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LOCAL GOVERNMENT AND RURAL SERVICE BARRIERS
TO ECONOMIC DEVELOPMENT IN COLUMBIA

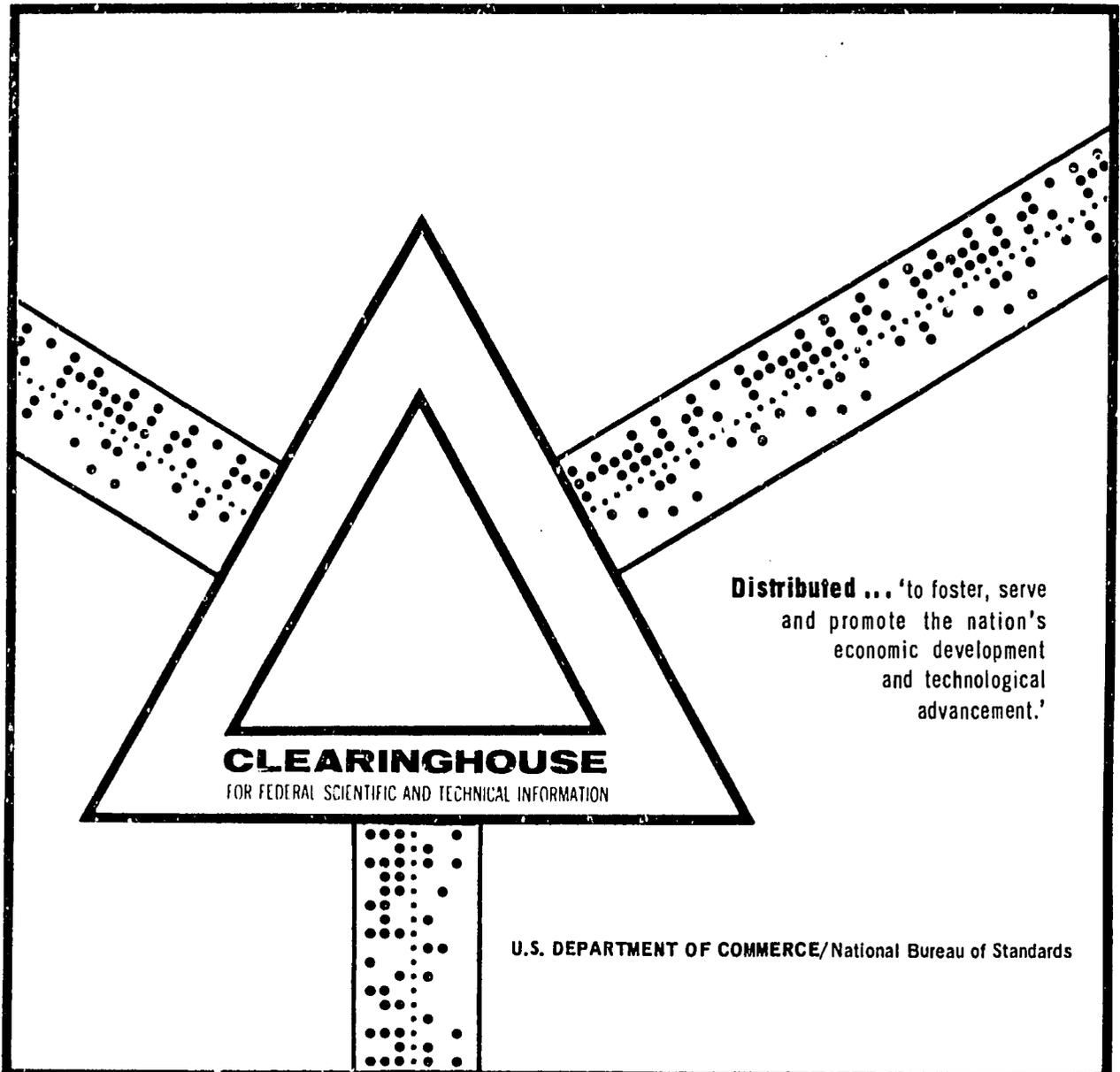
Herman Felstehausen

The Land Tenure Center
Bogota, Colombia

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June 1968

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By Herman Felstehausen

This study was carried out under an agreement between the State of Antioquia, Colombia, represented by the offices of Planning, Development, and Agriculture, and the University of Wisconsin Land Tenure Center. The Research Division of the Antioqueño Secretary of Agriculture's Office headed by Javier Gómez J. and assisted by Julio C. Giraldo J. provided support in collecting data and preparing reports. Vicente Flórez D., Land Tenure Center, assisted with the field work and the preparation of tables.

The author is assistant professor and country director of the Land Tenure Center, a cooperative program of the American Nations, the Agency for International Development and the University of Wisconsin. The author alone assumes full responsibility for all conclusions and recommendations in the English version of this report; views expressed are not necessarily those of the supporting or cooperating institutions.

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LOCAL GOVERNMENT AND RURAL SERVICE BARRIERS TO ECONOMIC DEVELOPMENT IN COLOMBIA

By Herman Felstehausen

I. The Problem and Theoretical Basis for the Study

Economic development, broadly speaking, consists of putting scarce factors of production to better use in order to produce more goods and services for a larger number of people. With this task in mind, development planners have tended to concentrate much of their attention on reallocating the traditional factors of production, namely: land, labor, and capital. But work in developing economies clearly indicates that these factors are not the only scarce resources. The traditional factors of production (also called conventional inputs) are often more abundant than are the nonconventional inputs. 1/ Nonconventional inputs here will be called public factors of production. Public factors of production are more institutional than physical in form. In agriculture they include education, health services, transportation, markets, public utilities, justice and public order, property identification, public finance administration, communications, and technical agricultural services.

Mellor points out that in many underdeveloped countries, traditional factors of production (such as labor) may be so abundant that their marginal productivity is very low or even zero. 2/ In these cases adding larger amounts of the factor will not increase productivity. The only way to significantly increase productivity is to add larger amounts of scarce factors. In some cases, these will have to be public factors of production, or a term to be used later, infrastructural investments.

The problem in rural Colombia is that public factors of production are so scarce that many question whether agricultural development can take place until they are made more available. These doubts range from conclusions that almost all public factors are deficient, 3/ to specific cases where the lack of public factors is impairing some, but not all, kinds of agricultural production. 4 & 5/

1/ John W. Mellor, The Economics of Agricultural Development. Ithaca: Cornell University Press (1966) 229-236.

2/ Ibid.

3/ El Tiempo, "Los Municipios Pobres," (November 2, 1966)

4/ James E. Grunig, "Information, Entrepreneurship, and Economic Development: A Study of the Decision Making Process of Colombian Latifundistas," Unpublished PhD Dissertation, University of Wisconsin, Madison (1968).

5/ Karl Wierer, "Economics of Improving Marketing Organization and Facilities to Accelerate Agricultural Development in Land Settlement Projects," Mimeograph, Instituto Latinoamericano de Mercadeo Agrícola, Bogotá (September 1967).

This study begins with the assumption that many public factors are scarce in Colombia and cannot be easily obtained as complements for the more abundant traditional factors of production.

The purpose of the study is to indicate first how public factors of production fit into the production process and then to determine the degree of scarcity of these factors in a rural area of Colombia. Ways will be suggested in which public factors might be increased or improved by institutional reorganization and modern administration in cases where they are found to be scarce.

People, regardless of where they live, require minimum levels of public services to be productive. Agriculture, by the nature of its demands for land, requires a widespread distribution of people and workers and thus also dispersed forms of services. These services or public factors can be considered costs of production in the same sense as conventional inputs since people will require them in order to produce a product in a given way at a given location. Public services also enter directly into production costs in the form of taxes, fees, materials and labor contributions which when invested by public agencies can be called "social overhead capital." ^{1/}

Public structures required to manage social overhead capital and to assure that it is productively invested have been labeled in various ways. One of the most useful and commonly used terms is infrastructure. Wharton distinguishes three classes of infrastructure: capital, service and institutional. ^{2/} Capital infrastructures are those which involve high costs to create such as roads and irrigation systems. Educational and health facilities are examples of service infrastructures. Institutional infrastructures are mainly of the administrative

^{1/} Albert O. Hirschman, The Strategy of Economic Development. New Haven: Yale University Press (1959) p. 83.

^{2/} Clifton R. Wharton Jr., "The Infrastructure for Agricultural Growth." in Herman M. Southworth and Bruce F. Johnston (eds), Agricultural Development and Economic Growth. Ithaca: Cornell University Press (1967) 107-142.

or record keeping types such as the property registry or the system used for tax administration. In this report all three types of infrastructure will be considered.

Infrastructural investments are distinguished from traditional factors of production by three main characteristics: 1) they are socially rather than individually organized due to their scope in size and effects when applied, 2) they are either free to the recipient or provided at rates regulated by public agencies, 3) and as already stated above, they are basic to a wide variety of other economic and social activities. 1/

Hirschman adds a fourth point to this list which serves as a kind of warning to developing countries: infrastructure cannot be imported. 2/ Each country faces the task of creating and managing its own. Experience shows this task to be more difficult than organizing primary production, yet thus far it has received little attention in developing areas. 3/

There are always those who argue that if the free market system is working well almost all public inputs can be provided by the private sector. In support of this argument, one can point in Colombia to private schools, private medical services and even private support for roads and irrigation projects. Such arguments, however ignore important distinctions between investment and planning decisions which must be made publicly and those which can be made privately.

Private decisions will always result in "misallocations" when dealing with, 1) collective goods, like police protection, 2) when private costs do not equal social benefits as with a sewerage system, for example, or education, 3) when natural monopolies are involved as with public utilities, or 4) when there are unusually high costs or risks involved; for example, in river basin development. 4/

In every country there are many examples of decisions that have been made privately because the governmental machinery for making them publicly did not exist.

1/ Ibid.

2/ Hirschman, op. cit., 83-84.

3/ Lauchlin Currie, Accelerating Development: The Necessity and the Means, New York: McGraw-Hill (1966) p. 56.

4/ Otto Eckstein, Public Finance, 2nd. ed. Englewood Cliffs: Prentice-Hall, Foundations of Modern Economics (1967) 8-11.

The result is often that new problems are created, to say nothing of the fact that some people are denied service. Here is just one example. It is logical for individual families near Bogotá to dump sewage and garbage into the Bogotá River. Considering the problems of disposing of wastes, the individual has few alternatives. Collectively, however, this creates an impossible situation for the city and has turned the Bogotá River into an open sewer. The situation cannot be corrected by private action. An instrument is needed to make a public decision so that collective action can be taken.

A large part of the development problem in Colombia is the lack of instruments for making collective decisions complicated even more by a desire that people be free to act as they wish. 1/ This has produced many serious misallocations of "social overhead capital," but given the lack of governmental machinery there were probably few alternatives. The development problem, thus, is not to build any particular road, school house or water main, it is to build organizations and governmental instruments which can plan and carry out public functions in those cases where private decisions fail to meet the task. 2/

The above points serve as guides to the kinds of activities one can expect to find in the public sector, but there is considerable variation from country to country and sometimes within countries as to what the public sector actually includes. For example, Colombian education is a mixed system of both public and private organizations. The same is true of health services. Another example is animal slaughter which is generally a public activity in Colombia, but there is no particular reason why it has to be. It belongs to the public sector by tradition more than because it falls under the points of criteria listed above.

In this report we will be concerned with six main categories of rural services which are generally considered the responsibility of the public sector in rural Colombia:

1/ Jaime Jaramillo Uribe, El Pensamiento Colombiano en el Siglo XIX. Bogotá: Editorial Temis (1964).

2/ Development programs, both foreign and domestic, generally ignore infrastructural problems in favor of physical and capital development. Title IX of the United States Foreign Assistance Act of 1967 is designed to help correct this bias, but the program has yet to be funded and applied.

- 1) Educational facilities -- buildings, teachers and equipment,
- 2) Health facilities -- buildings, staff and equipment,
- 3) Roads -- from the farm to the village or to connect with other roads,
- 4) Public utilities -- mainly in village centers,
- 5) Local government facilities -- municipal buildings, market places, police posts, streets and parks,
- 6) Agricultural services -- government administered credit, information and land improvements.

II. The Study Location and Method

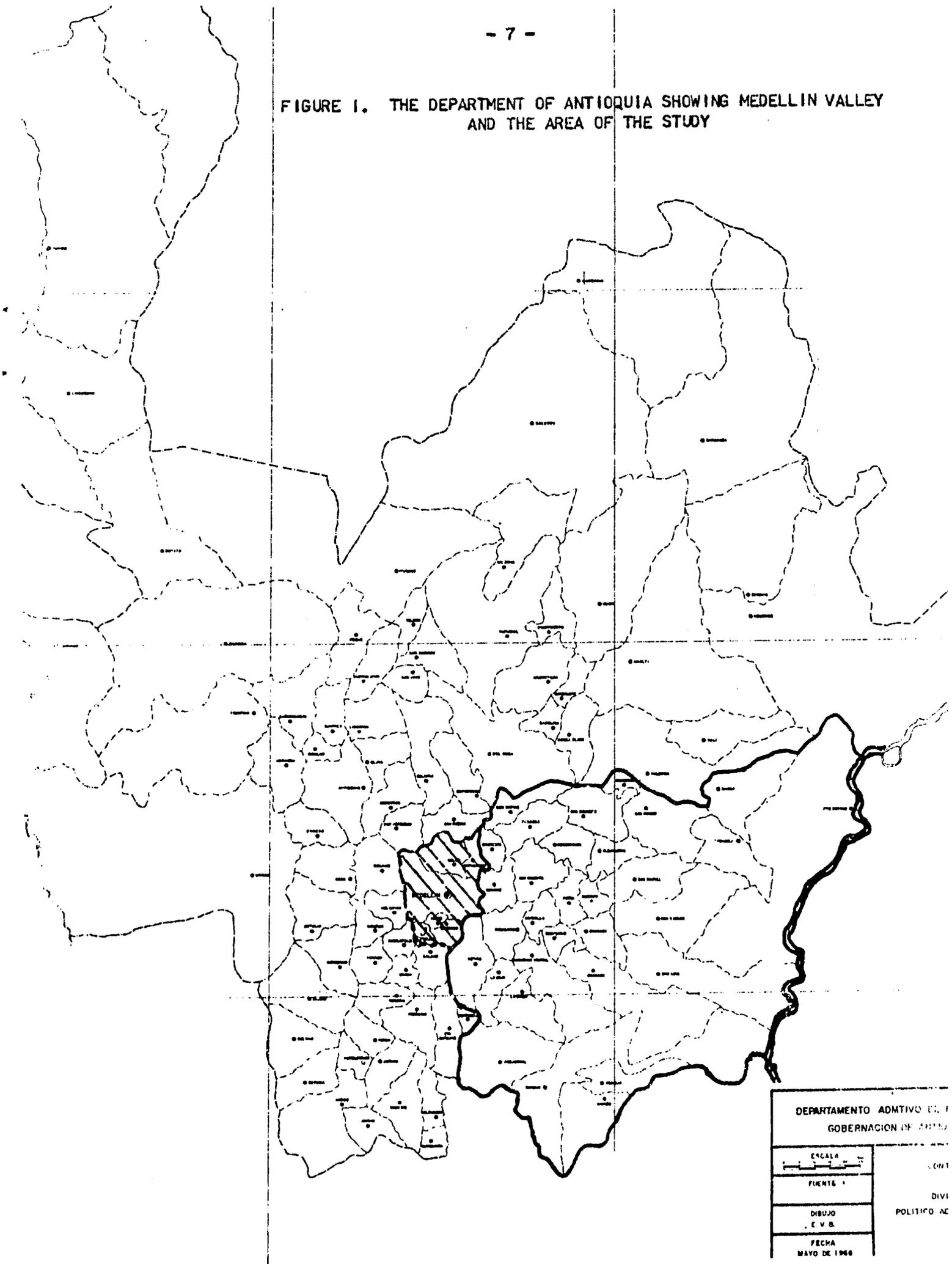
Data for this study were gathered in 31 municipalities in the eastern part of the Department of Antioquia. 1/ Antioquia was chosen because it is often recognized as the most progressive department in Colombia; the people have been described as industrious, business minded and intelligent. 2 & 3/ There are also indications that local government and public services in Antioquia are among the best in the country. 4/ A progressive area was chosen a priori on the grounds that it would provide examples of innovations for use in other areas. Special efforts were made to locate and note these deviations in order that their characteristics could be described and evaluated.

Since all of the municipalities within the Department of Antioquia follow the same general codes and administrative procedures (with the exception of the metropolitan area of Medellin), choosing a district within the department was done mainly on the basis of variation in agricultural and physical characteristics. The district of 31 municipalities provides variation in accessibility, kinds of agricultural products produced and density of population.

The region extends from just outside of Medellin on the east, along the route of the national railroad to the Magdalena River and south to the Department of Caldas. (See map). The area includes 1.1 million hectares of land and just over one-half million persons, nearly 20 percent of the department's population. The region provides variety and contrast in terms of rural conditions, access to

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- 1/ The municipality is analogous to a U.S. county but has only one governmental body for both the town and surrounding countryside. A department is like a province or state. Both come from European designations.
- 2/ Everett E. Hagen, On the Theory of Social Change. Homewood, Ill.: The Dorsey Press (1962) Chapter 15.
- 3/ James J. Parson. Antioqueño Colonization in Western Colombia. Berkeley: University of California Press (1949).
- 4/ Concejo de Medellin, Crónica Municipal Medellin, Edición Extraordinaria Dedicada a Conmemorar el 350 aniversario de la Fundación de la Ciudad, Medellin (1967).

