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WHERE MEN RIDE TIGERS: THE INDUSTRIAL
LANDSCAPE OF GUATEMALA

by

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A DISSERTATION

Presented to the Department of Geography
and the Graduate School of the University of Oregon
in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

December 1969

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100% COTTON-LIGER
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DEDICATION

To my family for their:

assistance,

sacrifice,

tolerance,

and

patience.

ACKNOWLEDGMENTS

This study is the result of over fifteen months of field work in the Republic of Guatemala, and of at least as many months of library research prior to and subsequent to that effort. Pertinent and available literature has been examined and statistical data compiled from a wide variety of sources. The problem, however, remains essentially field centered. All primary data were obtained through interviews conducted in the Republic of Guatemala at various times between 1966 and 1968. During the field period approximately 26 per cent of all the country's manufacturing firms were personally visited, but virtually every establishment employing more than five workers was interviewed in depth. Some 1,076 industries with more than five employees, such firms representing over 65 per cent of the total manufactural employment, provided the detailed data utilized for the study. This work is a testimony to the cooperation of those entrepreneurs.

No study is completed without incurring some debts for assistance, and certainly this one was no exception to that rule. Financial support for preliminary field research was provided by the Ford Foundation through a grant to the Institute of International Studies and Overseas Administration

of the University of Oregon. Later field work in 1967 and 1968 was made possible through a contract negotiated with the U.S. Agency for International Development of the United States Department of State (U.S. AID). Further, support from the Republic of Guatemala was equally important. Two host government agencies provided particularly helpful services, the Direccion General de Estadísticas and the Instituto Geográfico Nacional. In the former, the Sección de Censos Económicos furnished much background information and the Sección de Procesamiento de Datos Electrónicos (IBM) processed and printed the basic results of interview data gathered in the field. The Instituto Geográfico Nacional provided maps and aerial photographs utilized during the study's data collection phase.

Several individuals also played significant roles in the completion of this work. Gary Elbow of U.S. AID/Guatemala, along with Guatemalan members of the AID sponsored Local Municipal Development Program, assisted with field operations in the Amatitlán and South Coast regions. Phil Cook, also of U.S. AID/Guatemala, planned, developed, and directed the machine tabulations of raw data. Rosa Cook prepared the basic file of data cards and provided secretarial assistance whenever it was required. The Cooks also very graciously provided me with a home when it was needed.

Numerous Guatemalan friends also helped to make this

study possible and my profound appreciation is expressed to them for their assistance. But, since this is a study of their country, I do not wish to involve them in any way in the responsibility for its conclusions. The ideas and interpretations of fact expressed in this study, although influenced by many individuals and agencies, must be judged as my own. Full responsibility for any error or oversight therefore lies solely with me.

At the University of Oregon, I must acknowledge the assistance of my dissertation committee, Drs. Carl Johannessen, Gene Martin, Everett Smith, and John Woodham, for their guidance throughout this study. Dr. Johannessen helped develop my interest in the Latin American culture region and lent much of his insight to the preliminary analysis of data. Dr. Martin stimulated my interest in Middle America, worked with me in the field in Guatemala, and provided continual direction for the project from its inception. Dr. Smith stirred my interest in socio-cultural geography and helped me to develop my own thoughts on economic factors and their impact on the landscape. Dr. Woodham moulded any sense of history I may have and directed my background research into Latin American economic development. Finally, I owe a special debt to Dr. Clyde Patton who gave me constant encouragement and support... especially when it was needed. All five professors have provided counsel and intellectual

stimulation throughout my graduate experience at the University of Oregon.

I am very grateful to these individuals and institutions for their assistance. Without their help this study certainly would have been impossible.

Bruce E. Bechtol
December 1969

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CHAPTER I

INTRODUCTION

Mild men will not ride the tigers of development. Neither will mild political or economic systems contain or impel it.¹

With these words Robert Heilbroner posed the central issues of economic change in the underdeveloped countries. After years on the fringes of the more rapidly evolving industrial world, the underdeveloped areas are now engaged in efforts to duplicate the accomplishments of the more economically advanced states. Bound by the shackles of economic underproduction and rapid population growth, however, the aspiring areas have little time for slow evolutionary change. In fact, in those places where change has taken place it has been through some form of revolution.

Today revolutionary deeds and ideas are irresistably sweeping over much of the world. In the vanguard of this tide, innovation rides high as great modifications take place in traditional cultures and ways of life. Such transformations are of special interest since when and where they occur fundamental changes are also evident in

¹Robert L. Heilbroner, The Great Ascent, Harper Torchbooks, Harper and Row Publishers, Inc., New York, 1963, p. 135.

man-land relationships. If this trend of progress is inevitable, the old foundations of land and life will continue to yield to new technology and energy forces. Thus, it may well be that with the modification of more traditional societies the most dramatic chapters of the Industrial Revolution are only presently being recorded.

Yet in spite of all man's technological progress much of life remains the same. The most fundamental problem of the human race is still the economics of survival--simply obtaining food. In some regions, as is the case in the United States and Western Europe, economic development has been continuous, but for the great bulk of mankind drastic efforts will be required to insure any kind of future. Throughout the world hand-to-mouth agriculture still occupies the greatest number of working people; but many reverently view industrialization as the future god of salvation. While the song of the industrial siren is new and sweet to the developing nations, it is a song that is familiar to the Western powers. Through diffusion, a cross-cultural transference of industrial knowledge is taking place between the haves and the have-nots. But this is particularly paradoxical since, now, while the industrial nations are critically reappraising the impact of industry on their landscape, the aspiring nations have not. Thus, in spite of the consequences, manufacturing technology is

being carried to the ends of the earth.

In the simplest terms manufacturing is the conversion of any commodity into a more useful form. Geographically it is a characteristic of culture that is most uneven in its pattern of distribution--largely because of the differing locational requirements evidenced by its diverse types of activity. Nevertheless, regardless of where a manufacturing establishment is found, there are three functions which characterize its existence: (1) it is a gatherer of raw materials at a specific place, (2) it somehow converts these basic ingredients by changing their form and thereby upgrades them in value, and (3) the finished and more valuable goods are thence distributed. Any activity which performs all of these functions may be called a factory, the fundamental employment unit of manufacturing. An area of earth space occupied by these factories or plants may be called an industrial landscape, i.e., an area comprised of the distinctive forms of industry. This study is concerned with the distribution, development, and impact of such landscapes in the Republic of Guatemala.

Guatemala definitely is not a major industrial power in our world of today. On the other hand, it is a member of the rapidly industrializing Central American Common Market (CACM) and, as such, illustrates a developing country in the process of economic change. This study describes

Guatemala's industrial landscape and analyzes the factors which have influenced its development. Prime considerations are: (1) Who are the industrialists in Guatemala? (2) What is the general structure of Guatemalan manufacturing? (3) How are the manufacturers interrelated spatially within the country? (4) What are the major industries and what impact have they had on the landscape? (5) What locational considerations are important to the industrialists operating in Guatemala? (6) What was the process by which industrialization took place? And, most importantly, (7) Who and/or what are the factors that led to the development of the country's industrial landscape?

The primary goal of this inquiry is to account for the diffusion of industrial technology to the Republic of Guatemala. The central theme of this work is that such development was and continues to be the result of action and efforts on the part of foreign entrepreneurs and technicians. In the Republic of Guatemala, as in most of Latin America, industry has appeared as a recent phenomenon. Without much in the way of firm empirical data, it has generally been assumed that this development was due to the heavy investment of international capital, the introduction of foreign assistance, and foreign technology. Guatemala is seen as a model country for testing this thesis of development, a thesis which may be more broadly applied to the entire Latin American culture area.

The research results presented in this work are intended to serve as a challenge for further investigations in other parts of Latin America. Until now, no country study of this scope and type has been attempted anywhere in the Latin American culture region. It is contended, therefore, that a thorough understanding of the origins of industrial development in this one country--in conjunction with insights into its impact and distribution--will significantly contribute to an understanding of the changes which are taking place in the economic landscape of the overall area. Accordingly, this study provides some guidelines for comparing and expanding the current knowledge of basic processes operating to develop Latin American industrial landscapes. Obviously one country's experiences in the transformation of its economy are not necessarily the same as any other, but clues may be perceived in parallel developments that might otherwise remain hidden. If changes are to come to the underdeveloped nations of the world, the processes of change must be understood. This work is intended as a step toward such understanding.

Terminology and Methodology

The terms industry and manufacturing are utilized interchangeably throughout this work. And, when used, the word industry refers to the manufacturing function only, even

though industry is usually defined to include the full spectrum of all human economic activities. The Guatemalan Census definition of industry encompasses a much broader range of economic functions, but the latitude of their application is far too wide for the purposes of this study.

The Guatemalan classification of economic enterprises is based on the Clasificación Industrial Internacional Uniforme (CIIU) published by the Instituto Interamericano de Estadísticas. Within this classification a great number of service rendering establishments are included in the general category of industry. Under the international systemization a loose definition of manufacturing activities is suggested, for example, automobile mechanics and shoe and watch repair shops are all termed manufacturers. In this study a much stricter definition of manufacturing functions is applied; only those activities which convert raw materials into more marketable goods--either by hand or machine labor--are examined. Herein, all repair functions on already assembled goods are more appropriately classed as services and hence excluded from consideration.

In the measurement of manufacturing there are several criteria that might be employed, but depending upon the method used quite different conclusions may result. Such qualitative and quantitative standards as number of firms, number of employees, percentage of labor force in industry,

value of raw materials, or value added in manufacture, have been used as means to indicate the significance of activities. For this study, however, only numbers of firms and employment levels were utilized to gauge the importance of manufacturing. Both means of measurement are simple and generally satisfactory for establishing major trends within any economy. Further, most industrialists will divulge information for employment while other measures which require confidential or sensitive data are accepted less willingly. On a country-wide basis it was impossible to glean reliable statistics for investment, value added, and other complex criteria; however, when such information was available it was utilized to supplement the more easily obtained but comparative data pertaining to numbers of firms and employment levels.

The Guatemalan Census Office was very helpful in putting together a basic checklist of domestic industries. Data were provided in the form of business names, addresses, classifications, and employment within firms. By utilizing census information plus the 1967 membership listings of the Camara de Industria (Chamber of Industry), and other unpublished sources of data from diverse quarters, a large and allegedly complete file of Guatemalan manufacturers was developed. During the interview phase of the study, all this information was field checked for accuracy. Additions

or corrections were made when they were necessary--when new plants were discovered they were put into the data, if firms were no longer functioning they were deleted. The result was a field verified tabulation of all Guatemalan industries having more than five employees, a compilation that also disclosed a gross census error of at least 35 per cent in the reporting of firm numbers! These manufacturers provided the foundation data for this study.

During the field research period over 3,000 Guatemalan industrial facilities were visited. Of this number, only 1,076 manufacturers were found that employed more than five people; these were the firms that were the subject of intensive in-depth examination. Interview questions covered a wide range of information including such subjects as site and situation factors, employment, salaries, products, founding history, ownership, investment, sources of capital, markets, transport, future plans, and problems (Appendix I). Virtually all the respondents queried were cooperative, although there was a small percentage of hostile responses. In most cases answers to questions appeared to be truthful, but some were obviously fabricated--probably from fear of disclosure. Some respondents, for example, thought that the interview might in some way effect a new tax policy and were most reluctant to answer those questions dealing with capital investment, salaries, and sales. In most instances, though, because the research was being conducted by a gringo

(North American) interviewer better data was probably obtained than would have been possible with a Guatemalan investigator. Officials of the Guatemalan government are, frankly, not trusted by members of the business community.

The Guatemalan Census classification of industrial types--modified by excluding service activities--is employed in the discussion of manufacturing structure. In this system all industrial undertakings are divided into twenty separate classes, a grouping which includes: food products, beverages, tobacco, textiles, clothing goods, wood products, furniture, paper, printing, leather goods, rubber products, chemical goods, petroleum processing, non-metallic minerals, basic metals, metal working, machinery, electrical goods, transportation products, and miscellaneous manufacturers. These groups represent every industrial activity which might conceivably exist in the country.

All Guatemalan industry is discussed in the general treatment of industrial structure and patterns of distribution. In the detailed discussion and location of specific types of manufacturers, however, only those firms having more than twenty-five employees are included. If all Guatemalan industries had been mapped without regard for size, many of the maps would have been so complex as to be unreadable. Moreover, since the larger firms are the real core of the Guatemalan industrial economy, it is only fitting that they should be emphasized.

This present work is divided into twelve sections. Chapter II provides the general physical and cultural setting for the study. Chapter III focuses on the industrialists of the Republic; Chapter IV outlines the basic structure of manufacturing; Chapter V discusses the general spatial distribution of industry; and Chapter VI concentrates on the major types of manufacturers and their impact on the landscape. Specific locational considerations important to Guatemalan industrialists are discussed in Chapter VII. The process of industrialization, essentially a history of industrial development, is covered in Chapter VIII. This chapter introduces the operational milieu for industry in the Republic, a matrix of factors which are examined in depth within Chapters IX, X, and XI. Chapter IX deliberates on the influence of sociological and psychological values; Chapter X concentrates on political factors; and Chapter XI covers the influence exerted on industry by economic considerations, especially market. Chapter XII offers some conclusions for the study.

CHAPTER II

GUATEMALAN INDUSTRY: THE SETTING

What man does with the land he occupies largely depends on his cultural view of its use.¹ The various forms of human activity imposed on a landscape modify the original nature of the land and give it the cultural stamp of the society living on it. In this fashion cultural landscapes (manscapes?) are produced. Yet, as the natural order of things is changed so is the cultural since time may bring even further landscape modifications with the development of the occupying culture or displacement of former inhabitants by new human groups.² One vehicle man employs to make such transformations in the environment is his economy, his means of survival in the natural world. One form of this vehicle, the new wave of industrialization, appears to be a key factor in the dynamic development of landscape in the Republic of Guatemala. It is a story nourished on a country's endowment of land and people.

¹See: David Lowenthal (ed.), Environmental Perception and Behavior, Research Paper No. 109, Department of Geography, University of Chicago, 1967.

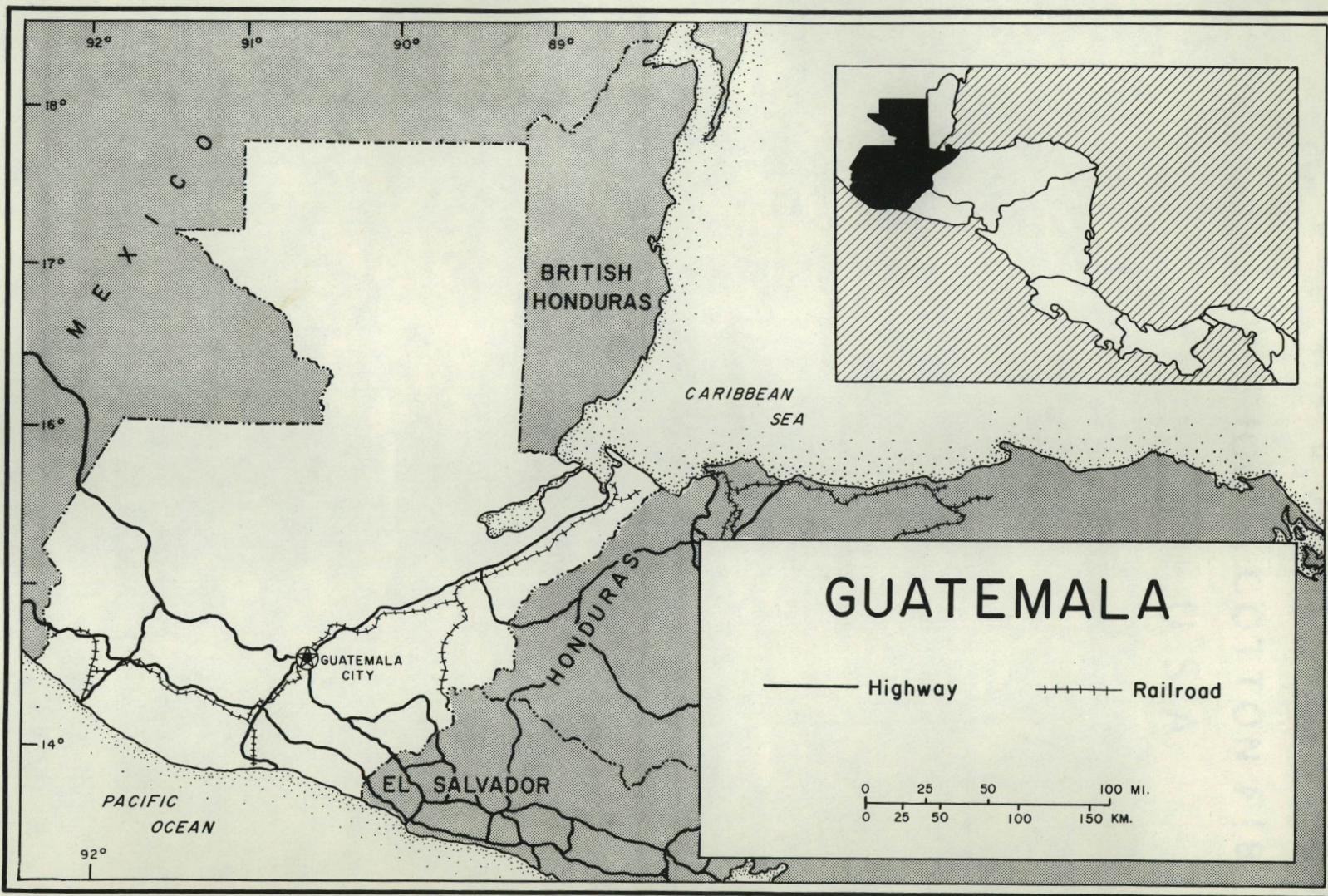
²Time and landscape change are major themes in: Carl O. Sauer, "The Morphology of Landscape," University of California Publications in Geography, Vol. 2, No. 2 (1925), pp. 19-53.

Guatemala, the northernmost of the six republics that comprise Central America, is a small country handicapped by limited natural and human resources (Map 1). Lying entirely within the general zone of the tropics, its political limits include some 42,042 square miles of landscape--an area some two-fifths as large as the state of Oregon or nearly equivalent in size to Tennessee.³ It is a country that can be conveniently subdivided into four broad physical geographic regions: (1) the South-Central Highlands, (2) the Motagua Valley, (3) the Petén Lowlands, and (4) the Pacific Piedmont and Plain. Each region has its own distinctive physical and cultural endowment.

The Physical Endowment

The landscape of Guatemala, like all of Central America, is characterized by a great deal of diversity within very short distances. Available environments range from high cool mountains to steaming tropical lowlands. Most conspicuous, however, are the lofty highlands which bisect and command the south-central portion of the country. Rising out of Mexico, these uplands pass west to east across the isthmus to a point where they eventually drown themselves in

³This figure excludes 8,866 square miles of territory claimed by the Republic of Guatemala as Belize (British Honduras) but under de facto control of Great Britain.



MAP 1

the Caribbean Sea. Two main ranges are evident. The lowest and northernmost is made up of the Alto Cuchumantes limestone plateau (9,000 to 11,000 feet) and the folded heights of Alta Verapaz. On the south, a second and higher range forms a northwest extension to the Central American volcanic axis, a region of active and non-active volcanoes interspersed with highland basins and lava plateaus. The western portion of this more southerly range, the Los Altos region, contains the tallest volcanic peaks and the highest basins in the country (10,000 to 14,000 feet), whereas eastern extensions of these same highlands stand relatively low (3,000 to 5,000 feet). As might well be expected on such tropical mountain slopes, there is a general vertical zoning of environments in accordance with the elevation and other local influences. Consequently, this upland portion of the country with its mosaic of ecologic niches has a spectrum of natural vegetation that varies from selva to mountain grasses. Most Guatemalans live and work in these highlands.

Lying between the two major ranges of the South-Central Highlands is the deep valley of the Río Motagua. Here, enclosed by high mountains and cut off from moisture bearing winds, the upper portions of this depression are characterized by dry slopes covered with scrubby brush. On the other hand, to the east, where the highlands descend into the

Caribbean, the rainshadow effect is less evident and the lower reaches of the Motagua Valley are mantled with pines and lush tropical evergreens. This region is one of the most economically depressed portions of the country.

The northern third of Guatemala, the Petén area, is an expansive wet tropical lowland. Comprised of a segment of the Yucatán Peninsula, this region is a huge limestone platform lying a scant five to seven hundred feet above sea level. Structurally, the landscape is distinguished by its karst landform features with typically disrupted drainage. Although best characterized as plains country, here and there the terrain is interrupted by low rolling limestone hills. Throughout, the most common vegetation cover is dense tropical rainforest interspersed with patches of manmade savanna. This region is largely unsettled and undeveloped.

A long narrow lowland on the Pacific side of Guatemala forms another major physical unit. This is a strip of land some 20 to 40 miles wide extending approximately 150 miles from the Mexican frontier to the border of El Salvador. In its length the region is oriented west to east with the South-Central Highlands. On the north it is bounded by the cordillera formed by the volcanic axis of Central America. To the south it is fringed by the waters of the Pacific. Along its ocean frontage mangrove lagoons border the straight

harborless coastline, but toward the interior the plain gradually yields to the rolling terrain of foothills covered with a forest of semideciduous vegetation mixed with manmade savanna and grassland. These hills, in turn, eventually blend into the steep Pacific-facing escarpment of the volcanic highlands. This region is generally identified as the Boca Costa (Pacific piedmont) and La Costa (coastal plain); potentially it is one of the richest agricultural areas in all of Latin America.

Climate in Guatemala, like topography and vegetation, is reflected in a complex variety of patterns. In part, this is due to location since the country lies entirely within the tropical realm, but local differences in elevation, configuration of the terrain, direction of prevailing winds and other such factors all play an important role in the influencing specific climatic conditions. As a general rule, the lowlands have high temperatures which seldom dip below 50° F. while the highlands tend to be cooler with only an occasional frost during the low sun period. Rainfall is marked by extremes which are used to distinguish the country's two seasons--wet from May to October and dry from November through April--even though a great deal of variability is evident in total annual amounts of precipitation. Differences are striking as recorded rainfall aggregates range from less than 20 to more than 150 inches. The Caribbean coast receives the heaviest rains but only

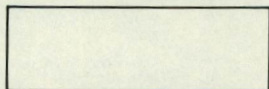
scant precipitation falls in the rainshadow influenced upper portions of the Motagua Valley.

As in all low latitudes, altitude is an important factor in modifying the effects of tropical location. Because of this, elevation is the means that is generally used to differentiate the country into regions of sensible temperature. Three major zones are locally recognized the hot lands that lie below 1,600 feet; the temperate lands between 1,600 and 5,000 feet; and the cold lands above 5,000 foot heights. The hot lands (tierra caliente) are found on the lowlands of both coasts and in the extensive Peten region. But, toward the interior elevations increase, and, here, the temperatures tend to be cooler and more moderate (tierra templada). Where extreme highlands are encountered the temperature change is even more dramatic and a constantly cool to cold realm is identified (tierra fria). These environments may be identified as major life zones (Map 2).

Natural resources are also a part of Guatemala's physical endowment and in this area the country is both fortunate and impoverished. On the positive side, the vast northern forests of Petén comprise a veritable storehouse of tropical hardwoods, chicle, medicinal plants and a score or more of other wood products. Thus, this region seemingly has a tremendous potential for development. Likewise, water resources appear as a largely untapped asset, particularly along the Pacific slopes of the volcanic highlands. On the

LIFE ZONES OF GUATEMALA

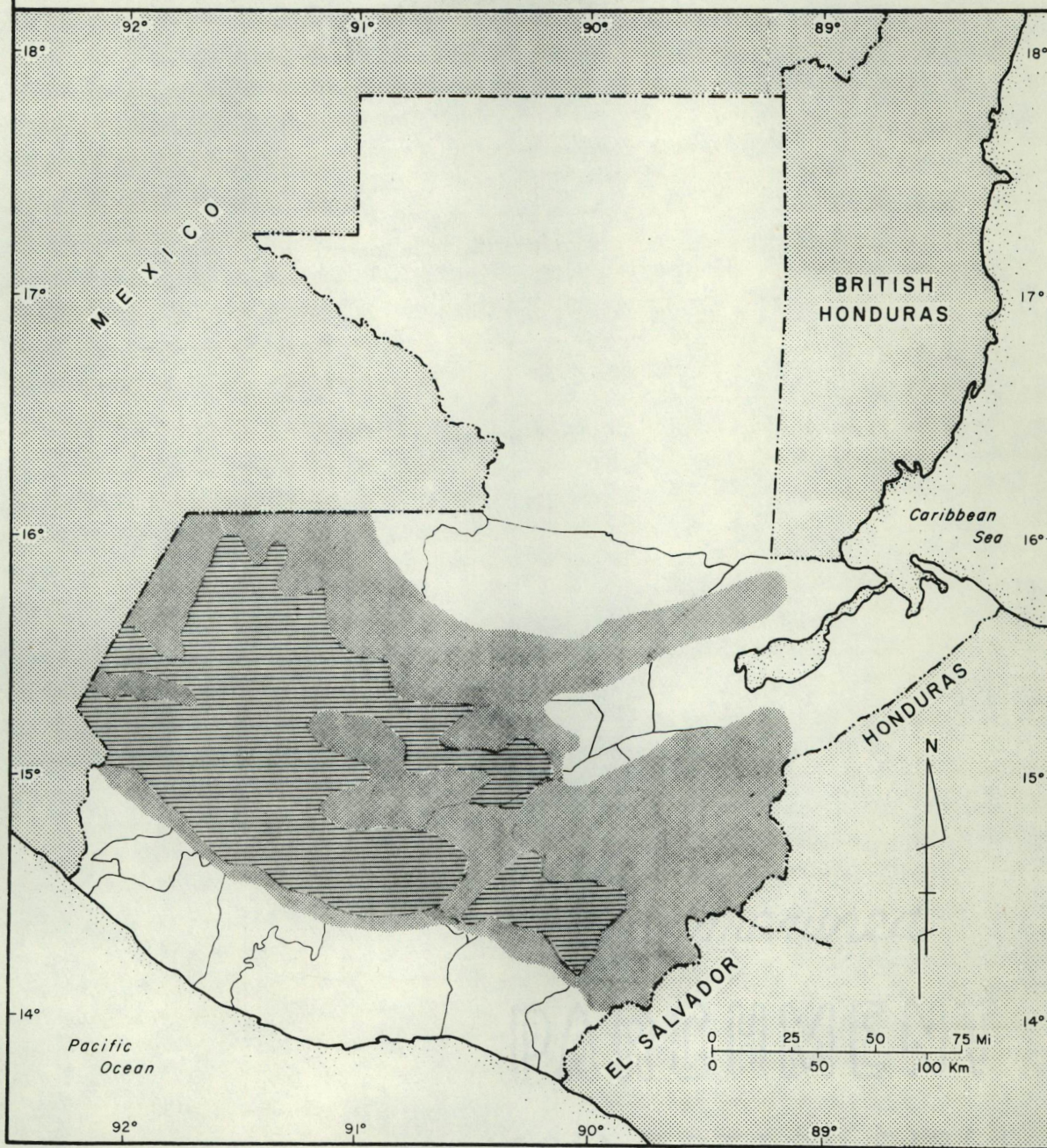
Hot Lands



Temperate Lands



Cold Lands



MAP 2

negative side, however, Guatemala is deficient in most of the key minerals consumed by modern industry. Indeed, coal, petroleum and iron deposits still remain undiscovered in spite of intensive exploratory efforts throughout the country. Yet, significant reserves of some minerals do exist within the Republic. Nickel abounds in the Lake Izabal region and is currently being developed under a multi-million dollar exploitation scheme. Moreover, promising strikes of copper, manganese, lead, zinc, silver, and sulphur have also been discovered in the highlands. To date, however, none of these resources have been effectively exploited.

The Cultural Endowment

Guatemala, with its approximately 4.5 million inhabitants, is the most populous of the Central American republics. But the painful corollary to that distinction is population explosion--the country's rate of population growth is one of the highest in the world, currently 3.3 per cent per annum.⁴ For the most part, the present rapid increase in population is the result of declining death rates brought about by the provision of better medical services, although

⁴All Guatemalan population figures are based on a manual tabulation of unpublished 1964 census data by Gary Elbow, 1968.

there is some evidence that there has been a slight boost in the birth rate as well.⁵ It remains to be seen if this growing pool of humanity will prove to be an asset or liability to the country. One hope is that these people can be put to work in labor intensive industry and thereby raise the national level of economic output. However, the swelling population only tends to magnify the problems of economic development and make any progress seem doubtful.⁶

Since the pre-Columbian epoch Guatemala's focus of human occupancy has been in the South-Central Highlands, literally the cultural heartland of the country. With the exception of some relatively recent movement to the fertile Pacific piedmont (Boca Costa) and plain (La Costa), those regions lying outside of the cool highlands have only been

⁵Perhaps the classic study of this new population trend is: Oscar H. Horst, "The Specter of Death in a Guatemalan Highland Community," The Geographical Review, Vol. 57 (1967), pp. 151-167.

