirement for participation in evaluation. It is improbable that citizens otherwise could be considered "participants."

After respondents mentioned projects undertaken in their barangay or municipality during the last year, they were asked whether their opinions had been sought on the value of the project. It turned out that respondents in low municipalities said their opinions were sought more frequently than those in high municipalities. The paired comparisons showed that this was true in six of the eight pairs of municipalities. The Eta-squared, though significant, was very small (.08), indicating little real difference among the groups of respondents. The grouped means showed only six percent of the respondents in low municipalities reporting that their opinions were sought, compared with four percent in high municipalities. These findings show small differences. The conclusion has to be that evaluative comments are not widely solicited regardless of whether the locality is more capable or less capable.

---

[20] Cohen and Uphoff, pp. 55 - 56.

The reasons for this, however, may be different between the two groups of localities. In the less capable municipalities, this appeared to result from the lack of any meaningful consultative process whatsoever. In the highly capable municipalities, the inattention to evaluative consultation appeared to be reflective of attempts to avoid discussion of issues once they were resolved, at least in the opinion of community leaders. Field observations and discussions suggested that mayors and other community leaders in this group of municipalities were strongly future-oriented. One mayor expressed himself this way:

> If I worried too much about opinions of projects completed, I would never have any new ones. Everyone has a different opinion at the end than at the beginning. Most expect more than can be delivered.
>
> You know how we provincianos (rural people) are. If we worried too much about last year's typhoons, we wouldn't plant and harvest anything this year. Better to discuss what needs to be done; and then everyone will participate.

This attitude which might be called the Pandora's Box Syndrome appears to be antithetical to learning from experience, but it probably reflects the fact that neither processes nor structures have been developed to obtain appraisals of programs or projects without diverting attention from present needs or without opening up factional differences of interest and opinion. To the extent "evaluations" are seen as reopening debate on old issues, they are much less likely to be seen as relevant to present problems.

In conclusion, the data collected suggest that there are no significant trade-offs between capability (or performance) and participation. In fact, the findings are consistent with positive associations between them, with the possible exception of participation in evaluation. Additional analysis can be done on such data to explore in more detail these relationships and others of interest.

For example, since the discriminant analysis indicates that mayors in both groups of municipalities are not participation-oriented, an interesting question is who are facilitators of participation? A review of data from interviews with locally assigned personnel of national ministries and field observations suggests that important contributions are made by MLGCD development officers and agricultural extension agents. Such a finding would require more documentatiion before being established, especially in view of the last decade of heavy criticism of traditional community development approaches such as those used in the Philippines. But the finding may be

correct, and it suggests the importance of combining qualitative interviewing with more standard survey techniques.

The next chapter briefly discusses the development of an information system which can be used as a base for such studies. Consultation processes for the improvement of local government performance are also suggested which can be stimulated and supported by such a data base.

Chapter VI
DEVELOPMENT OF A MANAGEMENT INFORMATION AND CONSULTATION (MIC) SYSTEM

The previous chapters directed attention to the allocative, evaluative, and diagnostic applications of the capability index. This chapter will touch on training and communication functions. While logically separable from the other three concerns, the relevance of the index to training and communication improvement is closely related to them. Ideally, there is a connection among these areas of concern: allocation leads to evaluation, to diagnosis, which in turn leads to training and communication improvement, and then back to allocation.

Since such is a chain has many possible weak links, it is worth returning to some of the observations on biases in allocation and evaluation noted in Chapters I, II, and III before proceeding to a discussion of management information systems. Of particular interest are the ways which such a system can be used to understand, control, and correct for these biases.

Below are some observations on the causes of biases within MLGCD operations. The potential contribution of the index to alleviating problems caused by these biases is only briefly discussed, as elaboration would lead to a substantial case analysis beyond the scope of this report. These observations, while limited to Philippine material, also apply to bureaucracies in other countries.

These observations are followed by a sketch of alternative organizational schemes for a management information and consultation (MIC) approach to local capacity development. This chapter offers a brief discussion of the personnel and financial requirements of such a system, and concludes with some thoughts on costs for a system.

Existing Organizational Weaknesses and Evaluative Capacity

Discussions in the earlier chapters suggested that severe constraints are placed on the Philippine government in assessing local government policies and local strategies for program implementation due to an underdeveloped information procesing capacity within the MLGCD. This point must not be overemphasized, since the regime obtains information on localities from numerous sources. Nevertheless, the constrained evaluative capability of the MLGCD, the key ministry for any decentralization or local development strategy, must give some cause for concern.

Field observations identified the following to be partially responsible for the failure to develop a stronger evaluative capacity within field offices of the Ministry:

(A) Most of the personnel have been neither trained in nor exposed to evaluative reasoning in either on-the-job or external training programs.

(B) The Ministry has neither suggested nor developed adequate, systematic procedures which field offices can use in performance evaluations or assessments of their own offices as well as localities.

(C) Despite their relatively small size, field offices—with the exception of those at the municipal level—are excessively compartmentalized. Specialists in various program areas are rarely encouraged to meet to discuss evaluations of localities.

(D) The high cost of transportation has brought about increased travel restrictions which further limit the possibility of field officers obtaining a "first hand" view of the situation.

(E) Like those of all people, the reports of MLGCD officers may be influenced by personal interest or political biases which are difficult to identify. Indeed, these biases are often subconscious rather than calculated; in other cases, signals from the central office and the regime may encourage fieldworkers to distort information in certain ways. Under the New Society, the heavy emphasis on quick results on a broad front has inhibited the development of reliable communications from the field. The New Society, of course, is not unique in this respect; however, this problem is one needing greater attention in public policy-making in the Philippines. Since President Marcos has expressed concern about distorted information flows, one can expect that this problem will receive greater attention in the future.

A management information and consultation (MIC) system, described in this chapter, can by using the capability index or some similar measures be helpful in overcoming some of the above deficiencies. Such a system would, however, find the problems mentioned in (A) - (D) more tractable to solutions than those mentioned in (E).

(A) Training and Evaluation. Unlike many Third World countries, the Philippines has been fortunate in recruiting educated and, with few exceptions, highly motivated persons as local government officers. Higher education is more extensive in the Philippines than almost any other country at a comparable level of economic development. Unfortunately, as in many Third World countries, the Philippines field experience is not adequately supported by professional development and morale boosting activities.

While all will agree that the training efforts of the Ministry have been substantial, most of this training has been directed to conveying specific program requirements and compliance standards. Little has been done to provide general training beyond the initial pre-service training program.

With few exceptions, fieldworkers have had little exposure to evaluative reasoning in their university training or MLGCD experiences. (A few are trained in the sciences; most are graduates in the liberal arts, education, and law.) Inadequate exposure to a "scientific" and systematic body of knowledge has had the unfortunate consequence of lowering the status of local development officers in the eyes of fieldworkers from other ministries; and, more importantly, it has lowered their effectiveness in the communities to which they are assigned. Coupled with the lack of opportunities for the development of professional skills and a sense of professionalism, a decline in morale is understandable.

A substantial body of literature in field administration has argued the case for "generalists" versus "specialists" as fieldworkers. However, this dichotomy is as dangerous as the one drawn between national-oriented and local-oriented mayors. (Recall that it was earlier reported that the "local" as opposed to the "cosmopolitan" mayors were more likely to achieve results consistent with national objectives.) Both dichotomies draw attention away from real problems to artificial categories. We noted earlier that local-orientation appears to combine with management-orientedness to produce high performance. Similarly, observations of community development workers in the Philippines suggest that it is the generalist workers possessing special skills appropriate to a specific locality who gain rapid community acceptance.

A management information system based on the capability index can make several contributions in this situation. Weaknesses in local performance can be pinpointed, and fieldworkers can be assigned to counteract these weaknesses. This boosts the morale of the worker, since his professional expertise is acknowledged. And as important, his entrance into the community may be eased by the contribution which he can make to problem-solving.

More important, perhaps, would be the use of the index to match training with needs. This can be done several ways. Holding formal training sessions in specific policy areas is one; another is the development of training modules which can be sent out to staff in places indicated by analysis.

In addition, the index itself presents a framework which, with appropriate simplifications and explanations, can be used to expose field personnel to systematic evaluation procedures. After the explanation of the system and the distribution of capability index scores, comments could be obtained from the field. This would be a useful and necessary learning experience for both field personnel and those operating the information system.

(B) Procedural Improvements and Evaluation. The information which provincial MLGCD offices obtain from the field is of two types. The first consists of a small amount of quantitative data such as the number of members in Samahong Nayon (SN), the collection of various SN funds, and so forth. The second consists of monthly and other periodic narrative reports from fieldworkers. Provincial and higher-level reports are based on these data.

An examination of the narrative reports in eight provinces revealed that the information contained in them was virtually worthless in appraising the state of MLGCD and municipal activities within the provinces. A major difficulty was that these reports follow no standard format. Activities which were reported as beginning in one month were not reported on in subsequent months. Suddenly, the activity would resurface in another monthly report! Apparently, rather than reporting systematically on all relevant aspects of the locality, fieldworkers tend to write about what appears to be the "hot" item for that month.

As fieldworkers become acquainted with the capability index, its format could serve as a useful model for structuring narrative reports. In addition, the emphasis which the MIC system, described below, places on analysis (or diagnosis) might encourage improvement in the quality of these reports. The fact that fieldworkers will know the capability scores—which give a relative ranking to their municipalities, within the province and compared with municipalities in neighboring provinces—should provide a framework for encouraging improvement which is presently lacking.

Among the quantitative data which the municipalities produce for provincial offices only those on SN activities were used in constructing the capability index.[1] (Others were not consistently reported, e.g. those on community development activities.) The procedure used by the MLGCD is to have the raw data sent to Manila where aggregated analyses are done to establish the program's status provincially, regionally, and nationally. These reports consist largely of frequency counts.