FIGURE 1. THE DEPARTMENT OF ANTIOQUIA SHOWING MEDELLIN VALLEY AND THE AREA OF THE STUDY



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Medellin and size of rural towns. The alluvial upland valley around Rionegro was one of the first agricultural regions in the department to be developed and is also the most heavily populated. In contrast, some of the lands along the Magdalena River and its tributaries are still being claimed by new settlers. Crops range from potatoes, corn and sisal hemp in the cold uplands, coffee on the slopes near Caldas and livestock and rice in the tropical Magdalena Valley. This wide variation in cropping patterns is due to altitude differences, not distances since the whole area is equal to only about half the area of the state of Maryland.

The main economic activity of Antioquia is farming and ranching. 1/ Gold mining, the stimulus that brought the first colonists to Antioquia, is still important economically, but only for a few commercial operations. 2/ Industrial activity dominates the Medellin Valley, an area of more than a million persons. There are no secondary industrial or urban centers in the department. The largest city outside of the Medellin Valley 3/ has only 17,700 persons. 4/

As might be expected, one of the difficulties in studying and evaluating public factors of production is to find suitable measures. Local government and public services have been studied mainly by political scientists, community developers and public finance experts. Many of their conclusions about services are in direct reference to publicly established criteria: e.g., the school system does not meet local demands. 5/ In the Antioquia study we did not sample public opinion although local officials were asked what citizens of the area considered to be the most urgent local needs. Others ask planning experts to set goals which serve as "standards" against which services are measured. 6/

1/ Pedro del Barrera, "Estudio Socio-Económico Area de Antioquia," mimeograph, Servicio Nacional de Aprendizaje, Bogotá (Abril 1962); and data from the Secretary of Agriculture of the Department of Antioquia, Medellin.

2/ Parsons, op.cit.

3/ The "Medellin Valley" in this report is defined as the municipalities of Medellin, Bello, Copacabana, Envigado and Itagüi. The real name of the valley is "Valle del Aburrá" and includes parts of other municipalities besides these listed.

4/ The city is Caldas which is in the Valley of Aburrá near Medellin. Other cities more distant from Medellin, but nearly as large as Caldas, are Rionegro, Puerto Berrio and Sonsón in the eastern region and Yarumal in the north.

5/ Mary McLean (ed) Local Planning Administration, 3rd. ed. International City Managers' Association, Chicago (1959).

6/ Samuel A. Hayes Jr., "Measuring the Results of Development Projects," UNESCO: Monographs in the applied Social Sciences (1959) 25-27.

Instead of trying to evaluate performance against public expectations or expert opinion, this study provides evidence that public services are in fact necessary for sustaining and expanding agricultural production, and from there attempts to measure the amount or level of service and at the same time to describe the form. This should tell us both to what extent public factors are limiting as well as which forms are most useful.

Evidence of the importance of public services in the Colombian setting can be drawn from a variety of studies. Jaramillo and Yepes found that additional rural roads could be economically built in Antioquia and that they could make the community more productive. 1/ However, the authors conclude that the problem was not one of low economic return to roads but rather one of organizational barriers (i.e. form). Wava Haney learned that the lack of health and educational services in frontier zones deters settlement and agricultural investment. 2/ This is a problem of the level of service.

There are no studies available on the rate of return to education in Colombia, but some evidence can be drawn from a study in Mexico which found very high returns to primary and secondary education. Martin Carnoy reports the social rate of return for fifth and sixth year education in 1963 was 37 percent annually.3/ A study of the land tax by Davis indicates that Colombian municipal tax revenues are both low and poorly invested. 4/ These last two examples are cases of both level and form. Edel calculated that physical community action projects provide more than a 12 percent rate of return even when overall promotional costs are included. 5/

1/ Diego Jaramillo S. and Francisco Jairo Yepes E., "Justificación Económica de la Construcción de Tres Carreteras Veredales en Antioquia," Unpublished Undergraduate Thesis, Facultad de Ciencias Agropecuarias, Medellín (1968).

2/ Wava G. Haney, "The Migration Process in a Minifundia Community of the Highland Region of Colombia," Unpublished PhD Dissertation, University of Wisconsin, Madison (in process).

3/ Martin Carnoy, "The Cost and Return to Schooling in Mexico: A Case Study," Unpublished PhD Dissertation, University of Chicago (1964).

4/ L. Harlan Davis, "Economics of the Property Tax in Rural Areas of Colombia," Unpublished PhD Dissertation, University of Wisconsin, Madison (1963).

5/ Matthew D. Edel, "The Colombian Community Action Program: An Economic Evaluation," Unpublished PhD Thesis, Yale University, New Haven (1967).

On the basis of these and similar conclusions, this study proceeded under the assumption that public factors can be limiting, and that investments in public factors can produce returns competitive with traditional factors.

Measurement problems resulted from trying to distinguish among quantity, quality and form. To the extent that services are organized in "superior or inferior" forms, the quantity and quality of services are also affected. In cases where organizational forms are at issue, the simplest non-parametric measures were applied. That is, given two alternative forms, A and B, the one providing the superior complement to agricultural production processes was chosen as the higher level. For levels, quantitative measures were used: for example, number of medical doctors per 1,000 population,

These questions were used as criteria to aid in the evaluation of services.

They were:

- 1) Quantity. Can almost anyone in the region (anyone is defined as 90% or more of the local residents) obtain each of the six classes of services listed in Section I by exerting a reasonable effort?
- 2) Quality. Is the technical level of the service adequate to eliminate or reduce the problem for which the service supposedly exists?
- 3) Form. Is the service organized in such a way that its future quantity and quality can be increased with reasonable effort and cost? This is also a measure of potential which is a part of form.

There was little success in measuring quality. Most of the results deal with quantity and form.

Others have taken note of these measurement problems as they relate to development economics, but few have tried to develop measures for public factors. Often they are dismissed as exogenous variables. Lauchlin Currie calls the public factors the unmeasurable variables and says, "Many writers insist that the distribution of income is as important as its volume, and stress the role of institutional, demographic and cultural factors. However, there appears to be something similar to a Gresham's Law operating in modern economics whereby measurable concepts drive out unmeasurable." ^{1/}

Two general development issues played a role in the selection of the problem and the study area. The first was a concern by department officials in Medellin over rapid urban growth in and around Medellin resulting from a continuous shift

^{1/} Lauchlin Currie, "The Relevancy of Development Economics to Development," mimeographed paper, workshop on International Development, University of Wisconsin, Madison (November 23, 1965).

of population from rural to urban areas. People and industries continue to flock to Medellín, the departmental capital, and to the towns in the surrounding valley basin. The population of the greater Medellín area has doubled in the last 12 years to a total of 1,139,790 in 1966. The rest of the department currently has 1,569,030 persons. 1/ At present growth rates, the Medellín Valley Area will have as many people by 1975 as all of the rest of the department. And the Medellín area is one in which growth space is limited because of its location on a small valley floor. All sides are pinched off by steep gorges and mountains rising nearly 3,000 feet on the sides.

A second concern was one expressed by rural residents of Antioquia. 2/ They constantly plea for assistance in trying to maintain and expand essential rural services. They feel they are victims of technological displacement and stricter training requirements for industrial jobs. New agricultural enterprises and input requirements are making customary farm production activities more difficult. At the same time, these people are demanding standards of health care, education and welfare more nearly like those found in urban centers. All of these factors accentuate the shortage of rural schools and teachers, the scarcity of country roads and modern transportation, the lack of medical centers and personnel, and the slow and sporadic growth of community services.

When the Land Tenure Center of the University of Wisconsin expressed an interest in studying these problems, the Secretary of Agriculture of the Department of Antioquia 3/ and representatives of the Department Planning Office and the Department Development Institute (IDEA) urged that an immediate start be made on an inventory of services and conditions in the rural municipalities.

1/ All population figures in this report are based on the "1964 National Population Census," Departamento Administrativo Nacional de Estadística, DANE, Bogotá (October 1965). Growth rates and population projections are based on data from "Anuario Estadístico de Antioquia," Dirección Departamental de Estadística, Medellín (1966).

2/ Observations made during a preliminary survey of the region.

3/ At that time, Dr. Guillermo Guerra Espinel, currently Economic Advisor to the National Minister of Agriculture, Bogotá.

It was quickly evident that much of the general descriptive data about resources and services already existed. 1/ Lacking were studies to describe the complexities of developing services where they did not exist. Hence, this report has been limited to only a part of Antioquia, but covers many aspects of public service organization and administration.

1/ For example, there is a 734 page study done in 1963 which describes much of eastern Antioquia; Instituto Colombiano de Planeación Integral y Corporación Social de Desarrollo y Bienestar, "Primer Plan Regional de Desarrollo para el Oriente Antioqueño 1963-1967," Medellín (1963).

III. The Results

A. Institutional Origins

The general conclusion from this study is that rural public services in Antioquia are not only scarce but also severely restricted by exhausted and antiquated organizational forms. In terms of future planning and policy making, the most serious aspect of the findings is that existing organizational forms lack potential. There are forms which have their roots in centuries of institutional struggle in Colombia.

The Colombian Constitution of 1886 says the Government will be unitary -- a centralized form. Most agree that it is, many agree it should be, but none agree about how to do it. The country was organized as a centralized system by Simon Bolivar, it experimented with liberal federalist forms in the nineteenth century, and returned to centralism under the constitution of 1886, the one now in effect. The model for centralism came from the Napoleonic Code of 1800 which suggested the division into departments and municipalities.^{1/} The Colombians superimposed this structure over an already antiquated Spanish regional and municipal form. ^{2/} Today there is a strange cohabitation of bureaucratic drifting, modern laws, private enterprise, and ancient administrative methods. There is a lingering feeling that Colombia is still a "Kingdom," but without the King. And in this setting, the subjects have been forgotten. ^{3/}

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- ^{1/} Harold F. Alderfer, Local Government in Developing Countries. New York: McGraw-Hill (1964) 3-24.
- ^{2/} José María Ots Capdequí, Estudios de Historia del Derecho Español en las Indias. Bogotá: Editorial Minerva (1940) 136-149.
- ^{3/} Vernon Lee Fluharty, Dance of the Millions: Military Rule and the Social Revolution in Colombia. Pittsburgh: University of Pittsburgh Press (1957) p. 179.

The President is the key central figure in the national government. State governments (departments) have had varying success in defining their number two places. The municipality is supposed to be the local unit of public authority, but this study indicates that in the countryside it is no more than a government out-post, fallen into disrepair, forgotten and debilitated. Yet because so many people live in the countryside and so much of Colombia's national product is generated there, development does not seem possible as long as local public services are lacking and community decision is paralyzed.

Agriculture accounts for about one-third of Colombia's gross national product, an amount about equal to industry and commerce combined. 1/ Rural areas must house, educate and service more than one-half (56 percent) of all working men and their families. 2/ Rural regions thus must provide the basic services farms need in order to produce, and just as important, they must build and maintain levels of living somewhat competitive with those in urban areas. Where this is not done, there is a tendency for people to migrate to areas of higher living levels. In Colombia, as in most countries, this means to the cities. 3/

The structure of municipal government in Colombia is drawn heavily from early Spanish and French forms. These forms tend to stress the connection to central authorities rather than to local citizenry. 4/ In Colombia, under

1/ José Américo Castillo and Gerald I. Trant, "Notes on Recent Developments in Colombian Agriculture," mimeograph, Universidad del Valle, Cali (1967).

2/ El Tiempo, "Colombia: Aspectos Demográficos," (March 8, 1968).

3/ Ramiro Cardona Gutierrez, "Emigración, Urbanización y Marginalidad," in Tercer Mundo Paper, Suplemento No. 44-45, (December 1967 - January 1968).

4/ José María Ots Capdequí, Estudios de Historia del Derecho Español en las Indias. op. cit.

the present constitution, the main municipal officials are the mayor; secretary, called the personero; treasurer, police inspector, judge and councilmen.^{1/}

The mayor is appointed by the departmental governor who in turn is appointed by the President of the Republic. Mayors seldom come from the towns they represent and often are rotated to new posts about once a year. They are paid by the department. The mayor, in other words, is the local arm of the central government. In many ways he is like the old corregidores, the king's inspectors, under colonial rule. ^{2/}

In Colombia the official representative of the people is the municipal secretary. He is like the alcalde ordinario (assistant mayor) under the colonial system. The secretary is selected and paid by the municipal council. He is usually from the community but ineffective as the community leader since in practice he has neither funds nor authority without the approval of the mayor. The treasurer is also selected and paid by the council. He is a book-keeper and tax clerk -- often he is poorly educated and trained.

The local community has no control over the selection of judges and police inspectors (police captains). The mayor is automatically the police inspector in the county seat. If the municipality is large and has other small towns, separate police inspectors are appointed to these districts by the governor. Police inspectors are civilians. The police agents, however, belong to a national force operated like a military corps using standard equipment and green uniforms. In order to enter the National Police Force candidates must first serve two years in the army. The direct command of the National Police is by officers who hold rank in the Armed Forces of Colombia and can be commanded by the Minister of Defense and the President.

Each municipality has a civil judge and if it is a large urban center it will also have a criminal judge. These judges are selected by judges of higher courts. They are paid by the judicial circuit from funds of the National Ministry of Justice.

The Mayor also has a judicial role in minor disputes. He can personally hear disputes between local persons, but acts mainly as arbitrator in trying

^{1/} Oscar Peña Alzate, Código Administrativo. 2nd ed. Medellin: Editorial Bedout (1965) 179-450.

^{2/} José María Ots Capdequí, Manual de Historia del Derecho Español en las Indias. Buenos Aires: Editorial Losada (1945) 367-380.

to get the dispute resolved.

City councilmen are theoretically elected by popular vote. In practice they are appointed by the party leaders of the Liberal and Conservative parties. This is done under a list system whereby each party prepares a slate of councilmen. Under the National Front, a 16 year Liberal-Conservative agreement which started in 1958, the first half of names on the Liberal ticket are assured victory along with the first half on the Conservative ticket. How party officials arrange the names, in other words, is the key determining factor. Elections are held every two years. 1/

The French municipal structure applied over the older Spanish colonial municipality has not proved to be a satisfactory model for rural Colombia. 2/ The classical municipal form, as this study also shows, appears to work best in the cities. It has not worked well as an instrument to aid in the conquering and settling wilderness frontiers. The system is too rigid for a country just starting development. It has not allowed for experimentation and variation in governing remote places facing wide variations in population, transportation, communication, resources and problems. 3/

Coupled with the above, is the fact that the revolution did not produce a "new beginning." Patterns of local administration were already highly defined by three centuries of colonial rule that trained the creoles, the principle organizers of the new republic. 4/ Colonial administration was

1/ For a systematic and unemotional treatment of Colombia's political system see: Robert H. Dix, Colombia: The Political Dimensions of Change. New Haven: Yale University Press (1967) 203-293.

2/ Fernando Galvis Gaitán, El Municipio Colombiano. Bogota: Imprenta Departamental Antonio Nariño (1964) Section I.

3/ Alderfer, op. cit.

4/ Rafael Gómez Hoyos, La Revolución Granadina de 1310. Bogota: Editorial Temis (1962) Vol. II, p. 60.

characterized as "negative administration" where the rules serve only to state what must be done with no concern for how, and controls are negative and ineffective. This is in contrast to what we in modern terms call "positive administration" in which higher levels of authority take responsibility for lower level failings, train and aid lower level government officials and even stand ready to carry out or complete those tasks where lower levels lag. 1/

Under the New Republic, administration continues to be "negative administration" except it now has a newer and more acceptable name embodied in the terms Centralism and Democracy. Modernization has been most successful at the national and departmental levels and in large cities with the rural municipalities left to stagnate. Meanwhile, Colombia is still a frontier nation; many of its areas, including those in Antioquia, have been settled for less than 100 years. 2/ This has been done essentially without a working model of public authority or local collective action. In this vacuum, rural people have often turned to indigenous forms of community organization recently embodied in what is officially called Acción Comunal. 3/ This response is so significant that it should receive much greater attention in formalizing public authority in the future.

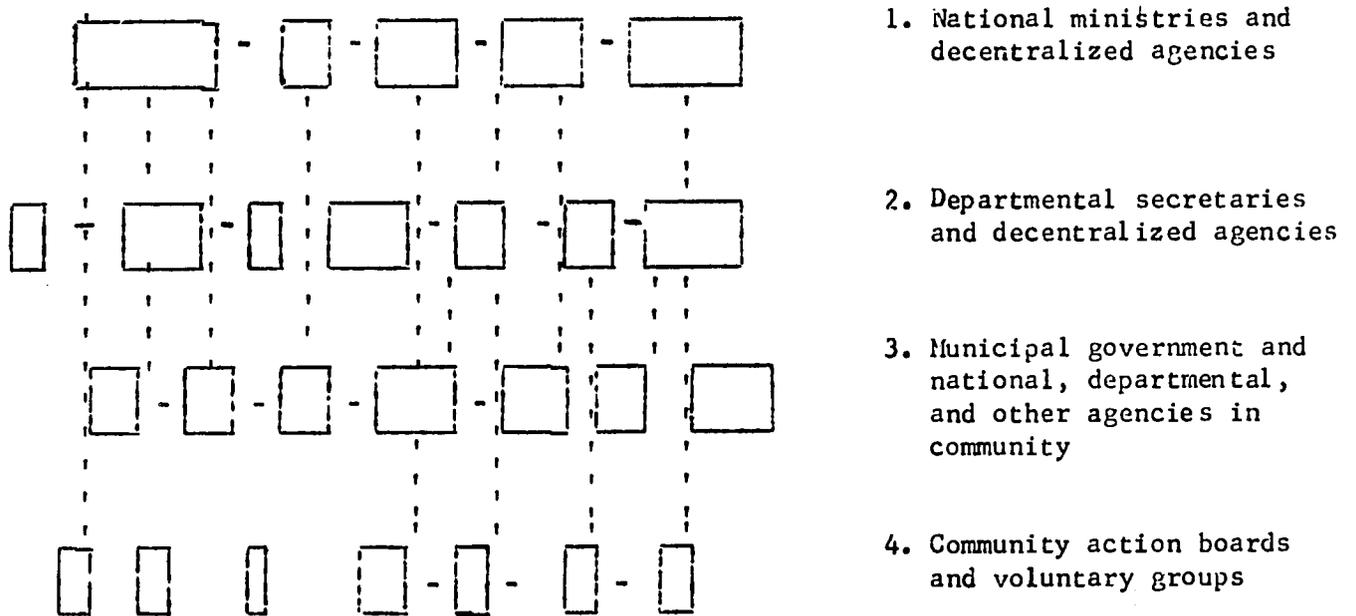
The structure of government in Colombia is usually drawn as a pyramid form indicating that the major focus of power and decision is concentrated in an integrated apex with direct lines of communication and control through the departments down to the base made up of a large number of municipalities. Unfortunately the model is neither descriptive nor useful in conceptualizing the structure of government in rural Colombia. The model is full of dozens of broken links. Often communication and decision are diffused through many official and semi-official bodies. The national government is not a clearly defined and coordinated nation-head; often it is a loose and widely diffuse collection of fragmented agencies and bureaus trying to act in an atmosphere of conflicting plans and interests while lower units try to work their way up

1/ W. Hoven and A. van den Elshout, Central Services to Local Authorities.
The Hague: International Union of Local Authorities (1962) 26-152.