⁶There are both positive and negative views toward the role of Latin America's rapidly growing population. A mere sampling of published studies would include: Kingsley Davis (ed.), "A Crowding Hemisphere: Population Change in the Americas," The Annals of the American Academy of Political and Social Science, Vol. 316 (1958), pp. 1-136; R. S. Smith, "Populations and Economic Growth in Central America," Economic Development and Cultural Change, Vol. X, No. 2, Part 1 (1962), pp. 134-149; Alfonso Gonzalez, "Some Effects of Population Growth on Latin America's Economy," Journal of Inter-American Studies, Vol. IX, No. 1 (January, 1967), pp. 22-42; William Giandoni, "Some Latins See a Plot Behind the Pill," The Sacramento Union, February 1, 1969; and K. Mayone Stycos, Ideology, Faith and Population Growth in Latin America, Population Reference Bureau Selection No. 26 (1969), Population Reference Bureau, Washington, D.C.

sparsely populated. Because of this uneven distribution, although the overall population density approaches 120 persons per square mile, the simple statistics by themselves are grossly misleading. Indeed, the highlands contain more than 80 per cent of the country's inhabitants--65 per cent concentrated in the western sector and Guatemala City alone and another 15 per cent located in the eastern highlands. About 17 per cent of the people live on the Pacific piedmont and plain while a mere 3 per cent inhabit the vast northern lowlands of the Petén region, an area nearly devoid of human settlement.

Population numbers and densities only give a partial insight into the nature of the Guatemalan people, however; the ethnic structure of the country is also of great importance. Today, Guatemala is comprised of two major ethnic groups--one Indian and the other Ladino (non-Indian). The Indian element is descended from pre-Columbian aboriginal ancestors. They are people who have generally rejected Western culture and are, in terms of sheer numbers, the most typical human component of Guatemala. The Ladino portion of the population is representative of all those peoples who do not live like Indians. This segment of Guatemalan society is Westernized in outlook but the minority in terms of numbers. Traditionally the Indians have lived in dispersed rural settlements in the highest and coolest portions of

Guatemala. This pattern was established shortly after the Spanish conquest and has been retained to this day. The Ladinos have generally occupied the tierra templada, concentrating their numbers in the old Spanish political and administrative centers which were located in the "more habitable" portions of the country.⁷ As the Ladinos control the large urban centers which command the political and economic life of Guatemala, they also rule the state.⁸ Thus, the overall culture is dominated by a ruling minority that loosely governs a large native populace--the Indian majority which in many respects stands aloof from any "outside" influence.

⁷The Spanish may or may not have been environmental determinists, but their settlements were certainly situated with an eye for strategic location. Most of Guatemala's colonial towns were established in places where Indian populations might be exploited or at control points where trade movements could be more effectively monitored. Specific details for the development of town sites were spelled out by the Spanish Crown. See: Dan Stanislawski, "Early Spanish Town Planning in the New World," Geographical Review, Vol. 37 (1947), pp. 94-105.

⁸See: Richard N. Adams, La Ladinización en Guatemala, Seminario de Integración Social Guatemalteca, Publicación No. 3 (1956), Guatemala, C.A.; and, Nathan L. Whetten, Guatemala: The Land and the People, Yale University Press, New Haven, 1961, pp. 44-81.

CHAPTER III

THE GUATEMALAN INDUSTRIALISTS

Organization, management, and technical skill are key factors in the development of industrial landscapes. When a country has a tradition of factory operations and a cadre of qualified technicians and managers it is usually well developed. Yet these are the same foundations of modernization that are lacking in the underdeveloped world. Given the desire for industry, the more traditional societies are poor in capital, short on know-how, wanting for skilled labor, and emasculated by their need for entrepreneurs and technicians. But of all these elements it is perhaps the latter two that are the most important.

Entrepreneurs and technicians are necessary for economic development whether it takes place in a capitalistic environment through private initiative or within a planned economy under some form of state direction. Someone must always "mind the store" and see that it functions smoothly. And, the more qualified the personnel, the more assured is the function and continued development. Truly, élan marks the best of the breed, the men with the instincts and the talent for their roles. In fact, the greater the task, the more stringent this need for ability. Modernization does

not come to traditional society through pedestrian efforts. The challenges of the underdeveloped world are tigers that cannot be met by mild men. This is something clearly shown by the experience of Guatemala.

Who Rules the Economy?

Guatemala's industrial entrepreneurs constitute a most unlikely community of common interest.¹ The group has its Guatemalans--Indians, Ladinos, and a special breed that prefers to be identified as "pure Spanish," but it also includes foreigners from Europe, the United States, other Latin American countries, the Middle East, and the Orient. In fact, close examination shows the largest and most important members of this fraternity are more international than national... a detail not normally appreciated (Table 1).

The data in Table 1 show that over 62 per cent of the

¹This section is based on personal field observations; however, related studies would include: Alfonso Bauer Paiz, Como Opera el Capital Yanguil en Centroamerica: El Caso de Guatemala, Editora Ibero-Mexicana, Mexico, 1956; Manning Nash, Machine Age Maya: Industrialization of a Guatemalan Community, The Free Press, Glencoe, Illinois, 1958; Robert C. Maddox, A Comparison of Wages in United States-Owned and Guatemalan-Owned Manufacturing Firms in Guatemala, unpublished Ph.D. dissertation, School of Business Administration, The University of Texas, Austin, 1967; and Gary S. O'Neal, The American Businessman in Guatemala, unpublished M.A. thesis, Institute of International Studies and Overseas Administration, the University of Oregon, Eugene, 1967.

TABLE 1

ETHNIC ORIGINS OF GUATEMALAN INDUSTRIALISTS, FIRMS WITH
MORE THAN TWENTY-FIVE EMPLOYEES IN 1968

Source Area	Industrialists	
	Number	Per Cent
Confirmed Guatemalan	128	29.4
Doubtful Guatemalan	36	8.3
(Guatemalan Subtotal)	(164)	(37.7)
Europe	150	34.5
North America	84	19.3
Other Latin American	26	6.0
Middle East	7	1.6
Orient	4	.9
(All Foreign Subtotal)	(271)	(62.3)
Total	435	100.0

Source: Personal interview by the author, 1967-1968.

major manufacturing establishments in Guatemala are controlled by non-Guatemalans. Furthermore, the figure is probably much higher since an additional 8.3 per cent of the firms claiming to be Guatemalan were really of questionable ownership. As a group, Europeans accounted for the largest percentage of all foreign industrial activities. European industrialists in Guatemala have come from: Belgium, Britain, Bulgaria, Czechoslovakia, France, Germany, Greece, Hungary, Italy, Poland, Rumania, Scotland, Spain, Switzerland, and Yugoslavia. However, when considering single country contributions to the entrepreneurial pool, the United States emerges as the primary source area. No other national group has been nearly as actively engaged in the current development of the country's economic landscape as American businessmen.

Thus foreigners--particularly those from North America--have played the decisive role in the development of Guatemala's industrial landscape. But how can these enterprises be recognized within the country? In many cases identification is simple. Some firms carry the names of parent foreign companies--the practice with most of the pharmaceutical concerns, e.g., Sterling Products International, Upjohn, Eli Lilly, Abbott, Miles Overseas Inc., and Squibb. Others attempt to give themselves a more national or regional flavor with names such as: Guatecal (Standard Oil of

California, Inc.), General Mills de Guatemala, S.A. (General Mills, Inc.), Pinturas Centroamericanas, S.A. (the Glidden Paint Co.), Blue Bird Centroamericana, S.A. (the Blue Bird Bus Co.), or Foremost de Guatemala, S.A. (Foremost Dairies, Inc.). However, some concerns go even further in attempts to mask their foreign origins by using facades, the case in two examples from the paper industry--Cajas y Empaques de Guatemala, S.A. (the name locally used by the Weyerhaeuser Co.) and Hispania, S.A. (the local trade name employed by Boise-Cascade Co.)--and the country's largest producer of instant coffee, Industria de Cafe, S.A. (owned by Coca-Cola interests).

Under analysis it is clear that foreign influence is evident everywhere in Guatemala's manufacturing sector. Indeed, the "national industries" are no more than puppet activities subservient to international masters. This is a domination that has come through total ownership of concerns, majority control, minority (on paper) participation, technical direction of operations, the granting of manufacturing licenses, and any one of several other possible means of imposing influence that might be employed. Some of these control methods, of course, are difficult to bring out into the open since the businesses are reluctant to disclose their mechanisms of manipulation. But the most obvious method of domination is still the most effective in practice, i.e., being the biggest.

Foreign capital controls the larger enterprises that constitute the heart and viscera of Guatemala's manufacturing sector. It does not control ownership in the majority of establishments in general, but it exercises command over industry by employing the most people and producing the great bulk of all manufactured goods by value. This influence of the larger industries carries down to the smaller activities which depend upon them for goods and/or services. Thus, their weight extends to broad segments of the business community, since the relatively small number of medium to large-sized enterprises manipulate the industrial economy. Control, quite obviously, is accomplished primarily through the ability to direct market.

To date there appears to be no major objection to the infusion of foreign capital within Guatemalan industry. On the contrary, foreign capital is needed and actively sought out. For example, numerous firms may be noted that originated as national-owned concerns; however, when expansion was initiated, these industrialists turned to foreigners for support. In part this may be due to the desire to obtain foreign licenses to produce known "name products" (this appears to be the case in several instances), but there is also the recognition that growth is impossible without operating capital and technical innovation. Honest nationals admit that it is easier for a foreigner to obtain

capital (even locally) so if they can establish ties with foreigners they usually can "gain some advantage," i.e., make more money. In short, opportunistic Guatemalan industrialists are quite willing to ally their interests with international capital. Their desires are expansion and economic support. Personal gain is the goal, not national development. So long as the profits roll in, many have learned to overlook the attached strings that control them. Consequently, national leadership in the economy has been supplanted by international direction. As a matter of fact, it could even be argued that national control of the economy never has existed, but this is a subject that remains to be examined in the historical record (Chapter VIII).

A Portrait of Entrepreneurship

Some discussion of "typical" kinds of entrepreneurs is fundamental to the understanding of Guatemala's industrial development. Several types, of course, could be selected for profile, but three will suffice since the categories of Indian, Latin elements, and foreigners from industrialized areas, generally encompass all the possibilities. This is a discourse on overall characteristics of each major group; it is not an attempt to create stereotypes. The significant factors to identify are levels of involvement and the role of each human component in the economic milieu.

The Indian is basic to Guatemalan culture. He appears primarily as a farmer, but he is frequently a manufacturer as well. Industry compliments his agricultural existence as a "home" activity that does not take him away from his family or patria chica (little fatherland or home area). But, most importantly, it is also something that he can do with locally available materials and his own hands. It is likewise something that may bring in a little more money. The Indian "industrialist" is a handicraft specialist. Each home is a workshop and these are the "factories" which are reported by the thousands in the Republic's economic census.²

As an entrepreneur, the Indian invests very little capital in his endeavors. Furthermore, the Indian contribution to the national economy through value-added in manufacturing is almost nil. Few Indians serve as technicians or are trained for work in the larger and more technically oriented industrial activities. These folk prefer to stay with their milpas (farm plots). Hence, this attachment to the soil makes them tend to shun any form of livelihood that might make them leave the land. The Indian peoples are not

²The number of "factories" reported by the 1966 census is a reflection of this. There is, of course, the desire to have "more" industry appear in developing areas and census enumerators have apparently included every sort of economic activity under the industrial heading. But, paradoxically, many of the largest industries were not counted in the 1966 census.

involved in the modernization of Guatemala, nor are they really involved in the creation of industrial landscapes-- particularly the kinds of landscape which are associated with modern factory units. Guatemala's Indians are within the economic environment, but in fact they are not a part of it. This is especially true with respect to the evolving industrial economy.

"Latin-types," i.e., people of Spanish extraction, mixed bloods, and all those who may be identified as "culturally" Latin, make up a second major element in Guatemalan society. Likewise, they are the second-most important group in terms of numbers of factories owned. Again, however, it is a matter of defining what constitutes a factory. Since most employ fewer than twenty-five workers, the great bulk of all establishments operated by these people would fall into the small-scale category. Although, as a group, Latins do comprise a major entrepreneurial influence in the medium-sized firms (25-99 workers). Within that category they exercise control over at least 50 per cent of the industrial establishments, but their ownership in the large-scale factory units appears to be negligible.

The Latin entrepreneurial influence is most obvious in the wholesale and retail trade sectors of the Guatemalan economy. These people are the shopkeepers, filling station

operators, and other similar providers of services evident in great number in the urban areas. Nonetheless, as a group, they are also deeply involved in light industry, particularly the production of foods, wearing apparel, furniture, and printing activities.

Latin manufacturers are commonly identified as representatives of the middle class, but this is really an oversimplification. People from all levels of Guatemalan society are evident within the group. However, in spite of origins, most established themselves to provide services for a limited or local market. Those interviewed voiced little optimism for their prospects in the future. Moreover, it was this group that expressed the most complaints, especially concerning labor. Labor was never skilled enough or turn-overs were alleged to be high because of laziness, drunkenness or any one of several factors. In truth, though, their problems are lack of entrepreneurial talent... their own, and capital.

Family operations prevail in the Latin industries. As a result, there is a tendency to over-rely on attitudes and techniques developed within firms through years of custom forged by traditional family-ways of operation. Strong personal and familial ties are given precedence over the impersonal but frequently more rational ways of modern technology. Because of this, industrial innovation is unlikely.

In Latin operations the emphasis is on the maintenance of traditions; effective and efficient functions are secondary. But foreigners generally reverse this situation; they emphasize innovation, not tradition. Consequently, the foreign businessman operates at a much different level than his Latin counterpart--simply reflecting contrasting cultural values.

Throughout the world foreign industrialists are frequently and fairly classed as exploiters and opportunists, but they are much more as well. Imagination, the ability to promote, a keen eye for manipulation, and aggressiveness appear to be the most tangible qualities of the group. And these are the traits that make them especially well-fitted for roles as innovators within traditional societies. Whatever it is that makes them different, though, a relatively small number of such Westernized or industrially-oriented peoples have played a role disproportionate to their numbers in the economic development of the Republic of Guatemala.

Many of the foreign entrepreneurs who came to Guatemala had factory experience in their native lands. Thus, they were seasoned in the ways of industrial technology when they arrived. Some came seeking escape from the wars of Europe; others to find adventure or opportunity; and many came as representatives for international capital. Nevertheless, regardless of their specific motivations, they all came to

better themselves. As a group they were not afraid of hard work; likewise, they were attuned to the ways of the modern world. But perhaps the most important element they carried with them as cultural baggage was their psychological desire for achievement, the motivation to succeed ingrained through their breeding and experience in Westernized or industrial societies.

Foreigners provide the dynamic leadership for Guatemalan industry. They either own the factories, manage them, or serve as engineers and consultants in their operations. All categories of economic activity are affected, primarily because of the absence of domestic capital and know-how but perhaps because of the local lack of initiative and foresight as well. In essence, foreign entrepreneurs merely fill a leadership void left by nationals, but this is not a popular view. Indeed, many Latin versions of the situation tend to rely on innuendo rather than fact, stressing conspiracy, exploitation, and imperialism by foreign powers. Yet such stories are only partly true; through their own failure to accept leadership the sheep were quite obviously willing to be shorn. Thus the frequent Latin use of foreign scapegoats for their economic problems seems somewhat unjustified and unfair. The truth of the matter, of course, lies somewhere in between.

Family enterprises comprise an important element among

the foreign manufacturers of Guatemala. Much akin to their counterparts in their countries of origin, these people represent a "new Guatemalan" component in the culture. Most of the activities controlled by this group were originally founded by entrepreneurs from outside the Republic and with imported capital. Today, however, many of these family operations function under management that was born within Guatemala. In practically all cases management personnel have been trained in the United States or Europe as well as through on-the-job service in the plants in Guatemala.

The foreign families in Guatemala control key sectors of some of the most important economic activities. This would include much of the food processing, beverages, clothing and textiles, cement, wood products and furniture industries. Notably, certain families tend to specialize in particular lines of products, although there is a great deal of diversity in the sorts of goods handled within industrial groups. Economic control has been expanded horizontally through marriage; whereas, vertical integration has followed the path of expansion into related activities. Thus, these families appear to be generally analogous to industrial families like the Fords of North America; the similarities are striking and the differences are really only a question of scale.

The newest element in the development of Guatemala's

industrial landscape is the footloose international entrepreneur. These men represent the recently established branch operations of some of the biggest industrial firms in the world. The plants they manage are not only large but complex--these are the business activities with the best trained management, the most skilled technicians, and international capital for support. In the hierarchy of the Guatemalan industrial community these are the elites--perhaps the most dynamic and creative of all the foreign innovators in the business world. These men, skilled in all phases of their trade, have usually been carefully selected for their jobs.

Obviously, international business has viewed Guatemala as a favorable investment area. And business expansion into the region has brought such names as: Purina, Foremost, Nestle, Kerns, Ducal, Adams, Clark, Canada Dry, Coca-Cola, Sterling Products, Miles Laboratories, Hoechst, Helena Rubenstein, Max Factor, Upjohn, Squibb, Colgate-Palmolive, Shulton, Monsanto, Shell, Standard Oil, and Texaco... and these are merely representative. The largest food industries are owned by international capital; but so are the chemical industries, the tobacco manufacturing, paper products, and all petroleum refining. Likewise, a major portion of the textiles, clothing, and rubber goods industries are also controlled by outside interests.

The key segments of the Guatemalan industrial economy--particularly those requiring heavy investment--fall primarily within the sphere of international influence. But this development of industrial potential and the maximum utilization of human resources is more than just an investment task. The adaptation of advanced manufacturing methods and skills within traditional society largely takes place under the direction of technicians. Yet imitation of methods is not enough; technology must be adapted to the needs of the country. Thus, imaginative men are required to identify and solve the problems which may be peculiar to the local situation. These must be men not only qualified for this work because of their experience with technology but flexible of mind as well. In truth, the technicians are the unsung heroes of industrial development--they are the ones that keep the machinery of industry operating.

Personal glimpses into the activities of the foreign managers and technicians indicate something of the nature of their problems in Guatemala, but these also show triumphs as well. In any event, the stories they tell are most enlightening:

1. A Mechanical Engineer - Cotton Industry

I kept looking at that damned river and the cotton on the other side. After a while I thought... if the cotton were only water I could pipe it across-- then it hit me, it could be piped across! We built the pipe right up to the gin... it saves

the farmers on the other side a pretty penny in transport. The nearest bridge is 20 kilometers east. (Note: the "pipeline" in question was built across a river to provide cheaper and more direct service between cotton farmers and a cotton gin. Prior to its construction farmers were forced to carry their cotton some 40 kilometers to be ginned. An idea changed all that, though.)

2. A Plant Operations Manager - Cotton Industry

I really couldn't believe it. You know they used to gin the cotton on the coast, haul it all the way to the city for grading, then put it back on trucks and transport it back to the coast for export from San José. Now, don't get me wrong... I'm not saying they're stupid... I'm just saying they never thought of an easier way to operate. After my first week on the job all bales were numbered and samples were taken to the main office in an envelope. That little suggestion saved a bundle in haulage and got me a pat on the back and a raise from the stockholders.

3. A Chemical Engineer - Chemical Products Industry

The plant broke down while I was off in the city on a holiday. The duty engineer was one of the local boys... His solution to the problem was to leave me a note requesting technical assistance from the home office in the U.S., send the work shift home, and go to bed himself. I found out about the trouble the next morning when I returned... in thirty minutes I had the plant working again. I had to jerry-rig a few pipes here and there to turn the trick, but, you know, believe it or not, we actually increased production... The people in the home office didn't believe it either so they sent some engineers down to check it out. The problem? Oh, it wasn't really that difficult... nothing a little ingenuity and getting my hands dirty couldn't solve.

4. A Mechanical Engineer - Textiles Industry

When I first put this plant into operation for them we had horrible safety problems. Most of

the workers were unfamiliar with machinery and, as a result, in those first few months we lost a lot of limbs or had long work stoppages. It really taxes your patience to work under such conditions, but I wouldn't leave... the challenge is too tempting to ignore.

5. An Entomologist - Chemical Products Industry

No benchmark has been established for insecticide use on the South Coast (in the cotton) so they just spray until the pilots (crop dusters) get tired of working. They've killed everything, insects, wildlife, and even a few people. Our company is trying to develop a more rational program but the problem of education is difficult here... we are hamstrung by tradition.

6. A Plant Manager - Furniture Products Industry

I trained every one of those boys in there myself. Sure, I'll admit that the first few items we made were crude and damn poorly made, but I put a personal guarantee on everything that went out that front door. We still get a few of those old relics back once in a while... and we still honor our replacement promise. Now we are recognized for our quality and honesty.

7. An Engineer - Furniture Products Industry

Half the time the equipment we buy doesn't seem to work properly here. Don't ask me why... maybe it's just my imagination, but regardless of what the cause is I still have to tinker with some other way to solve production problems.

8. Plant Manager - Chemical Products Industry

I think that advertising is the key. A lot of these people still think that aspirin from the States is better than what we make here... it is the same.

9. Owner-Manager - Food Products Industry

When we first started producing ----- I wondered if we would ever make a go of it. Those initial batches were a disaster. We

had the stuff hauled out of here in truck-loads as fertilizer, but finally we hit the formula adapted to our local resources. Now nobody can touch us.

10. Manager - Metal Products Industry

Let me give you an example of our problems in the production of just one product. We have two machines for sharpening ----- Each of these is operated by one man; neither requires any sophisticated skill to operate. However, we had a labor problem develop here because one man found that he was producing more than the other. We tried to point out that we were paying him more because he was producing more, but his answer was simply that he would prefer to work less for less money. These kinds of attitudes are difficult to change and even harder to stomach.

These vignettes are only examples of some of the problems faced by the innovators. Guatemalan society is a new environment for industry. If modernization is desired, it is an environment where traditional attitudes must be changed; an operational milieu where technical skills are lacking, manual labor of any sort is disdained, and business activities are suspect... particularly if they are very successful. Nevertheless, in spite of the obstacles, economic development has proceeded and new industrial landscapes have emerged. Economic modernization appears to be progressing at an ever increasing rate. Indeed, once the ideas were planted and began to bear fruit, the Industrial Revolution became self-sustaining.

CHAPTER IV

THE STRUCTURE OF MANUFACTURING IN GUATEMALA

Guatemalan statistics are a poor indicator of the country's true industrial structure. In 1966, for example, the Industrial Census reported the existence of some 16,530 manufacturing establishments with an alleged total employment of 68,903 people... the typical Guatemalan industry being represented by a firm hiring about four workers. Notwithstanding such naively given figures, however, less than 3 per cent of all Guatemalan industrial activities accounted for over 55 per cent of the country's aggregate corps of manufactural laborers and had a mean employment of some 87 people per plant. This suggests two things about the nature of industry in Guatemala: (1) there are a great number of very small-scale activities, and (2) relatively few establishments employ the bulk of the overall industrial labor force. Under such circumstances, it is also apparent that portrayal of a typical manufacturing concern is impossible. Indeed, the most significant characteristics of industry in Guatemala are observable in its extremes.

Plants and Employment

Guatemalan industry is represented by firms which

employ from one to over 1,000 workers. Accordingly, from industry to industry striking contrasts are evident: an Indian producing one pair of shoes a day next to a highly mechanized factory capable of manufacturing thousands of pairs of shoes in a week; a group of women rolling cigars in a hot, dusty backyard in Zacapa while, in Guatemala City, an air-conditioned modern tobacco plant mass produces machine-rolled cigarettes for export throughout Central America; or an illegal still producing aguardiente (hard liquor) in the very backyard of the only operating legal distillery in the country. Yet these are only examples that could be duplicated with a myriad of illustrations. Concentration of manufacturing activity is the rule.

During the field portion of this study only 1,076 plants were found which hired more than five people, and only 435 of these concerns employed more than twenty-five workers. Tables 2 and 3 point up the various employee-firm size relationships evident in the country. These data reveal that Guatemalan industry is structured in much the same fashion as other Latin American countries, a pattern reflecting a dearth of large factories and a preponderance of small-scale producers.¹ On the basis of these data, it

¹See, for example, Lloyd J. Hughlett, Industrialization of Latin America, the McGraw Hill Book Co., Inc., New York, 1946, p. 48; The Peruvian Economy, Pan American Union,

TABLE 2
CATEGORIES OF GUATEMALAN FACTORIES
BY EMPLOYMENT, 1968

Number of Employees	Factories	
	Number	Per Cent
1-4	15,454	93.49
5-24	641	3.87
25-99	309	1.88
100-249	102	.62
250-499	21	.12
500-999	2	.02
1,000 +	1	.01
Total	16,530	100.00

Source: Estimated data for the number of firms in the 1-4 worker category were provided by the Sección de Censos Económicos, Dirección General de Estadísticas, República de Guatemala. All other statistics are based on field work by the author 1967-1968.

TABLE 3
EMPLOYMENT IN GUATEMALAN INDUSTRY
BY SIZE OF FIRM, 1968

Firm's Employment	Total Employees	
	Number	Per Cent
Less than 5	23,883	34.66
5-24	6,888	9.99
More than 25	38,132	55.35
Total	68,903	100.00

Source: Estimated data for the number of employees in the less than 5 worker category were provided by the Sección de Censos Económicos, Dirección General de Estadísticas, República de Guatemala. All other statistics are based on field work by the author 1967-1968.

is also evident that relatively few large firms account for the high percentage of industrial employment.²

In sheer numbers Guatemala is a land of hundreds or thousands of "industries." Yet, the overwhelming majority of these activities are no more than backyard workshops, the most typical production unit of pre-industrial society. Such small-scale manufacturers, categorized here as cottage industries but perhaps more appropriately termed subsistence manufacturers, characteristically function with little in the way of capital (usually less than \$1,000 in total investment), hire few employees (less than five), and provide goods primarily for consumption in the immediate area of their production (in this case a municipio or municipality). Household or cottage industries contribute next to nothing to the economic modernization of the nation. In fact, in terms of productivity, one or two medium-sized modern plants could easily replace the lot of such activities in the output of any single commodity. Indeed, while cottage industry currently employs better than a third of all industrial workers, it is also being destroyed by

Division of Economic Research, Washington, D.C., July, 1950, pp. 111-117; and, Alcira Leiserson, Notes on the Process of Industrialization in Argentina, Chile, and Peru, Politics of Modernization Series No. 3, Institute of International Studies, University of California, Berkeley, 1966, pp. 30ff.

²Ibid.

competition with the new plants. Machines, for example, have largely replaced the craftsmen who produced such items as shoes, textiles, pottery, and rain capes. Thus, modern large-scale industrial technology is a recent and increasingly important influence in the country.

Capital intensive manufacturing, mass production on the assembly line, and the factory have been introduced to the Guatemalan landscape. The result is larger and more efficient concerns, increasing investment in the industrial sector and, perhaps most significantly, expanding employment along with an intensification of mechanization. Because of it the character of the landscape is becoming more like that of the industrialized parts of the world... something not necessarily desirable. But the Industrial Revolution has arrived in Guatemala.

Structure of Manufacturing in the Larger Plants

Guatemalan industries regularly employing more than five workers in 1968 directly provided jobs for 45,020 persons, or, just about 3.4 per cent of the country's economically active population.³ Although a little over 55 per cent of

³In Guatemala people are counted economically active from the age of seven. Some indication of what this means is shown through a comparison with the United States. In the United States a person is not considered a part of the labor force until the age of 16. My observation in

these firms hired more than twenty-five employees, almost 85 per cent of the industrial labor force involved in operations employing more than five people worked within this group. These data indicated that the larger factory units account for the bulk of all industrial employment in Guatemala.

Guatemala's extremely high percentage of employment in a relatively low percentage of large firms is a characteristic of almost all the groups shown in Tables 4 and 5. Employment concentration is most marked in the beverage, textiles, paper, and petroleum groups, all industries typically represented by large, mechanized operations in Guatemala; but high employment is absent in the primary metals and the miscellaneous industries, activities which are characteristically small (Table 5). Because of their importance as employers, it is evident that the larger activities bear closer examination.

Guatemala has a relative lack of industrial diversification (Tables 6 and 7). Plants producing food products easily have the highest percentage of employment, but this is not wholly unexpected in light of the needs of the people and the importance of agriculture in general. Foods and

Guatemala was that few children are employed in the larger industries; however, they are quite evident in the small-scale cottage operations, services, and agriculture. Child-labor legislation does not yet exist in the Republic.

TABLE 4

GUATEMALA: STRUCTURE OF MANUFACTURING WITHIN INDUSTRIAL GROUPS, BY NUMBERS OF FIRMS WITH MORE THAN FIVE AND TWENTY-FIVE WORKERS, 1968

Industrial Group (Abbreviated)	Number of Firms over 5 Workers	Number of Firms over 25 Workers	Percentage of Firms with over 25 Workers
Foods	253	94	37
Beverages	27	18	67
Tobacco	18	6	33
Textiles	112	70	63
Clothing	98	39	40
Wood	91	31	34
Furniture	54	15	28
Paper	14	10	71
Printing	50	17	34
Leather	19	8	42
Rubber	20	6	30
Chemicals	107	51	48
Petroleum Products	5	3	60
Nonmetallic Minerals	97	28	29
Primary Metal Industries	5	1	20
Fabricated Metal Products	55	24	44
Machinery Non-Electric	--	--	--
Electrical Goods	20	6	30
Transportation Equipment	13	6	46
Miscellaneous	18	2	11
Total	1,076	435	40

Source: Field work by the author 1967-1968.