An unfortunate aspect of this exercise is that no attempt is made to control for factors which might influence performance measures. In this situation, provinces with large numbers of land reform recipients, who are required to join SN, consistently outperform those in a different situation. One provincial supervisor, called a Provincial Development Officer (PDO), claimed that the SN efforts made in his province were

[1] SN activities were used as measures of adequacy and efficiency in local agricultural development. (See Appendix I)

consistently underrated, since two fishing municipalities were dragging down his provincial averages. This, of course, is a situation which the capability index is designed to avoid. Making the appropriate corrections will give better incentives, neither discouraging some nor supporting complacency in others.

(C) Specialization and Evaluation. Despite the emphasis of the MLGCD on "generalist" training for its fieldworkers, the operation of some provincial and most regional offices appears to be overly compartmentalized. It would detract from the central concerns here to spend much time discussing organizational structures and recommended changes; however, it is relevant to note that such structures encourage substantial cross specialization communication difficulties. This occurs despite the small size of some provincial offices. (Some have as few as five technical staffers.)

While personal antagonisms appear somewhat rarer than in many bureaucracies and informal communications are open, substantive discussions among staff on work-related activities appear to be infrequent. The situation frequently appears to be one of "You stay off my turf and I'll stay off yours."

The information system set up with the capability index would require provincial staffs to react to judgments of "overall" as well as "sectoral" performance. This should encourage substantive discussions across specialties. While this opens new opportunities, it may also lead to some individual and organizational adjustment problems. For this reason, it is suggested that reactions of users of the MIC system be monitored to discover whether anticipated results are being produced and adjustment problems are being properly handled.

(D) Budget Constraints and Evaluation. Any organization faces budget constraints while trying to achieve stated objectives; however, these constraints are particularly severe in developing countries. In the case of the MLGCD, for example, its responsibilities have continually expanded, but its budget has grown only about 80 percent as fast as the rate of inflation. This has meant a considerable decline in real resources devoted to its tasks.

In addition to this problem, the government of the Philippines has had to tighten travel budgets of all ministries. Not only have there been budget cuts, but the government has even limited the absolute amounts of gasoline which can be purchased. The impact of the last restriction has caused extremely difficult problems for ministries like the MLGCD which have highly dispersed spatial responsibilities.

All interviewed fieldworkers complained of increasing travel restrictions and their inability to make on-site inspections. However, the most frequently suggested solution,

increasing travel allowances, was highly unrealistic due to severe domestic and international economic pressures. Moreover, most field supervisors indicated that prior to tight travel restrictions they followed a practice of random surprise visits to project sites, a procedure which is likely to have had small benefits relative to costs in resources and time in any event. (However, it is not surprising that such a procedure was followed in view of the inadequacies of the reporting system noted earlier.)

An information system based on the capability index might be helpful in two ways. First, problem areas could be more easily and accurately identified and travel planned within budget constraints. Second, localities and program areas could be identified for attention in a nonrandom way, leading to larger benefits for any given expenditure.

(E) Personal Bias and Evaluation. The control of personal bias and preferences is a difficult problem for any management information system. Once this problem is confronted, one begins dealing with profound psychosocial and political phenomena. Most management information approaches are built upon assumptions of rationality in policy-making, even though in fact one often encounters definite nonrational elements in policy design and implementation. It would not be too far off the mark to suggest that most management information systems have produced little information and less management, since a proper balance was never struck between the rational and nonrational elements which enter policy.

This, of course, is not a problem which can be easily resolved. However, an increasing body of literature suggests that this problem is much less severe when an information system deals with issues of common concern. Earlier chapters suggested that there appears to be a community of interest for improving local government performance in the Philippines. In countries where this common concern does not exist, the direct policy impact of an information system built around a capability index is likely to be limited. However, even in such countries, construction of indices is likely to have some indirect impact through the improved diagnosis of policy problems.

A second area of concern deals with man as a proactice rather than a less complex reactive organism. That is, if persons realize that they are being evaluated on the basis of certain criteria, they will not simply react to that evaluation. Two other kinds of responses are possible. First, attempts can be made to submit fudged data which will improve their evaluation rating. Second, a "displacement" effect can occur. By attempting to "score" high, individuals can begin to take the indicators as the ends of policy without paying attention to achieving the "real" performance which the indicators were designed to measure.

The interference caused by fudged data can be limited by using data, similar to those suggested in this report, which are difficult to manipulate. The best "protected" scores are those which are figured independently or outside the community. Also, if the index is constructed on a computer, the computer can be easily programmed to flag any data which seem spurious.

Displacement can be controlled by monitoring the effects of the system in the field. For this reason, attention should not be focused solely on low performers, but high performers should also be monitored. Also, the closer the indicators are associated with real performance and the more difficult it is to manipulate the measures rather than achieving real objectives, the less likely displacement is to occur. This is the reason why a continual search for improved measures should be an integral part of any system attempting to construct performance indicators.

After this rather lengthy digression on illustrative uses of the system, it is time to describe the MIC approach more fully.

Characteristic Management Information Approaches and MIC

The proposal outlined here differs from usual management information approaches in three important respects. First, the system proposed is highly focused. Much earlier work on management information systems has suffered from attempts to collect very large data sets which require heavy resource outlays and substantial coordination and cooperation among bureaucratic agencies, despite their many conflicting goals and intermediate objectives. The result has been the collection of great amounts of data at high cost with little direct policy relevance. In general, these systems are unable to digest the information collected. As Simon points out, a useful management information system must digest and report less data than it collects; otherwise it merely contributes to information overload.[2] The capability index is one procedure for reducing a set of data to a more manageable and usable form.

Second, the procedures suggested below are less top-down than those usually prevailing in information systems. They recognize, and try to institutionalize, two-way communication processes which produce management information in a non-threatening way. The procedures are focused on providing information relevant to both lower and higher level participants and organizations. The provision of such information should improve both the frequency and quality of communication between these levels.

---

[2]Herbert Simon, The New Science of Management Decision (Prentice Hall, 1977).

Third, like most management information systems, it requires the establishment of a new unit which handles and processes data; however, unlike most management information systems, the focus of this unit is not only on data acquisition and dissemination but also on data reduction and on policy research of direct relevance to central-local government relations.

Most often, management information systems are viewed as useful tools for centralizing administrators. This ignores the fact that organizations have tended not to decentralize functions until top-level administrators are assured of frequent and reliable information on lower-level performance.[3] One of the great constraints to achieving greater decentralization and local self-government in developing countries appears to be the scarcity of reliable and valid information about localities, including their performance. Under these conditions a regime is likely to retain and exercise options to intervene in local affairs. Ironically, the exercising of these options under these conditions (lack of local-level information) is likely to be capricious and to lead to counterproductive results. Nevertheless, in the absence of better information, there are no other procedures to protect the interests of larger collectivities in the face of local opposition.

The argument that management information systems are centralizing in their effect often assumes that higher- and lower-level interests are necessarily conflicting. This may or may not be the case. In the preceding chapter, for example, it was noted that the Paradox of Performance in the Philippines suggests that local-oriented initiatives are more likely to achieve results consistent with centrally-stated objectives and that central actions inconsistent with local needs are likely to bring about low performance. The results also showed that the national regime has a clear stake in high local performance. Information on performance, therefore, is relevant to both local and national leadership, and need not be threatening to either. It could lead to more open and relevant bargaining about local and regime interests.

The Management Information and Consultation (MIC) System

The system proposed here, called a management information and consultation (MIC) system, is initially focused on arriving at capability index scores for rural

---

[3] See, for example, the case descriptions by George A. Smith, Jr., Managing Geographically Decentralized Companies (Boston: Harvard, 1958); and Bernard H. Baum, Decentralization of Authority in a Bureaucracy (Englewood Cliffs: Prentice-Hall, 1961).

municipalities. (The Philippines is used as a point of reference.) This differs from traditional management information systems in that the use of these index scores gives the regime the capacity to select individuals for involvement in policy discussions on the basis of objective criteria. Also, the fact that such an index exists encourages greater two-way communications between the regime and local officials by providing an objective indicator of areas requiring greater attention. To the extent that communications have been impeded by biased and self-seeking information flows or merely misperception, such a system may be helpful in resolving some issues relevant to policy.

While on the surface such a system appears threatening to at least one-fourth of the local officials, those whose municipalities fall in the lower quartile, in practice the degree of threat can be lessened by the way in which the government uses the system. A punitive approach—"throwing the rascals out"—would have great risks. Besides the obvious political risks, it has been pointed out earlier that the index measures performance of localities, not municipal governments. Low performance can exist for a number of reasons, including some completely beyond the control of mayors or locally-assigned fieldworkers of national agencies. Therefore, low performance implies that an assessment is needed of the situation in any given locality, not necessarily that blame in each specific case rests with any given person.

Use of the index must combine diagnosis with evaluation. The level of potential threat is lowered if the regime and those operating the system demonstrate a concern to help find solutions to community problems. The provision of tangible assistance would in most cases be favorably received. In situations where the locality is completely unresponsive and both evaluation and diagnosis support the need for change, a strong case can be made for removing individual officials, but this can be done on objective grounds which considerably lessens the fear of capricious government action.

Basing a management information system designed to encourage greater central-local consultation and cooperation on the capability index scores is partially justified by the high validity and reliability of the index exhibited in Chapter II of this paper. Moreover, the preceding chapter illustrates that these scores can be used in a variety of policy researches for both diagnosis and evaluation.

It should be emphasized that the index scores provide a focus for the collection and processing of data which is missing in most management information systems. The 13 indicators can be improved upon and added to as time, resources, and circumstances permit. Different measures or indicators might be used in other countries, but the framework proposed offers a structure for index construction of broad validity.

The data requirements for beginning such a system are not only focused but they are relatively modest. The need for intrabureaucratic cooperation is minimal, and as such a system is successful it could be slowly expanded. (It could also be dropped if not helpful in the circumstances with relatively little loss, since the initial fixed investment is small.)