2/ Parsons, op. cit.

3/ Edel, op. cit.

FIGURE 2. THE FRAGMENTED CUBE: MODEL OF PUBLIC AUTHORITY AND GOVERNMENT IN COLOMBIA



The flow of funds and decision is both horizontal and vertical, especially due to the functioning of many semi-autonomous agencies. Communication to the national level does not always pass through intermediate levels. Community groups, for example, may by-pass both municipal and departmental governments in seeking funds. The top presses down the bottom through negative controls. The system is characterized by a lack of linkages in communication, planning and action.

wherever they can without regard to intermediate governmental bodies. 1/ Voluntary community associations, while having little formalized connection with the structure, actually make up an important part of base programs.

The model which I have developed to describe this system is called the fragmented cube. This model is more useful than the pyramid because it suggests, as seems to be the case, that power is just as dispersed at the top as it is at the bottom and that the units, (the fragments), are fissured, disconnected, unstable, uneven and random. The model also accommodates the paternal, authoritarian, hierarchical social structure, and the important role of personal influence (palanca) in political processes. 2/

B. Availability and Distribution of Public Services

In this study, all of the six public service items: education, health, roads, public utilities, municipal facilities, and agricultural services, were found to be scarce in eastern Antioquia. In many cases potential was lacking.

A wide variety of local, regional and national agencies provide some public services to rural areas. Legally, however, the municipalities, together with the department, have the main responsibility for all of the six services except agricultural assistance. National agencies are the most important in the field of agriculture. Voluntary community organizations and semi-autonomous agencies -- both departmental and national -- play an important role in most of the services.

1) Education. Public education, especially primary education, is technically a joint responsibility of the municipality and the department. Free and obligatory primary education is guaranteed by the Constitution. (Article 41). In practice this obligation is only partly met and local and private groups bid from dozens of sources for funds to build and operate schools. The law says that the municipality must, "provide classroom and equipment for

1/ Antonio J. Posada F. and Jeanne Posada, CVC: Challenge to Underdevelopment and Traditionalism. Bogota: Tercer Mundo (1966) Chapters 2 & 3. Also Dix, op. cit.

2/ Andrew H. Whiteford, Two Cities of Latin America. Anchor Books, Doubleday & Co. (1964); also Jaramillo Uribe, op. cit.

the operation of urban and rural schools." (Law 39, 1903, Art. 9). Later this requirement was modified to, "grant appropriate grounds for such purposes, and also, fifty percent (50%) of the cost of the buildings." (Law 69, 1939, Art. 1). The nation is supposed to pay the rest of the building costs. In the region, both the municipalities and the nation have defaulted regularly on their obligation. Teachers for local public schools are hired and paid directly by the departmental government, but with some national matching funds.

Because of regular defaulting by the municipalities and the nation in carrying out public education, many rural communities have begun using informal procedures for raising funds and building schools. This practice was partly formalized in 1958 when locally organized and already operating community action boards called "Juntas de Acción Comunal" were given legal status. The enabling legislation provides that local groups may assume and share responsibility for certain public services, especially schools, health centers, roads and bridges, recreation and cultural centers, and activities to improve agriculture and cooperatives. (Law 19, 1958).

Matthew D. Edel indicates that community action boards are currently the main builders of rural schools in Colombia and that their investments in local projects in 1964 were greater than those of departmental and municipal governments combined. ^{1/} This is also true for the rural areas of eastern Antioquia in this study and suggests that future local government planning needs to give much more attention to this important sub-sector of community government.

The seriousness of educational problems in eastern Antioquia can be dramatized from the following figures. (See also Tables 1 and 2 in the Appendix). The region has a population of 515,570 persons of which 119,797 or 23 percent are of school age (defined in Colombia as 7 to 14 years old). Primary education in Colombia consists of 5 years of schooling, secondary education is 6 years. Of the children of school age, only about 60 percent attend school -- counting both public and private schools. But more serious than this is the very small number who complete primary schooling and are

^{1/} Edel, op. cit. Chapter 2.

thus qualified to continue future education.

A child living in eastern Antioquia has a 20 percent chance on the average of finishing primary school. Most who finish live in the village centers. If the child is confined to living entirely in rural areas, there is less than a 3 percent chance of completing the primary grades. Opportunities for continuing education are much better in the Medellin area. There about 50 percent are completing primary schooling. 1/

In 1966 there were 733 primary schools, both public and private, in eastern Antioquia. Of these almost all are public (719 of the total) with 646 of them in rural areas. Most rural schools (548) operate on an alternating system. This practice is carried out under the policy of the Roman Catholic Church in order to separate boys and girls in the classroom. 2/ Boys attend school for one-half day or on alternate days and girls attend the other half of the time. The effect of alternate schooling, of course, reduces almost in half the amount of classroom work a pupil receives even if he does complete the five years of primary education. In eastern Antioquia almost none of the rural schools offers the full five years of classes -- only 11 out of 646 schools.

Problems of educational finance will be discussed in the next section. The main cost of primary education is borne by the department in paying teachers' salaries and benefits. There are now 1,319 primary public school teachers in the region. Salaries and benefits for these cost about 20 million pesos per year. 3/

1/ Calculations are based on 1/7 of school aged population finishing each year.

2/ Orlando Fals Borda, "Bases for a Sociological Interpretation of Education in Colombia," in A. Curtis Wilgus (ed) The Caribbean: Contemporary Colombia. Gainesville: University of Florida Press (1962) 183-213. It is worth noting that the Constitution (Article 41) says that "The Government ... will hold the supreme power for inspection and vigilance over educational institutions both public and private." In effect, however, the Constitution has been amended through treaty powers by a Concordat signed with the Vatican in 1883 which makes the Roman Catholic Church the moral overseer of national education.

3/ The Colombian peso is worth about 6 cents U.S. (16.25 pesos/dollar).

In order to provide primary education to nearly 100 percent of school aged children in the region, about 800 additional classrooms are needed. If these additional school rooms were built, about as many more additional teachers would also be needed. This would raise the cost to the department for teachers by at least 10 million pesos and would double the burden to the community for buildings. Preparing the needed teachers, of course, would also be a problem.

Primary schools in eastern Antioquia produced 4,722 fifth year graduates in 1966. Since primary education is a prerequisite to secondary education, enrollments in secondary schools are expected to reflect the capacity of the primary system. Accordingly, there were 10,376 persons enrolled in the six classes of all of the secondary schools in the region in 1966. This includes 6,975 in public and private general high schools and 3,299 in normal schools. Normal schools, as the name suggests, are for the preparation of teachers but operate at the high school rather than the college level. Together secondary schools produced 422 high school graduates in 1966.

Annual attrition is high in the high schools just as it is in elementary schools. Most of those who enter do not complete all six years. Many students of normal schools, for example, begin working after about four years of training. Every municipality in the region except one has at least one high school. However, only 11 of the 31 municipalities have a high school which offers all of the six years of secondary education.

There are 67 high schools in the region counting public, private and normal schools. Of these, 27 are public schools, 21 are private. These schools are staffed with 565 teachers. The official schools receive most of their funds directly from the departmental government and teachers are paid directly by the department in the same manner as primary school teachers. High schools also charge registration fees which add to their local income. The departmental contribution to public secondary and normal schools in the region in 1966 was about 6.5 million pesos for teachers' salaries and 4.8 million for buildings and operations. It was not possible to gather figures on the budgets of private schools. They raise much of their income from registration fees and tuition but also receive contributions from the church, private donors, the municipal government, and decentralized agencies. Most of the private schools in the region are operated by the Roman Catholic Church.

2) Health. While Colombian law gives the municipality major responsibility for many public services, the law says little about questions of public health. In Colombia specialized medical services and many hospitals and clinics are privately operated. Yet in the countryside and low income urban districts, people expect that basic health care will be provided free of charge or at low cost.

Health personnel and hospitals in eastern Antioquia are supported mainly by the Beneficencia de Antioquia, a departmental agency which receives and manages the income from state lotteries, gambling and betting. In 1967 the Beneficencia was integrated with the Departmental Secretary of Health. In the future the Secretary of Health will pay all public doctors and other medical personnel in the same manner as the Secretary of Education pays teachers, while the Beneficencia will act as an administrative agency for gambling taxes and pass its income to the Secretary.

Eastern Antioquia is served by 68 doctors and 120 nurses. (Appendix Tables). Most rural doctors are provided by the department -- only 16 are in private practice. This provides one doctor for each 8,000 persons, a level which is obviously too low to meet local medical needs. Even the number of 68 overstates those actually available since constant replacement leaves some health centers without service as much as half of the time. Seven municipalities reported they did not have a medical doctor in the village at the time of the survey.

Most rural medical doctors are recent medical school graduates or interns employed by the departmental government to serve a required two years in the field. These doctors receive salaries ranging from 2,700 to 3,600 pesos per month. Many choose urban locations where salaries are the same but living and working conditions are better. The whole eastern area spends only about 10 pesos per person annually (60 U.S. cents) on public health facilities, hospital care and drugs -- a level of expenditure which cannot provide anything but low quality service.

Medical personnel tend to be concentrated in the larger towns, especially Puerto Berrio, Rionegro, Sonsón and Barbosa. This problem is a serious one for the country as a whole. A study by the Federación Médica

Colombiana reports that approximately one-half of the country's 7,000 doctors are located in Bogotá. Only 8 percent of rural Colombians received medical attention in 1966. 1/ Lack of health services coupled with conditions of poor transportation are important deterrents to frontier settlement since the risk is high that an accident or serious illness will result in death. 2/

3) Roads. Of all of Antioquia's infrastructural problems, one of the most serious and complex is the planning, construction and maintenance of farm to market roads. Solutions to road building problems are difficult for two important reasons. First, road construction demands large capital investments. Second, and probably more important than the first, Colombian laws and regulations providing for local farm to market roads are so full of blockages and undistributed responsibility that the construction and financing by local government of farm roads is almost impossible.

The departmental assemblies determine which will be departmental and which will be municipal roads. (Law 50, 1910, Art. 2). The departments have, for obvious cost reasons, limited their share to as little as possible. They generally provide part of the state trunk system in connection with the national highway network. This leaves most of the departmental territory to the municipalities which have no resources to build roads. The law says: "Responsibility rests with the respective municipal councils to plan and develop ... the roads which fall under its jurisdiction," (Law 50, 1910, Art. 4), with the general provision that roads linking municipalities will be departmental responsibilities.

Local initiative was further confused in 1960 when Decree 1650 created Caminos Vecinales (Community Roads) as an autonomous agency and made highway planning a national responsibility. According to follow-up administrative decrees, each department must set up a departmental road fund and planning committee which will provide for roads connecting municipalities. Municipalities are also encouraged to set up local road building committees which will be made up of: "a) the mayor or his representative; b) the

1/ La República, (July 13, 1967). Reported by Dr. Carlos Agualimpia.

2/ Wava G. Haney, op. cit.

Parish priest; and c) a representative from the respective departmental committee." (Decree 1084, 1961, Art. 11). The use of the local fund and the function of the local committee is to be determined by the National Community Road Board. With the mayor appointed by the governor, and the church and the department on the board, the municipality has essentially lost any ability it may have had to plan local roads. It never did have ability to pay for roads.

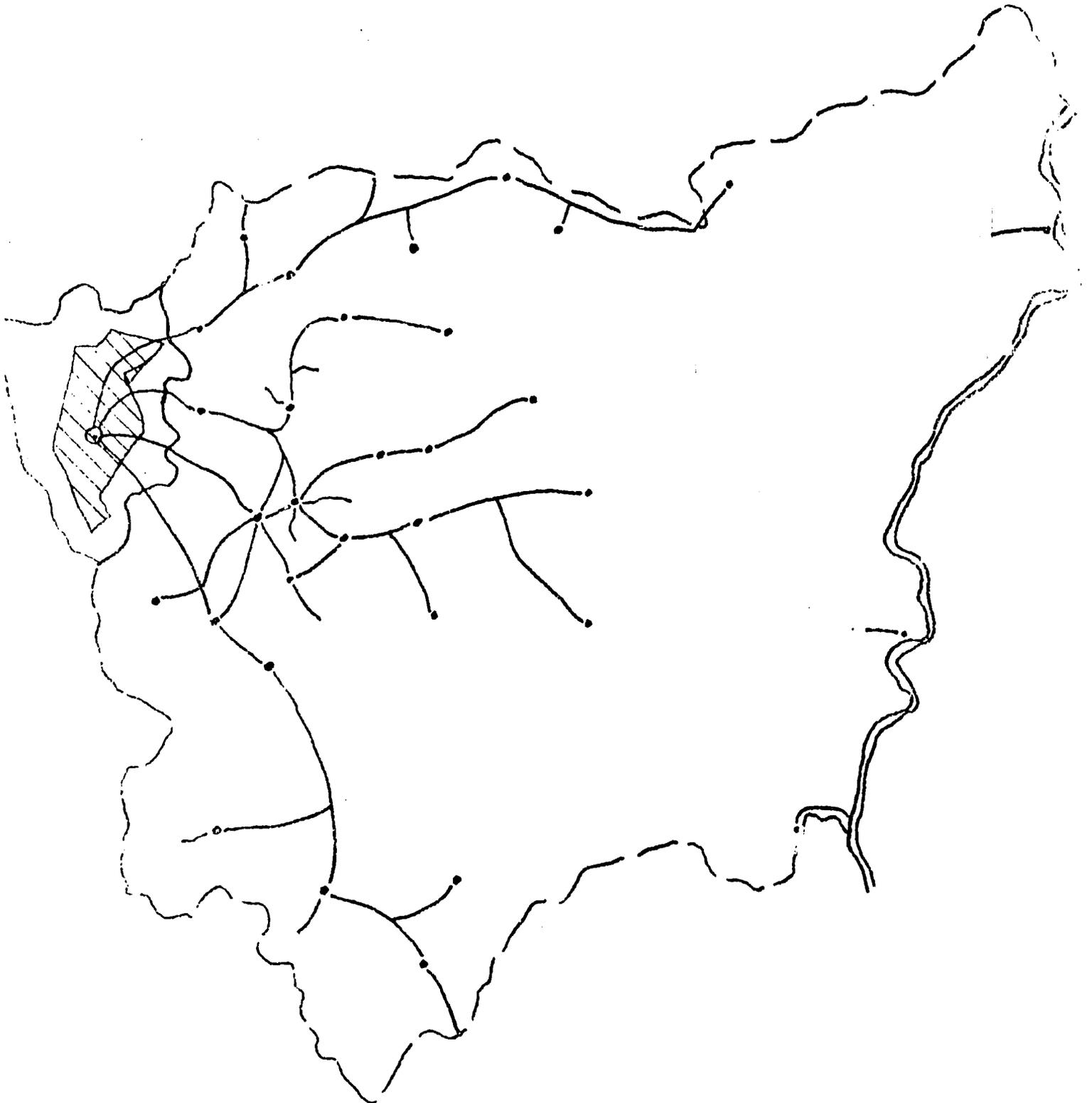
The results, of course, speak for themselves. The municipalities in eastern Antioquia did not build a single kilometer of rural roads in the last three years. But some rural roads do get built. They are being planned and constructed informally by Community Action Boards or from funds solicited from the Coffee Federation or other donors.

The region of eastern Antioquia has 1,148 kilometers of roads according to the survey which are passable throughout the year. These roads, including national, departmental and local roads, must serve a region covering 11,000 square kilometers of territory. There are about 80,000 farm parcels in the region of which only about one in eight is located on a road. One municipality, Caracoli, has no roads and no vehicles and can be reached only by train. The largest municipality in the region, Puerto Berrio, just recently started on a road system and has built the first 20 kilometers. Most of the farms in the region can now be reached only by pack mule or burro. This means that almost all produce entering the market moves the first leg of its journey by animal transportation.

An important addition to the region's road system is being provided by the Medellin Highway -- a modern, high speed, hard surface road being built by the national government to connect Bogotá and Medellin. Work on this highway is already underway at the Medellin end. The highway will cross the entire region from Medellin to the southeast and open up important new areas to road access. Land speculation has already begun along the proposed route.

Eastern Antioquia needs about 5,000 kilometers of new rural roads to give most of the farms in populated areas road access. This is five times the amount of roads now in existence. Some of these roads are needed to

FIGURE 2. THE 1960 ROAD NETWORK IN EASTERN ANTIOQUIA



provide links with the new national highway; most should be of the farm to market type.