TABLE 5

GUATEMALA: STRUCTURE OF MANUFACTURING WITHIN INDUSTRIAL GROUPS, BY NUMBERS EMPLOYED IN FIRMS WITH MORE THAN FIVE AND TWENTY-FIVE WORKERS, 1968

Industrial Group (Abbreviated)	Number of Employees in Firms with over 5 Workers	Number of Employees in Firms with over 25 Workers	Percentage of Employees in Firms with over 25 Workers
Foods	11,108	9,513	86
Beverages	1,631	1,549	95
Tobacco	971	859	89
Textiles	8,659	8,094	94
Clothing	3,276	2,576	79
Wood	2,655	1,950	73
Furniture	1,246	878	71
Paper	1,146	1,103	96
Printing	1,932	1,609	83
Leather	507	377	74
Rubber	875	709	81
Chemicals	4,073	3,441	85
Petroleum Products	235	215	92
Nonmetallic			
Minerals	3,241	2,620	81
Primary Metal			
Industries	87	27	31
Fabricated Metal			
Products	2,120	1,774	84
Machinery Non-			
Electric	--	--	--
Electrical Goods	582	444	76
Transportation			
Equipment	391	321	82
Miscellaneous	285	73	25
Total	45,020	38,132	85

Source: Field work by the author 1967-1968.

TABLE 6

GUATEMALA: A RANKED SUMMARY OF MANUFACTURING ACTIVITIES
WITH MORE THAN TWENTY-FIVE EMPLOYEES WITHIN CATEGORIES,
ACCORDING TO NUMBER OF FIRMS, 1968

Industrial Group (Abbreviated)	Number of Firms with more than 25 Employees	Percentage of all Firms with more than 25 Employees
Foods	94	21.6
Textiles	70	16.1
Chemicals	51	11.7
Clothing	39	9.0
Wood	31	7.1
Nonmetallic Minerals	28	6.4
Fabricated Metal Products	24	5.5
Beverages	18	4.1
Printing	17	3.9
Furniture	15	3.4
Paper	10	2.3
Leather	8	1.9
Tobacco	6	1.4
Rubber	6	1.4
Electrical Goods	6	1.4
Transport Equipment	6	1.4
Petroleum Products	3	.7
Miscellaneous	2	.5
Primary Metal Industries	1	.2
Machinery Non-Electric	-	--
Total	435	100.0

Source: Field work by the author 1967-1968.

TABLE 7

GUATEMALA: A RANKED SUMMARY OF MANUFACTURING ACTIVITIES
WITH MORE THAN TWENTY-FIVE EMPLOYEES WITHIN
CATEGORIES, ACCORDING TO EMPLOYMENT, 1968

Industrial Group (Abbreviated)	Number of Employees in Firms with more than 25 Workers	Percentage of Overall Employment in more than 25 Workers Class
Foods	9,513	25.0
Textiles	8,094	21.2
Chemicals	3,441	9.0
Nonmetallic Minerals	2,620	6.8
Clothing	2,576	6.7
Wood	1,950	5.1
Fabricated Metal Products	1,774	4.7
Printing	1,609	4.2
Beverages	1,549	4.1
Paper	1,103	2.9
Furniture	878	2.3
Tobacco	859	2.3
Rubber	709	1.9
Electrical Goods	444	1.2
Leather	377	1.0
Transportation Equipment	321	.8
Petroleum Products	215	.5
Miscellaneous	73	.2
Primary Metal Industries	27	.1
Machinery Non-Electric	--	--
Total	38,132	100.0

Source: Field work by the author, 1967-1968.

beverages combined account for almost 30 per cent of the country's industrial employment and about 25 per cent of all large manufacturing concerns. If textiles and clothing are added with foods and beverages these four industries account for 56 per cent of the industrial labor force and half of all the large firms. Surprisingly, the chemical industry stands out as a significant activity and employer in Guatemala. But, some industries are virtually absent in the data, particularly the manufacturers of primary metal products and machinery. Accordingly, it appears that the Guatemalan industrialists are primarily producers of non-durable consumer goods. They are also industries capable of utilizing relatively unskilled or semi-skilled laborers, an important consideration in a developing country.

CHAPTER V

THE SPATIAL DISTRIBUTION OF
GUATEMALAN MANUFACTURING

The workshops and factories of Guatemalan industry are dispersed widely but extremely irregularly over the landscape. In general, however, this pattern of distribution is quite simple since the bulk of the major activities, especially those employing more than five workers, usually tend to locate in the country's few large urban places. These centers of industrial concentration are complemented by an indiscriminate array of cottage manufacturers--small-scale production units that are found in almost every municipio (municipal area), in the country--but they are activities so limited in size and output that they are really unimportant.¹

Over two-thirds of all Guatemalan manufacturers and workers in industries employing more than five people are located in the Guatemala City metropolitan area (Maps

¹The municipio is a subdivision of the major administrative unit of Guatemala, the department. Municipios vary greatly in size and population; however, they are smallest in the densely inhabited areas and largest where the population is sparse. In many respects it is a political entity much akin to the New England town of the United States; size and function are similar in both units.

3, 4 and 5 and Tables 8 and 9). This unusually heavy concentration of manufacturing concerns is a phenomenon that has sparked some nationalistic interest in the dispersion of industrial activities into other sectors of the Republic. And, quite naturally, such a view is understandable as a more balanced participation in the economy is desirable for all regions. But, as long as the capital has the largest and most sophisticated market, the best transportation connections, most efficient communications linkages, greatest power availability, largest labor pool, best developed cultural and physical amenities, and any one of a dozen or more similar attractions that make it more appealing as an economic environment, industry will still focus there. These attractions, incidentally, operate as lures for both the domestic and foreign entrepreneur. Although, foreigners control half again as many firms as Guatemalans do outside of the national capital (Table 10). Accordingly, any program promoting the decentralization of industrial activity will have to take the allure of Guatemala City into consideration and provide for more tempting incentives to be offered if industry is to be enticed away from its attractions.

The Manufacturing Regions of Guatemala

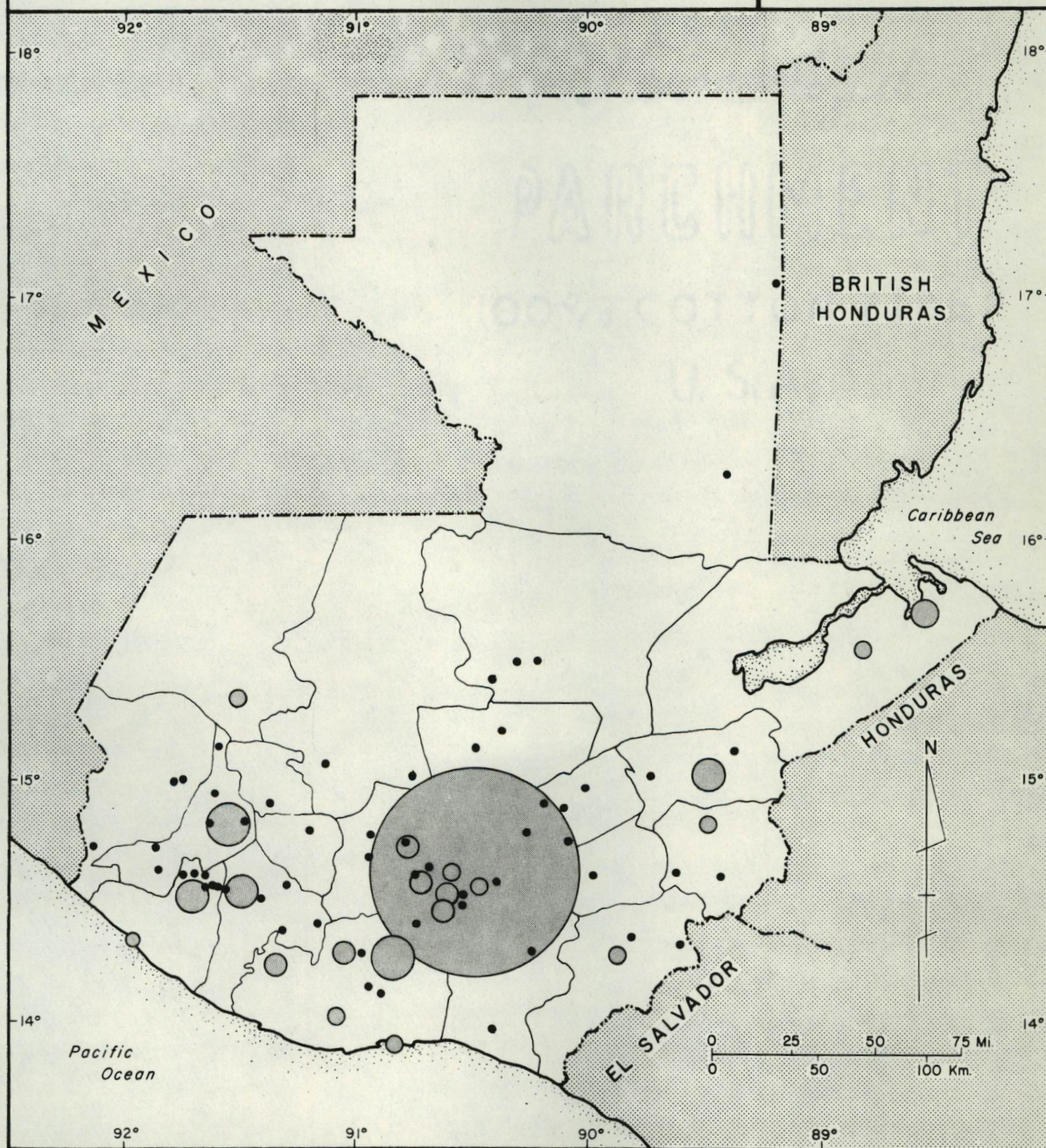
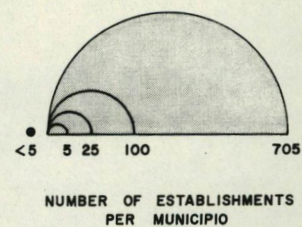
Within Guatemala the regionalization of manufacturing

DEPARTMENTAL ADMINISTRATIVE UNITS OF GUATEMALA



MAP 3

GUATEMALAN INDUSTRIES WITH FIVE OR MORE EMPLOYEES



MAP 4

TABLE 8

GUATEMALA: A RANKED SUMMARY OF INDUSTRIES EMPLOYING MORE
THAN FIVE WORKERS, BY DEPARTMENT, 1968

Reporting Administrative Unit	Activities with more than Five Workers	Percentage of Overall Total
(Guatemala City)	(705)	(65.52)
Guatemala	741	68.87
Escuintla	75	6.98
Quezaltenango	54	5.02
Retalhuleu	35	3.26
Suchitepequez	29	2.70
Zacapa	29	2.70
Izabal	19	1.77
Chimaltenango	18	1.68
Sacatepequez	13	1.21
Jutiapa	12	1.12
San Marcos	9	0.84
Chiquimula	8	0.74
El Progreso	7	0.65
Alta Verapaz	5	0.46
Huehuetenango	5	0.46
Jalapa	4	0.37
Baja Verapaz	3	0.27
Petén	3	0.27
Quiché	2	0.18
Santa Rosa	2	0.18
Sololá	2	0.18
Totonicapán	1	0.09
Total	1,076	100.00

Source: Field work by the author, 1967-1968.



MAP 5

TABLE 9

GUATEMALA: A RANKED SUMMARY OF EMPLOYMENT IN INDUSTRIES
WITH MORE THAN FIVE WORKERS, BY DEPARTMENT, 1968

Reporting Administrative Unit	Number of Employees	Percentage of Overall Total
(Guatemala City)	(27,746)	(61.64)
Guatemala	30,244	67.18
Escuintla	5,828	12.95
Quezaltenango	2,621	5.83
Retalhuleu	1,446	3.22
Suchitepequez	862	1.92
Chimaltenango	786	1.75
Sacatepequez	754	1.68
Izabal	739	1.65
Petén	429	0.96
Zacapa	400	0.89
Alta Verapaz	234	0.52
San Marcos	134	0.29
Jutiapa	125	0.27
El Progreso	103	0.22
Chiquimula	76	0.16
Huehuetenango	60	0.13
Jalapa	58	0.12
Santa Rosa	51	0.11
Baja Verapaz	29	0.06
Quiché	16	0.04
Sololá	14	0.03
Totonicapán	11	0.02
Total	45,020	100.00

Source: Field work by the author, 1967-1968.

TABLE 10
DISTRIBUTION OF THE 435 LARGEST INDUSTRIALISTS
IN GUATEMALA, BY ETHNIC ORIGINS, 1968

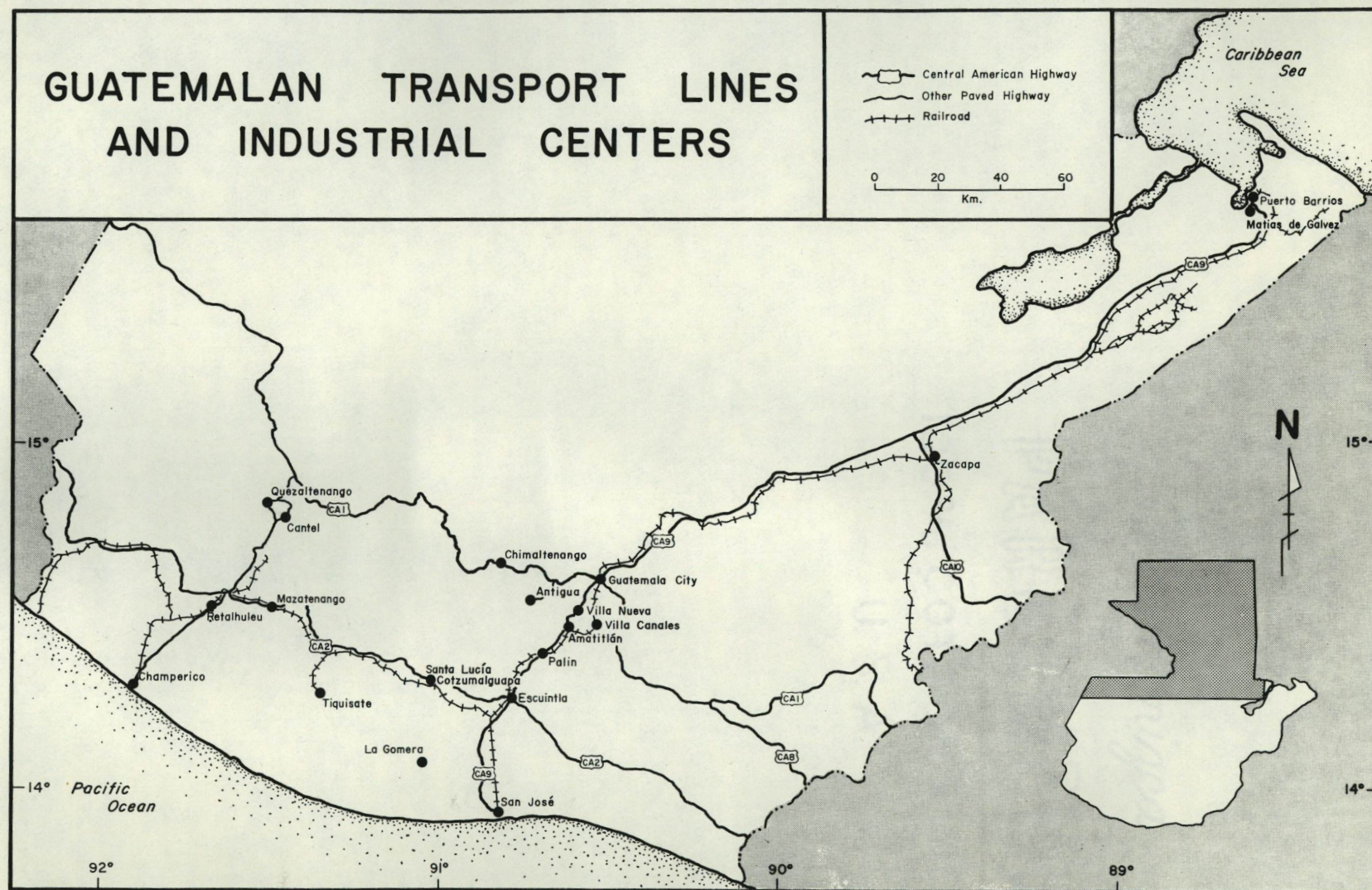
Ethnic Origin of Industrialist	Location and Total Percentage of Major Industries in the Republic			
	Guatemala City		Rest of Guatemala	
	Number	Percentage of Total Republic	Number	Percentage of Total Republic
Confirmed Guatemalan	84	19.3	44	10.1
Doubtful Guatemalan	26	6.0	10	2.3
(Guatemalan Subtotal)	(110)	(25.3)	(54)	(12.4)
European	107	24.6	43	9.9
North American	51	11.7	33	7.6
Other Latin American	23	5.3	3	.7
Middle Eastern	7	1.6	--	--
Oriental	2	.5	2	.4
(All Foreign Subtotal)	(190)	(43.7)	(81)	(18.6)
Total	300	69.0	135	31.0

Source: Personal interviews by the author, 1967-1968.

is quite marked. Moreover, all of the country's industrial regions are linked together along its major lines of cross-country transport, an overland trade pattern that has changed little since its development during the colonial period. As a result, practically every significant manufacturing activity in Guatemala is situated within a triangular shaped area lying south of an imaginary line connecting Puerto Barrios with Quezaltenango (Map 6).

Guatemalan industry is strongly associated with transportation arteries for its existence. Indeed, the construction of paved highways, which began in earnest in the 1950's, paralleled developments in industry. All the country's major urban centers--with the possible exception of Coban--and the ports are interconnected by hard-surface roads. The most important transport link, however, is the Interocean Highway (CA-9) which ties together the Caribbean and Pacific ports and Guatemala City. This highway is most strategic to Guatemala, but it is also important to Central America as it is allegedly the most heavily traveled transportation artery in the region.² Paralleling the transisthmian passage of the old International Railways of

²James R. Snitzler and Enrique Soto, Central American Transportation Study (Summary Report), Regional Office for Central America and Panama Affairs (ROCAP), Agency for International Development of the U.S. Department of State, Guatemala, 1965, pp. 31-37.



MAP 6

Central America (IRCA), once the chief means of overland transport between the east and west coasts, the Interocean Highway connects the two major paved routes between Mexico and the rest of Central America--the Interamerican Highway (CA-1) and the Pacific Highway (CA-2).³ However, in the northwest, another hard-surface bond is forged between these north-south trending highways where Guatemalan National Route 9S connects the highland city of Quezaltenango with the port of Champerico. Other paved roads are feeders to these transport lines.

Major centers of industrial development have been established at the intersections or pivot points of this skeleton of a transport system. Two manufacturing poles are, thus, located in the highlands--one focusing on Guatemala City and the other on the region around Quezaltenango--and two are located on the South Coast where Escuintla and the cities of Retalhuleu and Mazatenango similarly benefit from their situation at crossroads locations. Industry has also extended its operations out from the urban centers and along the paths between these major nodes of activity. This expansion is most obvious

³IRCA was nationalized by the Guatemalan government in 1969; however, this action will probably not change the efficiency of service. The railroad has always been limited by its single-track line and narrow-gauge, but with labor problems and increasing competition with faster and more direct highway transport it has practically ceased to function.

between the capital and Escuintla but it is also evident to a lesser degree throughout the transport net.

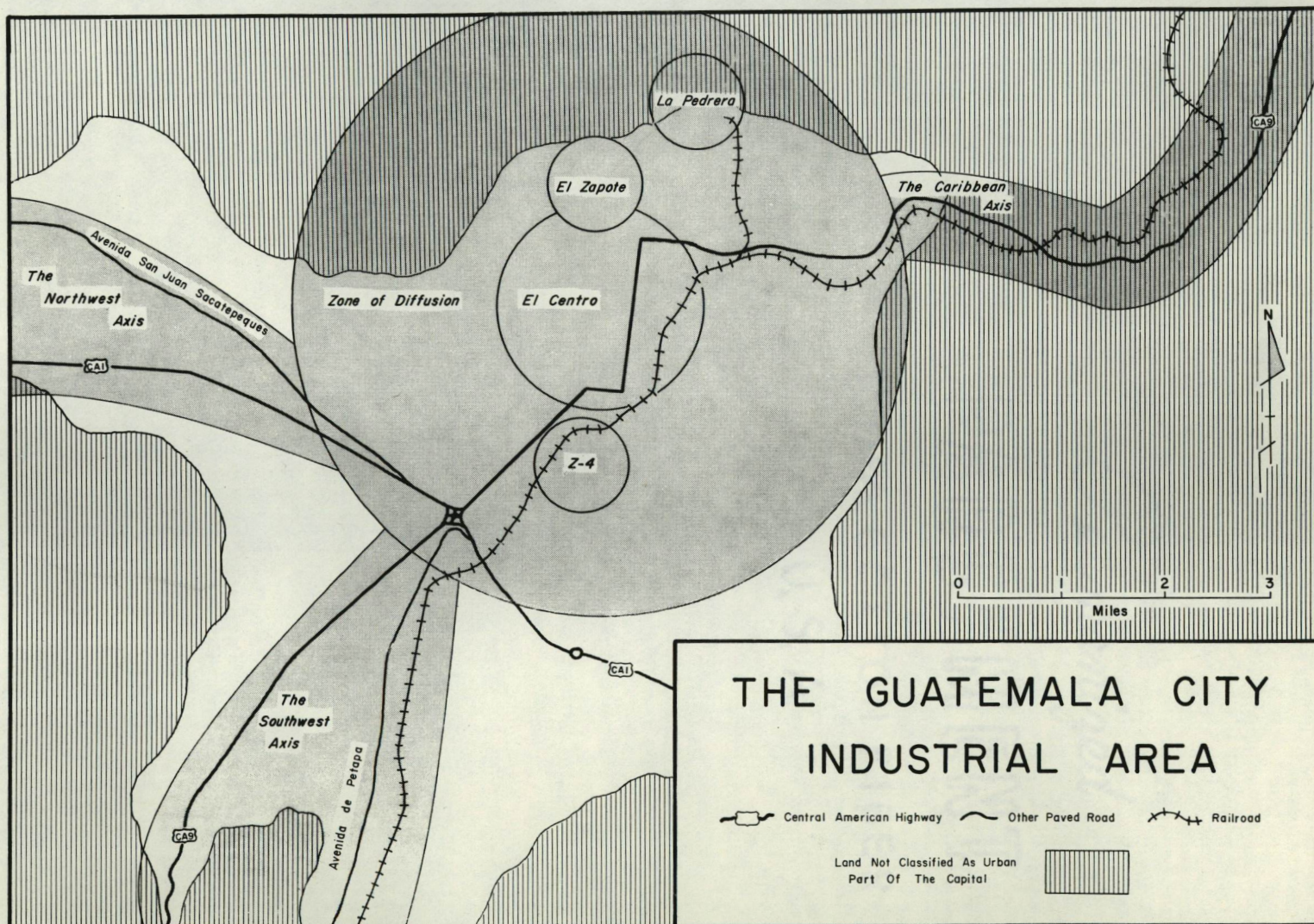
The Guatemala City Industrial Area

The significance of the national capital to manufacturing has already been suggested. Guatemala City is unquestionably the focal point for the Republic's industrial activity. Over 14 per cent of the country's population is concentrated in the capital; 62 per cent of the people employed in manufacturing work within the limits of this municipality. Guatemala City with its concentrated and more sophisticated populace forms the basic market and labor pool for domestic industry. In fact, with the few exceptions noted in other parts of the country, a list of Guatemalan manufacturers is no more than a roll call of firms in the metropolitan area of the capital.

Over a third of all the employees in manufacturing firms of any size in Guatemala City are working within a mile of the National Palace. This is the oldest part of the capital and the very heart of the city--El Centro (the Central District)--it contains approximately 90 per cent of all the printing establishments in the country and produces such goods as food, tobacco products, textiles, clothing, cosmetics, plastics, metalworks, and furniture. Some of the oldest industrial firms in Guatemala are located

in this area (Map 7). Beyond the Central District, out to a distance of about two miles, there is a zone of industrial diffusion. Within this region industry is scattered, quite diversified, and has been more recently established. Most firms in the area have founding dates in the 1940's and 1950's, but several were established in the 1960's--chemical and plastics manufacturers being the latest entrants. There are, however, some concentrations of manufacturing activity within this zone of diffusion which may be identified. In the north, beer, wine, soft drinks, and food are produced at Finca El Zapote. Nearby, at La Pedrera, all of the country's cement and many other non-metallic goods such as lime, bricks, tubes, and tiles are manufactured. On the south, administrative Zone 4 of the city generally defines a concentration of over 2,500 industrial workers in an area less than a mile square--one-third of the employment in shoe manufacturing, nine major food producers, eight chemicals products firms, and six metalworking establishments. The remainder of the city's industry is transportation oriented along the chief roads that converge on the capital.

The cheapest land for urban growth in Guatemala City lies at the fringe of the metropolitan area. Thus, as the older industrial firms are located close to the heart of the capital, the bulk of the largest and most modern manufacturing concerns are situated at its edge where land is



THE GUATEMALA CITY INDUSTRIAL AREA

 Central American Highway
  Other Paved Road
  Railroad

Land Not Classified As Urban
 Part Of The Capital



MAP 7

more available. Clean-lined, modern, and efficient in appearance, these plants lend an air of dynamism to the landscape that impresses even the least perceptive of tourists passing through; they form a suburban concentration of activity that cannot be missed.

Guatemala City's newest industrial firms are stretched out ribbon-like within five to ten blocks of the major arterial routes focusing on the city. The strongest foci of activity, however, appear in three areas: on the southwest where the Interocean Highway (CA-9) and Avenida de Petapa funnel traffic to and from the South Coast; in the east where CA-9 links the capital with the Caribbean; and in the northwest where the Interamerican Highway (CA-1) and the Calle de San Juan Sacatepequez provide trade ties with the Western Highlands.

Over a third of all industrial workers in Guatemala City and some of the largest manufacturers are found on the city's southwest approaches, CA-9 and Avenida de Petapa. Relatively new, almost all the firms in this area were founded after 1956 and the majority date from 1960. Products processed here include foods and beverages of all types, clothing and textiles, chemicals, industrial gases, wood and furniture, paper goods, glass, metalworks, building materials and rubber. The southwest is the city's main axis of development; activity on the Caribbean side of the

capital is much more specialized. Large food processors dominate the capital's northeast approaches, but other activities such as textiles, cosmetics, paint, tile, furniture, and buses are produced in the same area. The third leg of development, the chief highland routes into the capital from the west, is lined with sawmills, textiles plants, brick and stone products manufacturers, and especially, chemicals firms. This is the general area of location for the largest pharmaceutical and chemical products manufacturers in the country--Abbott, Herbruger, Miles Overseas, Hoechst, Eli Lilly, and Upjohn.

Quezaltenango

Quezaltenango is Guatemala's second largest city. Located in the Southwestern Highlands, it serves as the second most important transportation hub and market center in the highland area. This city currently has about 5 per cent of the country's manufacturers and employment. In terms of importance as a manufacturing environment, however, it merits a third place position behind Escuintla, the major industrial city of the South Coast.

The industrial structure of Quezaltenango is somewhat diversified, although its most significant activities fall into only four categories: foods, beverages, textiles, and clothing. Textiles and clothing producing firms account for

30 per cent of the city's industrial establishments and 43 per cent of the manufactural labor force. Large grain mills, a liquor bottling plant, a winery, a brewery and a soft drink bottling works employ another 30 per cent of the industrial work force. Leather tanning operations add 10 per cent to the manufacturing employment structure while furniture makers, a bus assembly facility, a plastics manufacturer, and a rubber goods plant make up the remaining balance.