The initial focus of research utilizing the system could be on improving the assignment of capability index scores. This could be done in a number of ways, the most important of which includes improving the component indicators and increasing their number in a way which yields more valid and reliable indicators across each program area and each policy objective. (The best components of the index will be different in different countries.) A program based on policy analysis utilizing this index would enable policymakers and researchers to understand better why localities perform well in certain program areas and not others, e.g. local finance versus local agricultural development, or on certain policy objectives rather than others, e.g. adequacy versus equity.

One use of such a system is to calculate and make known the index scores. These could be reported in a way such that localities are compared with their neighbors allowing for differences in base resource level. This exerts pressure on lagging localities to improve their performance in a less threatening way than would direct sanctions from the center or an intermediate (provincial or regional) level of government.

The modest costs associated with the initial implementation of the system are partially due to the fact that the data, the 12 - 15 indicators used in building the capability index, are generally available and easily calculable from existing government sources. (A range of costs is given for "minimalist" and "maximalist" strategies at the end of this chapter.) This eases data collection problems and leaves time and resources available for work on index refinement and consideration of what other data could be kept on computer files along with the index data.

It is important enough to reemphasize at this point that a management information system will surely fail if an early attempt is made to make it comprehensive. Such a system can only be constructed over time as its potential usefulness becomes appreciated. Another requirement is that procedures be developed for processing the data in a way which "reduces" it to a form meaningful to national and local policymakers.

Mere duplication by computers of files of data collected by other agencies contributes only to information overload. The development of composite indices or

indicators, on the other hand, reduces stored data to analytically relevant sets which can be used allocatively, diagnostically, and evaluatively. This kind of information can be used to encourage communications and improve training programs.

Illustrations of the possible benefits of a system built around the index using the MLGCD experience have been given earlier. It remains to note, however, that there are many other uses for a computerized management information system beyond those noted in this report. However, it should be kept in mind that any investment in the system discussed should also be at least partially credited toward the costs of building a multipurpose management information system if that is the ultimate policy objective.

The Management Information Group (MIG)

The earlier discussion of the data to be analyzed initially by computer and the functions of the MIC presupposes the existence of a group of individuals which could manage the system. The functions of such a group and staffing requirements are briefly discussed here.

A function of the management information group (MIG) during the early phase of system development would be the dissemination of information about the system to those national, regional, provincial, and particularly municipal officials involved. This includes the distribution of capability index scores with simplified explanations of their calculation and interpretation. This can be done through existing ministries after some training.

An important aspect of this work should be the solicitation of comments from the field. These should be focused on the reactions of fieldworkers and mayors to the index scores, and suggestions from municipalities in particular on the kinds of information which they would like to receive from the center. Some of these suggestions would be of direct use of the MIG; others could be passed on to appropriate ministries.

Follow-up efforts could be undertaken to check reactions to the system in specific localities. Of particular concern should be the appraisal of reactions to the production and distribution of comparative information on performance or capability. Does the distribution of this information produce appropriate behavioral responses?

Social experiments might be done such as the provision of unconditional grants to highly- and less-capable municipalities. Results could then be monitored for possible changes in behavioral responses to changes in the provision of national financial aid.

Reactions of certain groups or individuals would be of special concern to the MIG and others. Obvious interest would be focused on the reactions of municipal mayors and

locally assigned officials of ministries. Additional concern must be given to governors and officials in provinces, including reactions to attempts to integrate performance information into provincial decision-making processes. Also, monitoring the responses of important ministries such as the MLGCD, Ministry of Human Settlements, and the Ministry of Finance would be of concern in the Philippines, although one should not assume broad ministerial cooperation at the time the system is initially established.

These comments imply a rather broad research and evaluation effort at early phases in the implementation of the MIC system. Not all of this could be undertaken by the MIG without considerably straining resources and diverting attention from the information system itself and from policy-related studies. This implies that during the early phases of system implementation, considerable evaluation work would have to be contracted. Some of this work could probably be done through contracts with individuals associated with experienced research institutes in the country. Particular attention should be given to involving individuals associated with institutes which are potential consumers of data produced by the MIC system.

The use of the capability index results, feedback from the field, research reports, and field observations should make it possible for the MIG and regime officials to pinpoint local executives who could be more actively involved in provincial and national policy discussions. Initially, it can be expected that involvement or consultation might be limited to issues directly affecting local governments. However, as confidence is obtained in the use of the system and consultation processes, one could anticipate that broader issues might be discussed.

Opening up consultation processes to local executives would be an accomplishment in itself, since municipal mayors have not had any direct impact on national policy either before or after the establishment of the New Society in September 1972. Earlier research demonstrates that very few municipal mayors advance beyond that job; the mayorship appears to be a terminal career goal.[4] This suggests that national policy processes have been little informed by those officials most exposed to local political and administrative processes. Certainly, there has been no attempt to tap that experience systematically and consistently.

Because the MIC system suggested can begin small, working primarily on developing the capability index, the MIG could initially be composed of an outside

---

[4]See Arthur R. Williams, In the Eyes of the Mayor: A Report of Interviews With Two Hundred Fourteen Philippine Mayors, op. cit.

consultant and four to five persons on assignment within one ministry, or even one bureau within that ministry, supported by field personnel who could collect data and disseminate reports. This would be reasonably easy in developing countries which have computer facilities available with SPSS or other common-language packaged programs on-line. In these cases, teaching the necessary computer techniques requires only a few days of instruction.

There are several drawbacks to this strategy of starting on too small a scale. The first is that some work must either be postponed or contracted out. For example, most of the studies required to evaluate the results of the use of a system such as that mentioned above would probably have to be contracted out if the MIG were quite small. This is not in itself an insurmountable difficulty; however, the contracting of work often leads to poor work. Some research institutes tend to have large work backlogs and overcommitted personnel. These problems might be minimized by developing appropriate research designs prior to the signing of contracts, careful monitoring of the contract, and specifying which individuals would be designated to work on the contract. However, these tasks require uses of scarce personnel who might be better used in doing the research itself. Therefore, in the long run, it might be better to begin somewhat larger rather than too small, and to do much of the corresponding research directly.

A second problem is that the smaller the MIG, the more uni-functional it tends to become. A limited system based on bureau personnel would be largely constrained to producing, updating, and disseminating the capability index scores. These would then be available to other institutions which wished to use them for allocation, diagnosis, evaluation, training, and communication; but a small group can not expect to be actively involved in all of these areas.

A third problem is that the status of the MIG and its reputation for unbiasedness could be endangered if it were closely associated with an operational ministry. In fact, the surest way to protect and support the reputation of the MIG would be to give it sufficient resources and independence to do policy studies. This minimalist approach is a way of testing the ability of an administrative system to absorb a technical innovation.

A contrasting approach could establish the MIG as an independent research institute which would not only set up a system based on capability index scores but would also be actively engaged in diagnostic and evaluative research and the development of strategies for disseminating information, obtaining feedback, and involving local leadership in consultative processes. As part of this approach, emphasis should be given to MIG personnel having already acquired skills in statistics, policy

research (particularly its quantitative aspects), and group dynamics and organizational behavior.

The need for giving high priority to statistical skills early in the formation of the MIC should be obvious. Recruiting persons with these skills is essential for maintaining and improving the index and for developing procedures for processing and reducing data in addition to that required for the index. Eventually, additional information will have to be placed in the system as needs arise and local officials demand more information. This will raise new problems in index construction and computer usage.

The policy research aspect of the system is necessary to produce results which will meaningfully contribute to policy discussions as well as build confidence in the MIG and MIC system. Good policy research is also required for analysis of the capability index and expansion of the data base of the system.

Heavy emphasis should be given to quantitative skills in policy analysis. One of the major reasons for this is that in an early stage of its existence, the MIG has to build others' confidence in itself as an impartial, objective, and unbiased mediator between regime and local interests. This will most likely require concentration on problems tractable to quantitative analysis in the early phases of its existence. Moreover, the MIG will have to devote a considerable portion of its time and efforts to contracting out work and evaluating the results of contracted studies. While quantitative exposure is not essential for this work, it usually does lead to better research designs and a more critical analysis of results. In addition, the MIG will be part of an administrative environment in which it has to deal with other groups applying these skills; therefore, numeracy is required to facilitate interorganizational communications as well as to build the status and credibility of the MIG.

The success of the MIC system will depend very heavily on the recruitment of appropriately trained persons with skills in group dynamics and organizational behavior. These persons would have great responsibility for translating statistical results and research findings into language understandable to national and local officials. They would assess feedback concerning the MIC system, and develop the procedures required for establishing and maintaining communication linkages between national and local officials. At the same time, it would be possible for them to give attention to broader issues concerning government organization.

The choice between the minimalist or maximalist strategy or some strategy in between will depend on resource availability, on the readiness of the administrative system to accept innovation, and—most importantly—the commitment of the regime to

developing new policy processes based upon improving both governmental performance and participation of local leaders in policy discussions. Regardless of whether the broader implications of the approach described in this report are accepted by governments or not, the assessment of local capabilities and the techniques suggested in this paper should be of continuing interest to scholars and practitioners of development, particularly as efforts to build strong, decentralized local institutions are promoted.

Some Reflections on System Costs

As suggested earlier, a minimalist effort could begin with four or five persons on assignment from a ministry plus probably an outside consultant, not necessarily from abroad but working full-time with the management information group (MIG). This assumes that computer facilities are readily available, that a common language program such as SPSS is on-line, that the four or five assigned staff possess a broad range of skills and are not averse to doing some boring clerical work during the initial phase of system development, and that the cooperating ministry will make time of its fieldworkers available for initial data collection as well as follow-up.

The work in the Philippines suggests that index scores for 400-800 municipalities could be done the first year.[5] However, in line with the minimalist approach, it is suggested that scores be obtained for a sample of 200-300 municipalities in ten or more provinces during the first six months. The remainder of the first year could then be devoted to policy research of immediate concern to the regime and local officials. For example, in the Philippines a great deal of interest has been expressed in studying how local development funds are being used and how the current system of national transfers or allotments can be amended.

The largest expenditure other than those already noted would be travel to study localities. These expenditures would necessarily depend upon sample sizes, distances traveled, and other sample-related characteristics which would vary from country to country.