4) Public utilities. All of the towns in eastern Antioquia and usually the smaller villages too, have some form of public utilities to provide electricity, water, sewerage, garbage collection and local animal slaughter. In contrast to road building, public utilities have advanced further toward modern structures than any other local public activity. Much of the credit for this can be attributed to Acuantioquia and Electrificadora de Antioquia, semi-autonomous departmental water and power agencies designed to operate public services in small towns. Part of their model for achievement is provided by the highly successful Empresas Públicas de Medellín, one of Latin America's most modern and efficient integrated public utilities. ^{1/} Acuantioquia and Electrificadora de Antioquia both try to operate on the principle of user charges and centralized billing and management.

Municipalities may either operate their own public utilities or contract for services as long as rates and charges "are submitted to the national government for approval." (Law 109, 1936, Art. 2). The basis for this law is that the State must protect the individual, but in practice the law has little intended effect and serves more to remove flexibility and local initiative. The law also says water and food will be inspected for hygienic handling but in typical legal fashion there are no guidelines about what should be done if the products turn out to be contaminated.

Where municipalities operate light and water systems, service is often poor, maintenance is neglected, bills are not collected and new expansion lags city growth. Municipally run public services find it hard to raise rates against local protest, find it almost impossible to cut off services to those who do not pay, and lack city council support to get funds for maintenance and improvements.

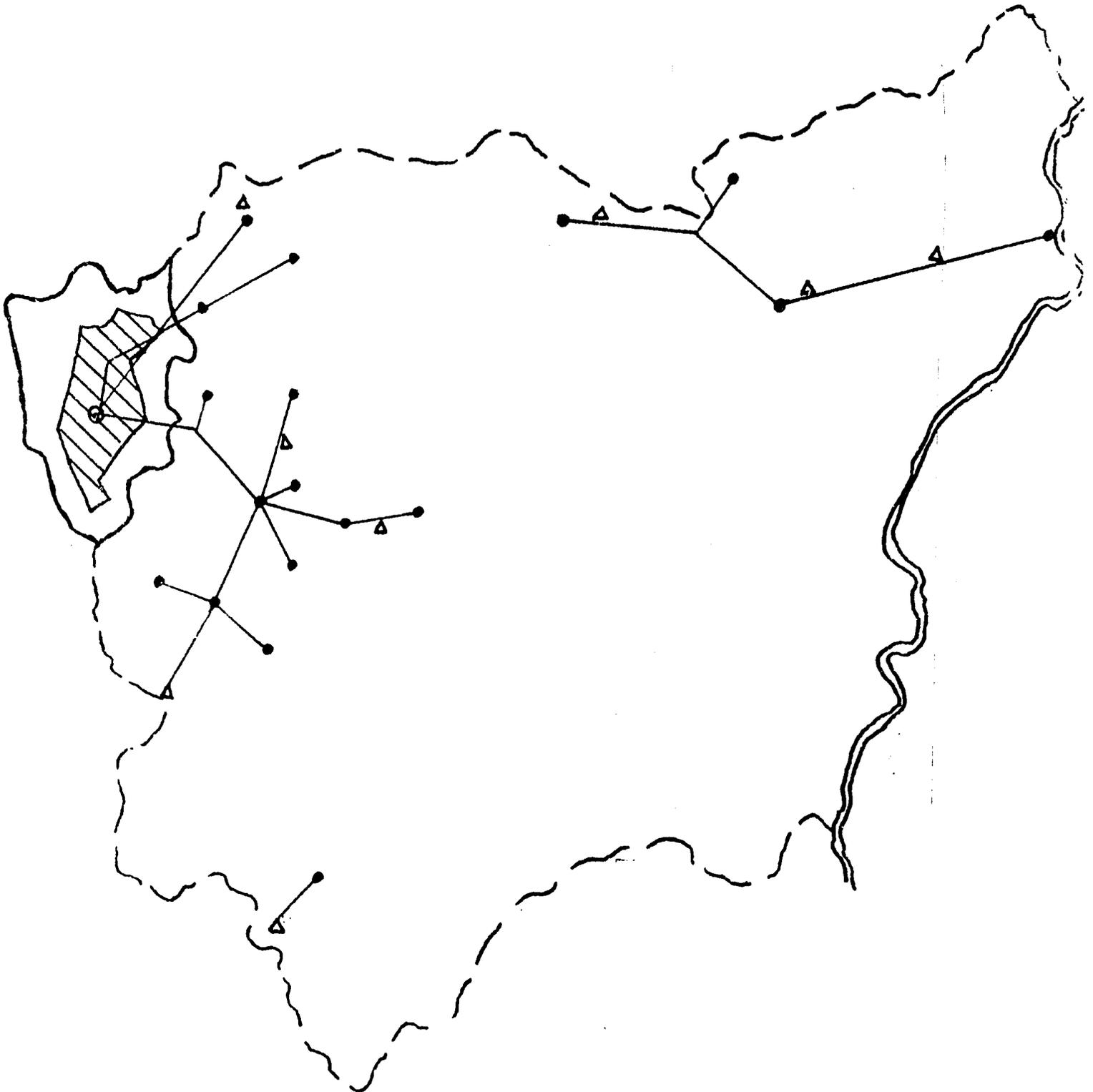
^{1/} E. Livardo Ospina, Una Vida, Una Lucha, Una Victoria. Monografía histórica de las empresas y servicios públicos de Medellín, Medellín: Empresas Públicas (1966).

Under these circumstances a departmental agency provides a useful third party service. It agrees to take over the village light or water systems if the municipal council will approve the transfer and subscribe capital to the departmental agency. The departmental agency in turn assumes responsibility for the operation and maintenance of the service, sets the rates and collects the revenues. Water and sewerage systems are always taken over together. Better service plus pay-as-you-go management usually results in substantial rate increases that bring a storm of protests from local townsmen. The local government usually cannot withstand this pressure, but since the departmental agencies centralize management and billing in Medellin, they are better able to operate on a business basis and cut off services for those who refuse to pay. But these too are not always effective and still fail to cover operating costs. Centralized companies, however, can attract better engineers and managers, buy materials in quantity, use electronic equipment for billing and numerous other advantages to users. Services which pay their own way also reduce the burdens of poverty stricken municipalities. Unfortunately many services are not like electricity and water and cannot be clearly divided by the amount each person consumes or receives as benefit. And so far, public utilities have been only for those who live in main sections of towns and villages.

Most people in eastern Antioquia, like those in the rest of Colombia, go to bed by candle light and dip their drinking water from mountain streams. This is one of the cruel reminders of what underdevelopment really means. The national housing census ^{1/} shows that eastern Antioquia has 72,547 occupied houses. Considering the population for the same period, there are an average of about seven persons per house. Of the houses, only about one-fourth have electrical service and almost all of these are in the towns. Our survey indicates that there are 24,460 users of electricity including business establishments and factories. Electrificadora de Antioquia provides service to 17 of the 31 municipalities in the region. Departmental water and sewerage services have not been as successful, reaching only seven municipalities. About one house in four within the region has running water and sewerage and again most of these are in the towns. (See Appendix)

^{1/} "Anuario Estadístico de Antioquia," (1966) op. cit., 340-385.

FIGURE 4. ELECTRIC POWER TRANSMISSION LINES IN EASTERN ANTIOQUIA
IN 1966
(Dots show towns with service; triangles are power stations)



Telephone and postal agencies, also public utilities, operate in all of the municipalities of eastern Antioquia. Distribution of these services is limited, usually of poor quality and often complicated by long delays or break-downs. There are only 1,229 telephones in the region to serve more than half a million persons. Nine of the municipalities have only a central exchange where the user must come to make his calls. Often these exchanges operate about 10 hours per day with no service during the noon hour and at night. Both telephone and telegraph use short wave radio to bridge the distances. No figures were gathered on telegraph availability but service was reported to be uncertain and irregular. One telegram sent from Medellin to a mayor in the region to inform him of this survey took 33 days to arrive.

National mail service depends mainly on passenger bus and train delivery. All villages can be reached by national mail, but again with delays. Surface mail is government operated while airmail (a separate post office in Colombia) is privately operated by Avianca, the national airline. Airmail service reaches Puerto Berrio and Puerto Nare through regular "bush flights" by Aero-taxi.

5) Local government facilities. A high proportion of all local government expenditures are used to pay administrative cost with most constructing and maintaining public buildings in the village. Each municipality must either own a city hall or rent space. The survey shows all municipalities in the area own at least part of the space they occupy. Many have borrowed funds to remodel their office facilities and still have loans outstanding.

In addition to the administrative offices, the municipalities provide housing for agents of the National Police who are located within the municipality, provide a jail building, and maintain market plazas, municipal slaughter houses and usually some public recreational facilities. The municipalities formerly provided their own police but during the violence of the 1950's, security police were nationalized. They are trained and maintained by the national government.

After the municipalities provide for physical facilities and pay local salaries and wages, they seldom have money left for services such as schools, roads and hospitals. And because services such as the local market plaza (usually the central plaza in the village) are used by almost everyone in the municipality to exchange products, there is considerable pressure for priority

expenditures in these areas. In addition, local administrative personnel and departmental supervisors often give priority to office buildings and have promoted these investments ahead of others. Half of the municipal buildings are either new or were judged to be in good condition. Slaughter houses and jails were generally judged to be in poor condition.

Little information was gathered on parks and sports fields. Often these were no more than designated areas where the young people gather to play soccer and basketball. The church (always located on the central square) usually took an interest in the plaza to see that flowers and trees were planted and that some part of the space was dedicated to benches and sidewalks and not entirely taken over by pack animals, trucks and market produce, purposes for which the country folks would tend to use it.

6) Agricultural services. The main agricultural assistance agencies in eastern Antioquia are the Secretary of Agriculture of the department, the National Ministry of Agriculture, the National Agrarian Reform Institute (INCORA), the Agricultural Credit Bank and the Coffee Federation.

All of the agricultural service agencies are oriented toward problems of farm technology and the traditional factors of production with the exception of the Coffee Federation. The Coffee Federation assists not only the farm producer but also local schools, roads, public utilities and other community improvements. They have local buying stations in the region and also give production credit, and extension advice through local offices. Their policy, however, is to concentrate their services in coffee zones. And eastern Antioquia is not a heavy coffee producing area.

All of the agricultural services are operated by departmental or national agencies -- none of the municipalities contribute directly to agricultural assistance. Aside from the Coffee Federation, the services use a standard one or two point program which consists of production credit and technical information. This is done under the a priori assumption that credit is the most limiting factor in farm production and that farmers lack information about technology.

Of the credit agencies, the Agricultural Credit Bank is the largest in volume and numbers with agencies in 18 of the municipalities. It also has

small farm supply stores with its banks, but in eastern Antioquia these stores generally do little business. INCORA has recently established a supervised credit program in the region serviced through 10 local offices. 1/ INCORA has in every case except one, entered areas where other programs were already operating and tends to add credit to a market not completely satisfied by the Agricultural Credit Bank. INCORA also had a title survey team working in the Rio Liel Valley preparing titles for about 80 new land settlers. At the time of the study the land surveys had been made but the titles had not yet been granted. Private land speculators were also titling land at their own expense under the expectation that the Bogotá-Medellin highway would pass through the area.

Besides the governmental agencies, there are 14 commercial banks in eastern Antioquia which add to the credit supply. These banks, however, are concentrated in the main towns, with 9 of the 14 in Rionegro, La Ceja, Sonsón and Puerto Berrio. A listing of agency locations is reported in Appendix Table 9 and in Figure 5.

Agricultural services which claim to provide mainly extension information are of limited service to the area. The agencies themselves lack information about their areas, often are not able to answer even basic agronomic questions and recommend inputs without consideration as to whether the supplies are actually available or economically used. 2/ Information agents spend much of their time in travel from farm to farm, in community relations, and in office work. The cost per farmer contacted is often more than 20 dollars.3/

1/ Abel Ronderos, "Proyecto de Crédito Supervisado para el Oriente de Antioquia," Mimeograph, Instituto Colombiano de la Reforma Agraria, Estudios Técnicos, Bogotá (April 1964).

2/ Herman Felstehausen, "The Organization and Availability of Rural Services in Antioquia," Land Tenure Center, University of Wisconsin, Madison, (In process).

3/ Bernardo Mora C. and Jesus M. Sierra M., "Organización, Actividades y Costo de Tres Servicios de Extensión Agrícola en Antioquia," Unpublished undergraduate thesis, Facultad de Ciencias Agropecuarias Universidad Nacional, Medellín (1968).

FIGURE 5. PRINCIPAL AREAS SERVED BY AGRICULTURAL CREDIT OR TECHNICAL ASSISTANCE

(Each circled point represents a town with an office of any one or a combination of the following: Agricultural Credit Bank, INCORA, Coffee Federation, Secretary of Agriculture, Ministry of Agriculture, or a Commercial Bank. There are 57 offices in 24 towns).



None of the agricultural service agencies or banks are found in areas lacking roads -- confirming the hypothesis that agricultural advisors follow rather than lead rural development and infrastructural investments. 1/ All of the services are concentrated in the towns nearest to Medellin. (See map).

C. Financing Rural Services: Distribution of Financial Responsibility

Expanded rural services naturally mean increased public costs. Yet the problem is not just one of raising more money. Much of the public revenue now collected is poorly invested and spent. 2/ An analysis of rural service structures must consider both revenue and public investment problems. First, public investment in rural areas are currently low, and much of the revenue comes from sources with limited potential. Second, local services are planned and operated by so many levels of government plus private and semi-autonomous agencies (almost all from outside the community) that no group, local or otherwise, can coordinate investments or income.

Municipal government constitutes an important part of total government machinery in Colombia. But in revenue terms, municipal governments in eastern Antioquia collect less than half of the money they spend. Besides, the structures are really "town governments" rather than rural-urban units as the name and the organizational diagrams would suggest. Most of the expenditures are made in the county seat even though a substantial part of the revenue is collected in the countryside. Together municipalities in Colombia consume about one-third of all government revenues, yet municipal governments are relatively unimportant when the expenditures of the largest cities are extracted from the total.

In Antioquia total municipal government expenditures in 1966 were nearly 695 million pesos. About 630 million pesos of this amount was spent in the greater Medellin area. The 31 municipalities of eastern Antioquia had total expenditures of only 18 million pesos during the same period. In other words, the Medellin area is spending 552 pesos on behalf of each person in its

1/ Patrocinio Santos Villanueva, "The Value of Rural Roads," in Raymond E. Borton (ed) Selected Readings: Getting Agriculture Moving. New York: Frederick A. Praeger (1966) 792-793.

2/ Dick Netzer, "Some Aspects of Local Government Finances in Colombia," mimeograph, Harvard Development Advisory Service, Bogotá (September 1966); also, Davis, op. cit.

community while in eastern Antioquia municipal governments spend only 35 pesos per citizen. Part of the unusually high figure in the Medellin area is from including the benefit tax, a frontage tax for special projects like roads and streets and income from the Integrated Public Utilities into municipal revenues. But even with these incomes subtracted, Medellin is still far in the lead over rural Antioquia.

In eastern Antioquia, departmental government is monetarily more important than local government. It is useful to look at how much revenue is collected locally and by whom. The following table shows the tax burden of the people living in the eastern region. This will be compared later with the value of the services they receive in order to illustrate to what extent they pay for what they receive.

Table A illustrates the lack of importance of municipal revenues in relation to the total. It is also worth noting that local voluntary activities such as Community Action Boards and the local churches produce about as much revenue as do the municipalities through formal taxation. Plans for comprehensive local development obviously need to give considerably more attention to the role of informal community groups considering their large relative importance. If their work and materials contributions were included, Community Action Boards would far exceed the municipalities in financial importance.

Not counting national taxes and withholdings from coffee sales, the eastern region of Antioquia is contributing 90 pesos per person annually to local and regional government. At the same time, considering the amount of service this income must buy, such an amount is obviously low.

Municipal and departmental governments depend mainly on inferior or secondary tax bases for almost all of their revenues. Secondary bases (income, expenditures, and property are the only primary bases) are those which affect only a limited number of people, tax limited items or items of low value or all of these. ^{1/} All of the municipal taxes with the exception of the land tax and potential benefit taxes are of this kind. All of the

^{1/} International City Managers' Association, Municipal Finance Administration, 6th ed., Published by the Association, Chicago (1926) p. 40.

TABLE A. LOCAL AND DEPARTMENTAL TAXES COLLECTED IN EASTERN ANTIOQUIA, 1966

(Thousands of pesos)

A. By the municipalities	
1. Land taxes	2,073
2. Industrial and commercial taxes	1,177
3. Livestock slaughter tax (young animals)	119
4. Gold mining tax	4
5. Minor taxes on market stalls, vendors, and miscellaneous	1,908
6. Back taxes collected on previous billings, approx.	<u>1,003</u>
SUB-TOTAL, MUNICIPALITIES	7,084
B. By local groups <u>1/</u>	
1. Community Action Boards (Acción Comunal), approx.	4,500
2. Local churches in main festivals, approx.	<u>2,000</u>
SUB-TOTAL, COMMUNITY	6,500
C. By the department	
1. Cigarette and cigar (tobacco) taxes	13,405
2. Beer taxes	6,706
3. Income from liquor monopoly (at 69% profit)	8,707
4. Livestock slaughter tax (adult animals)	951
5. Lottery and gambling, approx.	<u>3,000</u>
SUB-TOTAL, DEPARTMENT	32,769
TOTAL, LOCAL AND DEPARTMENTAL TAXES <u>2/</u>	<u>\$46,353</u>

1/ These figures are based on data and reports collected in each municipality during the study. They include only cash collections and do not include allowances for work contributions or materials -- a large part of Acción Comunal income.