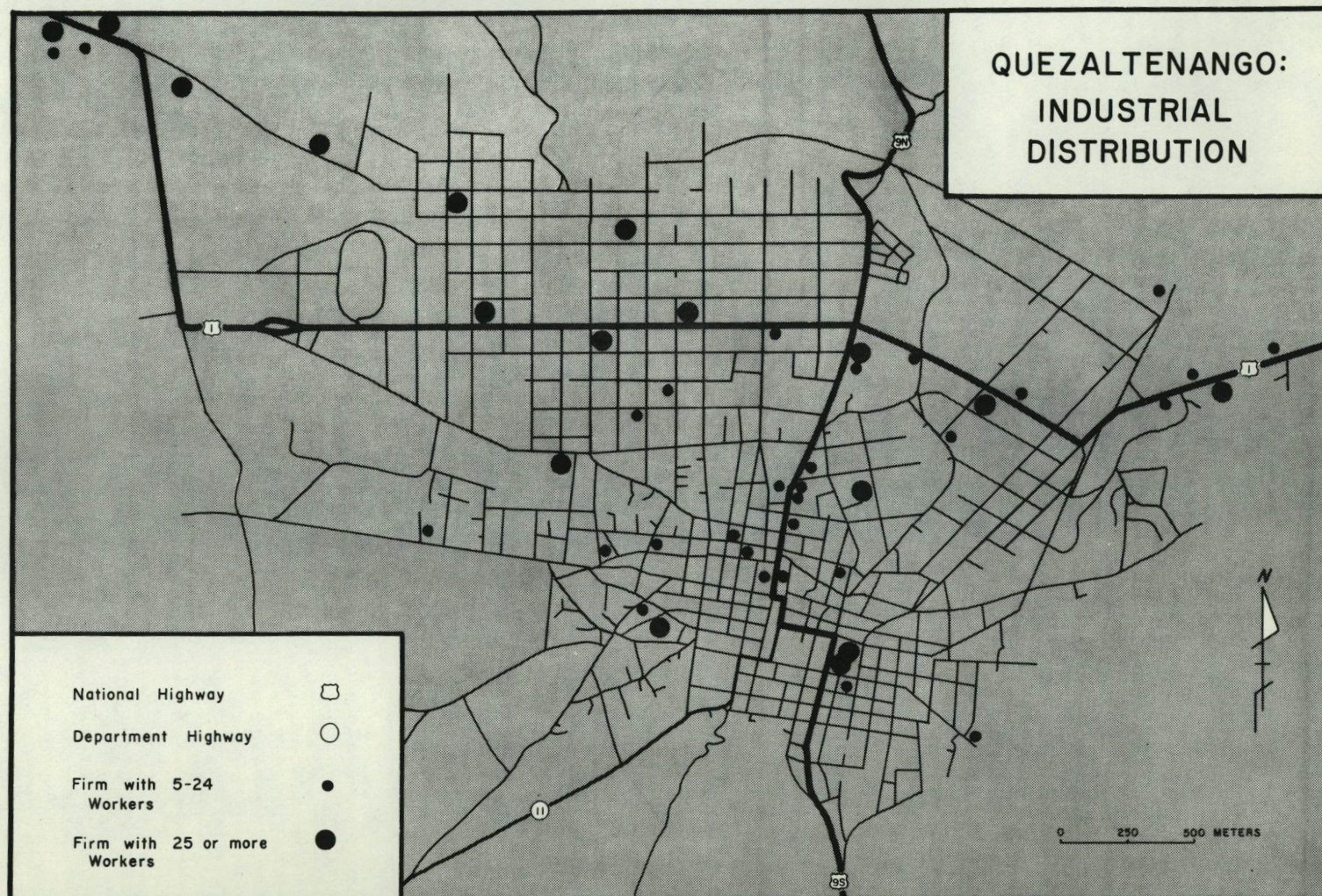
The raw materials for Quezaltenango's industrial plants come from domestic agriculture, other Guatemalan or Central American industries--particularly those located on the South Coast of the Republic--or are imported from the U.S., Europe, or Japan. Finished products cover a trade area that is local, regional, national, and international in its scope. Guatemala itself absorbs the greatest percentage of all these manufactured goods, although domestic sales are closely followed by exports to the Central American Common Market (CACM) countries.

Manufacturing in Quezaltenango is scattered but it does have an orientation to the major transport lines. Beyond that, however, it is difficult if not impossible to identify any cluster of activities that might pass for an industrial district. Historically an old economic center and once the second most important manufacturing city in the country,

today the region appears to be declining in significance. Many of the firms in operation here as late as 1960 no longer existed in 1968, but several moved to the capital--primarily in order to provide better service to their chief market area. No major industrial facility has been built in Quezaltenango since 1965. Thus an economic reversal has come to a city that sported a tobacco factory in the eighteenth century and also established itself as a center for the production of cotton and woolen textiles. However, while it has declined, other parts of Guatemala have grown, particularly the South Coast (Map 8).

The South Coast Industrial Region: The Escuintla Area

Agriculture is the backbone of the Guatemala economy and provides the country's industry with a high percentage of the raw materials needed for its operations. Yet, nowhere is this relationship more pronounced than in the commercial agriculture area of the South Coast. Here, on the fertile piedmont of the volcanic spine of the country the factory in the field concept is practiced to the ultimate. Sugar cane, cotton, coffee, citronella and a multitude of other crops flourish in this environment. And, since initial processing is best performed where the agricultural commodities are grown, throughout the landscape factories have sprung up to fill this need, e.g., cotton gins are

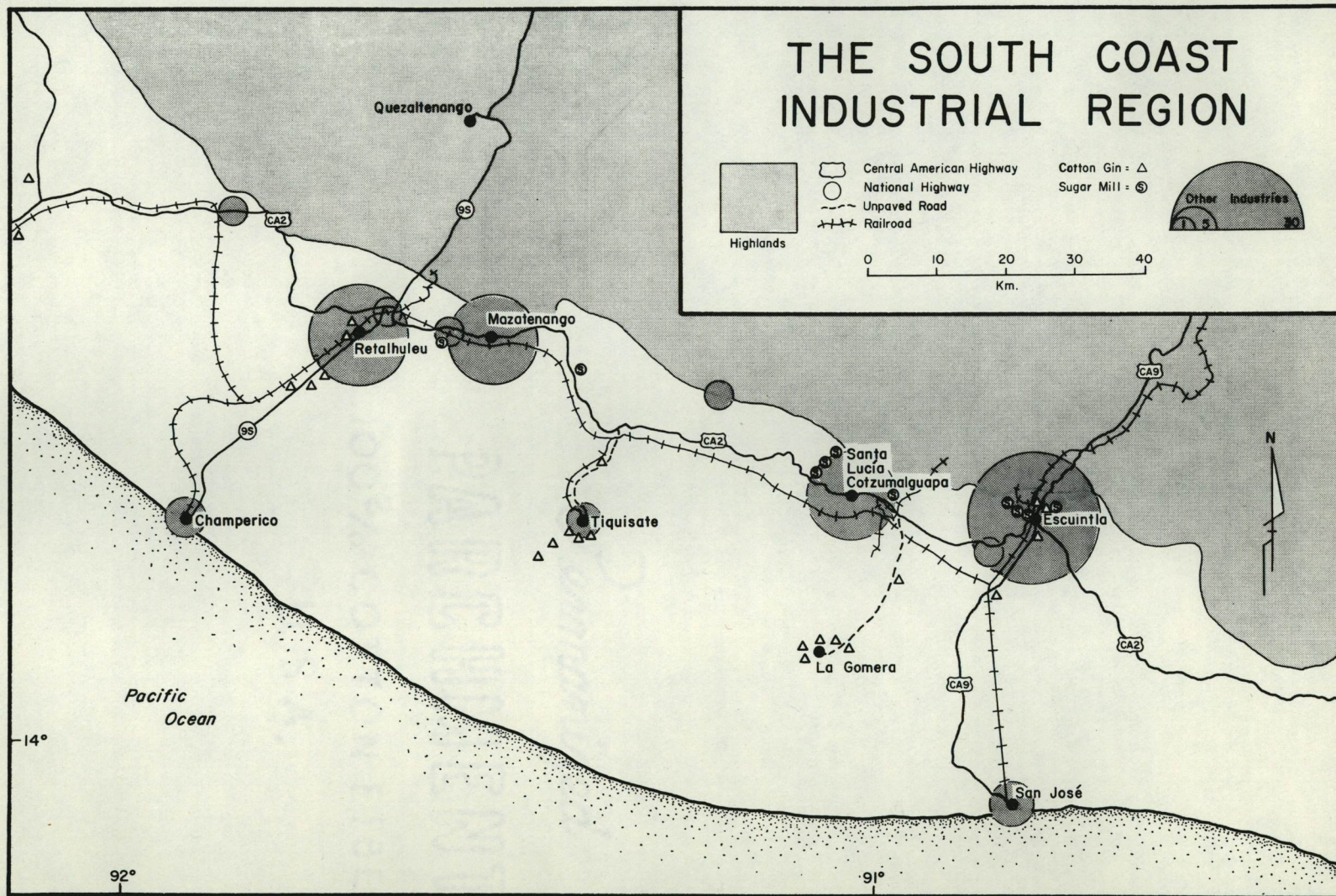


MAP 8

located in the cotton fields and sugar mills stand beside the cane brakes (Map 9). From this zone processed and semi-processed products are shipped to both the national and international market. This is the agricultural heart of Guatemala.

By and large the department of Escuintla has the most significant developments in manufacturing on the South Coast. Exceeded in achievements only by Guatemala City, it is the country's number two region in terms of manufacturing importance. Centered within the department capital, the city of Escuintla, are such activities as meat processing, cheese production, a large ice cream plant, sugar mills, several sawmills, a paper plant, cottonseed oil processors, one of the two petroleum refineries in the country, and a metal working factory. Moreover, another five sugar mills strung out along the Pacific Highway between the municipio of Escuintla and the department of Suchitepequez are also economically tied to the city. Four of these mills are located in the municipality of Santa Lucía Cotzumalguapa, a city which also supports three other important industries-- a yeast plant, the country's one operating legal liquor distillery, and a cottonseed oil factory.

Within the department of Escuintla there are two major cotton growing centers, La Gomera and Tiquisate. At the present time both support five ginning operations.



MAP 9

Tiquisate, the old United Fruit Company banana growing area, also had a yucca processing plant, a soft drink bottling works, two small citronella mills and a combined metal working, concrete block, and general service industry.

San José, the port city for the Escuintla area, is situated on the western terminus of the Interocean Highway. Although it is primarily a service center handling imports and exports, San José also has several industries with a maritime orientation, e.g., salt works and a seafood processing plant. A short distance south and down coast of this city a small shipyard began operations in late 1968.

The South Coast: The Retalhuleu-Mazatenango Area

Industrial development in the Retalhuleu-Mazatenango area is no more than an extension of activities already noted in Escuintla. In the municipio of Mazatenango, for example, the significant industries are an ice cream plant, a liquor bottling works, a soft drink manufacturing firm, and cotton ginning. The city of Retalhuleu has a cheese factory, cotton ginning operations, textile manufacturing, insecticide processing, a soft drink concern, and several activities of lesser import such as sawmills, furniture production, and numerous small clothing manufacturers. The port city for this region and Quezaltenango, Champerico, is much akin to San José in its industrial structure. This

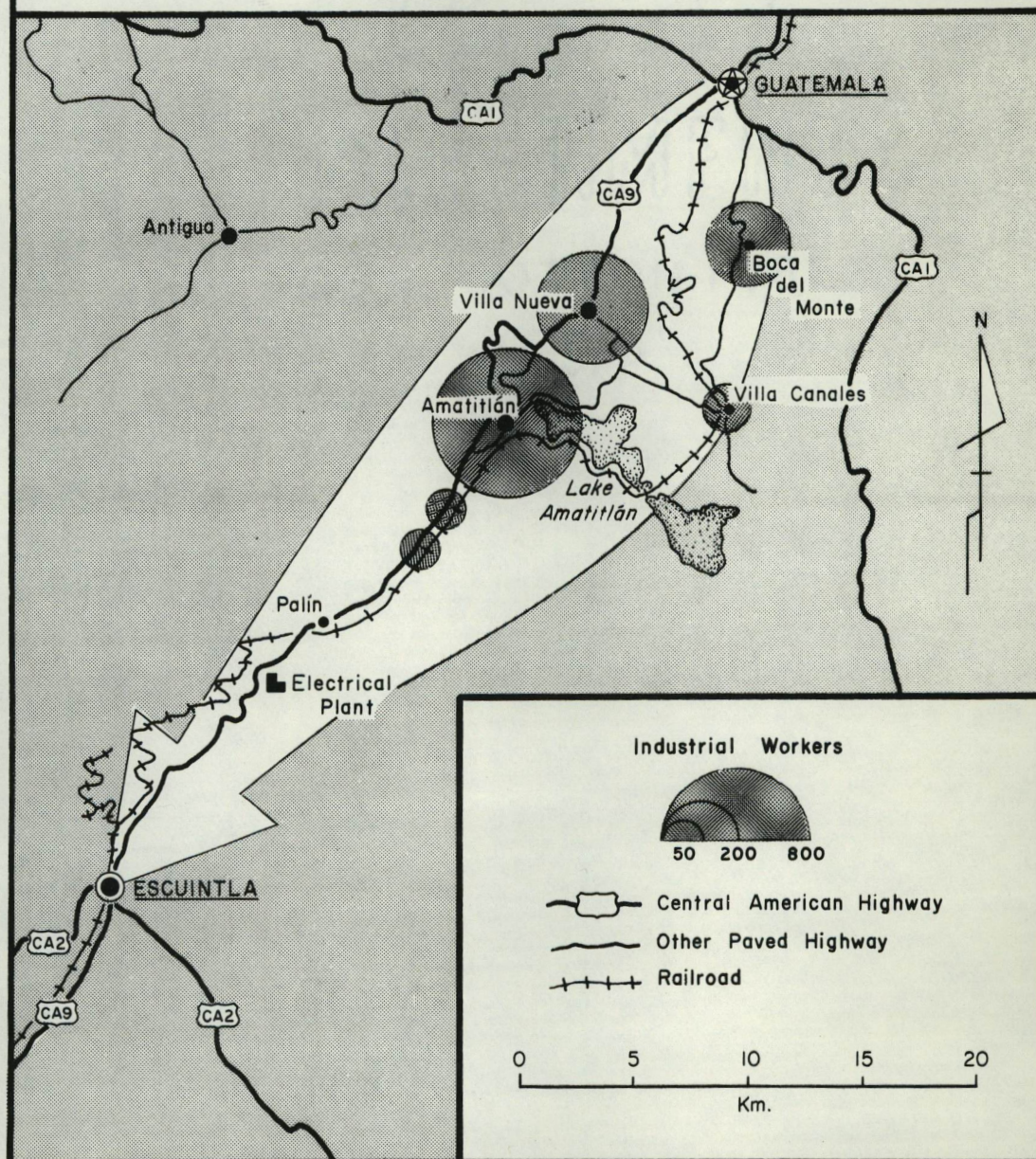
municipio has a small clutch of industries based on exploitation of the sea including three large salt works and one of the country's two major seafood processing plants. Throughout the Retalhuleu-Mazatenango area widely scattered sugar mills, citronella producers, cotton gins, and similar agricultural industries are evident along the Pacific Highway or on feeder roads to it.

Guatemala to Escuintla: A Developing Industrial Axis

Between the national capital and Guatemala's rich South Coast area lies one of the most rapidly evolving and significant manufacturing districts in the country. This landscape is a part of the transisthmian route crossed by the Interocean Highway and the mainline of the old international Railways of Central America. Here, the municipios of the region effectively serve as a bridge connecting the agricultural South Coast with the more diversified industrial complex developing in and about the capital. It is an axis comprised of the municipios of Villa Nueva, Villa Canales, Amatitlán, and Palín (Map 10).

In 1958 almost nothing except shacks evidenced man's use of the landscape between Guatemala City and the small town of Villa Nueva. Just ten years later, the municipio had a milk bottling plant, a grain mill, a textiles factory, a major furniture manufacturing concern, a cooking oil

THE GUATEMALA TO ESCUINTLA INDUSTRIAL AXIS



MAP 10

plant, a paint factory, two rock crushers, two metal works, and a huge German-owned pyrotechnics factory. Of all these manufacturers, only one began operations before 1950. The key year to development seems to have been 1959, the year the furniture factory initiated production. Since then Villa Nueva has acquired one or more new major industrial establishments per year. The bulk of these manufacturers are production oriented to sales in the member countries of the Central American Common Market (CACM). In fact, less than 5 per cent of all industrial workers in the municipio are engaged in operations geared to producing goods strictly for sale in the Republic.

The municipality of Villa Canales lies about 12 kilometers off the Intercocean Highway, but has secondary road connections with both it and Guatemala City. Rail transport is also available here since the municipio is served by the main line of the national railroad. Before the 1960's the only significant manufacturing activity in this area was the production of sugar or panela (crude sugar). Then, in 1964, one of Guatemala's two modern cigarette factories was located at Boca del Monte, one of the municipio's small settlements near Guatemala City. Now Villa Canales has over 300 people working full time in the production of cigarettes and other tobacco products for sale throughout Central America.

The city of Amatitlán is situated some 14 miles southwest of the national capital. Unlike Villa Nueva and Villa Canales it is located on both the transisthmian highway and the railroad. This municipio has a long tradition of agricultural processing which is still evident in its coffee and honey industries, but since 1960 economic expansion and diversification have drastically modified its industrial structure. Within the last eight years nine new industrial facilities have gone into operation in Amatitlán, only two of these are processors of agricultural goods. Textiles, plastics, paint, hand tools, stoves, cooking ware, and insecticides are some typical products turned out by the new plants. Notably, as was the case in Villa Nueva and Villa Canales, the great bulk of these goods are destined for sale in the CACM, some even being exported out of Central America.

The municipio of Palín, like Amatitlán, is transected by the main line of the railroad and the Interocean Highway. But in spite of its transportation advantages this municipio lacks the scale of development evidenced in other portions of the evolving industrial axis, even though it does have some representation. Since 1961 two manufacturers of size have located in Palín, both are firms producing chemical products for agriculture. The connection between these industries and the South Coast agricultural region is obvious.

Trade ties outside of Guatemala have exerted a strong influence on the new industries that have located themselves between the capital and Escuintla. Although all of the factories situated here serve Guatemala's domestic needs, they also trade throughout Central America. The possibilities for the further expansion of manufacturing in this region appear excellent. One development, a new hydro-electric project underway in the area, will surely attract power-hungry activities seeking new plant sites in the future.

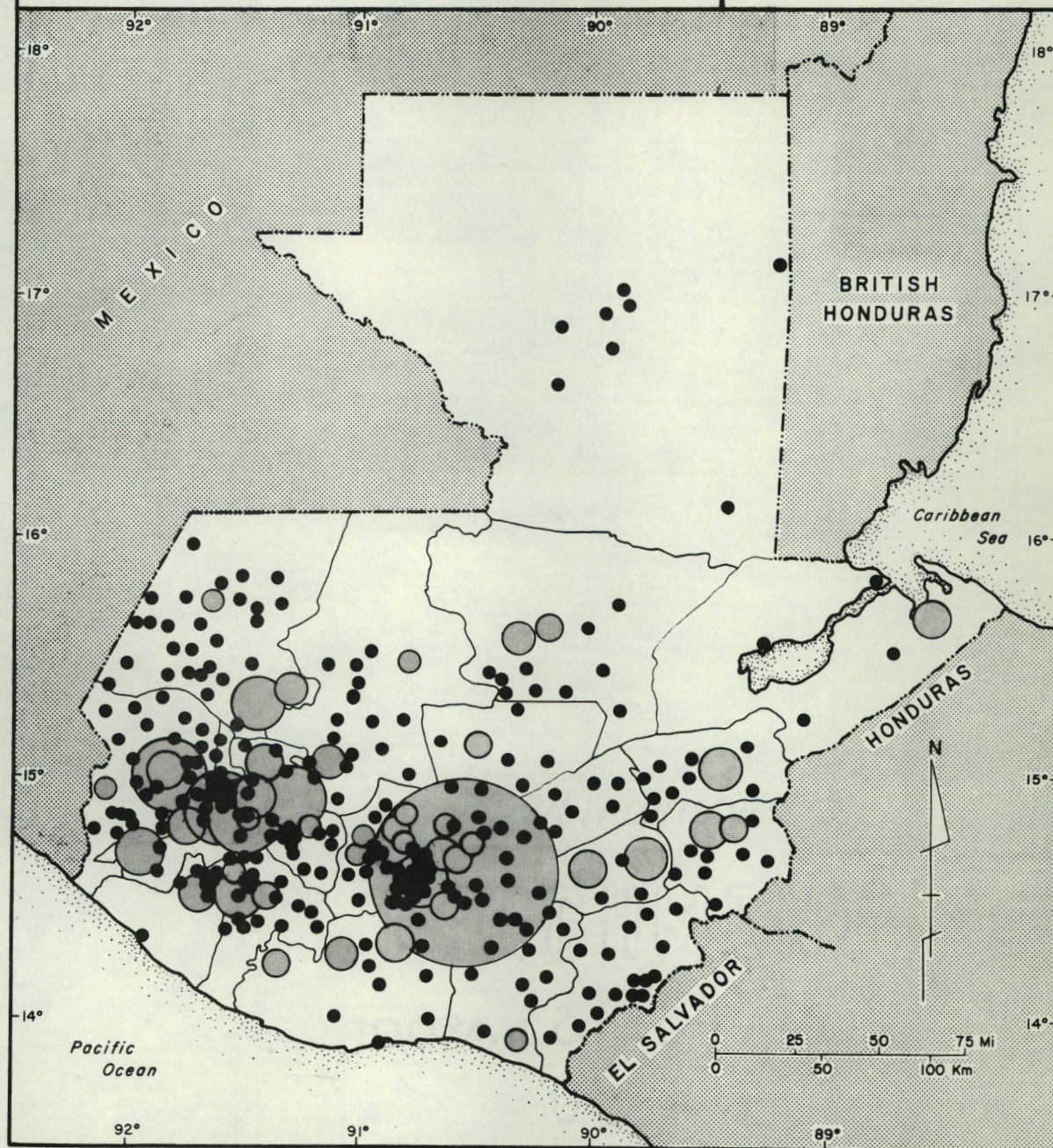
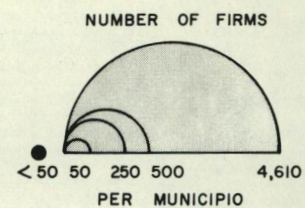
Lesser Developments in Manufacturing

On the Caribbean side of the country Puerto Barrios and the national port of Matías de Gálvez lie at the eastern terminus of the Interocean Highway. Aside from its port function this region is the base for a growing wood products industry and one of the country's two petroleum refineries. At another extreme, in the Central Highlands between the capital and Quezaltenango, three places, Antigua, Chimaltenango, and Cantel, function as centers specializing in the production of textile products. But outside of these developments and the major industrial regions previously noted, sizable industrial activity is best described as a one-town, one-firm situation. The country's small towns lying outside its major poles of development

simply are not large enough to support a strong and diversified industrial structure. These villages are the environment for the ubiquitous cottage industries, the small-scale "home" manufacturers.

Cottage industries are widely dispersed over the landscape of Guatemala; however, these activities are not disorganized (Map 11). Each region has a product--panela (unrefined sugar) is produced in the South Coast lowlands as is salt; whereas, baskets, textiles products, furniture, and lime come from the highlands. But this is also a specialization that extends down to the municipio level. For example, hats are made in Santa Cruz del Quiché, furniture comes from Totonicapán, brooms from Quezaltenango, pottery from Rabinal, metates (grinding stones) from Huehuetenango, and all sorts of clothing products are produced in practically every municipio. These commodities are sold throughout the country and are also the sorts of goods sought out by tourists.

DISTRIBUTION OF COTTAGE INDUSTRY IN GUATEMALA



MAP 11

CHAPTER VI

THE NATURE, LOCATION, AND IMPACT OF DIFFERENT TYPES OF INDUSTRY IN GUATEMALA

A somewhat clearer view of the Guatemalan industrial landscape is obtained when major types of manufacturing are examined separately; that is the task of this chapter.¹ Subsections following include a discussion of the nature and location of Guatemala's largest industrial firms. Factors explaining the distribution of activities are considered as are linkages between the various kinds of manufacturing. A final section presents some evidence of the impact of these activities on the land and people of Guatemala.

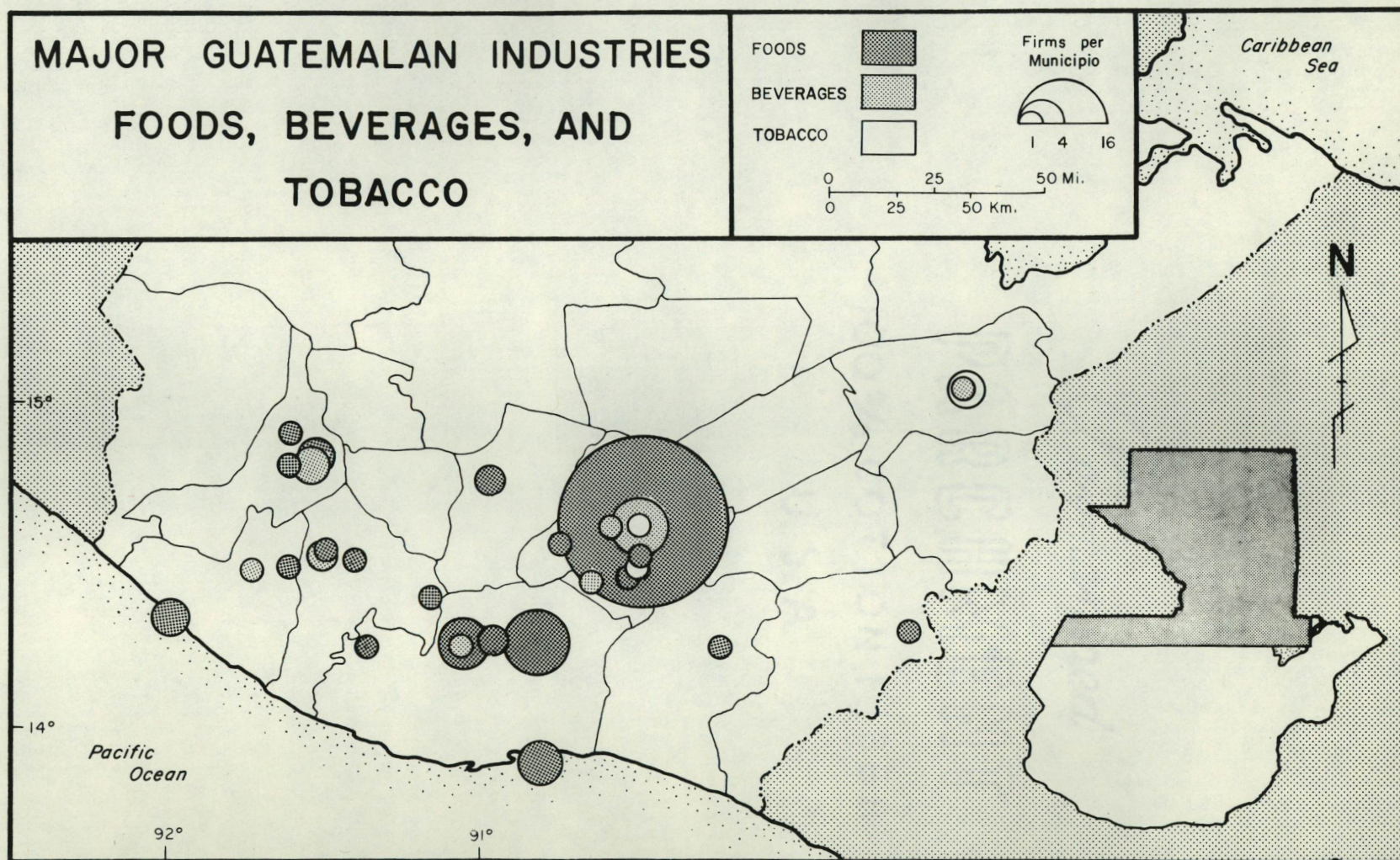
The Food Industries

The food products manufacturers group is the single largest category of industry in Guatemala. Of the larger firms, foodstuff production accounts for almost 22 per cent of all establishments and 25 per cent of the employment. It is also a kind of activity that has a great deal of foreign involvement, particularly in the biggest factories.

¹This chapter is based entirely on personal interviews by the author, 1967-1968.

The full range of location factors is observable in the Guatemalan food industry (Map 12). Meat processing, for example, is heavily oriented to the country's chief meat growing area (the South Coast), transportation, and market. Two large cattle processing plants, Ralda Berger y Cia. Ltda. and the Guatemala City slaughterhouse, operate as complementary industries on the South Coast at the transportation hub in Escuintla. These plants provide the capital with its beef. In Guatemala City an international exporter of meat products, Exguapagra, S.A.--a joint German-Guatemalan operation, is located on the main overland transport links with the ports of the Caribbean. Chickens are processed at the edge of the capital by Purina de Guatemala Ltda., a subsidiary of the Ralston-Purina Co. of the U.S. Cured meats are prepared in the city itself, two firms being particularly important--Empacadora Perry and Empacadora Centroamericana y Cia. Ltda.--both of which are at least partly owned by foreign interests. Two other major meat processing facilities, municipal slaughterhouses, serve regional market centers; one in Quezaltenango and the other in Antigua.