A maximalist approach would be quite expensive, and it would be of interest only to those countries which believe that local problems are so pressing and local reform so necessary that a major effort in institution building is required. An institute such as mentioned in a previous section of this report would probably need the assistance of

---

[5]This is allowing for to the initial setting up of the system. Once it is set up, scores could be easily revised every few months when data are available.

three outside consultants: one to assume overall project responsibility, a second to work on statistics and computer programming, and a third to work on organizational development and the building of external communication capabilities.

The institute could be built around three sections. The administrative section would be headed by the Director of the institute. One assistant director also might be hired for this section, but no other technical staff should be required. Three clerical staff might be hired for this section, one of whom would be available to work in the other sections if the workload should so require.

A statistical section could be manned by three technical staff plus six clerks and have responsibility for constructing and modifying the index, for dealing with general programming problems, and also for consulting on research proposals. The level of expertise required here would not be as high as one might expect if a common language program is on-line. Only one of the three technical staff would then need to have a solid programming background. The others would only need previous exposure to SPSS or similar packages and to behavioral statistics.

A research section composed of five technical staff and seven clerical staff could be responsible for developing research designs, doing field investigations, planning what information might be placed on the system in the future, and training interested agencies in the use of the system. An attempt should be made to hire technical staff with as broad a range of skills as possible. A fundamental requirement should probably be that at the time of employment, technical staff candidates already possess the skills required to read widely across the literature in several disciplines. Such a requirement would make it difficult and expensive to find qualified technical staff for this section in most developing countries. Nevertheless, potential payoffs should be worth the costs.

This maximalist approach probably could produce indices for about 1600 municipalities in one year, convey an initial understanding of the system to the most important ministries and a sample of local governments, and also produce a number of important applied research designs for field investigations to begin the following year.

A possible compromise between the minimalist and maximalist approaches is for three consultants to work with an interested ministry and local university on a two- to three-year contract. This would permit the consultants, while working with the system on the basis of the minimalist strategy, to direct post-graduate thesis re-search directly related to the policy research needs of the MIC system, allowing simultaneous testing of the system, training of ministry personnel, and professional training of a group of persons to man the system if it should become part of a local development strategy.

Other combinations than these are possible. It would be inadvisable for statistical reasons, however, to target fewer than 200 municipalities in at least ten provinces to test the system.[6]

Consideration has not been given to approaches which do not utilize a computer. The reason is that "capability" measurement without some statistical controls most likely will lead to the difficulties noted earlier in current MLGCD procedures. A set of controls could be established experimentally or quasi-experimentally without a computer system; but this, for even a modest number of variables, would require very complex procedures and large expenditures. Even then, it is doubtful that such procedures could produce results timely enough to have any appreciable impact on policy. Moreover, such an approach completely ignores the information storage and retrieval possibilities which exist on computerized systems.

These comments are not meant to suggest that exploring procedures which might be used to evaluate local capability in the poorest of the low income countries would be useless. First, it could clarify thinking about present and future possibilities. Second, exploratory studies using crude methods might produce knowledge relevant to the making of future policies, even if the results do not have any immediate policy impact.

---

[6]Recall that most of the analysis in this report was based upon 214 municipalities in eight provinces. While this is adequate for the above analysis and for the original study from which this is a spin-off, a larger number of provinces would assure more reliable interprovincial comparisons.

Appendix I
THE DEVELOPMENT OF A CAPABILITY INDEX

This Appendix discusses some aspects of the capability index not dealt with, or dealt with insufficiently, in the text of this paper. The first section reviews the actual measures used to fill the Performance Matrix on page 24.

The second section is a brief, non-technical discussion of the use of multiple regression. The multiple regressions actually used in calculating the capability index are given in the third section, which can be skipped by those not interested in the statistical results.

The fourth section gives an arithmetical example of how the capability index is constructed. This may appear somewhat complex and tedious, but in actual practice all of the calculations can be easily done by computer. This section is divided into three subsections: (A) capability measures; (B) the weighting of measures; and (C) capability index scores.

I. A Brief Discussion of Performance Measures

As suggested in Chapter I of the report, heavy weight is given in the scheme of measurement used to calculate the capability index to data availability, previous experience with these measures, and their validity and reliability judged in terms of that experience.

The use of local tax collections per capita as a measure of financial adequacy should raise few eyebrows. Unfortunately, the latest available data for fiscal variables were from the calendar year 1976. Much of the data on which the other measures were based were collected in 1978; however, there do not appear to be wide shifts in the ranking of municipalities on the fiscal data over short periods (two to three years.) Using multi-year averages can mitigate any problems perceived in using data from a single year. Likewise, few strong objections would be raised to the measure of fiscal efficiency. The cost of tax collections as a ratio of treasury operations to total revenue is a commonly recommended measure of efficiency in local fiscal administration.

The measure of fiscal equity (real property tax collections as a percentage of total collections) requires some explanation. The real property tax is frequently viewed as a proportionate rather than a progressive tax, and many local governments obtain

Previous Page Blank

less than 7 percent of their total collections from the tax. Nevertheless, the history of the tax in the Philippines is such, and other local taxes are so regressive, that a higher percentage collection of this tax does indicate a stronger commitment by local notables to equity. (It also indicates their willingness to tax themselves, since most own considerable real property.)[1]

The measure of adequacy for local service delivery or local administration (economic development expenditures per capita) is clearly consistent with the goals of the New Society and expressed preferences of citizens in all surveys on local finance which have been done in the Philippines.[2] Expenditures in the economic development budgetary category include those on infrastructural and public improvements with more than five-year life spans. Up to 1972, the Philippines had one of the lowest ratios of public investment to gross national product among developing countries.[3] Among rural local governments there had been virtually no public investment since 1934.[4] In the Philippines, the achievement of higher rates of public investment is not a matter of choice but of necessity. Past rates of investment do not even offset depreciation of public improvements in the rural areas.

---

[1]Most development finance literature recommends a higher and more effective real property tax. See for example, Richard M. Bird, Taxing Agricultural Land in Developing Countries (Cambridge, Mass.: Harvard University, 1974) which favors a land tax but is cognizant of political difficulties. More recent work has criticized land taxes as fixed levies on peasant income which fluctuate widely due to climatic and price cycles. An example is James C. Scott, The Moral Economy of the Peasant (New Haven, Conn.: Yale, 1976). Although the argument makes several useful points, this author is not particularly impressed by its application to the Philippine setting. The tax has been very low in the Philippines. Historically, there have been frequent remissions during poor weather or alleged "natural disasters." Also, the tax tends to be levied on improvements rather than land.

[2]See Arthur R. Williams, A Survey... . In addition, several national surveys have been conducted. All indicate that citizens desire increased expenditures on goods which fall in the budgetary category "economic development": roads, bridges, communications, and other capital expenditures. The Cebu survey even indicated that citizens were willing to pay more taxes to cover these expenditures.

[3]See Chenery and Syrquin, op. cit.

[4]This is the date at which the Commonwealth began and formal American tutelage ended. The observation is based upon the author's many field trips throughout the Philippines over eight years. A most serious problem is the decline of municipal waterworks systems, most of which have not been subjected to normal maintenance, much less expansion, since 1934. This presents an extremely serious health hazard. Fortunately, the Philippine government and USAID are now working toward solutions to this problem.

The measure of efficiency in local adminstration or service delivery (non-personnel expenditures as a percentage of total expenditures) is not a self-evident deductive measure of the concept. It is related, however, to the Philippine context in which, historically, personnel have been hired for office work regardless of their low marginal contributions to public production.[5] Under these conditions, a reduction of the ratio of personnel expenditures as a percentage of total expenditures shows an effort for efficiency in the provision of services.

Under different conditions, particularly where a government pursues a labor-intensive investment program, while at the same time undertaking to improve the allocation of labor and its marginal product, a decrease in the above ratio would be the more appropriate measure. However, at the present these conditions do not prevail in the Philippines or most other developing countries.[6]

The measures of local agricultural development turned out to be among the poorest of those used. Measures focusing on the Samahang Nayon (SN), government sponsored pre-cooperatives, were used since direct measures of agricultural activity, such as increases in agricultural output produced by various agencies, were often heavily doctored by extension workers to reflect favorably on their performance.

SN organization began in 1973 under a bureau of the Ministry of Local Government and Community Development (MLGCD), and organization of pre-cooperatives spread very rapidly. After the end of one year, the Bureau of Cooperatives reported that 88 percent of targeted municipalities and 63 percent of the targeted barangay were covered. This meant that 65 percent of the targeted SN were organized, and 56 percent of the membership figure had been met.

However, only 38 percent of membership fees and annual dues had been collected, and payment of these financial obligations have continued to be in arrears. The SN

---

[5]For an excellent, brief description and critique of local employment practices, see David Szanton, Estancia in Transition (Quezon City: Institute of Philippine Culture, 1971). For a critique of post-martial law developments, see Arthur R. Williams, A Tax Base Study... .

[6]At the present increasing attention is being given to labor intensive development; however, it is not clear whether this is being followed by appropriate action. An increase in the ratio of personnel expenditures to total expenditures of government could hardly be described as a net benefit unless something is done at the same time to redistribute labor to useful activities and increase its marginal product. In the Philippines, as in many other countries, preferential employment is given to clerks, drivers, and other hangers-on even when the need may be for laborers, irrigation canal inspectors, and so forth. See the references in the previous footnote.

have been organized as pre-cooperatives for information dissemination and financial training of farmers who are eventually, after training and a period of practice, to become members of full-fledged cooperatives which will engage in marketing and credit activities.[7]

The approach to the SN has been top-down from the center but modified informally by local circumstances. For example, the pressure on fieldworkers to produce a high membership figure or body count encourages them to dispense with or "modify" planned activities. Apparently, the incentives offered by the government, especially the availability of land under land reform and low interest loans, have led farmers to join, but the failure to meet financial targets and the dissatisfaction of members seen by the author in 1978 and 1979 suggest that the program has difficulties.