2/ National taxes, namely income, patrimony and gasoline taxes, as well as withholdings from coffee sales and a few minor departmental taxes are not included here. There was no way to separate out these taxes for the eastern region.

departmental taxes are in the secondary class. The benefit tax, which is theoretically promising, has yet to be successfully applied outside of the main cities even though regulations call for it to be used in all of the municipalities of Antioquia. (Ordinance 58 of 1963 & 34 of 1966). The tax has been used with the greatest success in the city of Medellin. 1/ Rural Antioquia, which has low collection rates for its customary taxes, is obviously in no position to undertake the more complicated benefit tax.

The tax revenues shown in the previous table are not always clearly divided and often have variations in rate structures which make the part attributable to any one region difficult to calculate. Cigarettes now have a 100 percent tax on their factory price if they use national tobacco, 120 percent if they use part foreign tobacco. Cigars are taxed at 50 percent of factory price. Since July 1, 1966, beer is taxed at 60 percent of its factory price. Of this amount, 95.2 percent goes to the departments and 4.8 percent to the nation. The departments must allocate two Colombian cents per bottle to their respective departmental road funds (Fondo de Caminos Vecinales, Decree 1665 of 1966).

The slaughter tax on adult livestock is charged at the rate of four cents per kilogram liveweight and is collected by the department. (Ordinance 23 of 1958). However, the proceeds are shared with the municipalities through participations which give the municipalities about 45 percent of the tax. Fines are collected by the municipalities but 50 percent of the revenue goes to the departmental housing fund (Fondo de Vivienda Departamental, Ordinance 40 of 1961). National liquors are not taxed as such but are departmental monopolies with profits going to the department. A rate of 69 percent profit was used for Antioquia.

The departmental government has heavy and growing responsibilities for education, health, and roads, but almost all of its income comes from sumptuary (consumption) taxes. Since sumptuary taxes tend to be income inelastic (poor people smoke about the same number of cigarettes per year as do wealthy people) these revenues can be increased only by increasing the rates, increasing the price of the product if the tax is ad-valorem, or waiting for the population to grow. Experience indicates these taxes are not keeping pace with growth in population and income. 2/

1/ William G. Rhoads & Richard M. Bird, "Financing Urbanization in Developing Countries by Benefit Taxation: Case Study of Colombia," Land Economics, Vol. 43:4 (November 1967) 403-412.

2/ Netzer, op. cit.

Because so much of the costs of education, for example, come from sumptuary taxes and health services from the departmental lottery, the Antioqueños have a saying: "My education floats in a bottle of beer and my health is only a number in the Medellín lottery."

Since the municipalities have more superior tax bases available to them than do the departments, they are looked to as hopeful sources of new revenue to pay for additional local services. The land tax theoretically has great potential, but its administration is complicated and in the hands of officials who lack both political backing and administrative competence. 1/ The trend in Antioquia is to place increasing responsibilities in the hands of the department without giving it new tax powers while giving only light responsibilities to the municipalities because they lack administrative capacity. At the same time, local voluntary groups have grown to constitute a "fourth level of government" which is usually forgotten in department plans. They have no tax bases at all, depend mainly on good will, and yet are able to raise as much income and invest it better than local governments. 2/

Besides taxes, local and departmental governments also collect income from the sale of services. Here again, the activities of the department and departmental agencies overshadow the rural municipalities. Since municipal services are generally of poor quality and inefficiently run (as already explained) more and more of these services are being turned over to semi-autonomous departmental agencies. The revenues shown in the following table are separate from tax revenues and can be considered additional contributions of the people of eastern Antioquia to the public sector.

When the collections for public services are added to taxes, total revenue collections in eastern Antioquia for both the municipalities and departmental agencies are raised to more than 70 million pesos. Municipal public utilities are already included in the municipal budgets. To this, departmental utilities should be added but not the items on schools and hospitals. This will put the rural municipalities on the same bases for

1/ Davis, op. cit.

2/ Edel, op. cit.

purposes of comparison as the Medellin metropolitan area.

TABLE B. INCOME FROM THE SALE OR RENTAL OF SERVICES IN EASTERN
ANTIOQUIA, 1966
(Thousands of pesos)

A. By the municipalities

1. Municipal water, sewerage, light, slaughter house, fees and fines.	4,057
2. Rent and miscellaneous sales of municipal property and equipment	<u>462</u>
SUB-TOTAL, MUNICIPALITIES	4,519

B. By departmental agencies

1. Departmental light and power utility and Medellin light and power sales to region (370 peso/user/yr)	7,400
2. Departmental water and sewerage utility (9,300 users at 90 pesos per user per year). <u>1/</u>	837
3. Telephone utility (10 pesos per month per phone and 500 pesos per month per central exchange). <u>2/</u>	200
4. Departmental hospitals and clinics,	2,679
5. Fees and tuition in departmental high schools.	<u>8,604</u>
SUB-TOTAL, DEPARTMENT	19,720

TOTAL INCOME FROM SERVICES 24,239

Medellin, for example, operates its own public utilities while many the smaller towns turn these activities over to the semiautonomous departmental agencies. These agencies do not report incomes and investments by municipality. This suggests needed changes in future public service accounting which will be discussed in the last section of this report.

1/ These rates seem unusually low, yet many municipalities charge only one peso per month per water tap in the building.

2/ Minimum rates.

When taxes and user charges are included with the same criteria, Medellin Valley residents receive municipal services per person valued at 10 times more than those received by persons living in eastern Antioquia. At the same time, they receive many other departmental and national services which are not available at any level in rural areas. There is little wonder that Medellin attracts most of the migrants from rural Antioquia. In a study of one municipality within the region, 28 percent of the families had members who had migrated. Nearly 40 percent of all migrants go to the Medellin metropolitan area, 20 percent to other departments and only 11 percent to other nearby areas within the region. 1/

The next table shows who provides local services. It is evident that while the department is a heavy tax collector in rural areas, it also contributes about equally to supporting local efforts. The often heard charge that the departmental government extracts revenues from rural areas which it does not return is not founded in Antioquia. However, Antioquia appears to have done better than some of the other departments in at least attempting to service rural areas. It has drawn up a development plan, for example, which recognizes some of the fiscal problems discussed here. 2/

The department takes pride in its slogan, "Antioqueños can do more!" Thus far the department has not been threatened by serious sectionalism or movements to form new departments as has happened in many other parts of Colombia. 3/ Still the fact remains that rural Antioquia is poor -- its modern façade due more to Medellin (a kind of Rome set among peasant fields) than to the development of its rural resources.

1/ Corporación Social de Desarrollo y Bienestar, "Estudio Sobre el Peñol y la Incidencia del Proyecto Nare," Editorial Universidad de Antioquia, Medellin (November 1966) 39-47.

2/ Departamento Administrativo de Planeación, "Cuarto Plan Cuatrienal, 1966-1969," Gobernación de Antioquia, Medellin (Junio 1966).

3/ Colombia has formed four new departments in the last two years as a result of break-away movements from already established states.

TABLE C. DEPARTMENTAL AND NATIONAL FUNDS ENTERING EASTERN ANTIOQUIA,
1966
(Thousand of pesos)

A. For general expenditures and rural projects	
1. Departmental grants for general uses, mainly municipal expenses and local welfare.	4,432
2. National and departmental appropriations for specific projects, mainly municipal buildings schools and churches. <u>1/</u>	645
3. National grants to acción Comunal, approx.	640
4. Grants from Coffee Federation, mainly for schools and roads.	3,759
5. Grants from Codesarrollo, mainly for schools.	163
6. Salaries for mayors paid by the department (1,700 pesos per month average).	737
7. Salaries for local judges paid by national government (2,200 pesos per month average)	955
8. Direct aid from IDEM, mainly for municipal buildings and utilities.	831
9. Project assistance to agriculture by Dept. Secretary of Agriculture, approx.	<u>500</u>
SUB-TOTAL, GENERAL GRANTS AND SUPPORT <u>2/</u>	12,662
B. For support to education	
1. Salaries of primary teachers paid by department.	20,331
2. Salaries of secondary teachers paid by department.	6,490
3. Departmental grants to secondary schools.	4,787
4. National grants to secondary schools.	461
5. Alliance for Progress assistant to schools (OAIPEC)	<u>264</u>
SUB-TOTAL, EDUCATION	32,341
C. For support to health services	
1. National grants to hospitals and clinics.	661
2. Departmental and Beneficencia grants to hospitals and clinics.	674
3. Salaries of medical personnel paid by Beneficencia.	557
4. Salaries for medical personnel and dentists paid by Secretary of Health.	4,234

- 1/ The national government appropriated 7,992,722 pesos for projects in the region; most of this money has never been dispersed. The national government also aids churches, private schools and other political causes. These funds are appropriated by the National Congress through special bills or riders to money bills. However, many times the national comptroller never pays these commitments and the good projects die with bad.
- 2/ Does not include police agents in the community paid for by national government.

5. C.A.R.E., approx.	200
6. Catholic Church Care program, Caritas, approx.	<u>100</u>
SUB-TOTAL, HEALTH	6,426
D. For departmental roads -- Departmental Caminos Vecinales.	2,807
E. Net new borrowing by municipalities in 1966.	1,553
TOTAL FUNDS ENTERING REGION	<u>\$55,789</u>

Besides the items shown here, there are also national and departmental agencies which were not included in our calculations but add personnel and salaries to rural regions. The most important of these are the national police and national and departmental tax representatives, public notaries, and registrars. Figures on the number of police agents are incomplete, but a report from the district of Rionegro encompassing 18 municipalities shows 192 police agents. This is greater, for example, than the number of secondary school teachers in the same municipalities. No figures were obtained on the number of tax representatives, but there is at least one representative in each municipality. They are paid by the department or nation as are mayors and local judges.

There are more than 20 institutions and agencies participating in the support of local government activities and services. As a result, the rural community is the victim of many kinds of regional and national pressures. It has neither voice nor control over most of the patrons it depends upon for financial survival. It does not even pay its chief public servants or the people who teach their children or treat their illnesses.

The four most costly services for rural communities are education, roads, public utilities, and health. Public utilities are paid for mainly by user charges. Of the other three, education receives the most public support. Roads, the most capital demanding public factor, receives less support than health and is paralyzed both in planning and finance.

The multiplicity of agencies, the lack of coordination and the undefined procedures used in approaching "sponsors" creates confusion at the local level

and leaves many groups disappointed when they fail to receive funds. The result is that municipal officials and local leaders all talk of the need for "pull" (plánca), legal skills, and back-handed dealings to get funds for local services. While resources are obviously limited (as they are in any economic system), the lack of collective forms of decision making and public procedures block almost every step forward.

In the survey, municipal officials were asked where they would go for funds to undertake needed public service projects. None of the municipal officers had a clear-cut procedure for raising new money -- they said it hinges on their successes in the big scramble with national, departmental and private agencies. Local officials often named the departmental secretaries as sources of funds, the Coffee Federation, the National Agrarian Reform Institute, the lottery administration and even the United States Embassy. Yet at the same time, they seldom said projects could best be undertaken and paid for locally. Community action leaders favored local initiative more than other groups and explained it was the only way to get the job done. However, they look to outside sources too.

All of the 31 communities in the study reported numerous "felt needs." During the inventory, local officials and community leaders were asked to identify the most urgent needs in each of the public service areas. All communities reported a need for more schools. Local people estimated the need at about 200; our own estimate is 800. In the health field, local officials in 13 communities said a doctor was an urgent need and 13 communities said a hospital was needed. All communities called for more or better health centers and clinics.

Local people were not able to indicate very accurately the number of kilometers of roads needed, but every community placed rural and inter-community roads high on the list of necessities. Our estimate is that about 5,000 kilometers of new roads are needed.

Public water systems were called for most frequently in the area of public utilities. New, improved, or expanded water systems were requested in 21 of the 31 municipalities with many also reporting a need for a combined sewerage system. There were 7 communities who placed electricity highest on the list of public utilities and 6 of the 31 said telephone service was so bad it was of little use.

Local government facilities and agricultural services were not as clearly recognized as specific needs. This may, however, have also been due to the fact that community facilities have received more attention during the years and agricultural services are not as important to town officials. Among the items mentioned were: 8 called for street paving, 15 said the market square was too small or in poor condition, 10 said a bank was urgently needed in the community for savings, lending and other business transactions, a few called for cooperatives and improved animal slaughter facilities.

The same local people were asked if they thought the local government had the capacity to undertake all of the projects they reported were needed. This usually provoked a long conversation about the problems of local government (i.e. "it does nothing") and a transfer of blame for inaction to higher levels (i.e. "the department and the nation will not help the way they should"). There were few estimates about how much the additional services would cost.

Municipal governments in rural areas are so unimportant in administration, planning and the value of services they finance that some observers have been prompted to argue that municipal governments hardly have reason for being. ^{1/} While these arguments in the past have often been based on impressionistic evidence, data from eastern Antioquia clearly support this conclusion.

The relative sizes of community, municipal and departmental revenue collections are shown graphically at the end of this section. Municipal income and expenditures are shown in Appendix Tables 5 and 6. Departmental government is five times more important to a local community than is its municipal government. Voluntary community organizations are nearly twice as important to the community financial structure as are land and commercial taxes to the municipality. The municipalities fail to meet either quantity or potentiality criteria. None of the services reach 90 percent of the people -- not even 50 percent of rural people. All of the local forms with the exception of Community Action Boards were judged inferior to alternative departmental or regional forms.

^{1/} Netzer, op. cit.

The lack of potential of rural municipalities is further demonstrated by examining revenue trends during the past 10 years. In rural areas public expenditures are needed even if population grows little since many of the basic community services have never been built. Large cities bear the heaviest burdens for public services, of course, because of rapid in-migration plus normal population growth.

The Medellin metropolitan area has been able to more than maintain its relative level of local government spending in spite of rapid population expansion. The Medellin area increased municipal expenditures from 102 million pesos in 1956 to 630 million in 1966 while the cost of living tripled and population grew by about two-thirds. In relation to the rest of the municipalities in the department, as well as in real terms, Medellin is gradually improving its position. In 1956 the Medellin area accounted for 35 percent of all Antioquian municipal expenditures. By 1966 this figure had climbed to almost 91 percent.

Meanwhile the fiscal structure of rural municipalities is being slowly depleted. On top of a long historical backlog of public works needs, rural regions also face a two percent annual population increase. An analysis of municipal income for eastern Antioquia during the last 10 years indicates they are not meeting population growth demands let alone older demands to correct inadequate service levels. Municipally based revenues are declining in relation to total local government income in rural regions.

For example, land tax revenue paid 27 percent of all municipal bills in eastern Antioquia in 1956. Ten years later land tax revenue had declined to 16 percent. This is because land appraisals and tax collections have not been kept up to date. Other local taxes have maintained their relative position, but that is less important since land is the main source of local tax revenue. The proportion of income from locally run public utilities has also kept pace with total revenues but this appears to be more due to larger sales than to an expansion of either services or rate increases.

The combined expenditures in the 31 municipalities of eastern Antioquia in 1956 were 4,288,664 pesos. Deflating this to the 1954-55 base period of the consumer price index for workers, this amount provided 9.73 pesos (about 59 cents U.S.) in municipal expenditures per person. ^{1/} By 1966 municipal expenditures had grown to 18,276,896 in current pesos

^{1/} The base period for the Colombian Consumer Price Index is July 1954 - June 1955 equals 100. The index for workers in Medellin 1956 was 105; in 1966 it was 333. Source: Revista Banco de la Republica, Bogotá.

but the Colombian currency had devalued from 2.50 pesos to 16.25 pesos to the dollar and the consumer price index rose more than 300 percent.

Using the consumer price index as the guide to the real rise in prices, plus accounting for population growth during the period, the municipalities in eastern Antioquia in 1966 were spending 10.64 pesos per person (about 64 cents U.S.). This shows a slight increase in expenditure per capita over 1956 and is accounted for entirely by increased departmental and national grants to municipalities, not by improving municipal revenue sources.