Large firms handling perishable dairy goods are oriented toward the market area of the national capital. Two of these, Foremost de Guatemala, S.A.--an American-owned concern--and La Pradera--a Guatemalan operation directed by



MAP 12

a German technician--control the fresh milk and ice cream market. Other plants handling perishable raw materials but producing more durable goods like powdered milk and cheese are located in the hinterland. Dried milk, for example, is produced in Asunción Mita under the direction of the Ministry of Agriculture. Although, this plant has not been too successful since it is poorly located with respect to its milk supply and ineptly managed. Most of the country's cheese is processed in three Cuban-owned plants, Los Cubanitos, and an Italian-owned firm, Parma; all are located on the South Coast. Yet the cheese industry appears destined to be another American-dominated venture as Parma is now producing cheese for Kraft.

The entire canning and preserving industry is located in Guatemala City. And, here again, foreign firms dominate--Nestle (Swiss), Imperial (a joint French-U.S. venture with a strong infusion of Pillsbury capital), Dulcina (Guatemalan but with 25 per cent American ownership), Ducal (U.S.) and Kerns (U.S.). These establishments control the market for all canned and preserved goods with the possible exception of soup; two "competing" firms, Ducal and Kerns (both owned by Grace Lines) accounting for over a third of all employment.

The seafood industry is raw materials oriented and mostly Japanese-owned. Two firms, Mariscos de Guatemala and Pesca, S.A., handle initial processing of fish and shrimp in

their plants on the Pacific coast--one in San José and the other in Champerico. But some secondary preparation of seafood is carried out in the capital at the Frisa y Freskamar plant, a joint Cuban-Spanish venture with shadowy ties to the establishments on the coast. Sugar and salt processing, two other activities which are raw materials oriented, are also located on the South Coast. Some thirteen sugar mills are strung over the departments between Retalhuleu and Santa Rosa. Salt production, a domestic industry relying on the natural elements of sea and sun, has developed near the Pacific ports of San José and Champerico.

Grain milling operations are distributed according to the location of locally available materials--the case in the highland areas where some wheat is grown--and in part in response to local need--as is the case with the mills serving the demands of bakeries and consumers in the capital. An average of 50 per cent of Guatemala's wheat must be imported so there is a strong tendency for flour mills to locate in or close to the capital where transport and distribution are greatly facilitated. Guatemala City is also the center for the foreign companies in this category--General Mills, Best, Pillsbury, and American Corn Products.

All of the country's large bakeries are market-oriented to the capital. Indeed, three establishments, Las Victorias (Guatemalan-owned), Brizco (Spanish-owned), and Modelo, S.A.

(a company of 100 unidentifiable stockholders), account for over a third of all employment in the bakery trade. One of these firms, Modelo, S.A., has undermined small bakery operations all over the country. Shops that once sold their own baked goods now serve as outlets for "factory bread" carried throughout the Republic by trucks from the Modelo plant in Guatemala City.

The remaining food processors, those in the "general food products" category, are mostly located in the capital. Here, industry is closer to its consumers or means of transport for gathering raw materials or exporting finished goods. And, again, the big firms are foreign dominated: candy being produced by Venus (Chilean), Arlequin (Foremost--U.S.), and Granada (Italian); gum by Adams (U.S.) and Clark (Philip Morris of the U.S. and Chilean-owned); coffee and chocolate by Caracol (Sardinian), El Quetzal (German), Incasa (Coca-Cola) and the Interamerican Capital Corporation of the U.S.; and miscellaneous products by the Königs (Swiss), INA (Spanish), Aliansa (German), Sharp, S.A. (under contract with Del Monte of the U.S.), and AGSA (a "Guatemalan" venture with "some" U.S. investment managed by American advisors). Yeast is manufactured in the capital under a contract with the Fleishmann Co. (U.S.), but about 80 per cent of Guatemala's yeast is produced on the South Coast in the Red Star plant in Santa Lucía Cotzumalguapa. Owned in part by "Guatemalans" and partly by Universal Foods, Inc.

of Milwaukee, Wisconsin, this factory utilizes blackstrap molasses--a by-product of the sugar industry located in the same vicinity--to manufacture a high-value commodity from a material that was once dumped into streams as waste.

The Beverage Industries

Much akin to the food industries, the location of the beverage producers varies with the nature of the commodity produced. The distribution of the Republic's liquor industry, for example, is a reflection of orientation to raw materials sources and tradition (Map 12). All of the country's legal distilling operations are centered on the South Coast where at least 99 per cent of all processing takes place at the Central Añejadora Guatemalteca, S.A. plant located in Santa Lucía Cotzumalguapa. This distillery is situated in the heart of the sugar cane region as sugar is the basis of its production. Alcohol is shipped from this primary processing area to bottling works throughout the rest of the country. In these bottling plants the different products are packaged: industrial alcohol, rum, whisky, liqueurs, and aguardiente (hard liquor). Any "differentiation" between brands comes with the addition of imported flavorings, bottling and distinctive labeling. The basic product, however, is manufactured on the South Coast thence delivered via stainless steel tank trucks to the country's other "production units."

Curiously, it appears that tradition has dictated the location of the liquor bottling plants themselves. Years ago each department had its own distillery located within its cabecera (department capital). Today the skeleton of that system is still evident in the distribution of bottling works; one each in Guatemala City, Quezaltenango, Mazatenango, and Zacapa. Most of the original production facilities have long since disappeared but the few bottlers that remain are operating out of the old established sites. No real reason for continuing this pattern can be given aside from traditional service in specific areas. The liquor industry is a multi-million dollar operation controlled by a closed corporation of stockholders (mostly Europeans) and closely supervised by the government. Also, it is probably the highest taxpayer in the country.

With the exception of the hard liquor industry, Guatemala's beverage manufacturers are producers of goods that increase in weight and volume through the addition of water, a ubiquitous material. In this category are wineries, breweries, and soft drink plants. Since water is a material that is available almost everywhere, it is more practical for manufacturers of these beverage goods to locate closer to their consumers. The wineries, for example, utilize imported wine concentrates and small quantities of local fruit in their production so their bottling plants are

evident in or near Guatemala City and Quezaltenango--the country's two largest population centers. Breweries are similarly oriented. The country has two major breweries, both controlled by the same family, which dominate domestic production. One brewery, Cervecería Nacional, S.A.--the manufacturer of the brand name Cabro, is located in Quezaltenango and the other, the Cervecería Centro Americana, S.A.--producer of the Gallo and Monte Carlo trademarks, is in Guatemala City. There is a third brewery, Cervecería Guatemalteca, S.A., also situated in the capital, but its production is extremely limited and can hardly be compared to that of its competitors. All three breweries were founded by foreigners (Europeans).

The soft drink manufacturers simply duplicate the pattern already evident in the beer and wine industries. Major bottlers of these goods are situated in Guatemala City, Quezaltenango, and also on the humid South Coast in Retalhuleu and Mazatenango. The coastal plants, however, are merely branch operations of parent facilities in the capital; one belonging to Incasa (Coca-Cola interests) and the other to La Mariposa (Pepsi-Cola contractors).

The Tobacco Industries

Tobacco products account for a little over 1 per cent of all large firms and 2 per cent of the industrial labor

force in Guatemala. But the operations of the tobacco processors are indicative of the diversity that can be encountered in Guatemalan industry (Map 12). The cigar industry, for example, focuses on the Oriente (Eastern) department of Zacapa where dark leaf tobacco is grown as well as gathered from surrounding production areas. Here, the tobacco is handrolled into cigars by women workers in ramshackle rural factories thence shipped to Guatemala City where distribution is made throughout the Republic.

Representative of the opposite extreme are the large, highly mechanized cigarette plants situated in the capital area. These facilities, Tabacalera Nacional, S.A. (a subsidiary of Brown and Williamson Tobacco Co. in the U.S.) and Tabacalera Centroamericana, S.A. (a subsidiary of the Philip Morris branch of the British-American Tobacco Co.), are controlled by foreigners and turn out machine-made goods manufactured from a blend of imported light leaf and domestic tobacco varieties. Their factory operations serve the domestic market yet also export heavily throughout Central America; these firms selling almost \$12 million worth of tobacco products in the region in 1964.

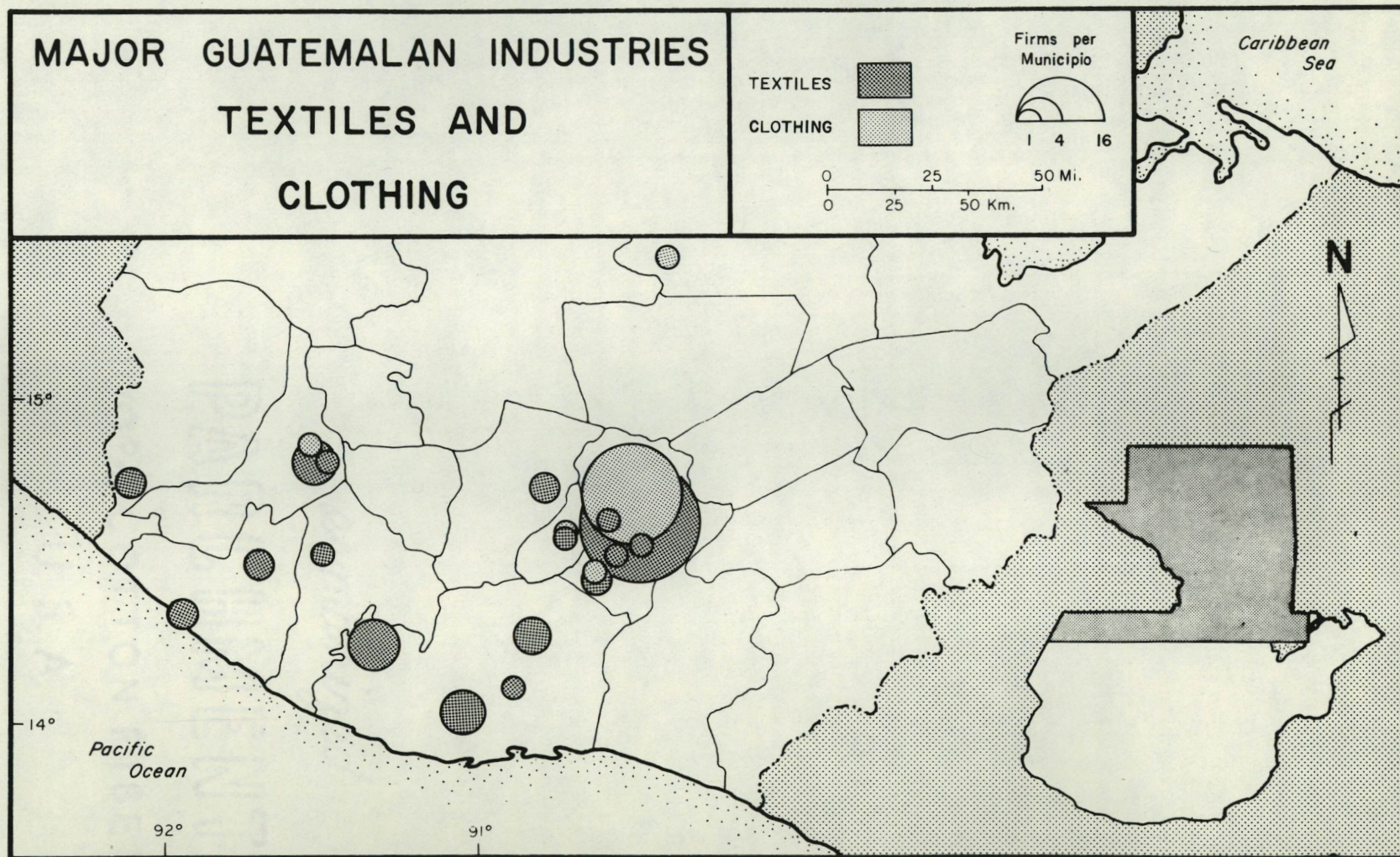
The sites of the modern tobacco plants were selected with an eye to centrality for assembly of domestic and imported raw materials as well as location with respect to labor availability, market, and sales distribution.

Guatemala City is not only a major consumption center but a transportation hub for shipment by air, rail, and highway. For the large-scale production of the cigarette manufacturers, therefore, location in the capital area was ideal. In fact, in 1964, Tabacalera Centroamericana, S.A. (formerly known as La Altense, S.A.) moved to the capital from Quezaltenango for precisely these reasons.

The Textile Industries

The textiles industry is second in importance as an employer in Guatemalan manufacturing with over 21 per cent of the labor force and 16 per cent of the total number of large firms. The bulk of all finished textiles goods are produced in fifty plants situated throughout the highlands, but some 85 per cent of the plants and workers are located in the general vicinity of the capital (Map 13). Other highland textile factories are found in the departments of Quezaltenango, Chimaltenango, and Sacatepequez. There are only two establishments manufacturing finished textiles products outside of the highlands, both are situated on the South Coast--Algodonera Retalteca, S.A., a cloth plant in Retalhuleu, and the kenaf factory which produces jute bags in Escuintla.

Industries specializing in the initial processing of textile fibers--all cotton gins--are distributed throughout



MAP 13

the South Coast departments of Escuintla, Suchitepequez, Retalhuleu, and San Marcos. This is Guatemala's cotton producing region. There are 21 cotton gins on the South Coast, but they only provide part of the materials required by the producers of finished textiles goods in the highlands. Thus, cotton is imported from El Salvador and synthetic fibers are imported from the U.S., Europe, and Japan. Linkages between industries are obvious; cotton ginned on the coast is transported to the highlands where it is converted into thread, yarn, and cloth. In turn, textiles products are then sold to the related clothing industries as raw materials. Gins are raw materials oriented to facilitate initial cotton processing; however, the availability of labor and the market in Guatemala's urban centers appear to be the most significant influences affecting the location of firms producing finished textile goods.

Certain sectors within the textiles industry are controlled by special entrepreneurial groups. For example, cotton ginning is largely directed by Americans--particularly people from the Southern states--who are also deeply involved in raising the crop. Turcos (Middle Eastern people) and various Europeans (particularly Jewish Europeans) dominate ownership in the broad field of finished textiles products. Moreover, throughout the entire industry foreigners control the largest and most productive firms. All of the cotton

gins and more than 85 per cent of the largest textiles factories have dates of founding later than 1954. However, the oldest continuously producing textiles plant in the country employs the greatest number of workers (750)-- Fabrica Cantel in the municipio of Cantel in Quezaltenango, a company established by a Spaniard in 1880.

The Clothing Industries

Manufacturers of clothing products employ almost 7 per cent of the Guatemalan labor force in nearly 9 per cent of all major industrial firms. This industry uses raw materials obtained from textiles, rubber, and leather producers that tend to locate in the same vicinity. Nevertheless, the clothing industries are primarily situated with respect to their markets, available labor, and plant space. As manufacturers that are sensitive to style changes, the clothing industries tend to cluster in the large population centers. Thus, not surprisingly, the national capital holds nearly 90 per cent of all establishments specializing in the production of such goods (Map 13).

Guatemala City is the production center for made-up clothing, 23 of the 24 firms listed in that category are located there. Quezaltenango accounts for the one large remaining establishment producing wearing apparel and Amatitlán is the site of Guatemala's only plant producing

clothing labels. Eleven of the country's major shoe manufacturers are located in the capital; only two large shoe factories are situated outside of Guatemala City--Calzado Coban in Alta Verapaz and Calzado Antigua in Antigua.

Three groups of foreign entrepreneurs hold control of approximately 90 per cent of the shoe production in Guatemala. Naturalized Spaniards operate the Condal, Fiesta, and Guatemalteca factories; a French family runs the German-founded Coban plant in Alta Verapaz--the oldest shoe factory in the country--and the Primavera firm, both of which are tied to Hulera Centroamericana owned by the same family; and, Czech, Swiss, and English interests direct the operation of the Incatecu and Universal plants that are really subsidiary companies of GINSA, the "Guatemalan" rubber company that produces tires for all of Central America. This group of foreign-owned plants has driven most of the small shoe manufacturers off the market. Indeed, many shops that once made and sold shoes only sell shoes now--the products of the big business enterprises that forced them out of production.

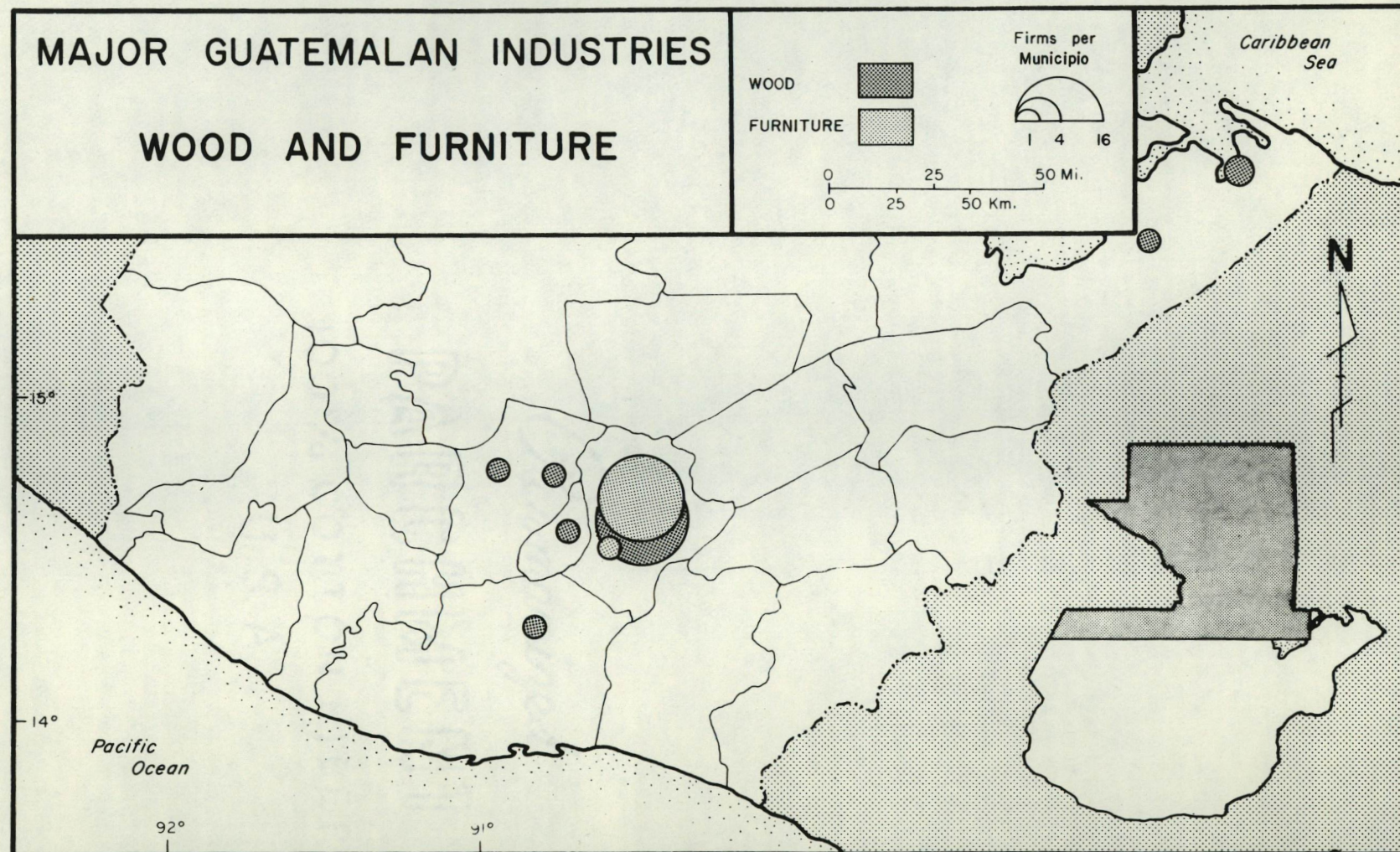
Like the shoe industry, ownership of the largest made-up clothing factories is primarily foreign. Over three-fourths of the market is controlled by industries directed by management that is American, French, Spanish, Italian, Jewish or from another Latin American country. Comparatively

small by U.S. standards, the average clothing plant in Guatemala only hires about 50 workers. There are only three firms in the entire industry that employ more than 100 people--Atlas, a company backed by Jewish interests; Coquette, allegedly a Guatemalan concern but operated by people with Italian names and American technicians; and, Pamarco, a Spanish-owned firm. All three industries produce a wide variety of clothing products for men and women.

The Wood Industries

Over 7 per cent of all major Guatemalan manufacturers and 5 per cent of the industrial labor force are involved in the production of wood commodities such as lumber, plywood, boxes, and coffins. But this is also an industry that appears to be more foreign than Guatemalan; at least 80 per cent of the people working in the wood industries are working for owners who are North Americans or Europeans--Italians and Spaniards being the dominant entrepreneurial element.

The distribution of the wood industries actually reflects two major aspects of location (Map 14). Guatemala City is the country's largest market for all manner of wood products. As a result, almost two-thirds of the wood manufacturers and 50 per cent of this activity's labor force are found in the capital. Various commodities are made



MAP 14

from semi-finished wood products shipped into the city from outlying firms or any one of three score or more small mills on the margin of the metropolitan area. Thus, the other important locational aspect is sources of wood. The firms in the hinterland are situated near their raw material sources. This type of location is an advantage for initial processing because logs are not only bulky but of relatively little value until they are modified into lumber, a more useful wood form.

Woods of all types are utilized without any apparent discretion by the Guatemalan mills. In Escuintla, for example, some fifteen different varieties of timber were in evidence in one small sawmill. On the other hand, if one type of wood prevails in an area--like pine--the firms tend to specialize because of resource availability.

Some products and markets are fantastically specialized in Guatemala's wood industry. For example, Exportadora de Maderas Omoa--a firm that is supposed to be Guatemalan--exports a reported 99 per cent of all wood it cuts to Newport News, Virginia, for use in the shipbuilding industry. And, another sawmill, Maderas El Alto--an operation owned by an American--processes only railroad ties and solely for export to Texas.

The Furniture Industry

Virtually 100 per cent of all large-scale Guatemalan

furniture manufacturers and the employment in those industries focuses on the department of Guatemala (Map 14). The furniture industry accounts for approximately 3 per cent of all firms and employment in the major industry category. Although these establishments serve the domestic market of the Republic, many also export goods throughout Latin America as well as the U.S. and Europe. In this export trade Spanish colonial style furniture and similar specialty products are the most frequently sought items; more prosaic commodities are provided for the domestic market.

There are only three furniture producing firms in all of Guatemala that employ more than 100 workers, but together these manufacturers do over \$1 million worth of business a year. Exporting an estimated 50 per cent of their products from the Republic, the three firms are definitely CACM-oriented in their sales. Two of the industries are foreign-owned; Camisa by a U.S. citizen and Aldana Hermanos y Cia. Ltda. by Spaniards. The third, Lamplasca, claims to be Guatemalan. All three establishments initiated operations after 1959; now, they employ better than half of all the people working in the largest furniture plants.

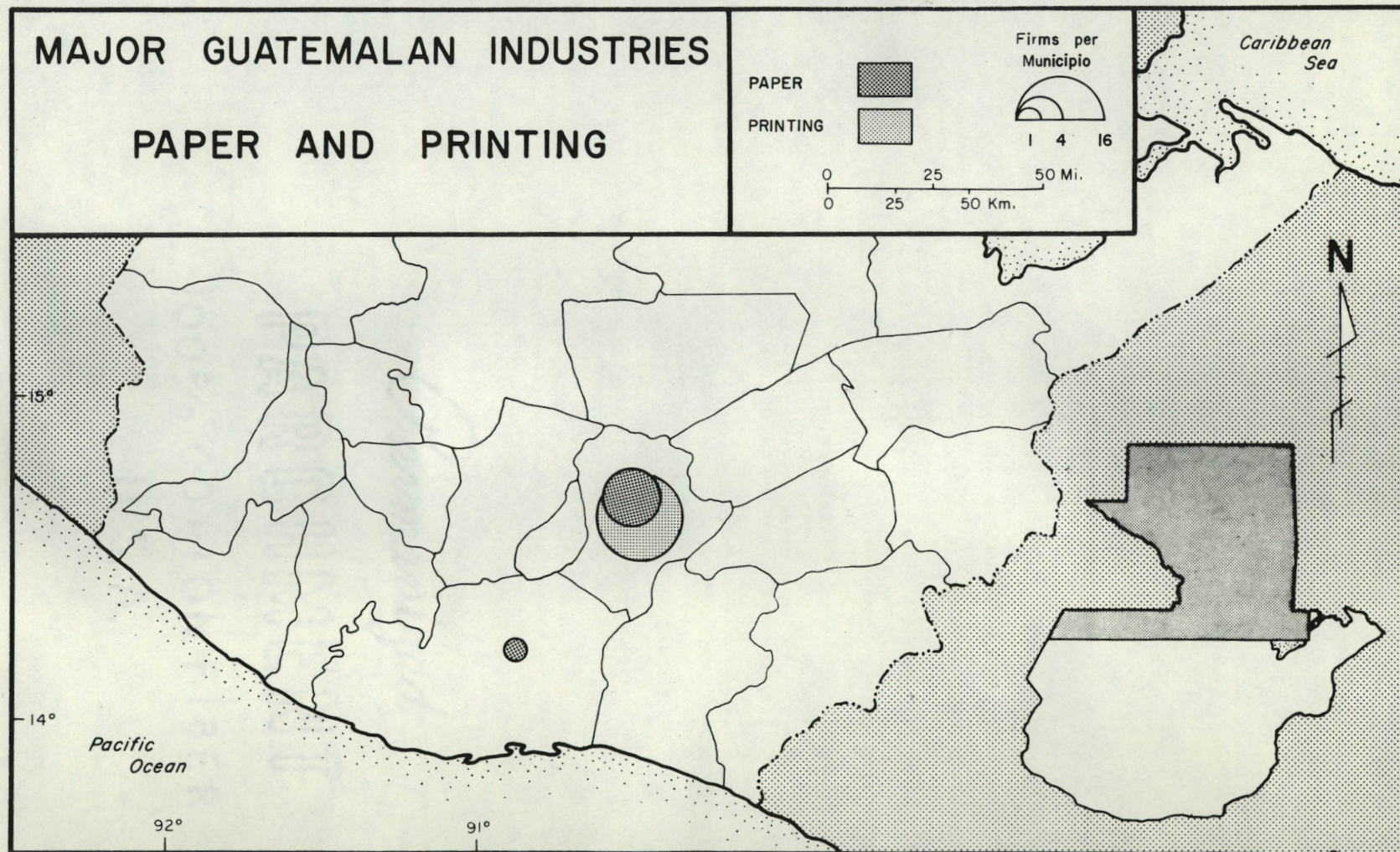
Other Guatemalan furniture manufacturers average about 30 employees per firm. Nevertheless, these also evidence a strong flavor of foreign capital. ADELA, an investment

corporation from Luxembourg, has \$110,000 invested in a company owned by a Dutch-Guatemalan--Simco, S.A., the furniture contractor for the government's new low-cost housing projects. Lesser amounts of foreign capital are spread throughout the industry--an estimated \$2 million in financial backing from Colombia, Mexico, Spain, Germany, Italy, and the U.S.

The Paper Industry

Currently there is only one paper manufacturing factory of any size in Guatemala, Industria Papelera Centroamericana, S.A. This plant, a facility representing an investment of almost \$4 million, is situated just outside the South Coast city of Escuintla (Map 15). It produces a low-grade product from domestically obtained raw materials such as bagasse from the sugar industry and waste paper. Another plant, Papeleria del Istmo, is expected to be put into operation near the ports on the east coast, but as of August, 1969, the firm was still not past the planning stage.

All other paper products industries of any size are located in the capital. Thus Guatemala City has most of the concerns and 80 per cent of the employment in the field, an activity that encompasses only 2 per cent of all the major industrial enterprises in the country. The paper handling establishments in the capital are those that



MAP 15

specialize in the assembly of containers for use by other industries or the preparation of paper products for business or educational use. All high quality raw materials required by these firms in their operations must be imported along with the machinery which is employed in the production of their goods.

American paper interests, specifically the Boise-Cascade Co. and the Weyerhaeuser Corp., have acquired about \$8 million worth of investments in Guatemala. For Boise-Cascade this includes: Hispania, S.A.--formerly a Spanish firm, Fabrica de Bolsas de Papel, S.A.--a plant specializing in the production of paper bags, and the paper plant in Escuintla. Weyerhaeuser owns Cajas y Empaques de Guatemala, S.A., a firm devoted to the production of paper packaging for other industries. These American-owned companies control the paper products industry of Guatemala.

The Printing Industries

The printing arts are essentially located with respect to their market (Map 15). Moreover, as printing is a clean industry that does not produce undue noise, smells or smoke, printers may be found almost anywhere. The firms in this group are generally oriented to population centers and, in particular, to the business sectors where their printing services may be located near those activities which require their attention.

Guatemala City is the center of Guatemala's printing trades. It has 100 per cent of all firms and printers employed in activities with more than twenty-five workers. Indeed, all of the country's major newspapers and periodicals are published in the capital. This industry enjoys a symbiotic relationship with other activities that require advertising or printing services. Thus, with 69 per cent of all classes of manufacturing firms in the country, Guatemala City is a natural site for the printing trades.