Nevertheless, the SN-related measures were used in lieu of the unreliable agricultural productivity data as proxy measures of local agricultural development under the assumption that the SN data do reflect, even if imperfectly, the degree to which agriculturally-oriented institutions were being developed in any given locality. Three difficulties arose in using these measures as one of agricultural "institutionalization" and performance.

First, at this time, it is not clear to what extent SN are merely substituting for or duplicating the activities of previously existing organizations. In many cases, these may have been more effective, efficient, equitable, and locally-controlled than the SN themselves. Second, it is not clear to what extent SN are in fact being used to promote agricultural development rather than to facilitate a transfer of savings to non-agricultural rural sectors or even to Manila. Third, interview results in rural areas undertaken by the author for another study indicate that many farmers have little confidence in the SN.

Nevertheless, the SN-related measures do touch one important aspect of local agricultural development. Both the measures of adequacy and efficiency reflect the degree to which local leadership can mobilize rural resources. Within this context, the measures while not particularly good are indicative of the degree to which local influence can be exercised within the agricultural sector.

The measure of adequacy in local planning (number of reported plans over a four-year period) is also one not justified by deductive reasoning. Clearly, an appropriate

---

[7] A brief, highly readable description of SN and the program's philosophy appear in Orlando J. Sacay, Samahang Nayon (Manila: National Publishing Cooperative, 1974) Sacay is in charge of SN. The statistics cited earlier appear on page 122 of this book.

measure should consider the quality of the plans. However, the number of plans correlated highly with independent measures of plan quality and equity. Therefore, it seems safe to assume that the suggested measure is appropriate even if not the best theoretically or under different circumstances.[8]

The measure of efficiency in planning (the ranking of plans on how much consideration was given in the plans to the return on investment) was done by ranking plans in each of the eight provinces visited. The author ranked them once, then a research assistant ranked the plans. Afterwards, any differences in rankings were discussed and reordering completed. The major drawback of this procedure was that the ranking could be done only within each province, one at a time, since no central files of plans existed. This means that interprovincial comparisons should not be made without careful consideration of any peculiarities between the provinces.[9]

The measure of equity in planning (the percentage of expenditures directed outside the poblacion) is justified by the strong center-periphery divisions which exist within most Philippine municipalities between the central poblacion and the more rural,

---

[8]The quality measure was obtained using the following procedure: The MCIP were ranked in each province. An interval-like score was then assigned to the rankings by dividing the assigned rank by the total number of municipalities which had submitted plans. Those which had not submitted any were given the lowest possible ranking. These derived measures were then correlated with the total number of plans in each municipality. It is surprising, in view of the intraprovincial scoring procedure, that the correlation coefficient approaches .50. The Pearson's r was also calculated for the equity measure on the number of plans prepared. Again, the r was almost .50.

The above described quality measure was not used in the calculation of the capability index; rather the number of plans was used as an indicator of adequacy for the following reasons. The more difficult-to-obtain quality measure was dependent upon rankings within provinces, so it was felt that, in view of the rather substantial correlations, the measure free of any direct relationships to within-province variance would be most appropriate. In addition, the number of plans as a measure also allowed for another aspect of adequacy, the extent to which the locality was formally complying with the national policy of annual local plan reviews. In view of the close association (r=.70) between the efficiency measure, which was also based on a rank-ordering, and the quality measure, it was feared that the use of the latter in calculating capability might in effect double count efficiency in the analysis.

[9]To make interprovincial comparisons, standard scores could be developed. However, this is not necessary since the ranking procedure used leads to a reasonable differentiation between high and low performers within provinces. Selecting a proportionate percentage of high and low performers from each province is essential to identify influences which operate more generally than simply in a small number of provinces. However, if one wishes to identify whether Ilocanos are better performers than Visayans, for example, one should use standard scores.

surrounding barangay area. This measure is by no means a perfect one of interpersonal equity, but in the Philippines a high correspondence exists between rural residence and poverty, malnutrition, and other disadvantages—not the least of which is inadequate public services.

The measure of the adequacy of local community articulation (ranking of the level of barangay activities) is broadly appropriate. The information was obtained from a panel of informed persons in each province, and is, therefore, province-specific which complicates comparisons across municipalities outside any given province.[10] Simpler procedures than this might be tried, such as using contacts in the primate city to do the ranking; however, since the author was visiting these provinces with a research team, it proved convenient to do these rankings in the provincial capitals. If the ranking is done in the primate city, special care is required in selecting the panel of informants.

The measure of efficiency (the ratio of municipal council costs in 1972 to SB costs in 1976) focuses on the degree to which resources are husbanded. Other ratio measures could be used; but the one suggested is easiest to calculate, and it does not require transformations to be fitted to multiple regressions.

One of the stated objectives of the New Society has been to increase voluntarism and thereby broaden participation in the implementation of projects and programs. At the same time, the structure of the municipal councils was changed in 1974 by increasing the number of new SB members to include barangay captains and economic sectoral representatives for agriculture and labor among others.

Officials have argued that the new SB would increase participation in decision-making by broadening representation, as previously mentioned, and by reducing the spoils of office. The last was supposed to result partially from doing away with councilor salaries and other prerequisites, except travel expenses and limited per diems. The effect of this was to be the attraction of a new breed of local office holders, the encouraging of heavier dependence of local office-holders on their constituents, and the freeing of local resources for development projects. The greater availability of local funds for projects was also to raise the level of policy discussion on the new SB.

The measure of efficiency suggested above only touches on one aspect of these complex relationships. Ideally, upper and lower bounds should be set on this ratio, since the allocation of too little funds, such as the elimination of travel expenses, altogether might retard local community articulation. However, little empirical data

---

[10] See the comments in the preceding note.

exist to support such a procedure. A justification for the use of this efficiency measure in the Philippine context was the tendency prior to martial law reforms for municipal councils to approve funds for their own use even if it meant the curtailment of certain services. A common "economy" measure was delayed payment of wages and salaries to municipal employees.

The measure of equity in community articulation (the ratio of SB members from the barangay to that of the poblacion) is supported by reasoning similar to that in the earlier discussion of the measure of equity in planning. The measure is admittedly crude. Service on the council or SB may not correspond to real influence. Also, residence may not correspond to interests actually represented, but in the Philippine context, one can argue that it is probable that different interests will be represented across spatial boundaries.

II. A Brief Discussion of Regression Analysis

Multiple regressions were used with the above described performance measures in an attempt to obtain capability measures[11] relatively free from influences which would bias performance evaluations upward or downward. An example cited in the text is that an attempt to assess performance of a locality on the basis of the percentage of farmer heads of households who are members of Samahang Nayon (SN) without allowing for the fact that some localities are predominantly fishing communities and others are haciendas now under land reform would bias evaluations of performance upward in the latter case and downgrade it in the former. This is true because (1) tenants who receive land transfer certificates must join SN and (2) part-time farmer-fishermen have little incentive to join SN. As a result, it would be easier for government officials to recruit SN members in the land-reformed haciendas areas and more difficult in the fishing villages.

The evaluation problem becomes increasingly complex when it is understood that more than one variable is likely to bias evaluations. That is, the percentage of farmer heads of households who become SN members is also likely to be influenced by economic variables.

In fact, the regressions below for a_{31} and a_{32} show that the percentage of farmer heads of households who become SN members is influenced inversely by the productivity

---

[11] As will be shown below capability measures are merely the performance measures controlled on some variables which are considered extraneous to an evaluation of capability.

of the land and the average size of farms. In other words, the program does appear to be oriented toward the poor in terms of membership recruitment. However, the size of financial contributions to the SN is positively related to the productivity of land and the average size of farms. This coincides with field observations which suggest that the SN program is having increasing difficulty in obtaining financial support from poorer farmers. Since benefits are related to the size of these contributions, there is great danger that the program will increasingly rest on a substructure of the poor supporting a superstructure for middle and high income farmers.

The findings presented in the last paragraph, although digressing somewhat from the themes of this Appendix, are meant to illustrate two points. First, and more relevant for the focus of this Appendix, some "controls" must be exercised over performance measures to lessen measurement bias; and, second, multiple regressions, while being used for control, can themselves produce findings which are useful for policy evaluation. This second point will not be pursued in this report due to certain statistical problems associated with the use of multiple regressions for this purpose which cannot be adequately discussed in this brief report.

What will be pursued in this Appendix is the use of multiple regressions for purposes of statistical "control." Two noted statisticians have referred to this as using "regressions as exclusion."[12] The idea is that purified measures can be obtained which exclude variables irrelevant to any discussion of capacity or capability of the organizational unit responsible for obtaining a certain level of performance in a specific area of concern. Measurement procedures similar to those described below have been used to assess the performance of hospitals and to measure the tax effort of countries and municipalities.[13]

Perhaps the easiest, nontechnical way to explain this use of multiple regressions is to imagine a situation where statistical control is unnecessary. An example is the scientist in his laboratory. Suppose that he wishes to study the behavior of a particular gas. Most likely, he would use a vacuum tube to remove any undesired interference from the atmosphere. In addition, he would also set the temperature to be used in each experiment. The scientist in this case is exercising experimental controls.

---

[12] Frederick Mosteller and John W. Tukey, Data Analysis and Regression (Reading, Mass.: Addison-Wesley, 1977), pp. 269-270.

[13] Of particular interest is Martin S. Feldstein, Economic Analysis for Health Service Efficiency (Chicago: Markham, 1968). Also see Roy W. Bahl, "A Regression Approach to Tax Effort and Tax Ratio Analysis," IMF Staff Papers, Vol. XVIII (1971).

Unfortunately, the manipulation of variables is difficult if not impossible outside the laboratory. For this reason, researchers often resort to quasi-experimental designs.

Many agricultural field experiments are fine examples of quasi-experimental designs. Areas to be planted are often paired on a number of contrasting characteristics, for example, high soil acidity versus low soil acidity. Unfortunately, while it is easy to pair sites (these are usually referred to as "control" and "treatment" sites) on a single characteristic, it is much more difficult to pair them on multiple characteristics. In fact, the sample sizes needed increase geometrically as the number of characteristics to be controlled increases.