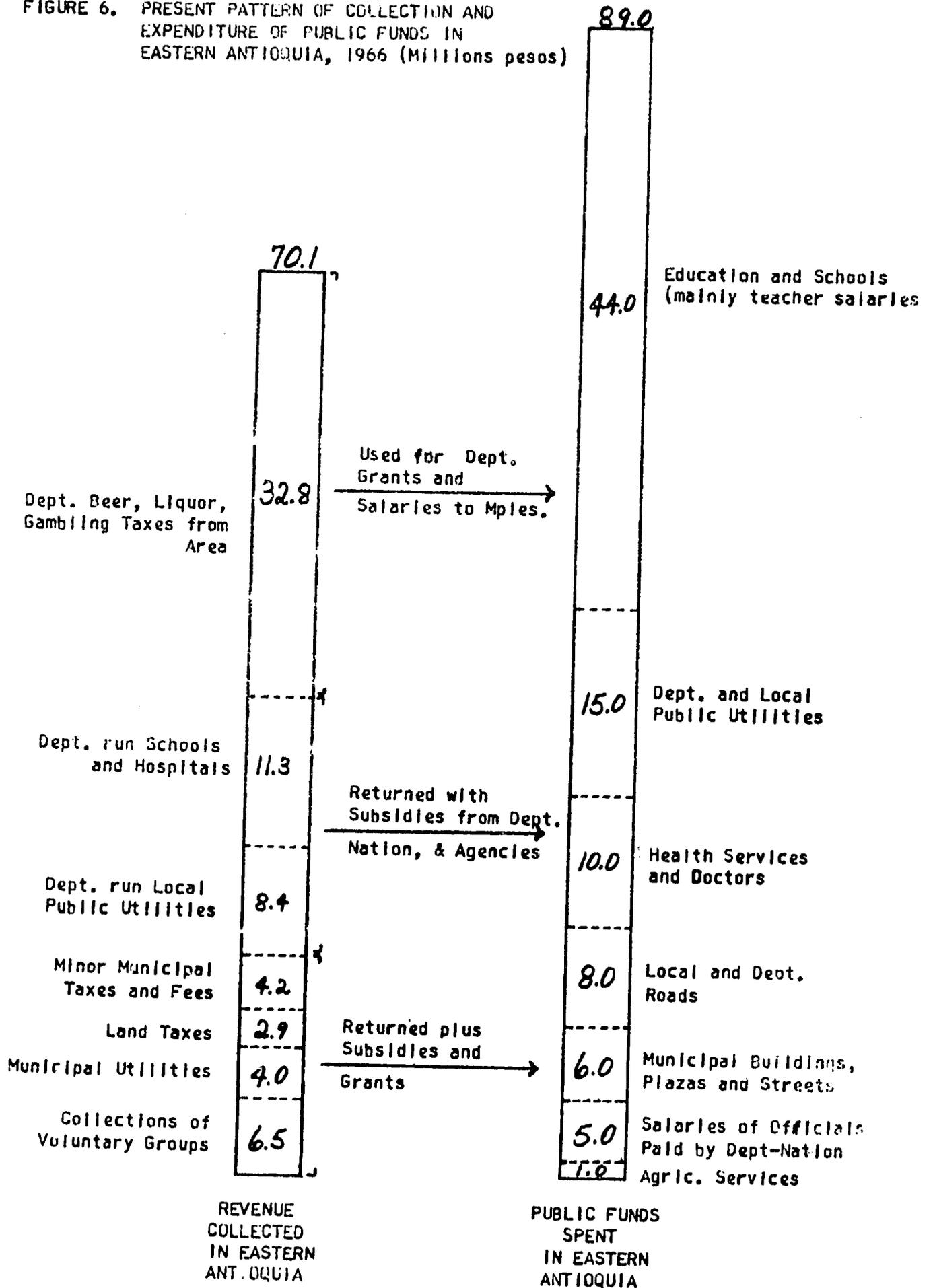
Expenditure trends for local governments in advanced countries are also towards increased grants from state and national levels -- but this is after local governments have already made sizeable contributions. In fact, local sources of revenue continue to grow in most countries; it is just that they are not growing as rapidly as grants in aid. 1/

This discussion suggests more strongly than ever that rural municipalities in Colombia probably have little future unless substantial adjustments are made in both organizational and financial structures. The future role of the municipality as the local unit of government remains a question. Yet municipalities probably cannot be abolished. By long tradition they have a firm place in the chain of Colombian government. In departmental capitals and large cities they do have importance. To some extent, they are the foundations of the national political parties. They provide public positions and prestige to local political leaders.

Local people need instruments to express their public concerns. What is suggested is that basic changes are needed before rural Antioquia can raise agricultural productivity or even maintain its present relative position with regard to metropolitan Medellin. These steps will be discussed in the last section.

1/ International City Managers' Association, op. cit., 37-40.

FIGURE 6. PRESENT PATTERN OF COLLECTION AND EXPENDITURE OF PUBLIC FUNDS IN EASTERN ANTIOQUIA, 1966 (Millions pesos)



IV. Improving Municipal Government and Rural Services

The purpose of this study was to first explain why public factors of production fit as much into resource allocation decisions as do traditional factors, and then to report the results of a study in one rural area giving actual levels and limits of public factor inputs.

The evidence arguing for an important role for public factor inputs comes from both historical and empirical case evidence. That is to say, one does not find agricultural systems or case areas which demonstrate rapid agricultural growth under conditions where (using data now from Antioquia): 1) only 20 percent of the population completes primary schooling, 2) there is one medical doctor per 8,000 to 10,000 inhabitants, 3) only about 20 percent of farms are accessible by road, 4) only 25 percent of homes have the benefit of electric power and almost nobody has safe drinking water, 5) local government spend almost all of their annual income on administrative salaries, office buildings, and village squares, and 6) agricultural assistance agencies provide mainly credit. These conditions mark out the symptoms of underdevelopment far more dramatically than the fact that farmers do not use fertilizers or hybrid seeds.

The final part of this report is devoted to outlining a few alternatives which might be considered in trying to improve municipal government and rural services. These points are intended mainly to guide future discussion and debate on this subject. This is not a model or a package for immediate application.

In dealing with the traditional factors of production, where one or more factors are found to be scarce, economic theory tells us to hire (or rent) limiting factors up to the point where marginal costs equal marginal returns. But how does one "hire" more public factors? Adding traditional factors is done largely through the market place by increasing money expenditures. Each individual entrepreneur acts as manager of this operation. If there are no managers, there are no transactions. Public factors present a different case because the managers and not just the factors must be created. These "artificial managers" are created out of groups of people and constitute what we call government bodies. If there are no public managers there will be no transactions in public factors.

The problem of increasing transactions in the public factor market is also difficult and complex because the definition of the instrument that moves the market is complex. In the traditional economic market place, price moves the market. In the public factor exchange, public purpose moves the market. ^{1/} This is why form and organizational potential are of vital importance because organization is the medium through which public purpose is decided.

The concept of potentiality is used, as explained earlier, as a measurement criterion since obviously not every form of public organization tried in Colombia is equally useful. The potential or usefulness of an organizational form is judged by its efficiency in adding the formation of public purpose. Public purpose is not clearly posted in the market place like price; it can be reported only after counting votes or opinions -- a task that itself requires an organizational form operating under established rules. Public purpose is formed by the interaction of alternative views in representative assemblies -- just as price is formed by the interaction of alternative offers in a free market place. From this example it is easy to see how kings and development planners can privately set purposes just as monopolists and oligopolist can privately fix prices.

The recommendations in the final part of this article are based on the conclusion that the free and representative establishment of public purpose in rural Colombia is often blocked by monopolized decision, is set by ideals rather than public demands, or in some cases because the instruments to determine the public purpose have never been formed. Recognition of these three problems is important because it leads to the search for new organizational forms rather than focusing concern only on the quantity of services available. At the same time, the new forms must be more appropriate than the old -- they will have to stand the tests of use and performance. They cannot be selected just because they reflect a set of "human ideals" or "natural rights" as a reading of much of Colombian

^{1/} A fuller explanation of these concepts can be gotten from: John R. Commons, Legal Foundations of Capitalism. Madison; University of Wisconsin Press (1959) 313-388.

constitutional history would indicate has happened. 1/ Idealized criteria continue to permeate the Colombian legal and political system and give "bosses" and "experts" license to carry out many programs that fit their private interests. 2/

Based on what has just been said, the specific suggestions for public service and local government improvements represent two types -- those which involve mainly administrative changes without changing the basic organizational form, and those which call for fundamental structural changes. Many of the administrative changes could be made through executive decrees within existing legislation. The more basic changes would require congressional action and even constitutional reform.

A. Fiscal Planning and Budgeting

Given the minor relative fiscal importance of rural municipalities, administrative and auditing changes should be made to reduce local overhead costs and paper work. Under present regulations, all municipalities in Antioquia, regardless of size or capacity, must collect 27 different taxes for which they maintain separate accounts, keep 27 other non-tax accounts plus 675 expenditure accounts organized under 13 programs. 3/ Budgets are based on these accounts with the municipality required to balance accounts monthly and send a report of income, expenditures, accumulated totals and balances, along with copies of receipts, to the departmental comptroller for audit. During a year these accounts may produce a stack of documentation two feet high in a small municipality with less than a half million peso budget (30,000 dollars).

Separate budgeting and accounting procedures should be developed for rural and urban municipalities. The most appropriate for Antioquia would be

1/ Op. cit., Volume I and Chapters 1 and 2 of Volume II.

2/ Orlando Fals Borda, La Subversión en Colombia. Bogotá: Tercer Mundo (1967).

3/ Departamento Administrativo de Planeación, "El Presupuesto por Programas en la Administración Municipal," Gobernación de Antioquia, Medellín (September 1965).

the establishment of a metropolitan zone around Medellin where present systems might be retained with simpler rules for the rest of the department. The rural municipalities should not keep more than six or eight income and tax accounts and about 20 expenditure accounts. Many minor taxes such as taxes on street vendors should be abolished in rural zones. Many of these petty taxes currently produce only a few hundred pesos (10 to 20 dollars) during an entire year.

Accounting and budget reports need to be redesigned in order to reflect what the local community does, not just the amount of money received and spent. At the present time there is no way to tell by looking at municipal accounts how the local government is supporting local services. Much of this difficulty is because books are kept according to class of executive order that approved the project and not class of project, and because municipalities share costs with many other agencies. A new road, for example, may appear only as labor in municipal expenditures with the departmental government providing the bulldozer and the Coffee Federation the materials.

The following six functional categories are suggested as a guide for more meaningful reporting: 1) education, 2) health and welfare, 3) roads; 4) public utilities, 5) streets, plazas and municipal buildings, and 6) general government administration. New construction and new projects need to be specifically designated since most expenditures are for operation and maintenance.

All departmental and semi-autonomous agencies should be required to report to the department the funds they give to local communities so that these accounts could be added in with municipal accounts. If this is not done, planning at the municipal level is impossible since "outside" agencies are so much more important than local finances and yet nobody has any way to know or predict their contributions. The municipality is too small a unit for reporting for many agencies. Because of this problem, regional divisions would be useful and are discussed below.

Local governments need more total revenue to construct roads and schools, the two most costly services in rural communities. Needed revenue will not be forthcoming from the departments since they have no tax bases which can produce the necessary volume. Alternatives are limited -- the land tax needs to be put to much greater use. Consideration should first be given to having the administration and collection of the land tax

taken over by the department. This is necessary because the municipalities do not have the administrative or technical capability to maintain appraisals or collect the tax.

Appraisal work in all of Colombia except the Department of Antioquia and Federal District is done by the National Geographic Institute. It uses complicated, costly and slow procedures which reduce the effectiveness and appeal of land taxes. 1/ Antioquia operates a separate appraisal office and is probably in a better position than the rest of the country to experiment with rapid, low cost cadaster procedures. As survey work is completed, land taxes should be substantially increased to produce larger amounts of revenue. At the present time, rates are four mills per 1,000 assessed valuation and are fixed by the National Government. The National Government should set only a maximum with the municipalities left to regulate rates locally.

Eastern Antioquia needs 800 new schools and 5,000 kilometers of new rural roads. A school costs about 30,000 pesos. A kilometer of low grade but passable road can be built for about 40,000 pesos. In many cases Community Action Boards would be willing to supply labor. To provide all of these roads and schools would cost 225 million pesos. This assumes the department would supply the new teachers and that maintenance costs would be in addition to the 225 million. High as these costs may seem, the land tax could easily cover them.

The concept of taxing agricultural land originated with the classical economist, David Ricardo, who argued that as more and more marginal lands are brought into production, good lands would command a higher and higher price. 2/ This accrued value, Ricardo called rent, and went on to show that this price resulted not because of any particular investment or action by the landlord, but simply because land was scarce. On this basis, Ricardo and others since have argued that the accrued value of land, or at least a part of it, should be taxed away by the state since it is not fair that a

1/ Davis, op. cit.

2/ George Soule, Ideas of the Great Economists. New York: Mentor Book, The New American Library (1952) 50-52.

person fortunate enough to own land should have free accrued income while a person not so fortunate receives nothing.

Applying this standard theory, we can calculate the potential land tax in eastern Antioquia. The region has 1.1 million hectares of land of which probably 800 thousand hectares have some agricultural potential. Land prices range from about 1,000 to 40,000 pesos per hectare. The 1966 official appraised value of only the agricultural land in the area was 1.1 billion pesos or an average of 1,000 pesos per hectare overall. With urban property it is 1.4 billion pesos. Bringing appraisals up to date, the area should be worth at least 4.6 billion pesos, 1/ an increase of 4 times. Using rising land prices of eight percent annually, (reports in the area indicate land prices are rising faster than this) the accrued annual land value is 368 million pesos.

Allowing for price fluctuations in land, errors in assessments and danger of political protest caused by increasing taxes, plus using the maximum rate of planned tax reform legislation, a tax of about one-sixth of the accrued annual value might be applied. Current proposed tax reforms place the mill rate at a maximum of 15, still low for agricultural land when compared with advanced countries. At this rate, agricultural land in eastern Antioquia would produce 72 million pesos of revenue annually. This would provide enough revenue in only five years time to construct the new schools and new roads rural Antioquia needs.

Before revenues can be increased, however, ways need to be found to give rural people direct evidence that their local taxes are producing benefits for them. If government reorganization is not included in the tax program, the measure is sure to be rejected. Farmers have little interest in paying taxes since most of the revenue is spent in the village or on projects of little direct benefit. Delinquency in payments in rural Antioquia is about 40 percent on any current year. At the same time, the municipal government has no practical enforcement procedure it can apply against delinquent tax payers. 2/ On the other hand, when farmers, even those with very low incomes, know that money spent will produce direct benefits, they are often

1/ This rate was provided by the Departmental Land Cadaster Office in Medellin, Dr. Antonio Caron, Director.

2/ Davis, op. cit.

willing to make relatively large contributions. This can be observed from the size of voluntary contributions to Community Action projects. During the survey, many local boards were observed using quotas for rural roads, schools, and water improvement projects. These quotas sometimes rose as high as 1,000 pesos per family, an amount greater than these same families would pay in all other forms of taxes during the same year.

Aside from land taxes, other existing local taxes have limited possibilities. The industrial and commercial tax is the second largest local tax source; it probably could not be increased greatly and serves more as a license fee than a tax. On the other hand, it should be maintained since it is one way to get an additional contribution from urban residents who receive the greater share of present local services. Livestock and other minor taxes should gradually be dropped with some of these taxes turned into license fees or fines.

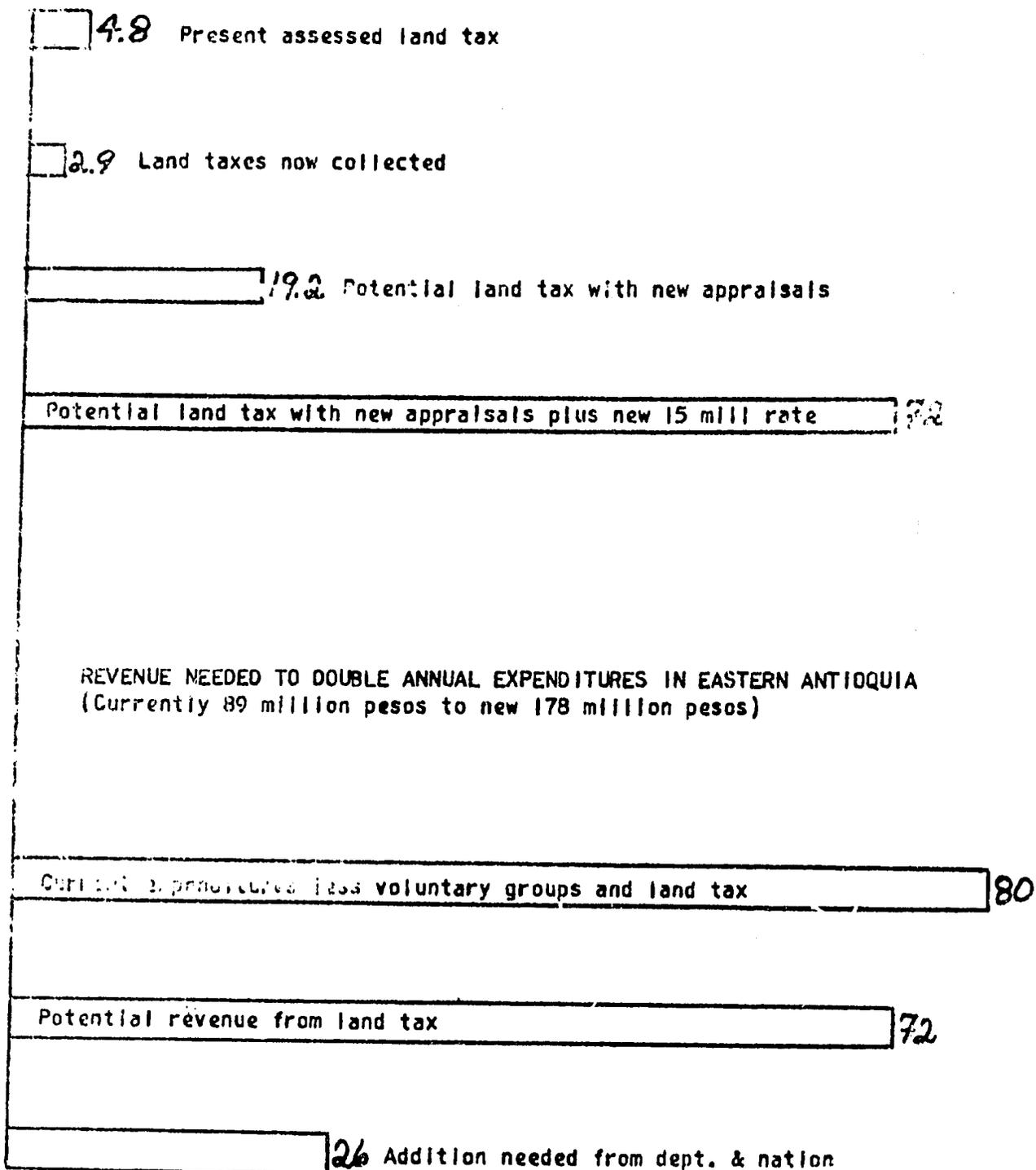
Municipal borrowing has increased rapidly during the last 10 years but is not at a high level on the average. Much of this borrowing is stimulated by departmental agencies such as IDEA and the municipal lending cooperative who use the loans as ways to get the municipalities to undertake immediate projects. The debt serves as a stimulus to the municipalities to find new funds to pay back the principal and interest. While in general this procedure is a good one, it should not be the main stimulus in the long run. Borrowing tends to concentrate investments in public utilities and municipal buildings -- items which have a rent return -- and tends to by-pass more urgent investment needs such as schools and roads.