The Leather Industry

Two centers of leather production are obvious in Guatemala, one in the general vicinity of Guatemala City and the other in Quezaltenango (Map 16). Only one other large leather producing firm is noted--a plant near Antigua. Numerous small establishments also appear throughout the country but they are not of sufficient size to be included here.

The location of the leather manufacturers suggests the attraction of market and raw material sources. Slaughterhouses provide the hides for processing but markets are required for the sale of the finished product. The plants that deliver meat to the urban areas also provide the hides that serve as a basis for the leather industry. Shoe manufacturing, a related activity in the clothing industry

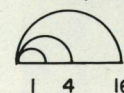
MAJOR GUATEMALAN INDUSTRIES

LEATHER AND RUBBER

LEATHER

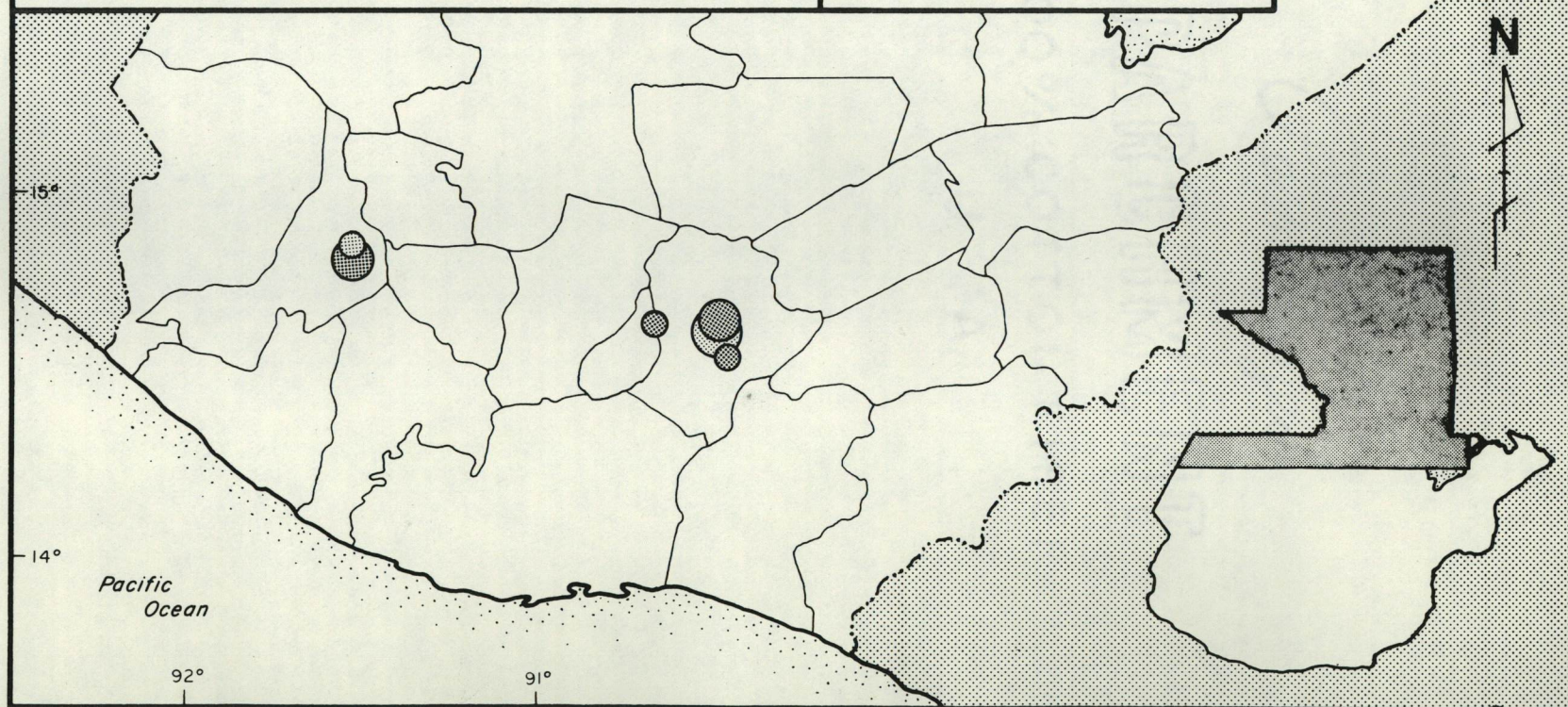
RUBBER

Firms per
Municipio



0 25 50 Mi.
0 25 50 Km.

Caribbean
Sea



MAP 16

category, consumes the bulk of all leather produced in Guatemala. Yet, because of the poor quality of cattle hides--frequently damaged by tropical flies--leather must also be imported. Indeed, leather-using industries attempting to maintain high standards of quality do not utilize Guatemalan leather for their goods.

The Rubber Industries

There are six large rubber goods producers in Guatemala; five are located in the national capital (Map 16). The only other major establishment noted--a tire recapping plant in Quezaltenango--is a branch of a Guatemala City firm. One company in the rubber products group, GINSA, accounts for almost three-fourths of all employment. A joint operation financed by over \$5 million in Central American and U.S. capital, this factory was the first of the Central American Common Market (CACM) integrated industries, i.e., a plant meant to produce all the tires manufactured in the region. Thus the GINSA factory is sales oriented to the CACM area. The remaining firms in the rubber products category are primarily dedicated to domestic service such as recapping tires and the production of soles and heels for shoes.

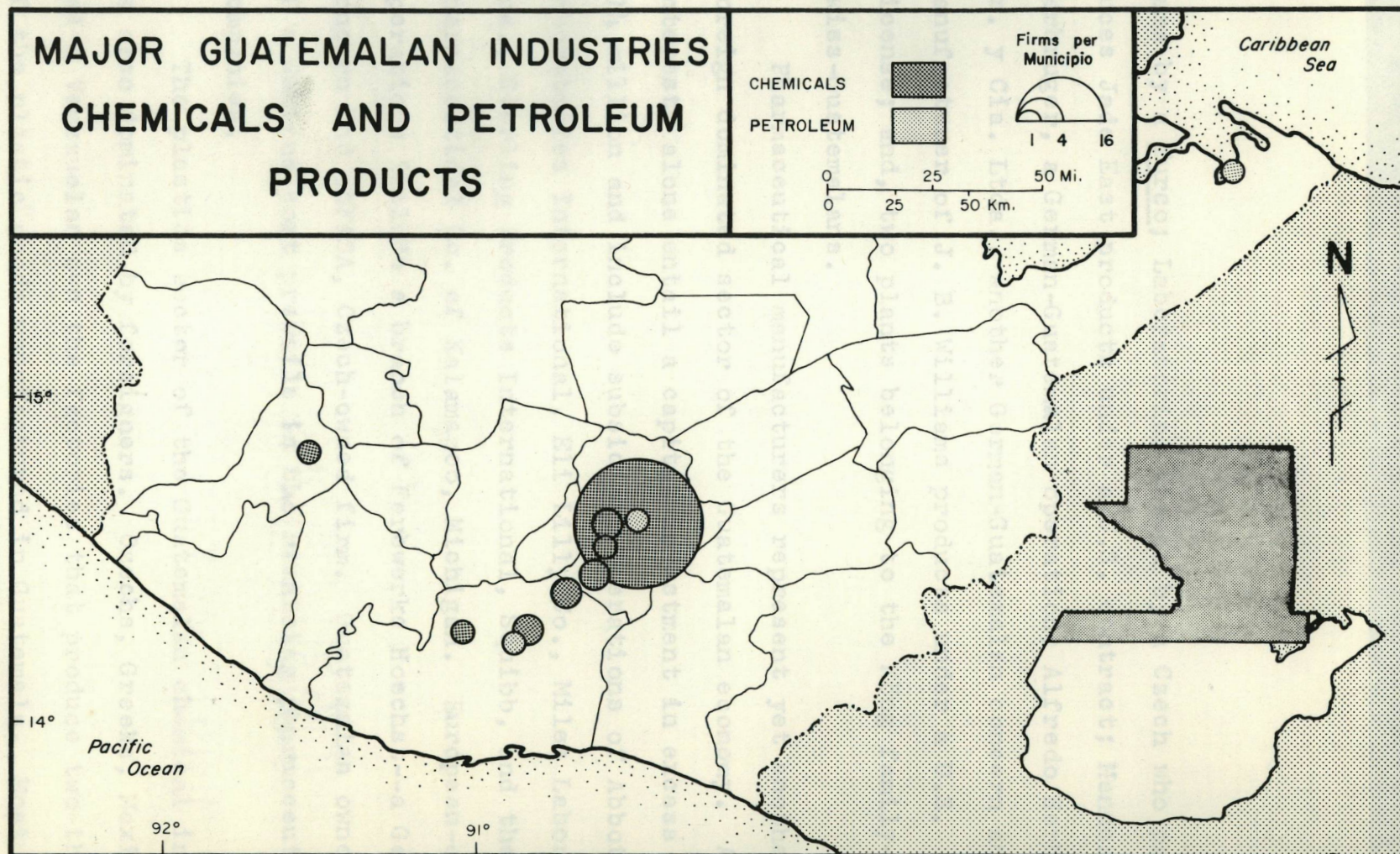
The Chemical Industries

Chemical industries employ over 9 per cent of all labor

in almost 12 per cent of Guatemala's largest industries. The national capital is the important center for all the chemical trades with over three-fourths of the firms and the bulk of the labor force (Map 17). This concentration in Guatemala City includes: a Chinese-owned ink plant; all the producers of industrial gases; all but one of the country's manufacturers of toilet articles; every pharmaceutical producing establishment; 95 per cent of the plastics industry; and the only match factory in the country--Fosforera Centroamericana, S.A.--a huge European and Guatemalan-owned concern.

American-owned firms producing cosmetics and toilet articles employed 50 per cent of the people working in that sector of the Guatemalan chemical industry in 1968; they also did over \$10 million worth of business in Central America. The American-owned companies include: Shulton, S.A., a subsidiary of Shulton, Inc., of Clifton, New Jersey; Max Factor de Centro America, S.A., one link in an international chain of plants; Helena Rubinstein de Centro-america, S.A., the Central American branch of the New York concern; Revlon de Guatemala, S.A., a subsidiary of Revlon, Inc.; and, Industria Quimica, S.A., the Central American production plant of the Colgate-Palmolive Co.

All but two of the remaining factories manufacturing toilet articles are owned by other foreign groups--Productos



MAP 17

Lama by a Turco; Laboratorios Darosa by a Czech who produces Jade East products under a U.S. contract; Mendez Herbruger, a German-Guatemalan operation; Alfredo Herbruger, Jr. y Cia. Ltda., another German-Guatemalan concern and the manufacturer of J. B. Williams products under a U.S. license; and, two plants belonging to the K6ng family--Swiss-Guatemalans.

Pharmaceutical manufacturers represent yet another foreign dominated sector of the Guatemalan economy. American interests alone entail a capital investment in excess of \$14 million and include subsidiary operations of Abbott Laboratories International, Eli Lilly Co., Miles Laboratories, Inc., Sterling Products International, Squibb, and the Upjohn Pharmaceutical Co. of Kalamazoo, Michigan. European-owned operations include a branch of Farbwerke Hoechst--a German concern and INFASA, Czech-owned firm. Guatemalan ownership of a dubious sort prevails in the remaining pharmaceutical companies.

The plastics sector of the Guatemalan chemical industry is also dominated by foreigners. Czechs, Greeks, Mexicans, and a Venezuelan own the factories that produce two-thirds of the plastic goods manufactured in Guatemala. Most of the plants in this group are located in the vicinity of the capital--the main market for such products. There is one plastics factory situated outside of the Guatemala City

metropolitan area, Villata, a Mexican-owned venture located in Quezaltenango. The only other developments in the chemical industry outside Guatemala City have been established south of the capital along the main highway to Escuintla and the South Coast.

The industries in the developing axis between Guatemala City and the South Coast are new; all the chemicals firms were founded after 1960. Villa Nueva has two of these concerns: a huge German-owned pyrotechnics factory that was still under construction in 1968, and, Pincasa, a subsidiary operation of the Glidden Paint Co. of Cleveland, Ohio. Four other chemicals plants are situated between Amatitlán and Palín: Fuller y Cia. de Centro America, S.A., a branch of the Fuller Paint Co. in the U.S., and three insecticides manufacturers--Bayer de Guatemala, Ltda., a company owned by German-Guatemalan interests, Quimica Retzloff Centroamericana, Ltda., a firm owned by a U.S. citizen living in Texas, and Monsanto Guatemala, S.A., a subsidiary of the Monsanto Co., Inc., of St. Louis, Missouri. Escuintla serves as the center for cottonseed oil processing; two plants being located in the city of Escuintla and a third in Santa Lucía Cotzumalguapa. Proximity to cotton, a raw material source, is the major consideration for the location of the cottonseed oil producers, but the pull of market appears to be the most significant factor in the location of all other industries in the chemicals group.

Petroleum Products

Guatemala has not yet discovered a domestic reserve of petroleum; therefore, activity in this industrial category is extremely limited. Crude oil is imported from Venezuela and refined internally to satisfy the country's domestic needs. This is accomplished in two foreign-owned refineries: Guatecal, a Standard of California subsidiary located at the break-in-bulk point of Puerto Barrios, and a Texaco operation situated on the South Coast near Escuintla (Map 17). The latter refinery lies somewhat inland from the Pacific but it is served by a pipeline that allows tanker-to-plant transfer of crude oil. Both of Guatemala's refineries are located on good rail and highway transportation lines. Thus, their transport situation enables them to effectively serve the major market in the capital as well as the hinterland areas. These two plants represent a capital investment in excess of \$16 million.

There is one other petroleum products industry of size located in Guatemala City, a subsidiary of the Royal Dutch Shell Oil Co. This plant processes cooking gas; obviously it is situated in the center of its major pool of consumers.

The Nonmetallic Mineral Industries

The nonmetallic mineral industry includes the manufacture of products of glass, clay, china, cement, stone,

and other nonmetallic minerals. These industries account for over 6 per cent of all Guatemalan industry and the manufacturing labor force including some of the most significant industrial activities in the Republic.

Any area with a substantial population demanding housing will have a number of firms that produce construction materials. Guatemala City is no exception as in and about the capital area there are located some 82 per cent of all the firms associated with the nonmetallic mineral industries (Map 18). Raw materials are obtained in the vicinity of the city and processed and sold in the local market.

Foreigners control the most significant sectors of the nonmetallic mineral industries. Indeed, two firms initiated by foreign effort account for over a third of all employment in the field--CAVISA, a producer of glass products backed by Mexicans with CACM capital, and, Cementos Novella, S.A., an Italian-founded concern that is the only portland cement producer in the country. These two establishments represent over \$10 million in investment. Novella also has interests in Mixto Listo and Mezcladora, S.A., two ready-mix concrete companies operated ostensibly by Americans. U.S. citizens hold capital in two companies manufacturing pre-stressed concrete products--Spancrete and Copreca, S.A.--as well as the rock-crushing and construction material concern known as Pedrera Villalobos Ltda. Belgians, Spaniards, and

MAJOR GUATEMALAN INDUSTRIES

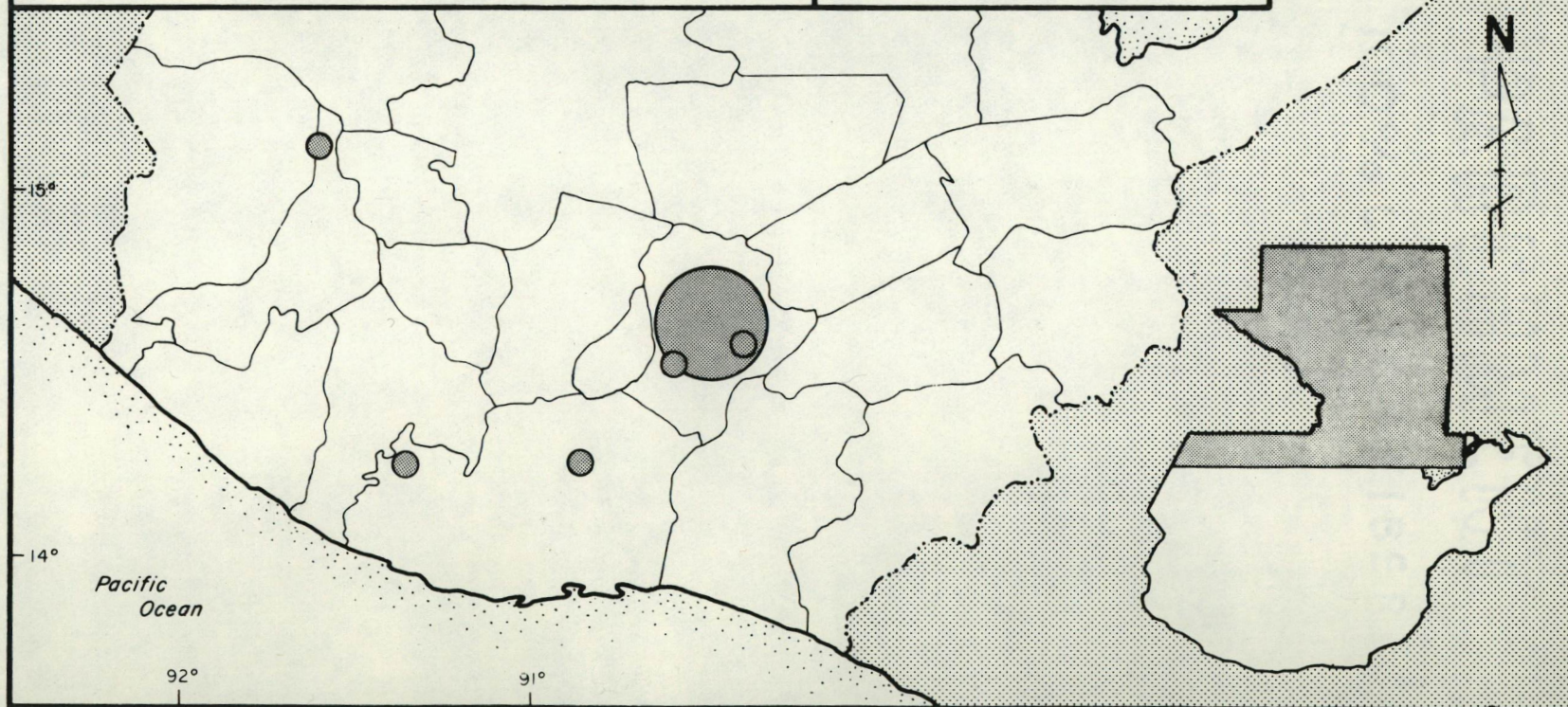
NONMETALLIC MINERALS

Firms per Municipio



0 25 50 Mi.
0 25 50 Km.

Caribbean Sea



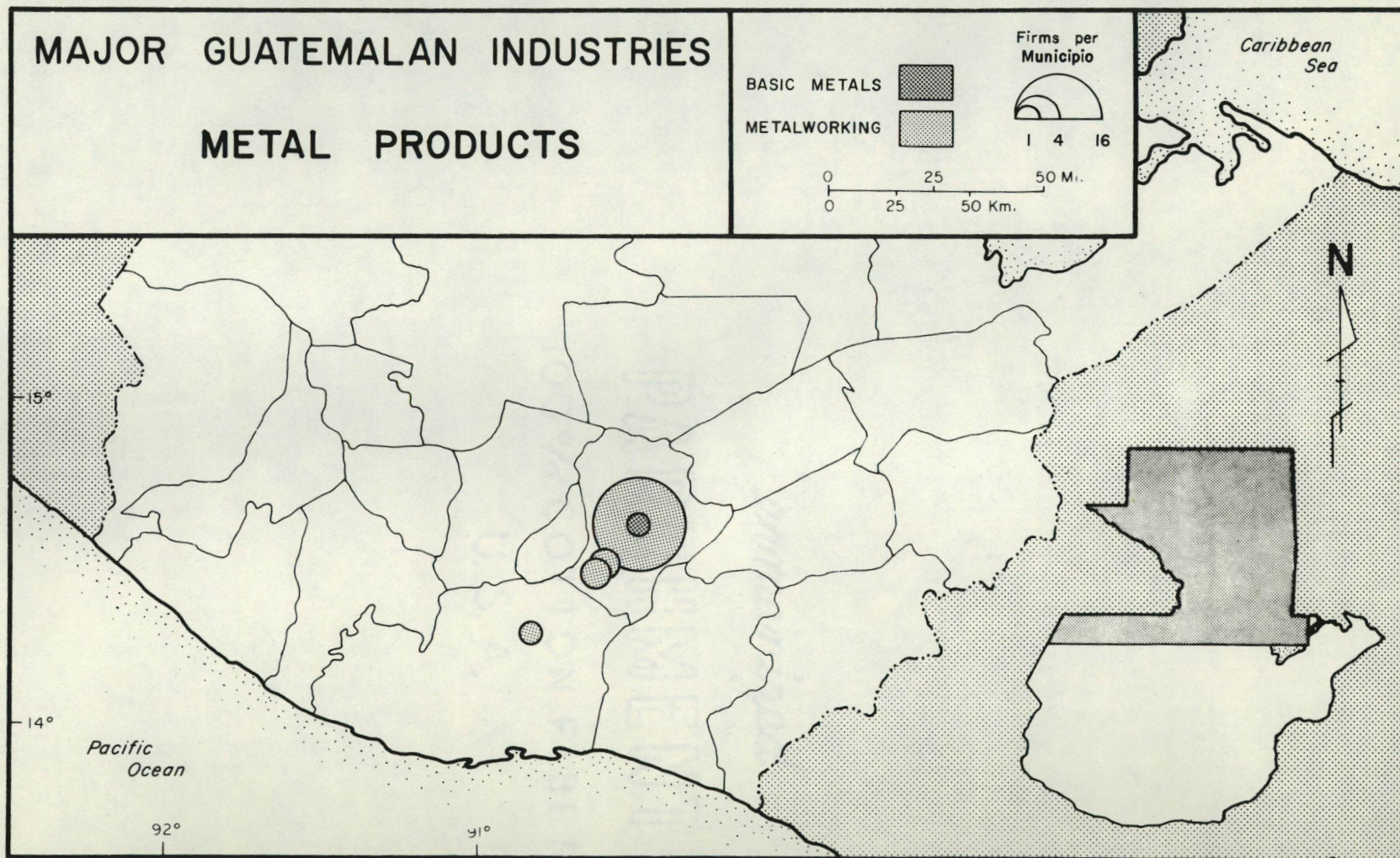
MAP 18

Italians operate firms turning out tiles, bricks, and marble goods. And, a company backed by mixed Swiss, American, and Guatemalan capital--Duralita, S.A.--manufactures specialized asbestos building materials.

The remaining distribution of nonmetallic mineral processors is no more than a reflection of the location requirements evidenced by the previously mentioned large firms. In almost all cases the availability of raw materials is the controlling factor. Products of this industry are not only bulky but also of relatively little value so that expensive transportation costs are prohibitive. Thus, two large-sized operations in this category appear on the South Coast where they are raw materials-oriented to provide for local needs--one in Escuintla where the government makes drainage pipes for the South Coast departments and, the other, in Tiquisate in order to provide construction materials for the people there.

The Basic Metal Industries

Guatemala lacks resources of coal and exploitable deposits of iron and similar types of minerals that might make a basic metal industry possible. Due to the lack of domestic reserves any operations of size in this group would be expected in the vicinity of Guatemala City (Map 19). In this case, market is the most important location factor.



MAP 19

The major users of metals are situated in and about the capital area. Their needs and the dearth of domestic raw materials have dictated imports to satisfy demands. The country's rail lines and highway routes provide sufficient transportation means between the receiving ports and domestic users. Only one large firm was noted that primarily dedicated its operations to service within this industrial category, Ruttimann, a Swiss-founded establishment in Guatemala City.

The Metalworking Industries

Metal products manufacturers, although lacking in domestically produced raw materials, account for almost 5 per cent of the overall industrial structure of Guatemala. As has been the case with almost all other types of industry, the bulk of firms in this category are located in the vicinity of Guatemala City (Map 19). In fact, over 95 per cent of the metalworking establishments in the country are situated in the department of Guatemala. Transport is a key factor for these activities since the basic metal industry is neither equipped or diversified enough to provide for the metal fabricator's needs. Because of its situation on the most efficient means of transport, the capital market area is the most important influence in the concentration of firms. Notably, Italians and Spaniards dominate ownership in these Guatemala City operations.

Five metalworking activities located outside of the national capital deserve special mention. Two of these are in Villa Nueva, Galvanizadora Centro Americana, S.A.--a galvanizing plant jointly-owned by the Glidden Paint Co. of Cleveland, Ohio, Japanese interests, and Guatemalans--and APSA--a plant founded by a Swiss that specializes in the manufacture of prefabricated steel structures; two are situated in Amatitlán, Herramientas Collins, S. A.--a plant producing handtools owned by the Stanley Tool Co. of the U.S.--and IMCASA--a stove manufacturing firm that is wholly-owned by the Tappan Range Co. of the U.S.; and the last is in Escuintla, ICOSA--a custom manufacturer of metal products for agriculture. Raw materials for the metalworking industry are imported from the U.S., Europe, Japan, and Mexico. Some export to the CACM and other Latin countries takes place, but the major market is domestic.

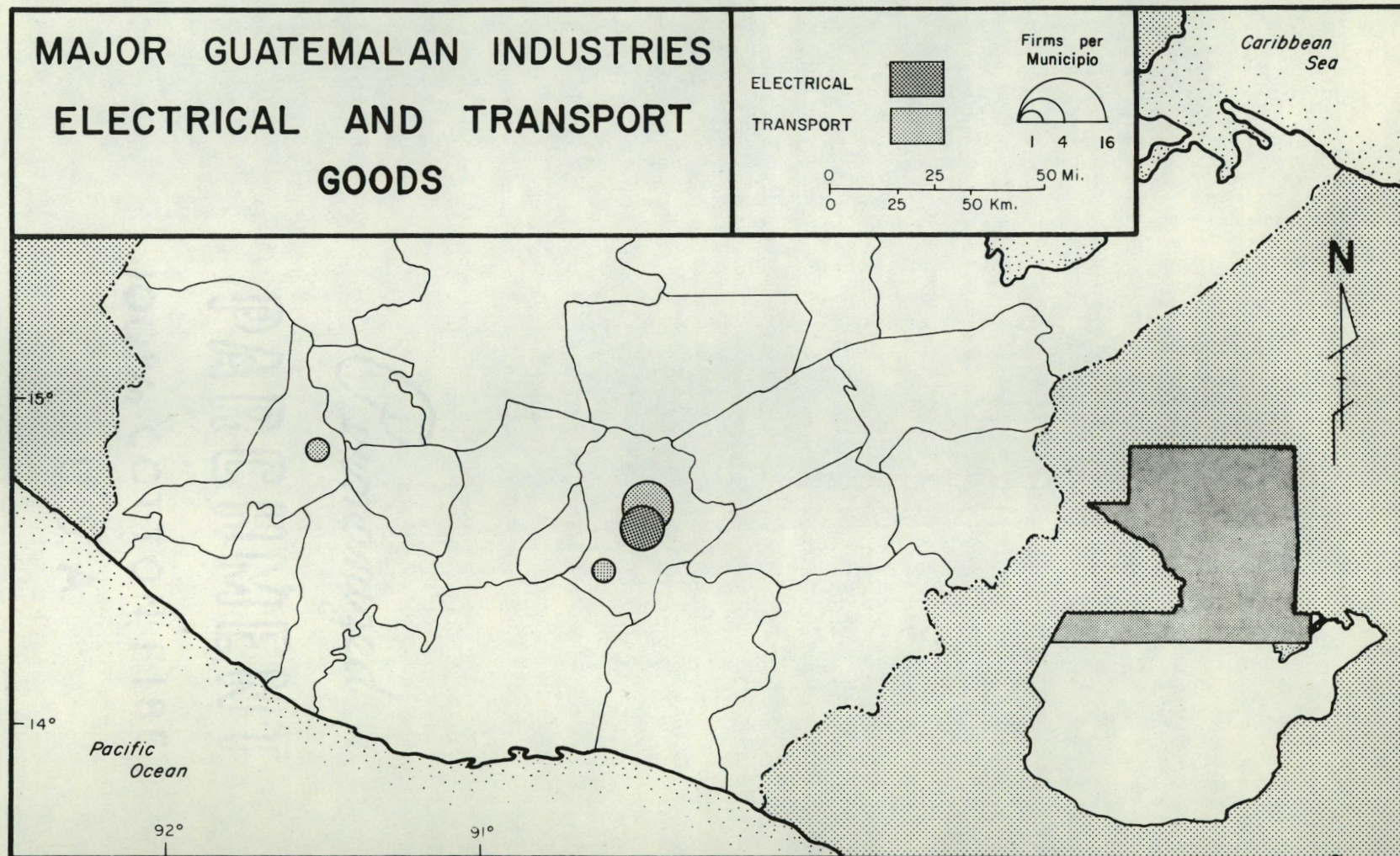
Guatemalan Machinery Manufacturers... A Myth

Throughout the world the production of machinery is not only affected by sources of raw materials, market demand, and transportation but, also, by the availability of skilled labor and the machine tools required for making other machinery. Since Guatemala lacks the resources for such an industry, this category of production is non-existent in the Republic. Yet, in the Guatemalan Industrial Census

machine shops and machinery repair facilities are normally classed as "machine producers." But these establishments are not, in fact, turning out equipment. They are no more than service rendering firms and must be considered as such. Needless to say, the country relies heavily on machinery imports to fill the specific requirements of its industrial sector. Goods of this type are imported from the U.S., Europe, and Japan; they also account for a high percentage of the country's yearly inflow of foreign products and outflow of domestic capital.