A major drawback in the use of either the experimental or quasi-experimental approaches in doing policy research is that both are based on a priori rather than a posteriori designs. While a strong case can be made from a scientific point of view for the former, an uncomfortable fact of life is that most social programs are not designed for scientific research. Evaluation designs are usually done after program implementation rather than before. This suggests that statistical controls may be more generally applicable to policy research than either experimental or quasi-experimental controls.[14]

Multiple regression is a convenient procedure for exercising statistical control. The procedure seeks, by calculating a series of partial correlations, to derive weights statistically for a series of independent variables vis-a-vis a dependent variable. For example, assume that a_{31} for a set of localities is regressed on variables l, p, and s; for these localities, the following regression equation would be produced. The signs for the coefficients x_1, x_2 and x_3 depending on the relation between variables l, p and s and the dependent varable a_{31}; the equation shown indicates that a_{31} increases as l increases and as p and s decrease:

$$\hat{a}_{31} = x_0 + x_1 l - x_2 p - x_3 s \qquad (1)$$

---

[14] A number of excellent works in recent years, however, have suggested quasi-experimental designs relevant to policy analysis. See, for example, William M. Evan, Organizational Experiments (New York: Harper and Row, 1971). The suggestion in the text of this report that "more" capable and "less" capable localities be given different kinds of support and that results be monitored and assessed is another example of a quasi-experimental design.

These designs will become increasingly important over the next few years. Nevertheless, one suspects that they will remain for some time only a small portion of the evaluative work which is done.

Subject to certain statistical conditions, which will not be outlined here, one can say that x_0, the intercept term, represents the "average" value which a_{31} would assume if l, p, and s had no influence on a_{31}. On the other hand, x_1 represents the influence which l would have on the average on a_{31} if p and s had no influence. Similar interpretations can be given to x_2 and x_3. The sum of x_0 plus the other x's multiplied by their associated variables gives an equation-predicted value for a_{31} for any given municipality. (A "hat" appears over a_{31} in the equation since it is a "predicted" value.)

This predicted value "controls" for (takes into acount) the influence of variables l, p, and s on the original performance variable a_{31}. Since the regressions were done on many municipalities, the predicted value represents the average score which any given municipality should receive for the values of l, p, and s associated with that municipality.

If the actual value of the performance variable (a_{31}) is taken and divided by the equation predicted value ($\hat{a}_{31}$), i.e., $a_{31}/\hat{a}_{31}$, any municipality with a score greater than 1.0 can be said to be performing better than the average on the measure $a^{\star}_{31}$, while any municipality with a score less than 1 can be said to be performing less than the average. The capability measures on which the capability index is constructed are simply this ratio of the actual performance value to the equation-predicted performance value. In simple mathematical terms, the capability measure ($a^{\star}_{31}$) is

$$a^{\star}_{31} = a_{31}/\hat{a}_{31}. \qquad (2)$$

The next section of this Appendix lists the multiple regressions which were used in constructing the thirteen capability measures. For those uninterested in these results it is suggested that they proceed to Section IV which gives an arithmetical example of the construction of capability measures and the capability index.

III. The Multiple Regressions

The regressions used to obtain the value of $\hat{a}_{ij}$ in equation (2) are listed below. Standard errors are listed in parentheses beneath the regression coefficients. (See the Performance Matrix for definitions of a_{ij}.)

$$a_{11} = -.3694 + \underset{(.6247)}{2.7612}\ \text{POPED} + \underset{(.0805)}{.2681}\ \text{CAPAID 76} + \text{DV}$$

$\bar{R}^2 = .2462$

POPED = mean level of education of citizens 21+ years of age

CAPAID 76 = per capita aid from the national government in 1976

DV = dummy variables for the provinces

The dummy variables were 1 and 0 for each of the provinces. These were used to control for provincial variation.[15]

$$a_{12} = 21.1933 - \underset{(.0477)}{.0985}\ \text{WAGE} - \underset{(.7599)}{.5755}\ \text{SIZE} - \underset{(.1264)}{.5213}\ \text{AREA} + \text{DV}$$

$\bar{R}^2 = .3932$

WAGE = percentage of labor force classified as wage and salary workers

SIZE = the average size of farms

AREA = the total area of the municipality

$$a_{13} = 6.2895 + \underset{(.0460)}{.2020}\ \text{DPOP} + \underset{(.0072)}{.0301}\ \text{DENS} + \underset{(.0827)}{.0370}\ \text{PROD} + \text{DV}$$

$\bar{R}^2 = .2606$

DPOP = percentage change of population (1970-1975)

DENS = population density per hectare

PROD = value of agricultural produce per hectare

$$a_{21} = -17.3737 + \underset{(.0134)}{.0362}\ \text{DENS} + \underset{(.1327)}{.4220}\ \text{AREA} + \underset{(.6466)}{1.2156}\ \text{LNREV76} + \underset{(.0923)}{.6162}\ \text{CAPAID 76} + \text{D}$$

$\bar{R}^2 = .3865$

LNREV76 = natural log of the gross land revenue and receipts in 1976.

$$a_{22} = 87.5691 - \underset{(.9011)}{3.3493}\ \text{LNREV76} - \underset{(.1544)}{.5849}\ \text{CAPAID 76} + \text{DV}$$

$\bar{R}^2 = .2353$

---

[15] A good brief discussion of the use of dummy variables appears in G. S. Maddala, Econometrics (New York: McGraw-Hill, 1977), pp. 132-191. The dummy variables consist of 1's and 0's. One if the municipality is in a particular province and zero if it is not. To simplify presentation, the coefficients are not given in Section III of this Appendix.

$$a_{31} = 20.2000 + \underset{(.0663)}{.1177}\ \text{LANDLES} - \underset{(.2765)}{.6069}\ \text{PROD} - \underset{(1.3135)}{1.6548}\ \text{SIZE} + \text{DV}$$

$\bar{R}^2 = .4103$

LANDLES = percentage of farm operators who are landless tenants

$$a_{32} = -.4011 + \underset{(.2259)}{.3849}\ \text{LANDLES} + \underset{(.9337)}{.4351}\ \text{PROD} + \underset{(4.4357)}{5.3325}\ \text{SIZE} + \text{DV}$$

$\bar{R}^2 = .5390$

$$a_{41} = 2.2141 - \underset{(.0031)}{.0134}\ \text{CAPAID} + \text{DV}$$

$\bar{R}^2 = .2306$

$$a_{42} = .7227 - \underset{(.0012)}{.0035}\ \text{DWEL} + \underset{(.0013)}{.0005}\ \text{WAGE} + \text{DV}$$

$\bar{R}^2 = .2360$

DWEL = percentage of dwelling units of heavy construction

$$a_{43} = 35.4707 + \underset{(.0333)}{.0645}\ \text{DENS} + \text{DV}$$

$\bar{R}^2 = .0895$

$$a_{51} = -3.7174 + \underset{(.0919)}{.5434}\ \text{LNREV76} - \underset{(.1256)}{.0199}\ \text{POPED} - \underset{(.0044)}{.0065}\ \text{FARM} + \text{DV}$$

$\bar{R}^2 = .1630$

FARM = percentage of heads of households who gave farming as their primary occupation

$$a_{52} = 4.6038 + \underset{(.0118)}{.0678}\ \text{AREA} + \underset{(.0011)}{.0012}\ \text{DENS} - \underset{(.0565)}{.2777}\ \text{LNREV76} + \text{DV}$$

$\bar{R}^2 = .2692$

$$a_{53} = 29.7413 + \underset{(.3688)}{.8618}\ \text{PROD} + \underset{(.0091)}{.0155}\ \text{CAPAID 76} + \text{DV}$$

$\bar{R}^2 = .0749$

The above equations are only a small number of those actually run. Some are obviously in need of improvement (such as the one a_{43} and a_{53}.)

IV. An Arithmetical Example of Capability Index Construction

Section II ended with a discussion of capability measures; this section begins with an arithmetical example of the construction of a capability measure. This is followed by a brief discussion of weighting of these measures. This Appendix concludes with an arithmetical example of capability.

(A) Capability Measures. As an illustration of the calculations of capability measures, the equation for a_{43} will be used:

$$a_{43} = 35.4707 + .0645\ \text{DENS} + (-16.4274\ \text{PR1} - 24.3868\ \text{PR2} - 26.2574\ \text{PR3} - 20.6795\ \text{PR4} - 17.9394\ \text{PR5} - 8.0730\ \text{PR6} - 7.0803\ \text{PR7})$$

The figures in brackets show the coefficients for the dummy variables.

The particular locality under investigation has a population density of 15 per hectare and is in Province number 1. Its predicted performance score is:

$$35.47 + (15 \times .06) + (-16.43 \times 1) = 19.94.$$

Now, if its actual performance score is 16, its capability measure score is

$$16/19.94 = .85$$

Table AI-1 shows the actual capability measure scores in a province with 41 municipalities:

TABLE AI-1: A Presentation of $a^{\star}_{43}$ Showing Breaks About the Median

Scores
5.73
3.29
3.03
2.87
2.84
2.80
2.78
2.56
2.20
2.20
2.20
2.08
2.07
1.99
1.75
1.03
.74
.59
.53
.08
---------- median
.00 ---------- 21 scores here

This table lists the scores from highest to lowest. Note that 21 scores were zero. This implies that the median is between .00 and .08. Calculations on the other seven provinces and on the other 12 performance measures produced distributions similar but somewhat less extreme than those in this table.

The next step in the procedure was to decide how to aggregate the thirteen capability measures to produce a single capability index for each municipality. Since the focus of the work with the index is on identifying groups of more capable and less capable municipalities, there is no need to retain the raw capability measure scores. Therefore, the value of one was assigned to each municipality which scored in the upper fiftieth percentile in its province on each measure and zero to each municipality which scored in the lower fiftieth percentile. That is, each municipality could obtain a score of zero or one on each of thirteen measures depending upon whether its capability scores on those measures were below or above the median in that province.