B. Local Government and Rural Service Reorganization

The previous emphasis in this report on increasing municipal revenues should not mask the urgent need to increase the administrative capacity of local groups and to work out systems for better representation of local interests. Many local officials agree that municipal government is debilitated. ^{1/} Mayors are appointed by the governor and often are not familiar with

^{1/} Good statements can be obtained by reading the reports of municipal delegations to the National Congress of Municipalities; for example: "Proyecto de Ponencia de la Delegación de Tabio al III Congreso Nacional de Municipalidades Reunido en Neiva" (June 21, 1962).

FIGURE 7. PRESENT AND POTENTIAL REVENUE FROM LAND TAXES IN EASTERN ANTIOQUIA (Millions of pesos).



Total 178

the areas they serve. They are poorly paid (average 100 dollars per month) and rotate often. City councilmen say their positions have become honorary titles -- that city councils have neither resources nor authority to function. The personero is supposed to be the official representative of the people but in practice he is the municipal secretary. Executive and decision-making powers rest with the mayor who has the most direct connection to central authorities. The personero is often viewed as a stable long-term community leader, but the study shows this is not the case. The municipalities in eastern Antioquia had new personeros on the average of every 18 months.

Municipal government is poorer than was expected and exists more in name than in fact. The question now is: Should a new attempt be made to build model French-style municipal structures, or should a more indigenous course be chosen? Experience suggests locally adapted organizations would be more useful and probably more successful.

A combination of the following steps should be considered:

1) Establish the Medellin Valley as a special urban zone like the Federal District of Bogotá and then divide the rest of Antioquia into rural service-administrative zones.^{1/} The present "Planning Regions" dividing the department into 10 zones could probably be used for this purpose. ^{2/} These regions should then serve as branch offices for the department and should be managed by trained staff. Municipal offices would be preserved but mainly as administrative posts and local decision centers. Since most municipalities are too small to be efficient, this plan could serve as an intermediate step in gradually turning municipalities into rural "township" governments and making the regions the main units of local government.

As indicated earlier, the most serious shortcomings are representation and administrative and management capacity. Present technical and administrative talents are concentrated in the large cities. The rural regionalization plan would be expected to move at least a minimum number of technicians and trained administrators out into the rural districts. This idea

^{1/} Pilot districts have been suggested by: Garland P. Wood, Gobierno Local: "La Cuerda al Cuello o Piedra Clave," Temas Administrativos, Vol. 4:8 (April 1968) 53-62.

^{2/} "Cuarto Plan Cuatrienal," op. cit., maps in Appendix No. 4

has already been discussed by the Departmental Government with the possibility of including medical teams, engineers, architects, economists, and lawyers from the universities to give field support to the regional centers and practical experience to the teams.

2) Thought should be given to reorganizing municipal councils on a gradual basis by giving Community Action Boards (Acción Comunal) first one representative on the municipal council and gradually increasing this to up to two-thirds of the seats. The mayor should be paid by the municipality at the salary determined locally -- with perhaps guidelines established by the departments. Eventually he should be selected by the council and finally elected on a popular basis. He should be the chief representative of the municipality and the local people. Laws which make the municipal secretary the chief "representative of the people" should be abolished since the secretary in most places has already lost his representation to the mayor -- if indeed he ever had it. These suggestions are modifications of some already being considered in the National Congress under the current government's package reform: "Nuevo Régimen para los Departamentos y Municipios." ^{1/}

The main differences between these alternatives and the government plan is the amount of representative authority eventually to be built into the system. The current government proposals would reduce the authority of the already weak municipal councils and place most of the legislative and executive power into the hands of an elite "planning council" at the departmental level. This is in response to a lack of technical and administrative talent -- the same issue expressed above, except that additional concentration of power monopolizes the public factor markets rather than aids in the formation of public purpose.

The political party implications of government reorganization are seldom discussed publicly but need to be given serious consideration. To drastically and rapidly change the composition of municipal councils would shake the very foundations of the Liberal and Conservative parties in Colombia.

^{1/} El Tiempo, (October 4, 1967).

The municipal council is often the local meeting place for local politicians. To place peasant leaders from Community Action Boards on municipal councils would probably cause changes in the whole political party structure of the country. If such reorganization is too peaceful and gradual, present political leaders cannot be denied their public stage overnight. 1/

Since Community Action Boards are the only currently existing strictly rural representative bodies, funds from land taxes should be specifically earmarked for their use during the early stages of these reforms. This would stimulate the formation of more boards and would channel investment into badly needed rural schools and roads. The local board is also a way to stretch the worth of the peso since the local boards often contribute voluntary labor. 2/ Roads demand equipment too, which could best be owned by the department and maintained at its regional centers.

3) Consideration should be given to placing public utilities as rapidly as possible in the hands of the already established departmental semi-autonomous utility companies. Tariffs need to be raised to cover operation and maintenance costs. These agencies should be required to report their collections, investments, and operating costs by region.

Semi-autonomous agencies should all be required to report how much money they collect and spend in each region, not necessarily in each municipality. Gradually as the planning capacity of the regional staffs increased, semi-autonomous agencies that now give grants to local services could be encouraged or even required to funnel their contributions directly to local priority projects.

Public health activities for the time being can remain with the department, and agricultural services with semi-autonomous national agencies. These units may be suitable even in the long run if some attention is given to allowing local voice in determining agency service policies.

1/ Colombian history is full of stories of the party boss or "caudillo", and his fight to preserve his elite position; see Fluharty, op. cit. and Davis op. cit. 53-61

2/ Edel, op. cit.

4) Obtaining qualified personnel for rural public administration is an urgent need -- one the department and local communities themselves need to invest in. Superior personnel is the main advantage the department has over the local community, not superior organization or representation. For a constant supply of new personnel, the department should give thought to the establishment of training programs and support to schools of public administration. This training could be built into secondary schools already operating in the region.

C. The Conclusion

The discussion thus far strongly suggests that the department is a far superior governing body than is the municipality, but in many ways it is also weak. The question of departmental reform is outside the scope of this paper but at some time it will also have to be considered.

The objective of this work and discussion is to achieve higher levels of service and more rapid development of rural areas. This requires not just the maintenance, but the building of large segments of new infrastructure. To begin such an effort will demand the organization and use of talents and structures already available. This is why Community Action Boards must be called upon for a greater and more formal role. It is also why the departments need to move more technicians into the country.

Part of land tax revenues should be turned over directly to local Community Boards if they agree to use the money for roads, schools, health centers or public utilities. As the boards become more fully represented in municipal and regional councils, this money could be passed directly to the councils for investment. Also as this happened, councils should have freedom to increase the land tax rates in order to raise funds for more extensive local projects.

Land tax not turned over directly to local boards should still be earmarked for use in the region in which it was collected. With experience and growth in local government, regions should at some time replace municipalities as the main local unit.

Some of the changes suggested here would require constitutional reforms. In all cases there should be emphasis on flexibility to allow for local experimentation and local variation. After all, different groups of

people look for different goods when they go to the market; in the same way they look for variation in public services when they go to the public factor markets. There is an urgent need to expand on at least some of these goods. Without them, rural Antioquia can never be more than marginally productive.

LIST OF PUBLICATIONS CITED

- Alderfer, Harold F., Local Government in Developing Countries. New York: McGraw-Hill (1964).
- Barrera, Pedro Nel, "Estudio Socio-Económico Area de Antioquia," Mimeographed. Servicio Nacional de Aprendizaje, Bogotá (Abril 1962).
- Cardona Gutierrez, Ramiro, "Migración, Urbanización y Marginalidad," Tercer Mundo Paper, Suplemento No. 44-45 (December 1967 - January 1968).
- Carnoy, Martín, "The Cost and Return to Schooling in Mexico: A Case Study," Unpublished PhD Dissertation, University of Chicago (1964).
- Castillo, José Américo, and Trant, Gerald I., "Notes on Recent Developments in Colombian Agriculture," Mimeographed, Universidad del Valle, Cali (1967).
- Commons, John R., Legal Foundations of Capitalism. Madison: University of Wisconsin Press (1959).
- Concejo de Medellín, Crónica Municipal Medellín, Edición Extraordinaria Dedicada a Conmemorar el 350 aniversario de la Fundación de la Ciudad, Medellín (1967).
- Corporación Social de Desarrollo y Bienestar, "Estudio Sobre el Peñol y la Incidencia del Proyecto Nare," Editorial Universidad de Antioquia, Medellín (Noviembre 1966).
- Currie, Lauchlin, Accelerating Development: The Necessity and the Means, New York: McGraw-Hill (1966).
- Davis, L. Harlan, "Economics of the Property Tax in Rural Areas Of Colombia," Unpublished PhD Dissertation, University of Wisconsin, Madison (1968).
- Departamento Administrativo Nacional de Estadística, DANE, "National Population Census: 1964," Bogotá (Octubre 1965).
- Departamento Administrativo de Planeación, "Cuarto Plan Cuatrienal, 1966-1969." Gobernación de Antioquia, Medellín (Junio 1966).
- Departamento Administrativo de Planeación, "El Presupuesto por Programas en La Administración Municipal," Gobernación de Antioquia, Medellín (Septiembre 1965).
- Dix, Robert H., Colombia: The Political Dimensions of Change. New Haven: Yale University Press (1967).
- Eckstein, Otto, Public Finance, 2nd Ed. Englewood Cliffs: Prentice-Hall, Foundations of Modern Economics (1967).

- Edel, Matthew D., "The Colombian Community Action Program: An Economic Evaluation," Unpublished PhD Thesis, Yale University, New Haven (1967).
- El Tiempo, Bogotá. daily newspaper.
- Fals Borda, Orlando, "Bases for a Sociological Interpretation of Education in Colombia," in A. Curtis Wilgus (ed) The Caribbean: Contemporary Colombia. Gainesville: University of Florida Press (1962).
- Fals Borda, Orlando, La Subversión en Colombia. Bogotá: Tercer Mundo (1967).
- Felstehausen, Herman, "The Organization and Availability of Rural Services in Antioquia," Land Tenure Center, University of Wisconsin, Madison, (in process).
- Fluharty, Vernon Lee, Dance of the Millions: Military Rule and the Social Revolution in Colombia. Pittsburgh: University of Pittsburgh Press (1957).
- Galvis Gaitán, Fernando, El Municipio Colombiano. Bogotá: Imprenta Departamental Antonio Nariño (1964).
- Gómez Hoyos, Rafael, La Revolución Granadina de 1810. Bogotá: Editorial Temis (1962).
- Grunig, James E. "Information, Entrepreneurship, and Economic Development: A Study of the Decision Making Process of Colombian Latifundistas," Unpublished PhD Dissertation, University of Wisconsin, Madison (1968).
- Hagen, Everett E., On the Theory of Social Change. Homewood, Ill.: The Dorsey Press (1962).
- Haney, Gave G., "The Migration Process in a Minifundia Community of the Highland Region of Colombia," Unpublished PhD Dissertation, University of Wisconsin, Madison (in process).
- Hayes Jr., Samuel P., "Measuring the Results of Development Projects" UNESCO: Monographs in the applied social sciences, Paris (1959).
- Hirschman, Albert O., The Strategy of Economic Development, New Haven: Yale University Press (1959).
- Hoven, W., and A. van den Elshout, Central Services to Local Authorities. The Hague: International Union of Local authorities (1962).
- Instituto Colombiano de Planeación Integral y Corporación Social de Desarrollo y Bienestar, "Primer Plan Regional de Desarrollo para el Oriente Antioqueño 1963-1970," Medellín (1963).

- International City Managers' Association, Municipal Finance Administration, 6th ed., Published by Association, Chicago (1962).
- Jaramillo S., Diego, and Francisco Jairo Yepes E., "Justificación Económica de la Construcción de Tres Carreteras Veredales en Antioquia," Unpublished Undergraduate Thesis, Facultad de Ciencias Agropecuarias, Medellín (1966).
- Jaramillo Uribe, Jaime, El Pensamiento Colombiano en el Siglo XIX. Bogotá: Editorial Temis (1964).
- McLean, Mary (ed) Local Planning Administration, 3rd Ed. International City Managers' Association, Chicago (1959).
- La República, Bogotá daily newspaper.
- Mellor, John W., The Economics of Agricultural Development. Ithaca: Cornell University Press (1966).
- Mora C., Bernardo and Jesús M. Sierra M., "Organización, Actividades y Costo de Tres Servicios de Extensión Agrícola en Antioquia," Unpublished undergraduate thesis, Facultad de Ciencias Agropecuarias, Medellín (1968).
- Netzer, Dick, "Some Aspects of Local Government Finance in Colombia," mimeographed, Harvard Development Advisory Service, Bogotá (September 1966).
- Ots Capdequi, José María, Estudios de Historia del Derecho Español en las Indias. Bogotá. Editorial Minerva (1940).
- Ots Capdequi, José María, Manual de Historia del Derecho Español en las Indias. Buenos Aires: Editorial Losada (1945).
- Ospina, E. Livardo, Una Vida, Una Lucha, Una Victoria. Monografía histórica de las empresas y servicios públicos de Medellín, Medellín: Empresas Públicas (1966).
- Parson, James J., Antioqueño Colonization in Western Colombia. Berkeley: University of California Press (1949).
- Peña Alzate, Oscar, Código Administrativo, 2nd. ed. Medellín: Editorial Bedout (1965).
- Posada F., Antonio J. and Jeanne, CVC: Challenge to Underdevelopment and Traditionalism. Bogotá: Tercer Mundo (1966).
- Rhoads, William and Richard M. Bird, "Financing Urbanization in Developing Countries by Benefit Taxation: Case Study of Colombia," Land Economics, Vol. 43:4 (November 1967).
- Santos Villanueva, Patrocínio, "The Value of Rural Roads," in Raymond E. Borton (ed) Selected Readings: Getting Agriculture Moving. New York: Frederick A. Praeger (1966).

- Soule, George, Ideas of the Great Economists. New York: Mentor Book, The New American Library (1952).
- Ronderos, Abel, "Proyecto de Crédito Supervisado para el Oriente de Antioquia," mimeographed, Instituto Colombiano de la Reforma Agraria, Estudios Técnicos, Bogotá (Abril 1964).
- Wharton Jr., Clifton R., "The Infrastructure for Agricultural Growth," in Herman E. Southworth and Bruce F. Johnston (eds), Agricultural Development and Economic Growth. Ithaca: Cornell University Press (1967).
- Whiteford, Andrew H., Two Cities of Latin America. Anchor Books, Doubleday & Co. (1964).
- Wierer, Karl, "Economics of Improving Marketing Organization and Facilities to Accelerate Agricultural Development in Land Settlement Agrícola, Bogotá (September 1967).
- Wood, Garland P., "Gobierno Local: La Cuerda al Cuello o Piedra Clave," Temas Administrativos, Vol. 4:8 (Abril 1968).

V. A POSTSCRIPT TO THIS PROJECT

A comment on the fate of this project appears to be in order as a caution to those who expect future response and interest in this field.

This project was planned and carried out with the specific intention of providing useful and relevant information to departmental and municipal officials in Antioquia. With that objective in mind, departmental participation was included at all stages and a simplified version of this report was distributed in Spanish to departmental officials. The report is being published by the Department of Antioquia.

After the distribution of the reports, individual and group conferences were held with departmental secretaries, division chiefs, planning officers, and in a few cases, local municipal officials. Even though the report is critical, it has been generally well received and the participants in the study have been both publicly and privately praised for carrying out a vital study.

The conclusion of these efforts is this: Nothing is likely to be done by the department or the municipalities. There appear to be three main reasons for this somewhat surprising reaction:

- 1) Departmental officials, while often imaginative in their everyday work, are constantly aware of their secondary positions in the centralized hierarchy. Officials respond readily to the issues discussed in this report, but do not turn that response into administrative action. It appears that departmental officials will not initiate reforms or bureaucratic changes without orders from the President and national ministries. To do so might appear as a revolt or a rebuff against the higher authorities.
- 2) Departmental and municipal officials are not in office long enough to undertake major new programs. During the 18 months this study was underway, all major personnel except one research coordinator, changed positions. All of the departmental secretaries connected with the project changed jobs during the study with the head of the planning office changing three times. There is also rapid turnover in municipal offices as reported by the study.

- 3) The basic reforms proposed in the study are contrary to established bureaucratic interests and concepts. The report recommends increased revenue collection as well as increased local autonomy. Taxes, especially property taxes, are generally opposed by government officials who often count among the medium and large sized property holders. Increased municipal authority violates long established concepts of centralized control and decision making. This point is nicely illustrated by remarks made during the project meetings: "As it is municipalities won't do what we tell them. The situation would be worse if we gave them more decisions to make."

A typical and convenient response to these dilemmas is to keep research carefully separated from administrative duties. One official even suggested that the report was so interesting that more projects like it should be undertaken. But he said nothing about the proposed reforms.

VI APPENDIX -- TABLES 1 through 9.