Electrical Goods

Guatemala City is the center for the electrical products industry as the capital has all of the major establishments and employment in that category (Map 20). The distribution of such manufacturers is not unexpected since the makers of electrical goods are generally located within their chief market areas. Moreover, those urban places that have power available also have the highest demand for electrical products. Notably, almost two-thirds of the employment in Guatemala's electrical industries is listed at one plant, Duralux, S.A. This factory is a battery producing firm owned by American and Guatemalan interests; it is an affiliate of the Ray-O-Vac Co. in the U.S. The Duralux business operation represents a \$2 million capital investment in an



MAP 20

industry for regional service--50 per cent of its sales are directed into intra-CACM trade.

Transport Goods

The Guatemala City metropolitan region leads in importance as a place of location for the producers of transportation goods (Map 20). This activity is the sort of business that is associated with concentrations of the transport means it serves. Because both market and transport converge on the capital, it is not surprising that this area should have the greatest number of firms and workers in the production of transportation equipment. Of the establishments in the city, two produce buses, one bicycles, and the other box backs for trucks. One industry, Blue Bird de Centroamericana, S.A., supplies 50 per cent of all the buses sold in Central America. This plant is a subsidiary of the Blue Bird Bus Co. of the U.S. and is wholly-owned by Americans.

Outside of Guatemala City's transport industries, there are only two other major firms producing transportation goods in the country. Buses have been assembled in Quezaltenango since 1929. This plant was put into operation by an Italian under the trade name of Rosmo; it employs more people than any other transport industry in the Republic. The other firm, a manufacturer of water craft, is located near Lake

Amatitlán in the city of Amatitlán. This business was founded by Otto Slowing, a German, in 1928.

Miscellaneous Manufactures

Miscellaneous manufactures include all other activities not classed under any other major subdivision. There were only two industries listed in this category in all of Guatemala in 1968, a firm producing jewelry and a Greek-owned facility making artificial flowers. Both of these establishments were located in Guatemala City.

Some Impacts of Industry on Guatemala

The factory belching smoke into the atmosphere or dumping toxic wastes into a nearby stream makes an obvious impact on the landscape. But there are other marks that industry makes that are not so bold--subtle influences on land and people that tend to deepen in importance with passing time. These can bring changes that become just as apparent and, perhaps, as undesirable as the waste-filled atmosphere created by a repulsive factory. Guatemala shows evidence of both these aspects of industrialization.

Destruction of the landscape and pollution are perplexities everywhere in the world today. However, both conditions pose more problems when people lack concern or are not even aware that they should be concerned--the case

in Guatemala. One example of what can happen is evident in the production of cotton. This is an important crop for Guatemala; without it many industries manufacturing food, chemicals, textiles, and clothing goods would be hard pressed to survive. But, because of poor planning (or no planning), cotton is killing the Republic's South Coast. The chemical industry is largely responsible.

No benchmark has yet been established for the use of insecticides in Guatemala's cotton zone. Paradoxical as it may seem, the person who determines the amount of poison used on the crops is frequently the pilot who flies the plane--and he gets paid for every spray run he makes. Some of the consequences of this situation are clear but others are not as obvious. It is no accident that great numbers of fauna have disappeared from the South Coast; indeed, there have even been human deaths in this region because of insecticide. But it is also possible that this indiscriminate use of poison might have something to do with the recent appearance of a more hardy variety of mosquito in the area--a mosquito that has reversed initial successes in Guatemala's malaria control program. Further, the same water that irrigates the cotton flows into many of the salinas (salt ponds) which provide the table salt for most Guatemalans. Once that is known, it is not difficult at all to conjure up a picture of DDT pouring out of a saltshaker... it can happen.

Another vivid example of the impact of industrialization is evident in the highland municipio of Cabricán in Quezaltenango. Here, U.S. AID sponsored the formation of an industrial co-operative to produce lime. As it turns out, the lime manufacturing venture has developed into a U.S. financed project to stimulate soil erosion. The slopes in the municipio are steep, they are also mantled by volcanic ash that is very susceptible to erosion. Native pines stabilize the soil, but pine is also used as a fuel to burn lime from limestone rocks. The increased activity of the lime co-operative has resulted in the removal of much of the pine cover on the mountain slopes surrounding Cabricán. Consequently, deep erosion scars have incised themselves into the landscape. After the pine is gone, there will be no fuel for lime production; however, there will not be any soil for agriculture either.

The little changes brought to Guatemala by industry do not jar the senses nearly as much as the raped landscape of Cabricán. Nevertheless, in the long run, the little things will probably have more of an impact on the land and the people. For example, neighborhood bake shops have already fallen prey to competition from the mechanical bakeries in Guatemala City--large plants producing great quantities of high-quality baked goods of all types. Shoe production has become almost entirely a factory operation as smaller shops

have been forced into the role of repairing rather than manufacturing a product. Cheap but rugged ready-made clothes are gradually replacing colorful Indian costumes throughout the country. And, more practical plastic tablecloths have virtually destroyed the market for palm leaf raincoats once produced in quantity on the South Coast. Entrepreneurs have been quick to recognize and press opportunities--one illustration being the Czech manufacturer who designed a plastic water jug to match the style of the pottery jugs already in use by the Indians. The new product was not only more durable but inexpensive and colorful as well; it also sold. Thus, little by little, industry erodes the traditional way of life by supplanting it with something new.

On the surface most industrially induced modifications in the landscape appear acceptable to Guatemalans. The new factories provide a certain psychological uplift to the people--they are symbols of progress in a country where innovation has long been feared or rejected. But change can also come too quickly. And, perhaps, this is the greatest danger industrialization offers to the Republic. If all the old values of the culture are submerged because of the acceptance of that which is new, much of the country's personality... the real Guatemala, if you will... seems destined to be lost. Industry homogenizes the world and

makes places more alike; the issue is whether or not this is desirable.

Picturesque people and sleepy countrysides do not necessarily make for viable national states. The tourist can observe and appreciate the scenery, but the nationalist's concern is for a full stomach, shelter, and some hope for the future. Guatemalan culture is quaint and the bulk of the people are abysmally poor. If industry can help these folk, who cares whether they wear colorful clothes or make beautiful pottery. Improvements in the Guatemalan way of life are more important than entertaining transients passing through the country.

CHAPTER VII

LOCATIONAL CONSIDERATIONS PERCEIVED BY
INDUSTRIALISTS IN GUATEMALA

Human decision-makers determine the environment into which an industry is placed. Consequently, the location process is one that is extremely subjective as it is a reflection of how the potential factory site is perceived by an individual or group. Industrial plants do not necessarily develop at all favorable sites or in the most desirable situations. Indeed, there is no principle, economic or otherwise, that can guarantee the location of a plant in the best or most rational site. The decisions of men can be reasoned or effected by bias. And, industry's important locational considerations are not necessarily found in textbooks or in the abstract simulations of the real world constructed by model builders. Truth lies in the description and analysis of the situation as it exists.

One of the stated objectives of this study was to determine why industry located in Guatemala. The best way to approach this problem is through an examination of the locational considerations perceived in the attitudes of the entrepreneurs, themselves. During the interview phase of the survey the question was posed: "Why did you locate your

plant here in Guatemala?" The data utilized represent the responses of Guatemala's 1,076 largest manufacturers. Some of the typical responses are shown below:

1. This is my home. (candle-maker)
2. My grandfather built this business with his own hands. When he arrived in this country (from Italy) there wasn't a single ----- manufacturer in Central America. It was an opportunity he recognized and took advantage of. (non-metallic mineral products manufacturer)
3. My uncle worked for over eight years in a ----- plant in the United States. When he came back home he borrowed money from my father to build a factory. We really didn't expect him to be so successful but when he was we bought in. We raise coffee too but the sale of ----- makes more for us now. (textiles products)
4. I went to school in the United States. Do I come home to raise pigs with a degree in engineering? (plastics manufacturer)
5. While I was in the service I passed through this lovely little country and fell in love with it. After the Korean thing was over I came back and started the business just to see what I could do with it. I never thought that it could snowball into something like this. (furniture products)
6. We've sold in this area for years and, quite frankly, were afraid that if we didn't put in a branch plant they would fence us out with a damn tariff. (chemical products)
7. Competition... -----, -----, and ----- moved in here so we felt we had to, too. (chemical products)
8. As far as we were concerned the country was ideal. Not only is the climate pleasant but Guatemala is centrally located with respect to the whole region. It (Guatemala) was our biggest buyer (of all CACM countries) before we moved here. (transportation products)

9. The choice was between Costa Rica and here. The very day that the board was deciding, Irazu (a volcano near the proposed plant site in Costa Rica) blew its top and the decision was made to come to Guatemala. (pharmaceuticals)
10. Our market for ---- was dying a slow death in the States while our exports to Latin America continued to grow. We made a survey of the region and found we could produce the same product here, do it for less in costs, and sell it for the same price. The local government went out of its way to assist us so Guatemala was the choice. (metal products)
11. Have you ever noticed how much ----- and ---- cost in the stores here? They used to be just about half as much but still more expensive than our home price. Honestly, it was possible for us to clear a better profit margin using labor and local resources and we did want to put up a branch plant here in the region anyway. (food products)
12. We've got a good market here now and labor is a helluva lot cheaper, but don't think we're in the region to exploit the people... we're just here to live within the economy. (chemical products)
13. Well, let's look at it this way--we pay nine cents a pound for ----- (a raw material) in the States and sell ----- (the product) for about thirteen or fourteen cents a pound. Here we get our raw materials for next to nothing and sell the finished product for twenty-five cents a pound. (food products)
14. To make money, what else? (clothing products)
- The untypical response to the locational query came from an American firm of international standing:
- None of your ----- business. All you bleeding heart idealists think we're here to screw the damn people regardless of how much good we do. Forget it... we don't answer any questions we don't have to.

But, market is industry's prime attraction to the area. The Guatemalan industry is oriented to three levels of market service: (1) local, (2) national, and (3) international. The most important location factor for Guatemalan industry, is discussed further in Chapter XI.

Market

The most often cited factor for plant location in the Republic was market.¹ In fact, almost 65 per cent of all respondents specifically indicated market as the prime motivation in the selection of their business site. Moreover, this basic economic element was mentioned as an important locational consideration during virtually every interview. It appears that market has grown to prime significance as a perceived influence because of the increasing demand for all manner of manufactured goods within the country and the Central American Common Market (CACM). However, in spite of this market expansion there are still many products that will probably never be economically feasible for production in the area. For example, no matter how much the market expands, its needs for machine tools, sophisticated electronic apparatus, and heavy industrial products, are better filled by industries lying outside the region in the more developed areas--primarily from North American, European, or Japanese sources. But, market is industry's prime attraction to the area.

Guatemalan industry is oriented to three levels of market service: (1) local, (2) national, and (3) international with a strong emphasis on exchange within the

¹Market, the most important location factor for Guatemalan industry, is discussed further in Chapter XI.

Central American Common Market countries. The smaller manufacturers producing goods for immediate or local sale are almost ubiquitous in the Republic. These firms include such activities as baking, shoe production, printing, and woodworking. However, the medium-sized plants (25-99 employees) and large-sized firms (over 100 employees) tend to cluster along the regions major transport lines and in the central places connected by those lines such as Guatemala City, Quezaltenango or Escuintla. The cities provide a strong local market base for sales, furnish an available labor pool for the larger factories, serve as collection points for raw materials, and also maintain the more reliable city services required for the operation of the more mechanized large industrial plants. Typical firms in the urban centers that would fit into the large-sized category are textiles manufacturers, breweries, mechanical bakeries, assembly operations of all types, and pharmaceutical plants.

Labor

Guatemalan labor is largely unskilled, or more accurately, untrained. Manufacturers must teach their employees the skills they require through on-the-job schooling; consequently the largest pool of the best industrial workers is in the national capital. In the industrial establishments interviewed the average wage of workers was determined to be

\$2.50 per day. However, it must be noted that "average" tends to be misleading since wages ranged very widely--from less than \$1.00 to as high as \$5.50 per day. The employees working in the less mechanized plants received the lowest wages while those that earned the most were found classed as semi-skilled or skilled laborers and involved in more technical operations where some skill of mechanical aptitude was required. Production output is highly variable, but generally tends to be low per man hour and per man day. Also, the wages of labor are relatively low when compared to the cost of living in the highly urbanized areas such as Guatemala City.

Although the purchasing power of the average industrial worker is limited, he at least receives some hard cash for his labor. Most of the Guatemalan people are rural agricultural folk who customarily live at a level that does not yield much in the way of wages. This small real cash income of the bulk of the population has operated as a limiting factor on the expansion of the potential domestic market. Indeed, perhaps less than 14 per cent of the people in Guatemala make up the present market for most industrial goods. The industrial labor force, therefore, may also develop into the region's most important group of consumers. Without such growth, manufacturing will cease to expand.

Labor relations in Guatemala were one of the most

frequently mentioned problems for industry. Nonetheless, cheaper labor was one of the factors cited for its importance to location. Foreign firms tend to follow policies of hiring and training personnel that are more enlightened than their national counterparts. There are two reasons for this: (1) it is less expensive to hire a Guatemalan national for a job if the foreigner must be transferred in from outside, and (2) it also makes for good public relations if the firm can demonstrate its "national character." In spite of this, however, in the foreign firms key positions in the business hierarchy are filled by foreign managers and technicians.

There is at present no really unreasonable attitude toward industrial management by labor. Unions in the manufacturing industries are at best weak. The problem with labor is more a problem of discipline. The traditional pattern of Guatemalan culture dictates a paternalistic relationship in the society. He who controls takes care of his workers; they are dependent upon him for survival. By most foreign standards this is a much different business arrangement than is desired. Nevertheless, foreign industry has accepted the cultural challenge.

The highest wages paid to labor are noted in foreign firms. If anyone follows the labor laws of the country to the letter it is a foreign firm. Thus, as a general rule, the foreigners provide the best working conditions and are

the most concerned for their employees' welfare. More familiar with working in advanced societies where labor is frequently more demanding of management, the foreign industrialists have gone out of their way to prevent labor discontent. If anyone is exploiting labor it is the Guatemalan businessman... the national. Foreigners are outsiders and they are well aware of the fact that because of this they are more subject to criticism--deserved or not. Consequently, labor fares relatively well under foreign management. In fact, given a choice most Guatemalan laborers prefer to work for foreign concerns. The pay is better, the fringe benefits are greater, and there is usually more opportunity for advancement.

Raw Materials

The requirement for production materials is an important consideration of all industries. As a location factor, therefore, it is an influence of considerable import, especially for the operations where perishable products or weight loss are involved. Few major Guatemalan industries listed this influence of prime concern to their location. But, some of the country's largest industrial concerns were among the respondents who cited raw materials as their prime location factor. Industries that reported a strong raw materials orientation were, for example, the producers of

cement, pumice, concrete products, lime, wood products, lumber, sugar, cotton processing, and the various food industries including the initial processors of beef, fish, and poultry as well as beverages.

The raw materials for Guatemalan industry come from both internal and external sources. Domestic agriculture provides the base for most industry with coffee being predominant; yet, other products of the fields are becoming increasingly important. Sugar cane is the base for the production of panela (unrefined sugar), sugar, liquor, industrial alcohol, and yeast. Domestic cotton ultimately ends as thread, yarn, clothing, other textiles products, animal feed, and oil--all goods produced within the country. Animals provide meat, dairy foods, hides for leather goods, tallow for soap and candles, and bone for fertilizer. Oil derived from the citronella plant is used as an ingredient in chemical manufacturing. And, some soft wheat is grown and is utilized in the milling and bakery industries. Other raw materials are provided by forest and mineral resources.

Guatemala's forests furnish chicle for gum and the various woods that are employed in the manufacture of lumber, furniture, and similar types of items. Mineral resources yield such basic materials as limestone for cement, clay for bricks and pottery, and the precious and semi-precious metals and stones that provide a basis for the jewelry and

handicraft industries. Except for chromite and salt, very little has been done to develop other mineral resources, but sulphur and nickel hold much future promise. Chemicals, paper, metals, petroleum, some textile fibers, e.g., nylon, rayon, kenaf, and other materials found in paucity locally are imported and consumed by the domestic manufactures. Under the protection of the Central American Common Market a great many industries have come into existence that rely on imported inputs in their operations. For these manufacturers, of course, national resources mean very little, but the question is: How realistic are activities of this type? Guatemala needs to find new ways to utilize its existing resources, but it needs to press the search for other resources as well.

Communications and Transportation

Sure means of communication and transportation are basic requirements for all industry. Through communications the needs of markets are ascertained, orders are placed, and the flow of industrial activity is maintained. Efficient transport facilities insure delivery of both raw materials and finished commodities on demand. For industry the ideal is to have several alternatives in communications and transport, but both of these have been major problems for Central America. As a result, industry has gravitated toward those

countries with the largest populations (market) or toward population clusters with the best communications and transport linkages, as is the case in the northern part of the region where Guatemala and El Salvador have both the population and transport linkages that are desired.

Overland transport has been difficult to develop and very costly in Central America, largely because of the nature of the terrain and the area's traditional economic orientation to foreign nations rather than adjacent countries. This picture is changing, though. As the Common Market has developed, the increase in its trade has encouraged changes in the orientation of commerce and improvements in transport. Yet, much still remains to be done.

Central America is deficient in communications and transportation lines. It is not only served by inadequate systems, in fact, no systems exist. Telephone connections, for example, are being built, but at best they are only serving the capitals. Outlying parts of the region rely almost solely on radiophone or telegraph for communications. The picture in Guatemala, although somewhat better than it is in some of the other countries, is still bleak. All of Guatemala's principal population centers are served by routes open to all weather vehicular traffic, but less than 20 per cent of the country's estimated 12,000 km. (7,500 mi.) of road is paved. The bulk of all domestic and inter-regional traffic moves on these highways.

Rail shipment is also available to industry in Guatemala, but it is not a major consideration for locating factories. Although the country only has some 1,280 km. (800 mi.) of rail line, the railroad links both coasts, Mexico, and El Salvador by means of narrow gauge track. Rail efficiency, however, varies a great deal as does reliability. Industries located along the tracks reported both dissatisfaction and satisfaction with service. Generally, industrialists felt that door-to-door shipment via trucks was more desirable, a great deal more reliable, and far superior.

Over a third of Central America's international traffic moves through Guatemalan ports.² On the Pacific the major ports are San José and Champerico; however, both lack the ability for adequate and efficient cargo handling. Located on a harborless coastline, these ports require lighter service to shuttle goods between the ships and their "port facilities" (piers). On the Atlantic side both Puerto Barrios and Matías de Gálvez are larger and better equipped to handle shipping; the bulk of Guatemala's imports and exports via the sea therefore justifiably move through the Caribbean ports.

Air service for freight and passengers is available

²Snitzler and Soto, op. cit., Table V-A 2.

for industry throughout Guatemala and internationally. Aviateca, the Guatemalan national airline, provides domestic and international service. However, Pan American Airways is the international carrier, even though other lines such as KLM, Lufthansa, and TACA provide similar types of services. LACSA and SAHSA furnish minimal connections to other Central American states. The large companies are the chief means of transport for international air traffic. Internal air freight is primarily moved by regional carriers or through contracts with individual pilots. The Republic's major air terminal is situated in Guatemala City; smaller landing strips are distributed over the country, but these are primarily for private use. Thus, except for the capital, there is a lack of air service for industry in Guatemala.

As far as most industrialists in Guatemala are concerned, transportation is really a market ministering problem. And, since the bulk of the market for manufactured goods lies in the northern part of Central America where transport facilities are best developed, their interests have brought them there.³ Communications and transportation were considered by entrepreneurs but essentially in relationship to the prime locational factor--market service to

³Guatemala and El Salvador have five times as much improved road (508 miles per 1,000 square miles) as the Central American average (100 miles per 1,000 square miles). Bureau of International Commerce, International Commerce, Vol. 74, No. 14 (April 1, 1968), p. 4.

Guatemala and El Salvador, the two countries that account for 50 per cent of all intra-CACM trade by value.⁴

Special Incentives

Guatemala is now committed to a policy of industrial expansion. This is evident in the government concessions that have been extended to industry. Manufacturers have obtained virtual grants of monopoly, tax breaks, duty-free imports of raw materials and machinery, and even shipping assistance when required. In addition, tariff protection is extended to many commodities to encourage the purchase of domestic-made goods. Most recently, loans acquired through the influence of the United States have been earmarked for use within the country's economic development program. Thus, the influence of government in all phases of development presently seems to be a strong motivation to industrialization.

Investment incentives offered by the Guatemalan government have been instrumental in attracting industry into the country. During this survey almost every large firm interviewed made some reference to the "special privileges" made available by the government. Probably the most important of these, however, was tariff. High tariffs protect goods

⁴Ibid., p. 3.

made within the region by keeping out non-CACM competition. Nevertheless, this is also potentially dangerous for development since it may force people to pay more for goods made in Central America than if they were imported. But, as one factory manager put it:

We had a choice--either move into the region with tariff protection now before we had any real market going for us... or wait until the competition moved in first, established a market, and fenced us out with a tariff. Frankly, we felt caught between the devil and the deep blue sea... this is a worldwide concern with an international reputation to maintain so what could we do?

Other Locational Factors

There are several other considerations for industrial location that were indicated by business entrepreneurs in Guatemala, but they are not considered of great importance. Most of these were mentioned only once or twice during the interview period and all are more appropriately classed as secondary locational considerations or specific site factors. These would include such things as: water availability, land, climate, warehouse space, already existing plant facilities, power, and similar factors. Most industrialists gave more than one reason for plant location. Generally, the first response revolved on the recognition of a key economic factor, e.g., market or available raw materials.

Because of AID sponsored promotional programs propagandizing the region for foreign investment, I was

particularly interested in noting how many industrialists had been influenced in some way by this literature. Evidently this industrial promotion has not been too successful in attracting potential investors. In my contacts, at least, not one entrepreneur could recall being influenced by any promotional program--in fact, no respondent had read an investment brochure for Guatemala until after he arrived. Personal contacts with the Central American economy through previous business dealings or with Guatemalan nationals appear to be more significant for knowledge of the opportunities in the area.

CHAPTER VIII

THE PROCESS OF INDUSTRIALIZATION IN GUATEMALA

In 1946 the Republic of Guatemala conducted its initial census of industry. Since that benchmark was established, the country has experienced a rapid rate of industrial growth that, in retrospect, appears nothing short of phenomenal. In this wave of development a major change has also taken place within the economy. Even though agricultural activities such as farming and ranching still employ the greatest percentage of the people, industrialization appears to be the most dynamic element in the evolution of the Guatemalan economic landscape. One of the problems in understanding this development, however, is the very recentness of its introduction. The achievements of the present are often given exaggerated attention without taking due regard for today's foundations in the past. In truth, the origin of Guatemalan industry may be traced back to the aboriginal period.

Aboriginal Roots

The development of Guatemala's economic landscape began with initial human occupation sometime during the late

Pleistocene period.¹ The area's first inhabitants, hunters and gatherers, lived by subsisting on wild fruits, grubbing edible plants and killing game. Later, through the innovation of plant domestication, the heirs of these primitive folk discovered the means of producing and controlling their food supply at a fixed location. With this technological advance the people were able to attach themselves in increasing numbers to a specific place. Thus, plant domestication assured food supply but, even more importantly, it also marked the genesis of sedentary agricultural civilization in the region.² Sometime around 500 B.C. the distinctive character of this Guatemalan development reflected itself in the formation of the unique Maya culture, probably the most advanced of the New World civilizations.³

The Maya, the aboriginal inhabitants of Guatemala, were fundamentally farmers, but their culture also produced a knowledgeable corps of skilled industrial craftsmen.⁴ These

¹See: Carl O. Sauer, "A Geographic Sketch of Early Man in America," Geographical Review, Vol. 34 (1944), pp. 529-573.

²See: Carl O. Sauer, Agricultural Origins and Dispersals, Bowman Memorial Lectures, Series Two, American Geographical Society, New York, 1952, pp. 64-72.

³J. Eric S. Thompson, The Rise and Fall of Maya Civilization, University of Oklahoma Press, Norman, Oklahoma, 1954, p. 270.

⁴Valentin Solorzano F., Evolucion Economica de Guatemala, Publicacion No. 11, Seminario de Integracion Social Guatemalteca, Guatemala, 1963, pp. 19-32.

people specialized in various activities--particularly working with feathers, stonecutting and the production of jewelry from copper, silver, and gold--to provide for the vanities of their society's politico-religious elite. In addition, in those areas favored with raw materials, more prosaic crafts such as basketmaking, the potter's trade and weaving also flourished. Over the intervening centuries many of the Indian peoples have managed to hold fast to their traditional handicrafts so that even today certain villages are noted for the fashioning of particular goods.⁵ But, this type of production should not really be considered as a significant category of manufacturing. These folk are no more than practitioners of a class of home industry which barely maintains them at a subsistence level. It is a form of livelihood that contributes virtually nothing to the Guatemalan manufacturing economy. Native handicrafts, nevertheless, are one of the country's chief attractions, especially to tourists. The quaintness of the products tends to disguise the poverty behind their creation.

⁵Sol Tax and members of the Viking Fund Seminar on Middle American Ethnology, Heritage of Conquest, The Free Press, Glencoe, Illinois, 1952, pp. 43-75; and, Felix Webster McBryde, Cultural and Historical Geography of Southwest Guatemala, Smithsonian Institution, Institute of Social Anthropology, Publication No. 4, Washington, D.C., 1945, pp. 114ff.

The Legacy of Spain

All of what is now Guatemala became a Spanish colony in the first half of the sixteenth century. In those earliest days of European occupancy, gold, silver and similar precious commodities were of prime concern to the conquerors. But, unlike Mexico, Guatemala was not richly endowed with such riches for easy plunder. The Mayan peoples did not have great hordes of treasure as was the case with the Aztecs, nor was the area likely to yield such wealth. As a result the Spanish exploitation of Guatemala took a much different course than that of Mexico. In Guatemala the Spaniard, like the Indian before him, soon turned his attention to the fruits of the soil.

Land and Indians were the major concerns in colonial Guatemala. Indeed, for the Spanish colonist possession of land was more than just a means to wealth, it was a measure of social status, prestige, and power. Quite frequently the landholdings were not even developed. The foci of colonial life were the towns and cities, and it was there that the estate master could usually be found. Only infrequent tours of inspection brought the lord into contact with his land and Indian vassals. Meanwhile, trade and industry languished as meaningful paths to position simply because these sectors of the economy were closely controlled by the Spanish Crown and its colonial representatives. The monarchy made the rules; as a result the socio-economic

system was closed and there was little opportunity for innovation.⁶ Furthermore, the inquisition reinforced the economic philosophy of the Crown so few men chose damnation or death to challenge Spanish authority.

Throughout the colonial period the economic destiny of Guatemala was directed by royal authority. Economic life followed a rigid pattern as the crown set a simple but ruthless relationship--mercantilism. Crude products such as precious metals, stones, and agricultural goods could move freely from the colony but only toward Spain. Shipment to other countries and colonies was strictly forbidden. Once in the homeland, basic raw materials were supposedly converted into finished goods for return shipment and sale in the New World. Guatemala, for example, could not produce an industrial good unless it was unobtainable from the mother country. No competition or industrial activity was tolerated which might threaten this trade pattern.⁷

As a result of the neglect of manufacturing, other segments of the economy were emphasized such as mining,

⁶See: Silvio Zavala, The Colonial Period in the History of the New World, Publication No. 239, Comisión de Historia, Instituto Pan-Americano de Geografía e Historia, Mexico, pp. 129-140.

⁷Ibid. It should be noted that Spain made it impossible for this system to work since the Spanish failed to develop the industries required to make it function.

ranching or agriculture. Hands to work the mines or till the soil were easily provided by the indigenous population. In the first years of the colony, labor was not considered a problem as it was easily obtained by the landholders and mine managers through a method whereby the Indian rendered services in return for instruction in the Spanish language and the Catholic faith, the encomienda system.⁸ In 1549, however, a law was passed that forbade the contract of such arrangements. Thereafter, the landholders turned to a new labor acquisition scheme, one which involved the imposition of a work levy on an entire Indian community--officially though through the colonial representatives of the Crown. This latter means of acquiring labor, the repartimiento (labor allotment), was likewise abolished in 1632, but not before debt peonage was a well-established way of securing needed workers for the farms and mines.⁹

Spanish control and economic policy made the Guatemalan

⁸The encomienda system was not restricted to Guatemala. This labor arrangement had firm roots in the culture of Spain and was quite typically applied throughout the New World colonies by Spain. See, for example, Charles Gibson, Spain in America, The New American Nation Series, Harper Torchbooks, Harper & Row Publishers, New York, 1966; pp. 48-67; L. B. Simpson, The Encomienda in New Spain (rev. ed.), University of California Press, Berkeley, 1950; and, Chester Lloyd Jones, Guatemala, Past and Present, University of Minnesota Press, Minneapolis, 1940, chapters 10-12.