The reason the median is selected as a cut-off point can be seen in Table AI-1. The most acceptable cut-off point on the measure in this table, and the other thirteen measures, is at the median; also, the clearest break in the scores appears close to the median in all provinces. The use of any other cut-off point would not only appear more arbitrary, but using the quartiles, for example, would produce aggregate capability index scores (described below) which would cluster about zero. This is highly undesirable, since it would then be impossible to use normal multivariate statistical procedures for analysis of the index scores. These points could be discussed in more detail; however, this would lead the reader farther away from the principle problem at hand: how to aggregate the individual series of thirteen ones and zeros for each municipality.

A simple procedure would be to add the ones and zeros together to obtain a capability index score. However, the major objection to this procedure is that it would assign equal weight to each of the capability measures in the index. This assumption is not only unrealistic, but it is incompatible with the normal meaning of "capability" which implies the capacity to achieve certain goals or objectives according to a set of priorities. For this reason, the next subsection of this Appendix will give an arithmetical example of the weighting procedure used to construct the capability index.

(B) The Weighting of Measures for the Capability Index. The weighting procedure and the weights were described earlier in the text of this report. A discussion of the use of content analysis to obtain these weights appears in Appendix II, which also mentions some alternative procedures.

Below is the profile of one of seventeen municipalities in a province. It shows the individual a's associated with a series of ones and zeros and the multipliers or weights used in constructing the index.

a_{11}	1 x .082	=	.082
a_{12}	1 x .082	-	.082
a_{13}	1 x .082	=	.082
a_{21}	1 x .145	=	.145
a_{22}	0 x .145	=	.000
a_{31}	0 x .018	=	.000
a_{32}	1 x .018	=	.018
a_{41}	0 x .042	=	.000
a_{42}	1 x .042	=	.042
a_{43}	1 x .042	=	.042
a_{51}	1 x .100	=	.100
a_{52}	1 x .100	=	.100
a_{53}	0 x .100	=	.000

The sum of the above is .693. This multiplied by 100 gives the capability index score of 69.3.

C. Capability Index Scores and Their Quartile Breaks. Table AI-2 lists the capability index scores of the municipality mentioned previously and all other sixteen municipalities in the province.

TABLE AI-2: A Presentation of Index Scores Showing Breaks About the First and Third Quartiles

Scores	
74.3	
69.3	
67.8	
66.1	
--upper quartile--	
62.8	
51.6	(largest point spread)
49.6	
46.8	
46.6	(median)
46.5	
45.3	
41.8	
38.6	
--lower quartile--	
32.1	(also largest point spread)
29.3	
25.8	
19.5	

This table and the distribution of capability index scores in the other seven provinces is similar. The largest point spreads appear either at or close to the upper and lower quartiles. This provides a reasonable cut-off point for classifying municipalities as either more or less capable.

In the analysis presented in the text of this report, municipalities in the upper quartile of their province are labelled "more capable" and those in the lower quartile "less capable." While it cannot be argued that quartiles are the only reasonable identification point, the fact that breaks occur at or close to the quartiles in all eight provinces argues for their use. Different points of dispersion might be found in different countries or at different times within a single country.

Appendix II
CONTENT ANALYSIS OF PRESIDENT MARCOS' SPEECHES

The weighting procedure used to aggregate the performance measures into a "capability index" can vary from the simple to the complex. Unfortunately, a trade-off may be involved between the degree of objectivity desired and the complexity and consequent costs of the procedure. Weighting procedures can be purely subjective but explicitly stated by the researcher these involve little cost, or they can, like the procedure described in the later portion of this Appendix, concentrate on obtaining greater objectivity at relatively higher costs.

One simple weighting procedure would be the assignment of equal weights to all program categories and then sum them to obtain a "capability index." The problem with such a procedure is that it assumes that all the program categories are of equal weight to all of the persons involved in the policy process. This assumption is highly unrealistic, since the policy process itself consists of making choices among emphasis to be placed on program activities and policy objectives. Nevertheless, such a procedure would be justifiable if the performance of a locality in one program area were highly correlated with its performance in other areas; this would imply that the relative rankings of municipalities would not be altered by the weighting procedure.

Such an approach was not used in the study described in this text. While the correlations among performance in the different program areas were generally positive, they were small. This suggested that related but different dimensions of capability were being measured on the individual indicators. The author did not wish to assume that "capability" was equally reflected on all the indicators.

Another weighting procedure which could have been used consists of asking panels of experts to identify the weights which they or the regime would assign to each of the policy areas or program objectives. This can be done using simple or more complex procedures depending upon the situations confronting policy analysts. For example, "experts" could be asked to distribute points among the program areas and policy objectives or they could be given circles or other kinds of diagrams to divide according to the "appropriate" weightings.

Any number of other procedures can be suggested, and their adequacy depends largely upon their costs relative to the degree of accuracy required in the capability ranking of localities. Since the focus of the research described in this report was on the identification of factors affecting local capability, a content analysis weighting procedure was used which probably gave a highly accurate weighting of regime

preferences but at somewhat higher cost than other users of the capability index might desire. More research could be done on appropriate weighting procedures; however, until this is done, there is no reason to assume that any consciously designed weighting procedure in itself makes the use of the capability index ranking more or less desirable without considering the specific purpose for which the ranking will be used.

Content analysis of some 2,000 speeches and policy statements of President Marcos was done by the author and a research assistant for the study described in the text. Unedited transcripts of these speeches were obtained from the files of the Ministry of Public Information (MPI). These speeches covered the period from September 11, 1972--the declaration of Martial Law—through July 31, 1979—the end of data collection.

The author and his assistant in turn extracted "thought patterns" from these speeches which varied between 100 and 300 words.[1] Patterns were extracted if mention was made of local government, rural development, and land reform within them. There was high intercoder agreement (.899) between the author and his assistant on the identification of thought patterns. Eight hundred fourty-nine such patterns were identified in these 2,000 speeches.

The thought patterns were then coded on the appearance of twenty-four cues. Again, there was high intercoder agreement of .978 overall; and a range of .571 to 1.000 on individual cues. These data can be used to generate a number of useful findings, including evidence that the regime has moved continually over time from a simplistic approach to rural development (placing money in the rural areas) to a much more complex one (integrated rural development). However, the purpose of this Appendix is the more limited one of describing how the approach was used to generate the weights used to build the capability index which was described in Appendix I.

A matrix similar to the 5x3 capability matrix was generated by the cross classification of cues on the local government thought patterns. Such content analysis procedures are frequently called "contingency analyses."[2] Table I-3.1 is the one on which the weights used in the analysis were extracted.

---

[1]Use of "thought patterns," which is an intermediate unit between the single word or group of words and an entire communication, is described in Ole R. Holsti, Content Analysis for the Social Sciences and Humanities (Reading, Mass.: Addison-Wesley, 1969), p. 122.

[2]For a useful and still most appropriate description of contingency analysis, see Charles E. Osgood, "The Representational Model and Relevant Research Methods," in Ithiel De Sola Pool, Trends in Content Analysis (Urbana: Illinois, 1959), pp. 61-78.

TABLE AII-1:
Implicit Weights Assigned by President Marcos to Elements of the Decentralization Matrix, January 1976 through July 1979

	AD	EF	EQ	CON↓	CON↑	TOTAL
SV	.116	.053	.033	.071	.024	.291
FI	.098	.038	.036	.077	.012	.245
PL	.053	.032	.021	.033	.012	.127
BN	.027	.059	.030	.074	.056	.301
Coop	.021	.003	.009	.006	.006	.036
TOTAL	.344	.166	.096	.258	.136	

SYMBOLS

SV	=	local service delivery
FI	=	local finance
PL	=	local level plannning
BN	=	barangay activities
Coop	=	Samahang Nayon activities reflecting local agricultural development
AD	=	adequacy in the program categories
EF	=	efficiency in the program categories
EQ	=	equity in the program categories
CON↓	=	control down, an emphasis on central direction in the program categories
CON↑	=	control up, an emphasis on initiative coming from the bottom in the program categories

A discussion of the referents of the first eight symbols appears in the first section of Appendix I.

The patterns on which the table was based cover the period January 1976 through July 1979, the last of the three clear periods which emerged from the content analysis.[3] This period corresponds most closely to that of the fieldwork.

The table also contains two additional policy objectives: references to control exerted from the top down (CON) and references to control exerted from the bottom up (CON). One should also recall that insufficient measures were found for two of the cells in the matrix. For these reasons, it is not appropriate to use the within cell weights on the individual capability index scores. Therefore, the total weights, the right column of the table, were divided equally among the capability scores in each of the program areas.

The most important result of this procedure was that relatively greater weights were given to the efficiency and equity policy objectives. This is not a major drawback analytically, since observers might prefer to give these objectives somewhat heavier weights anyway. Analysis, so far, indicates that small changes in these weights do not change the classification of municipalities into high and low groups.

Nevertheless, the content analysis results, not reported here do show changes in the weights over time periods. The weights are likely to change appreciably in the long-run. Therefore, more work should be done on the sensitivity of the classification procedures to these weights, both over time and across audiences. In the latter, it

---

[3]The other two periods are September 2, 1972 - July 31, 1973, and August 1, 1973 - December 31, 1975. The first begins with the establishment of martial law and ends with the referendum-plebiscite which established a New Constitution. It is characterized by a regime search for legitimacy. The second period begins after the New Constitution and ends with the official end of the term of all local officials on January 1, 1976. This period is characterized by a big push in rural development focused on delivering financial resources to the rural areas and a heavy top-down approach from the center.

The last period begins with the President possessing wide discretionary powers to replace and discipline local officials and ends with the end of the research; however, during this period in 1978 an election occurred for the Interim National Assembly. This might be called a period of retrenchment. The regime backed away from a heavy top-down approach to localities and advocated a more integrated and regionally diversified approach to rural development.