TABLE 1. PRIMARY EDUCATION IN EASTERN ANTIOQUIA, 1966

<u>Municipality</u>	<u>School Aged Population 7-14 years</u>	<u>Students Enrolled in Primary Schools</u>	<u>Students Completing Primary Grades 1966</u>	<u>Number Urban Schools Public & Private</u>	<u>Total Rural Schools</u>
1. Abejorral	2,501	4,201	581	4	48
2. Alejandría	892	625	15	2	10
3. Argelia	3,233	1,874	63	3	23
4. Barbosa	5,181	3,232	112	2	32
5. Carcof	2,093	995	37	2	6
6. Carmen de Vib.	5,297	3,031	186	3	25
7. Cisneros	2,470	1,641	140	3	8
8. Cocorná	5,983	3,064	82	2	40
9. Concepción	1,352	807	48	2	11
10. Don Matías	2,291	1,307	101	2	8
11. Girardota	3,449	2,404	145	3	20
12. Granada	3,941	2,692	125	2	32
13. Guarne	3,495	1,978	97	3	18
14. Guatapé	1,060	773	36	2	11
15. La Ceja	4,774	2,704	230	3	13
16. La Unión	2,370	1,580	96	2	11
17. Maceo	2,003	1,000	75	2	9
18. Marinilla	4,198	2,929	201	4	24
19. Narina	4,304	2,107	63	2	24
20. Peñol	2,654	1,771	80	2	19
21. Puerto Berrío	6,810	3,670	287	8	10
22. Retiro	1,974	1,136	69	2	12
23. Rionegro	7,136	5,114	575	4	31
24. San Luis	2,839	1,306	31	2	16
25. Santuario	4,774	2,910	221	2	21
26. San Carlos	4,647	2,607	215	2	33
27. San Rafael	2,524	1,426	52	2	22
28. San Roque	3,411	1,837	147	2	18
29. Santo Domingo	3,370	1,887	150	2	22
30. San Vicente	3,495	2,150	92	2	20
31. Sonsón	<u>10,071</u>	<u>5,811</u>	<u>370</u>	<u>9</u>	<u>49</u>
TOTAL:	115,097	70,569	4,722	87	646

TABLE 2. SECONDARY EDUCATION FOR EASTERN ANTIOQUIA, 1966

<u>Municipality</u>	<u>Number Secondary Schools All types</u>	<u>Number of Teachers all Sec. Schools</u>	<u>Total Secondary Enrollment</u>	<u>Number Students Completing Secondary School 1966</u>
1. Abejorral	2	28	596	23
2. Alejandría	-	-	-	-
3. Argelia	2	21	130	-
4. Barbosa	2	22	283	-
5. Caracolí	1	7	35	-
6. Carmen de Vib.	2	27	408	26
7. Cisneros	2	6	306	-
8. Cocorná	2	14	244	-
9. Concepción	2	13	28	-
10. Don Matías	2	28	439	9
11. Girardota	3	26	448	-
12. Granada	1	31	493	56
13. Guarne	4	22	221	-
14. Guatapé	2	n.i.	48	-
15. La Ceja	4	50	936	75
16. La Unión	2	15	224	-
17. Linceo	2	13	98	-
18. Marinilla	2	38	537	50
19. Narinó	2	10	134	-
20. Peñol	2	18	195	-
21. Puerto Berrío	3	31	405	-
22. Retiro	2	17	247	-
23. Rionegro	4	60	1,217	98
24. San Luis	2	9	90	-
25. Santuario	2	12	592	18
26. San Carlos	2	15	285	-
27. San Rafael	2	20	164	-
28. San Roque	2	21	248	11
29. Santo Domingo	2	29	401	27
30. San Vicente	2	12	192	-
31. Sonsón	<u>3</u>	<u>41</u>	<u>732</u>	<u>29</u>
TOTAL:	67	656	10,376	422

TABLE 3. HEALTH PERSONNEL IN EASTERN ANTIOQUIA, 1966

<u>Municipality</u>	<u>Public Doctors</u>	<u>Private Doctors</u>	<u>Public & Private Dentists</u>	<u>Graduate Nurses</u>	<u>Practical Nurses</u>	<u>Health Inspectors</u>
1. Abejorral	3	-	2	-	4	1
2. Alejandría	-	-	-	-	1	-
3. Argelia	1	-	-	-	2	-
4. Barbosa	2	2	3	-	3	1
5. Caracolí	2	-	-	-	2	1
6. Carmen de Vib.	2	-	1	-	3	1
7. Cisneros	2	1	2	-	3	-
8. Cocorná	3	-	1	1	5	1
9. Concepción	1	-	1	-	3	-
10. Don Matías	1	1	-	-	3	1
11. Girardota	1	1	1	-	4	1
12. Granada	2	-	1	-	5	1
13. Guarne	1	-	1	-	1	1
14. Guatapé	1	-	-	-	1	-
15. La Ceja	2	1	1	1	4	1
16. La Unión	1	-	1	-	3	1
17. Maceo	1	-	-	-	2	1
18. Marinilla	1	-	1	-	2	1
19. Mariño	1	1	1	-	2	1
20. Peñol	1	-	3	-	2	-
21. Pto. Berrío	4	3	4	3	11	-
22. Retiro	1	-	1	-	1	1
23. Rionegro	2	2	3	2	6	1
24. San Luis	3	-	-	-	4	-
25. Santuario	1	1	1	-	2	1
26. San Carlos	1	-	1	-	4	1
27. San Rafael	2	1	1	-	3	1
28. San Roque	2	-	1	-	3	1
29. Sto. Domingo	2	-	1	-	3	1
30. San Vicente	1	1	1	-	1	1
31. Sonsón	<u>4</u>	<u>1</u>	<u>4</u>	<u>3</u>	<u>7</u>	<u>2</u>
TOTAL:	52	16	38	10	110	24

TABLE 4. PUBLIC UTILITIES IN EASTERN ANTIOQUIA, 1966

<u>Municipality</u>	<u>Electric Power Users</u>	<u>Electric Service from</u>	<u>Number of Telephones</u>	<u>Number Users of Running Water & Sewerage</u>	<u>Total Number Occupied Dwellings</u>
1. Abejorral	1,203	Munic.	Central	1,200	4,679
2. Alejandria	56	Munic.	Central	250	605
3. Argelia	102	Munic.	Central	369	1,707
4. Barbosa	863	Depart.	57	973	2,398
5. Caracolí	465	Depart.	18	600	1,276
6. Carmen de Vib.	805	Depart.	25	950	3,321
7. Cisneros	1,369	Depart.	50	1,800	1,671
8. Cocorná	315	Munic.	20	1,267	3,551
9. Concepción	322	Munic.	Central	322	928
10. Don Matías	768	Depart.	8	630	1,353
11. Girardota	867	Depart.	9	668	1,872
12. Granada	35	Depart.	9	855	2,408
13. Guarne	551	Depart.	7	460	2,073
14. Guatapé	305	Munic.	Central	505	757
15. La Ceja	1,897	Depart.	79	1,541	2,393
16. La Unión	497	Depart.	22	485	1,457
17. Maceo	591	Depart.	Central	450	1,297
18. Marinilla	1,005	Depart.	15	840	2,757
19. Mariño	480	Munic.	5	480	2,259
20. Peñol	500	Munic.	8	650	2,040
21. Pto. Berrio	2,762	Depart.	390	2,200	4,697
22. Retiro	603	Depart.	3	400	1,225
23. Rionegro	3,112	Depart.	65	1,620	4,730
24. San Luis	200	Munic.	Central	300	1,846
25. Santuario	882	Depart.	7	1,200	2,745
26. San Carlos	500	Munic.	6	380	2,571
27. San Rafael	394	Munic.	Central	500	1,683
28. San Roque	551	Depart.	11	650	2,080
29. Sto. Domingo	370	Munic.	6	550	1,928
30. San Vicente	314	Depart.	Central	503	2,283
31. Sonsón	<u>2,560</u>	Depart.	<u>400</u>	<u>2,630</u>	<u>5,947</u>
TOTAL:	25,244		1,229	26,228	72,547

TABLE 5. MUNICIPAL INCOME FOR EASTERN ANTIOQUIA, 1966

Municipality	Total Munic. Income	From Land Taxes	From Industrial Commercial Taxes	From Public Utilities, Fees & Fines	From Transfers Of Dept. & National Gov.	From Borrowing
1. Abejorral	925,495	233,974	50,018	202,718	220,094	-
2. Alejandría	232,413	10,775	4,500	54,371	105,459	-
3. Argelia	308,039	32,730	30,215	70,298	44,857	74,721
4. Barbosa	618,956	126,061	40,344	59,502	210,298	-
5. Caracolí	469,348	91,927	29,620	105,270	146,867	-
6. Carmen de Vi.	585,942	57,628	43,055	138,397	81,618	72,225
7. Cocorná	380,722	24,829	14,499	46,943	172,348	-
8. Cisneros	684,738	41,930	37,960	337,547	148,119	-
9. Concepción	289,604	29,833	5,986	38,599	114,880	-
10. Don Matías	607,047	69,180	30,111	71,663	151,208	23,000
11. Girardota	629,423	182,297	33,827	115,517	137,101	50,000
12. Granada	357,704	28,548	14,376	162,447	46,565	-
13. Guarne	393,216	50,847	17,415	43,879	126,101	30,000
14. Guatapé	347,314	15,099	6,372	127,887	131,843	667
15. La Ceja	1,470,901	141,633	55,465	289,644	297,253	350,000
16. La Unión	479,660	62,234	21,220	53,733	35,333	-
17. Linceo	535,165	89,342	26,998	125,261	97,242	70,000
18. Marinilla	473,535	46,752	19,460	49,232	158,959	62,000
19. Marín	470,138	86,019	49,397	94,335	106,585	15,000
20. Penol	409,249	31,855	13,409	113,999	99,229	991
21. Pto. Berrío	2,525,190	335,372	214,184	563,595	362,989	120,000
22. Retiro	423,685	80,374	7,081	13,263	144,675	60,000
23. Rionegro	2,650,307	273,204	79,185	90,110	267,920	477,331
24. San Luis	657,102	100,427	20,796	236,988	127,486	-
25. Santuario	502,560	51,467	23,956	112,452	106,351	49,000
26. San Carlos	507,549	47,323	28,112	94,630	159,011	-
27. San Rafael	352,185	25,130	29,300	153,808	76,280	-
28. San Roque	446,499	87,739	50,843	53,245	87,181	-
29. Sto. Domingo	574,358	66,881	15,604	87,324	133,011	-
30. San Vicente	305,871	29,998	11,812	60,508	83,121	-
31. Sonsón	1,414,239	321,656	145,490	334,429	201,832	97,600
TOTAL:	21,028,654 ^o	2,273,064	1,176,719	4,056,594	4,431,871	1,552,535

^oAmounts not accounted for by following columns is mainly non-designated departmental and national funds.

TABLE 6. TOTAL MUNICIPAL EXPENDITURES FOR EASTERN ANTIOQUIA, 1965

<u>Municipality</u>	<u>Salaries, office costs, operations, per diems and benefits</u>	<u>Investment in construction and maintenance</u>	<u>All other costs</u>	<u>Total Expenditures 1965</u>
1. Abejorral	618,935	109,350	133,196	861,531
2. Alejandría	85,051	19,182	59,596	163,829
3. Argelia	91,780	174,087	19,135	285,002
4. Barbosa	295,249	160,221	124,565	580,035
5. Caracolí	210,152	138,410	31,206	379,768
6. Carmen de Vib.	228,706	204,341	69,300	502,347
7. Cisneros	438,521	113,666	72,500	624,687
8. Cocorná	244,585	5,981	84,194	334,760
9. Concepción	141,340	33,481	21,228	196,049
10. Don Matías	434,910	52,125	41,405	528,440
11. Girardota	371,636	17,180	135,805	524,621
12. Granada	223,200	88,350	25,336	336,886
13. Guarne	184,879	101,872	59,781	346,532
14. Guatapé	168,014	27,720	83,399	279,133
15. La Ceja	409,482	725,910	74,787	1,210,179
16. La Unión	214,639	57,502	130,645	402,786
17. Linceo	250,338	140,359	25,435	416,132
18. Marinilla	181,376	186,799	84,386	453,061
19. Marino	313,062	15,404	56,534	385,000
20. Peñol	262,599	86,870	697	350,166
21. Puerto Berrío	1,444,741	471,052	502,805	2,418,598
22. Retiro	243,167	66,134	56,841	366,142
23. Rionegro	910,131	204,392	887,960	2,010,483
24. San Luis	322,616	51,910	256,548	631,074
25. Santuario	226,685	87,153	81,769	395,607
26. San Carlos	323,202	69,565	67,981	460,748
27. San Rafael	140,170	59,794	136,042	336,006
28. San Roque	204,379	157,149	57,372	418,900
29. Santo Domingo	307,628	131,267	57,288	496,183
30. San Vicente	104,738	87,765	15,101	207,604
31. Sonsón	<u>709,358</u>	<u>388,367</u>	<u>276,882</u>	<u>1,374,607</u>
TOTAL:	10,313,819	4,233,358	3,729,719	18,276,896

TABLE 7. GOVERNMENT PERSONNEL AND LOCAL GROUPS IN EASTERN ANTIIOQUIA

<u>Municipality</u>	<u>Number Municipal Officials</u>	<u>Number Assistants & Secretaries</u>	<u>Number of Workers & Custodians</u>	<u>Number Police Agents</u> °	<u>Number of Community Action Boards</u>
1. Abejorral	6	13	23		5
2. Alejandría	4	7	9	6	10
3. Argelia	5	5	10		15
4. Barbosa	7	6	36		17
5. Caracolí	5	5	34		7
6. Carmen de Vib.	5	6	10	6	14
7. Cisneros	5	8	22		8
8. Cocorná	6	10	9	20	21
9. Concepción	4	11	7	4	7
10. Don Matías	7	6	20		8
11. Girardota	6	8	15		6
12. Granada	6	7	11	13	33
13. Guarna	5	5	8	6	17
14. Guatapé	4	4	10	6	7
15. La Ceja	7	8	21	10	2
16. La Unión	6	7	11	4	9
17. Naceo	6	7	9		4
18. Marinilla	6	5	18	7	22
19. Narino	5	8	8		5
20. Peñol	4	8	11	6	9
21. Puerto Berrío	12	15	60		12
22. Retiro	5	6	11	4	8
23. Rionegro	8	11	41	24	20
24. San Carlos	6	8	14	21	18
25. San Luis	8	11	10	9	15
26. San Rafael	4	7	13	28	15
27. San Roque	8	9	15		15
28. Santo Domingo	8	12	10		17
29. Santuario	5	5	8	12	16
30. San Vicente	5	5	7	6	20
31. Sonsón	<u>12</u>	<u>19</u>	<u>44</u>		<u>25</u>
TOTAL:	190	252	535	192	407

° All municipalities have police agents -- information is incomplete.

TABLE 8. WAGES AND SALARIES IN EASTERN ANTIOQUIA COMPARED TO COST OF LIVING ITEMS, 1966

SALARY OR WAGES		COST OF LIVING ITEMS	
<u>Position or job</u>	<u>Pesos</u> <u>Per month</u>	<u>Article</u>	<u>Peso</u> <u>Price</u>
1. municipal mayor	1,700	1. loaf of bread	2.50
2. municipal judge	2,200	2. dozen eggs	7.00
3. municipal secretary	1,100	3. quart unpasturized milk	1.00
4. agronomist-extension worker	3,000	4. pound of good beef	6.00
5. public health doctor	3,100	5. pound of potatoes	.50
6. health inspector	900	6. pound of rice	2.00
7. rural school teacher	900	7. dozen bananas	1.50
8. secondary school teacher	1,200	8. pound of coffee	5.00
9. clerk-typist	600	9. cup of coffee in cafe	.20
10. store clerk	500	10. bottle beer in cafe	1.20
11. skilled workman	1,000	11. bus fare in city	.30
12. skilled machine operator	1,250	12. rent on slum dwelling	500./m
13. manual labor in village	400	13. electric bill in village	10./m
14. manual labor on farm	325	14. pair mens shoes	30.
15. messenger boy	400	15. mans shirt	50.
16. lottery ticket salesman	900	16. car of Ford-Chev. class	160,000.
17. shoe shine boy in city	700	17. modern house in city	500,000.
18. maid in a home	200	18. table model TV	4,000.
Many of the above positions would also provide some fringe benefits, per diem or perquisites.		19. office call to doctor	30.
		20. child in good school	300./m

Exchange rate is 16.25 pesos to the dollar or approximately 6 U.S. cents per peso

TABLE 9. AGRICULTURAL SERVICE OR CREDIT AGENCIES IN EASTERN ANTIOQUIA

<u>Municipality</u>	<u>INCORA</u>	<u>Sec. of Agriculture</u>	<u>Ministry of Agriculture</u>	<u>Coffee Federation</u>	<u>Agric. Bank</u>	<u>Com. Bank</u>
1. Abejorral	-	X	-	X	X	XX
2. Alejandría	-	-	-	-	-	-
3. Argelia	-	-	-	-	-	-
4. Barbosa	X	-	-	-	X	X
5. Caracolí	-	-	-	-	-	-
6. Carmen de Vib.	X	-	-	-	X	-
7. Cisneros	-	X	-	-	X	X
8. Cocorná	-	-	-	-	-	-
9. Concepción	-	-	-	-	-	-
10. Don Matías	X	X	-	-	-	-
11. Girardota	-	-	X	-	X	X
12. Granada	-	X	-	-	X	-
13. Guarne	X	X	-	-	-	-
14. Guatapé	-	-	-	-	-	-
15. La Ceja	X	-	X	-	X	XX
16. La Unión	X	X	-	-	X	-
17. Naceo	-	-	-	-	-	-
18. Marinilla	X	X	-	-	X	-
19. Nariño	-	-	-	X	X	-
20. Peñol	-	-	-	-	-	-
21. Pto. Berrío	-	-	X	-	X	XXX
22. Retiro	-	-	-	-	-	-
23. Rionegro	X	X	X	-	X	XX
24. San Luis	-	X	-	-	-	-
25. Santuario	X	X	-	-	X	-
26. San Carlos	-	X	-	-	X	-
27. San Rafael	-	X	-	-	X	-
28. San Roque	-	X	-	-	X	-
29. Sto. Domingo	-	-	-	-	X	-
30. San Vicente	X	-	-	-	-	-
31. Sonsón	-	-	X	X	X	XX
TOT.L:	10	13	5	3	18	14

Some agencies share offices -- total number of offices is 57.