Procedures for calculating the numbers in each cell or the horizontal or vertical totals can be found in Osgood, op.cit. The contingency approach used by Osgood and others is intended to capture associations among cues whether these are intended or not by the source of the communication. This approach is particularly suited for policy analysis, since the "policy" may not always be explicitly stated in the communication.

would be useful for example to compare the weights of local officials with those of regime spokesmen.[4]

The procedures described in this Appendix are rather difficult and time consuming for those engaged in policy research. However, simpler procedures could be used to assign weights. They could be assigned a priori by researchers on the basis of what they believe to be a "proper" weighting. Or, different series of weights can be run through the computer to compare the results of alternative weightings. A major difficulty with subjective procedures is that they have given undue emphasis to the purely fiscal aspects of local government.

An interesting result of the content analysis is that the Philippines regime attributes, at most, a weight of .245—less than 25 percent—to the fiscal aspects of local government activities. This should serve as a warning to those who use subjective weights. An advantage of the conceptualization of local government outlined in the text of this report and in this Appendix is that discussions of local government performance or central-local government relations would require that discussants explicitly state the weights which they are assigning to program areas.

---

[4]This is now being done using some data collected during interviews with 214 Filipino mayors.

Appendix III
LINEAR DISCRIMINANT ANALYSIS

As explained in the text, the municipalities were divided into two groups, a more capable and less capable group, on the basis of the index scores. Linear discriminant analysis was then used on these two groups of municipalities to locate independent variables which would "explain" why municipalities fall into either one of the two groups.

By statistically maximizing the variance between these two groups on a subset of independent variables, discriminant analysis is able to assign weights to these variables. When analyzing two groups of cases it has been suggested that these weights can be given interpretations similar to that of multiple regression coefficients.[1] While there is some mathematical similarity, it should be kept in mind that regression procedures most commonly minimize the sum of the squared differences from the mean, whereas discriminant procedures maximize between-group variability relative to within-group variability on the selected weights.[2] This implies that the weights will differ proportionately from regression coefficients (beta weights).[3]

In the analysis done for this study, a discriminant analysis was run using 64 variables with the two groups. In this analysis, a large number of independent variables were pulled out which were not significant. A second analysis was run with the statistically significant variables, and this produced discriminant-function coefficients for 22 independent variables. This standardized discriminant function is reported in Table AIII-1 below.

---

[1] See in Norman H. Nie et. al., SPSS, (New York: McGraw-Hill, 1975) the section by William R. Klecka, "Discriminant Analysis," pp. 443 - 444.

[2] Paul E. Green, Analyzing Multivariate Data (Hinsdale, Illinois: The Dryden Press, 1978), pp. 145 ff.

[3] Green, p. 165. This is only true of the two-group case.

TABLE AIII-1: Standardized Discriminant Function Coefficients

	Function 1
HONESTY	.1678
NATION	-.3055
AGE	.3964
EDMAYOR	.2619
KNOWLEDGE	-.2883
DPOP	-.2693
INFLUENCE	.3182
LOSSAUTONOMY	.1662
DWELL	.6846
PESOHEC	-.5596
STRAT4	.1920
STRAT9	-.1686
RESPOB	-.1632
NEED2	.2468
NEED3	.1981
OCCFATH6	-.2386
QUALITY3	-.2704
ASPECT3	.2972
NORGS	.0720
VOTEKBL	.4948
LANDCON	.3579
VOTEFM	-.3090

(NOTE: A positive relationship means a positive relationship with the most capable group)

TABLE AIII-2: Definitions of Discriminant Variables

HONESTY	Commitment to high standards of personal conduct measured on a scale.
NATION	Commitment to national interests as opposed to those of more local concern measured on a scale.
AGE	Age of the mayor in years.
EDMAYOR	Education of the mayor in years.
KNOWLEDGE	Knowledge of national programs designed to help local governments measured on a scale.
DPOP	Change in municipal population (1970 - 1975).
INFLUENCE	Influence of a mayor relative to that of other mayors in the province by panel rating.
LOSS AUTONOMY	Whether the mayor identified himself as losing autonomy between 1972 and 1978.
DWELL	Percentage of dwelling units of heavy construction, scaled on type of wall and roof.
PESOHEC	Value of agricultural output, average on land under cultivation per municipality.
STRAT4	Mayor commitment to increasing local tax collections as an acceptable strategy to strengthen local capabilities.
STRAT9	Mayor commitment to using self-help projects as an acceptable strategy to strengthen local capabilities.

RESPOB	Whether the mayor resides in the problacion.
NEED 2	Commitment of the mayor to "amenities" for his community, i.e., water supply, electrification, health improvement, etc.
NEED 3	Commitment of the mayor to plaza improvements and markets (large visible projects in the problacion).
OCCFATH6	Whether the mayor's father was a farmer, fisherman, or vendor (low status occupations)
QUALITY3	Importance of honesty as a value relative to that of seven other values; priority ranking of honesty by mayor
ASPECT3	Commitment of the mayor to implementation and management as an aspect of his job.
NORGS	Number of community organizations which seek to be actively involved in community decisions, identified by mayor respondents.
VOTEKBL	Average vote to official (KBL) candidates as a percentage of eligible voters in the 1978 elections for the National Assembly.
LANDCON	Gini coefficient measuring the concentration of land patterns by size of farms.
VOTEFM	Average vote for President Marcos in the 1965 and 1969 presidential elections.

The canonical correlation of .683 and the reduced Wilks' lambda of .534 is evidence of the rather high association of the variables in Table AII-1 with the dependent variable classifications.[4]

---

[4]For a brief description of canonical correlation and the Wilks' lambda, see Klecka, op. cit.

Another way to look at the discriminant function is to ask how accurately the function can correctly classify the cases into high and low groups. This is a question of predictive validity. Table AIII-3 shows this.

TABLE AIII-3: Classification Table Based on the Discriminant Function in Table AIII-1

Actual Group	# of Cases	Predicted High	Predicted Low
High	54	42	12
		(77.8%)	(22.2%)
Low	54	11	43
		(20.4%)	(79.6%)

Percent of 'Grouped' Cases Correctly Classified = 78.7%

Not only is there an overall high level of cases correctly classified (78.7%), but the Table also shows that high "predictability" occurs within both the high and low groups.

The substantive importance of the independent variables is discussed in the text of the paper.

SPECIAL SERIES ON RURAL LOCAL GOVERNMENT

#1 **The Elusiveness of Equity: Institutional Approaches to Rural Development in Bangladesh** Harry W. Blair, $3.50, 138 pp.

#2 **People's Communes and Rural Development in China** Benedict Stavis, $4.50, 184 pp.

#4 **Panchayati Raj and Rural Development in Andhra Pradesh India** G. Ram Reddy, $3.50, 98 pp.

#5 **The Dynamics of Institutional Change and Rural Development in Punjab, India** S.S. Johl and Mohinder S. Mudahar, $4.50, 171 pp.

#7 **Rural Local Government and Agricultural Development in Java, Indonesia** Gary G. Hansen, $2.50, 86 pp.

#8 **Local Institutions and Rural Development in Japan** Ronald Aqua, $2.50, 110 pp.

#9 **Local Institutions and Rural Development in Malaysia** Stephen Chee, $3.50, 112 pp.

#10 **Basic Rural Democracies and Rural Development in Pakistan** Norman Nicholson and Dilawar Ali Khan, $3.50, 106 pp.

#12 **Local Government and Rural Development in the Philippines** Santiago S. Simpas, Ledvina Carino and Arturo Pacho, $3.50, 188 pp.

#13 **Local Institutions and Rural Development in South Korea** Ronald Aqua, $3.50, 82 pp.

#15 **Rural Local Governance and Agricultural Development in Taiwan** Benedict Stavis, $4.50, 132 pp.

#16 **Local Governance and Rural Development in Thailand** Marcus Ingle, $3.50, 106 pp.

#17 **Local Government and Agricultural Development in Turkey** Douglas E. Ashford, $3.50, 112 pp.

#18 **Local Government and Rural Development in Yugoslavia** Zdravko Mlinar, $3.50, 136 pp.

#19 **Local Organization for Rural Development: Analysis of Asian Experience** Norman Uphoff and Milton Esman, $4.50, 117 pp.

SPECIAL SERIES ON ANIMATION RURALE

#2 **Animation Rurale and Rural Development: The Experience of Senegal** Sheldon Gellar, Robert B. Charlick and Yvonne Jones, $5.00, 211 pp.

SPECIAL SERIES ON AGRICULTURE RESEARCH AND EXTENSION

#1 **Participatory Approaches to Agricultural Research and Development: A State-of-the-Art Paper** William F. Whyte, $5.00, 120 pp.

#2 **El ICTA en Guatemala: La Evolucion de un Modelo de Investigacion y Desarrollo Agricolas** Lynn Gostyla and William F. Whyte, $4.00, 103 pp. (Spanish version of #3 below)

#3 **ICTA in Guatemala: The Evolution of a New Model Agricultural R & D Model** Lynn Gostyla and William F. Whyte, $4.00, 48 pp.

#4 **Peasant Innovation and Diffusion of Agricultural Technology in China** Mary Sheridan, $4.50, 100 pp.

SPECIAL SERIES ON PARAPROFESSIONALS

#1 **Paraprofessionals in Rural Development** Milton Esman, Royal Colle, Norman Uphoff, Ellen Taylor with Forrest Colburn, Douglas Gritzinger, Robert Hall and Cynthia Moore, $5.00, 149 pp.

#2 **Guatemala's Rural Health Paraprofessionals** Forrest Colburn, $3.50, 60 pp.

#3 **Women Paraprofessionals in Upper Volta's Rural Development** Ellen Taylor, $3.50, 65 pp.

#4 **Paraprofessionals in Village-Level Development in Sri Lanka: The Sarvodaya Shramadana Movement** Cynthia Moore, $3.50, 64 pp.

#5 **The Village Health Worker Approach to Rural Health Care: The Case of Senegal** Robert Hall, $3.50, 61 pp.

#6 **Agriculture Paraprofessionals in the Philippines: Farmer Scholars, Agricultural Counselors and the Samahang Nayon Development Program** Douglas Gritzinger, $3.50, 65 pp.