⁹Gibson, op. cit., and Jones, op. cit.

colonial period a time of limited possibilities for industry. During this epoch the pattern of dependence on one or two crops for foreign exchange developed. Thus, the seeds of monoculture and unfavorable trade balance were early sown. In reality, many of Guatemala's economic problems of today are directly traceable to this term of Spanish hegemony.

Colonial Industry in Guatemala

Guatemalan industrial development during the colonial period was closely tied to agriculture. Sugar cane was introduced from the Antilles in the latter half of the sixteenth century and shortly thereafter its processing became an important industry for the colony.¹⁰ The Pacific piedmont (Boca Costa) was the major region of sugar production. Here, climatic conditions were found to be almost ideal, the soil was rich, and rivers and streams were available to turn the grinding machinery of the mills. By the end of the seventeenth century there were eight major sugar factories operating in Guatemala, five of which belonged to the church.¹¹ But, sugar was only one product

¹⁰See: Bruce E. Bechtol, "Notes on the Sugar Industry of Guatemala," Oregon Geographer, Vol. 1, No. 2 (1967), pp. 5-8.

¹¹Discussed under "Industrial Development" in: Franz Nowotny, Recent Economic Development in Guatemala, unpublished Ph.D. dissertation, Department of Geography, University of Florida, 1960.

derived from the cane. Alcohol was also produced as a by-product of the same operations, a highly profitable enterprise although it was one that was very carefully regulated by the Crown.

The native cacao plant also played a role, albeit brief, in the Guatemalan colonial economy. In this case, Spanish exploitation merely followed already established aboriginal guidelines, cacao was grown and processed in the Suchitepequez region on the Pacific coast thence shipped to Mexico for sale. By the early seventeenth century, however, Guatemala no longer was a significant producer of cacao.¹² Another industry, dye processing, proved to be a much more lucrative venture of the colony.

The most important industry in Guatemala during the colonial period was dye production. Under Spanish control dyestuffs played a prominent role in the economy for almost three centuries. Two commodities stand out, indigo and cochineal. Indigo was processed in factories located next to swift-flowing streams on the Pacific piedmont. Cochineal, a red dye obtained from a tiny scale insect grown on the prickly-pear cactus, was primarily produced by individual

¹²See: John F. Bergmann, The Cultural Geography of Cacao in Aboriginal Middle America and its Commercialization in Early Guatemala, unpublished Ph.D. dissertation, Department of Geography, University of California, Los Angeles, 1959.

Indian households throughout the cooler highlands. Both of these industries disappeared, however, with the advent of synthetic dyes on the world market in the middle of the nineteenth century.¹³

Industrial Development Within the Republic

In 1821 Spain lost the Captaincy General of Guatemala to the new and independent Republic of Mexico. Guatemala thus gained its independence through annexation to a former sister colony. Mexican control was destined to be short lived, however. In 1823 Central American liberals declared their area a free federation of Central American states. Shortly thereafter independence was assured and practically every population cluster in the region declared its sovereignty. As a result a period of bloody civil wars followed as regional special interest groups fought for control. Chronic instability was the only constant in this seesaw struggle for political power. Due to the violence, economic development stagnated.¹⁴

¹³The best study of the dye industry in Guatemala is: R. S. Smith, "Indigo Production and Trade in Colonial Guatemala," Hispanic American Historical Review, Vol. XXXIX, No. 2 (1959), pp. 181-211.

¹⁴Mario Rodríguez, Central America, Prentice-Hall, Inc., Englewood Cliffs, N. J., 1965, pp. 49-92.

Changes in the Economic Landscape: 1821-1945

The characteristic economic activities of Central America were well established through centuries of Spanish control. Indeed, after independence criollos (pure Spaniards born in the New World) merely followed the known ways of doing things, favoring continuance of the feudalistic and semi-capitalistic policies evolved under Spanish domination. Economically monoculture remained typical, the only apparent difference being the production of goods for the world market and not just for Spain. Furthermore, the self-sustaining hacienda (big farm or estate) entrenched itself even deeper into the economy as it was a secure unit capable of either survival or profit depending on the times. There was a deep and real concern for the development of new crops, new ideas and the acquisition of investment capital. But, it was also recognized that innovations and financing could only be obtained through foreign assistance-- Central America itself was bankrupt. Accordingly, after independence immigrants were welcomed to the region primarily because they had the technical know-how and money required to rebuild the economy. Foreigners subsequently became a key element in all phases of economic development.¹⁵

¹⁵Ibid., and, Louis E. Bumgartner, José del Valle of Central America, Duke University Press, Durham, 1963, pp. 232-235; and, William J. Griffith, Empires in the Wilderness:

Around 1860 coffee was introduced to Guatemala from one of the other Central American republics--most likely Costa Rica.¹⁶ Foreigners played a major role in the development of this industry both in the growing and the processing of the crop. Germans established the first coffee plantations in the Coban and upper Boca Costa regions; soon thereafter North Americans, Englishmen and Guatemalans followed their lead.¹⁷ To this day coffee remains Guatemala's most important export oriented industry, but it has been both a blessing and a curse to the country. Because of the emphasis on coffee production, stability of the Guatemalan economy hinges on fluctuating world market prices. When the coffee price is up the economy is strong, but when it is down the whole country suffers. Coffee, nevertheless, helped to promote changes in the Republic.

Coffee does not assume importance in manufacturing

Foreign Colonization and Development in Guatemala, 1834-1844, University of North Carolina Press, Chapel Hill, 1965.

¹⁶Robert C. West and John P. Augelli, Middle America: Its Lands and Peoples, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1966, p. 383. This is a secondary source but the authors of the book do not reference their source of information.

¹⁷Guillermo Nájuez Falcon, German Contributions to the Economic Development of the Alta Vera Paz of Guatemala, 1865-1900, unpublished M.A. thesis, Department of History, Tulane University, 1961.

until it is readied for roasting, grinding, or conversion into soluble form, but its initial processing takes place where the fruit is grown. Once the coffee cherries are picked, they are carried to the beneficio (processing center). Here they are washed to promote fermentation; this causes the fruit to split. Then, the wet fruit with its exposed beans is sun-dried in open patios or in ovens. After the beans have dried, the husk is removed by milling. These green milled beans are then graded and sacked for shipment to buyers.

In the 1880's the banana industry was introduced to the Republic. Later, in 1906, the United Fruit Company (UFCO), a North American firm, established itself in Guatemala and brought the banana into its own as an export item.¹⁸ This crop soon gained great significance in the economy since it complemented coffee in securing foreign exchange. Indeed, bananas and coffee dominated the economy of Guatemala during the years prior to World War II. The large-scale commercial enterprises involved with the production of bananas and coffee proved to be nothing more than extensions of the old colonial plantation economy but

¹⁸The role of the United Fruit Company in Guatemala has been critically examined best by: Stacy May and Galo Plaza, The United Fruit Company in Latin America, National Planning Association, Washington, D.C., 1958.

with different owners. Accordingly, until relatively recent times, monoculture ruled while manufacturing activities played only a small role in the overall economic picture.

By the late nineteenth century the industrial sector reflected some established patterns. Textiles production, an old and important activity, was initiated with large-scale production methods in the 1880's--the first major plant was founded in Guatemala by a Spanish immigrant.¹⁹ Sugar mills dating from the colonial period were still operating on the South Coast. Beverage producers, various food products manufacturers, and numerous printing, leather and clothing goods establishments were functioning from at least the end of the 1800's. Guatemala City was the site of Latin America's first portland cement plant, this industry being founded by an Italian in 1897.²⁰ However, all of these activities were limited in production and were oriented essentially towards domestic consumption. Moreover, the firms founded at this time were generally owned and

¹⁹Unless otherwise noted, all references to industry are based on data collected during field interviews with industrialists.

²⁰The owner of this industry was just as surprised as I was to find his plant was the oldest in Latin America. The portland cement plant generally accepted as the earliest in Latin America opened in Argentina in 1919. See: Miller, op. cit., p. 429.

staffed by immigrants, primarily Europeans.

The depression during the 1930's nearly destroyed the commercial economy of Guatemala. The bleak economic picture did not change significantly until World War II when the effects and the demands of the war forcibly redirected the subsequent economic development of the country. The war cut deeply into the Republic's traditional export sector by eliminating Europe as a market but, even more importantly, it also triggered new efforts towards diversifying agriculture and industry. Some infant industries began to appear in the 1940's simply because the hostilities had made it difficult for the country to import many required manufactured goods. Many of these establishments were operated by "new Guatemalans," European Jewish peoples who had fled war-torn Europe. After World War II industrial development gained tremendous momentum.

Industrial Growth Since 1946

In 1946 there were an estimated 4,600 industrial establishments of all sizes in the whole of Guatemala. Altogether these firms employed about 26,000 people. Since then manufacturing has grown at a rapid relative rate that has created significant and, perhaps, far reaching changes in the direction and diversification of the economy.

TABLE 11
THE GROWTH OF MANUFACTURING IN GUATEMALA, 1946-1968²¹

Year	Number of Firms	Number of Workers
1946	4,600	26,000
1958	8,595	35,829
1968	16,530	68,903

According to the estimates shown in Table 11, by 1968 Guatemala had almost four times as many industrial firms of all sizes as it did in 1946. During the same period the total manufactural employment only increased about two and a half times, an indication that most of the new industries tended to be small-scale undercapitalized operations. Undeniable proof of this is established with more exact and reliable information derived from the analysis of field data shown in Table 12. Of the 1,076 industries interviewed,

²¹Guatemalan Census statistics for industry are difficult to obtain, definitely questionable, and not even comparable for all census years. The Industrial Census of 1946, for example, allegedly reports all industries in the Republic but the cottage industries in the hinterland are not shown. The censuses of 1953 and 1958 only reflect data for firms with more than three employees. The 1966 Industrial Census was probably the most accurate ever taken in Guatemala, yet my preliminary research in the Republic during the same year brought to light a rather curious correlation between the accuracy of data and paved roads. Thus, the data in Table 11 are my own "reasonable" estimates derived from the information available.

TABLE 12

FOUNDING DATES FOR GUATEMALA'S 1,076
LARGEST INDUSTRIAL FIRMS

Founding Period	Factories	
	Number	Per Cent
Unknown (but before 1945)	76	7.0
Before 1900	18	1.7
1900-1929	78	7.2
1930's	60	5.6
1940's	112	10.4
1950's	254	23.7
1960-1968	478	44.4
Total	1,076	100.0

Source: Field work by the author, 1967-1968.

this group representing all Guatemalan manufacturers with more than five employees, 78 per cent initiated operations after 1940. In a detailed breakdown of founding dates, over 44 per cent of these larger industries were established in the 1960-1968 period, almost 24 per cent in the 1950's, and just over 10 per cent in the 1940's. Thus, the field data show that more major manufacturing activities were introduced to Guatemala in the years between 1960 and 1968 (44 per cent) than in all the years between the Spanish conquest and 1949 (32 per cent).

In the final analysis there are a number of locational considerations which might help to explain the process of industrialization in Guatemala. Some of these elements, however, are local and specific site factors with an accent on such lures as available raw materials, power, fuel, labor, means of transport, cheap land, water, climate, topography, waste disposal or any one of several hundred or more similar influences.²² Some of these were discussed in Chapter VII. There are, though, more general inducements or factors that can effect industry's decision to select one national state or world region for an economic environment while, conversely, ruling against others. These are

²²See: H. McKinley Conway, Jr., "700 Plant Location Factors," Industrial Development, Vol. 4 (October, 1957), pp. 17-20ff.

situation factors which comprise an operational milieu influenced by both space and time.

Major Influences in the Industrialization Process

All innovations move within space and society through time. There are, therefore, three important dimensions that affect the diffusion of new things or ideas: the spatial, the temporal, and the social.²³ Man and his environment are inextricably bound together. Change in any element of the human-spatial complex will surely cause a reaction which affects the whole. In short, the man-land relationship may be thought of as an association that is held together by all links and relations that exist or take place within it.

Guatemala's industrial landscape is the result of human decisions concerning the use of space through time. Industrial innovation came to the country, but only by passing simultaneously through an operational milieu comprised

²³See for example: Torsten Hagerstrand, "The Propagation of Innovation Waves," Lund Studies in Geography, Series B (Human Geography), IV (1952); Earl H. Pemberton, "Spatial Order of Cultural Diffusion," Sociology and Social Research, Vol. XXII (1938), pp. 246-251; Raymond V. Bowers, "The Direction of Intra-Societal Diffusion," American Sociological Review, Vol. II (1937), pp. 826-836; and, Elihu Katz, Martin Levin and Herbert Hamilton, "Traditions of Research in the Diffusion of Innovation," American Sociological Review, Vol. XXVIII (1963).

of the culture's value system (socio-psychological characteristics), political environment, and special economic conditions. This operational milieu is a matrix that influences economic production, consumption, and all trade. It also effects man's perception of how the spatial realm can and might be used, i.e., attitudes toward the country's physical and human resources. These influences are the subject of more detailed examination in the three chapters following.

CHAPTER IX

THE GUATEMALAN INDUSTRIAL ENVIRONMENT: SOCIOLOGICAL
AND PSYCHOLOGICAL CONSIDERATIONS

In the diffusion of any innovation it is group or individual receptiveness that ultimately serves as the key factor in the acceptance or rejection of an introduced action, idea, or thing. Further, when it comes to change, the general rule is always conservatism. Man simply does not trade his old established ways for something new which may upset the security offered by the familiar status quo. An innovation is "different" and because of this it will only be accepted if it is imposed, propagandized by a particularly effective means of persuasion, or has some obvious advantage which is readily perceived and desired. Thus, cultural bias, i.e., sociological and psychological influences must always be weighed as considerations in the evolution of new thoughts, institutions or things.¹

When one begins to speak of the sociological and psychological characteristics of people, however, there is

¹For expansion of this point see: Homer G. Barnett, Innovation: The Basis for Cultural Change, McGraw-Hill, New York, 1953, pp. 71f.; and, Richard T. LaPiere, Social Change, McGraw-Hill, New York, 1965, pp. 1-38.

always the danger of over simplification. These are rather intangible factors and difficult to assess, especially when some sort of causal relationship is implied or deduced that requires an evaluation of the strengths or weaknesses of one culture as compared to another. It would seem then that the advisability of relating economic development to cultural difference may be questionable, but it can provide food for thought and, indeed, is necessary if one is to understand how and why industrial development has taken the vein it has in the Republic of Guatemala.²

The Guatemalans

Guatemalan society poses some special problems for cultural analysis. Like all of Spanish America it was greatly affected by a colonial heritage of Iberian domination. As a result many imposed Spanish customs and institutions have been retained. On the other hand, however, the Guatemalan Indian presents an added difficulty. In this country the Mayan folk and the conquerors did not completely mix, nor was the foreign culture wholly accepted. Because of this the Republic is still more "Indian" than "Spanish." Add to this the cultural contributions of the Negro--small

²Norman S. Buchanan and Howard S. Ellis, Approaches to Economic Development, Twentieth Century Fund, New York, 1955, pp. 74ff.

as they may be in this country--and the complexity of the problem becomes staggering. And yet, the true picture must also include the non-Indian, non-Spaniard, and non-African as well. After independence the "other" Europeans, North Americans, and Asians likewise contributed to the culture so they must be considered, too. Each group left its mark on the landscape.

Today Guatemalan society is stratified along three lines: race, culture, and income. Racial prejudice is not marked, but there is a definite recognition of racial differences between groups. Color, nevertheless, is not a major bar to social movement; particularly if money and education are present to make the person in question "lighter." Culture, i.e., an education in the Western fashion, and income really determine a man's position in the society. They dictate a social scale where three major classes may be identified, a scale differentiating the people into upper, middle, and lower class groups.³

Guatemala's upper echelon is comprised of two types of people, those of the landed aristocracy and the self-made men. The former garnered their status through birthright. As members of the oldest established families their

³These views are based on my own subjective evaluation and are, of course, subject to criticism.

position is derived from name, pride, and tradition. Land, and not necessarily money, is the basis of their wealth and station. The self-made men, on the other hand, moved into the upper class because of their ability to manipulate money. These men are the business and political giants of the country and, more often than not, of post colonial origins. Their position rests upon economic success and the power associated with it. Sharing some but not all of the values of the old landed aristocracy, these newcomers to society's upper strata are generally more receptive to twentieth century cultural innovations than their predecessors.

The middle class is clearly the most poorly defined segment of Guatemalan society. This group constitutes the bulk of the country's most politically active people and the core of the military leadership. At present there is very little group identity, only an aspiration to reach the top. Educational drive and economic striving are aimed at the acquisition of attitudes and modes of living typical of the upper class. These people are emulators of success and hold an ersatz sense of values borrowed from the upper class which they admire.

The peasant sits at the bottom of the Guatemalan social ladder, but here again it is a matter of reckoning with two types. First, there are the uneducated and culturally deprived agricultural peasants who live outside

the urban centers. These people farm for their livelihood and fall into any one of several categories, for example, those who farm their own land, wage earning farmers, or sharecroppers. The second group is comprised of a growing number of urban peasants, an element that has largely evolved out of the country's population explosion and a lower-class quest for employment in the cities where, seemingly, there are more opportunities. Many of these people find their way into service activities such as household work or gardening. They flock to the capital and the urban areas in increasing numbers putting a strain on city services that are already overburdened and archaic.

The vast gulfs in this social stratification are a reflection of Guatemala's agricultural traditions. The demarcations existing within it have been reinforced through four centuries of control by the upper class. It is a system where the family unit has prevailed as the center of all social and economic life, a family that is usually extended to include relatives, close friends, and in some instances even entire communities. The father figure controls "the family" dictating responses and seeing to the welfare of its members.

In a traditional agricultural society where conditions are relatively stable the family-centered economic and social arrangement worked fairly well, but in a capitalistic

industrial society its value quickly diminishes. When all members of a family depend on the land, close and very personal relationships develop to bind the unit together. However, in the impersonalized factory environment the family relationship loses its importance. Indeed, such organization weakens industrial operations if less able family members are given responsible positions better filled by more capable "outsiders." Efficient factory management depends on skills, not familial ties. Yet, the family firm--with all of its weaknesses--is typically Guatemalan as relatives administer the business in industries owned by nationals. The practice is simply an extension of custom developed under the old agricultural system. It is outmoded today.

But tradition is hard to break. The old ways tend to be maintained by the landowning upper class, and it is this group that is most "Latin." Custom keeps the rest of society in its place. The lower classes cannot really afford the luxury of "Latin attitude" as they do not have the position, wealth, and ample leisure time to enjoy it.⁴ Nonetheless, it is emulated and is the cultural norm that prevails, perhaps because it is desired.

⁴See: Julian Steward, Theory of Cultural Change, University of Illinois Press, Urbana, 1955, p. 74.

Guatemalans seem to fit a general Latin character mould that is practically stereotyped.⁵ Their's is a value system emphasizing individualism, personalismo (personalism), dignidad (dignity), humanism, social position, and fatalism.⁶ Although some or all of these values may be "good," in almost every case they conflict with the attitudes and mores of foreigners. Thus they definitely are important influences since programs of development involving economic modernization and social reform must function within the operational milieu these values have helped to create.

In Guatemala the individual is valued for his uniqueness, i.e., because he is unlike anyone else. This is a quality of character that is defended with a passion. Conformity to rules or a common purpose is difficult. And,

⁵See for example: John Gillin, "Modern Latin American Culture," in: Olen E. Leonard and Charles P. Loomis (eds.), Readings in Latin American Social Organization and Institutions, Michigan State College Press, East Lansing, 1953, pp. 10-13; Salvador de Madariaga, Englishmen, Frenchmen, Spaniards: An Essay in Comparative Psychology, Oxford University Press, London, 1931; T. Lynn Smith, "Values Held by People in Latin America which Affect Technical Cooperation," Rural Sociology, Vol. XXI (1956), pp. 68-75; and, William L. Schurz, Latin America: A Descriptive Survey, The Dutton Co., New York, 1949, pp. 327ff.

⁶There are other sociological and psychological characteristics of Guatemalans that would be interesting to explore; however, they do not directly relate to the theme of this work and will not be considered.

because of this, any organization requiring sublimation of the individual personality to a group effort is almost impossible. Examples of this sense of super-individualism are legion but one will suffice. By chance I was present at a board of directors meeting for one of Guatemala's major industries. Almost as soon as it started the gathering was in absolute chaos, its members quibbling back and forth across the table. Smiling, the company's chief technician, an American engineer, turned to me and said: "Thank God there are only six of them. If there were eight there would be four arguments instead of just three." Each obviously felt obligated to assert his views against the group.

Closely tied to the notion of individualism, the concepts of personalismo and dignidad appear to be equally important. Guatemalans tend to personalize their relationships, only trusting people they know intimately, i.e., the friends or "family" who appreciate their individual "soul." Consequently face-to-face contacts between people are absolutely necessary to obtain any kind of true working relationship. Indeed, impersonal dealings with "outsiders" are shunned. Strangers, they believe, are incapable of understanding the individual's personal sense of dignidad or worth. Protectiveness surrounds what is "known" or "trusted" even though it may mask institutions or people of

middling competence. Dignidad is not to be questioned through criticism.⁷

Ideologically Guatemalans are humanistic. Their culture is characterized by an emphasis on spiritual as opposed to materialistic values. Hence, they fit the Latin American pattern described by Gillin. Their society:

...is characterized by logic and dialectics, rather than by empiricism and pragmatics; the word is valued more highly than the thing; the manipulation of symbols (as in argument) is more cultivated than the manipulation of natural forces and objects (as in mechanics)... the worth of the logic lies in the manipulation of concepts, not in the empirical investigation of premises.⁸

Because of this, the accent is on art, philosophy, poetry, and literature. Industry and sciences are tolerated but only because they are necessary.

All Guatemalans are very conscious of their position in society. Most seem to be aware of their chances of improving themselves as well. It is interesting to note that members of the emerging middle class (the aspiring element in modern Guatemala) attempt to acquire all the visible marks of social status they can afford. The

⁷Criticism, even when constructive, is viewed as insulting. Moreover, "kidding" or "teasing," which are a part of North American culture, can be dangerous since it may be interpreted as an affront to one's dignidad.

⁸Gillin, loc. cit.

recognition they gain through owning new automobiles, grand homes and similar expensive paraphernalia may be sufficient to gain tacit acceptance a little higher up in the hierarchy. Since elevated social status can open "family" doors, position is also economically important.

Fatalism must be mentioned as the final note on the Guatemalan psychology. The people, although nominally Christian, tend to believe that their lives are predetermined and subject, therefore, to powers beyond their control. For example, if a man is successful it is because he has had "good fortune"--not because he worked for what he obtained. As a result, the idea that a person can better himself through hard work is more of a foreign innovation. Furthermore, the stratified social system simply reinforces this fatalistic outlook, perpetuating a sense of resignation amongst the people for "things as they are."

These are some of the attitudes and mores of the Guatemalans. The foreigners in their midst have frequently operated with a different sense of values. It is necessary, therefore, to compare both to determine how they have influenced economic development, in particular industrialization. It has been suggested throughout this work that innovation came with the foreigner and, in fact, the Industrial Revolution is especially indicative of this. If this is true, what are the values and attitudes of the

non-Guatemalans that have enabled them to play such a decisive role in the creation of a Guatemalan industrial landscape?

The Foreign Contrast

There has been little research into the impact of the foreign business community in Guatemala and even less into its attitudes and values.⁹ Hence, the findings in this section are based primarily on personal observations made in the field. These conclusions include data from all foreign groups and represent value norms, not individual differences. Further, only those values which might effect economic development or industrial growth are examined. Admittedly, the information did not come from a carefully controlled experimental situation, but nonetheless it is indicative of some major cultural contrasts.

As a group, the foreign industrialists are less inclined toward nebulous inner values while, conversely, being strongly oriented to the materialistic. They have slight concern for the Latin's individual sense of "soul," or for that matter, individualism itself. Because of this, much

⁹Exceptions and related studies would include: Bauer Paíz, op. cit.; Griffith, op. cit.; Maddox, op. cit.; May and Plaza, op. cit.; Nájuez Falcon, op. cit.; Nash, op. cit.; O'Neal, op. cit.; and Rippey, op. cit.

of the personalism so characteristic of the Guatemalan business community is lost in the foreign industrial circle where a "team effort" dictated by "company policy" tends to be more typical. People-to-people relations, although important to any business activity, are not as rigorously pressed by foreigners. Unlike the Guatemalans who are affected by familial or personal ties, the foreigners are more familiar with working for international boards of directors, faceless stockholders, and with impersonal company reports and statistics. They are also some distance from most of their relatives. As a result, the foreign industrialist lives in a world that is less exclusive in its dealings yet less human as well.

In business operations a Guatemalan will frequently make decisions with his "heart" whereas the tendency of foreigners is almost always toward the practical. Again, this is probably a reflection of cultural experience since the foreigner prefers not to be "involved" or placed in a position that he cannot view objectively. Non-Guatemalans, and especially the non-Latin group, are much less emotional in their behavior than their Latin counterparts. Basically pragmatic in their approach to problems, they also are better technicians and more receptive to technical innovation than the Guatemalans.

Non-Latin businessmen are more prone to views of

technical achievement and business relations as means to financial success. Since the humanistic values of the Latins, i.e., dedication to the arts, philosophy, and "culture," are not really necessary for such material gain, they are neglected. A Guatemalan businessman may write poetry in his spare time and his works will be read and recognized by his countrymen for their humanistic value. On the other hand, members of the foreign business community are generally unfamiliar with such work and more apt to be reading or writing for technical or trade journals. Thus, the Guatemalan sense of values appears impractical to materialistic success while the foreign approach seems more direct or practically oriented.

All things considered, foreigners are pursuers of money and Guatemalans are seekers of social prestige. The Guatemalan is concerned for his culture and intangible soul while the foreigner is interested in wealth and tangible material gain. Foreigners are strivers and innovators who have been exposed to and a part of the Industrial Revolution in the more developed world. It is not surprising, therefore, that they are better equipped and more dynamic participants in Guatemala's economic modernization. They possess the wherewithall to introduce and stimulate economic development even though they generally lack the "accepted" sense of social values held dear by nationals.

However, these social values may be equally important to the evolution of a "good society."

With the economic modernization of Guatemala changes are taking place within the culture as well. Indeed, industrial development brings increasing contact with foreign influences that will continue to modify both the economic and social fabric of the country. Foreigners are not tied to the old social order of society and have little to lose by changing it. Thus, they are more willing to dare, to experiment, to modify or substitute to gain progress. The society's sense of values has effected and will continue to effect the operational milieu for industry, but it will evolve with it as well.

CHAPTER X

THE GUATEMALAN INDUSTRIAL ENVIRONMENT:

POLITICAL CONSIDERATIONS

For some 300 years prior to independence the present Republics of Guatemala, El Salvador, Honduras, Nicaragua, and Costa Rica as well as the Mexican State of Chiapas were all united in a common colonial federation known as the Captaincy General of Guatemala. During this period the region's economy was controlled by Spain. With the dissension that brought independence in 1821 the old colonial association was continued but transformed into part of a united monarchy under Iturbide, the self-proclaimed Emperor of Mexico. But, this was a unity that was to last only two years, until 1823, when the small rural provinces of the region formed the Republic of Central America. The amalgamated Republic of Central American States, in reality more of a monetary union than a true federal system, lasted through 1839. Then, because of internal dissent and poor communications, the Central American states as we know them today went their separate ways. Since the dissolution of union there have been several attempts to reunite the region on a purely political basis, but ultimately all

these efforts have been resisted.¹

Central America's history of political instability with its frequent changes in governmental personnel and policies has been cited as a factor hindering economic development.² With the exception of significant foreign and domestic investments in coffee, sugar, bananas, and later cotton, it appears that the prevailing atmosphere of uncertainty has generally discouraged desperately needed injections of capital into the economy. As a result, political stability has been assumed to be a prerequisite for economic development... the reasoning being that no country can make meaningful and lasting economic and social advances without it. Unfortunately political stability seems to have a nebulous connotation in this regard. For the world at large and as far as most businessmen are concerned, abstract political idealism and morality serve no useful function in the development of an economic climate. Indeed, from the point of view derived from the Guatemalan experience, the business community appears to fear social reform trends and governments that seemingly espouse such

¹See: Thomas L. Karnes, The Failure of Union: Central America, 1824-60, The University of North Carolina Press, Chapel Hill, 1961, p. 253.

²See: Carlos M. Castillo, Growth and Integration in Central America, Praeger Special Studies in International Economics and Development, Frederick A. Praeger, New York, 1966, pp. 7ff.

programs, i.e., the Alliance for Progress. Accordingly, democracy (another term with a nebulous meaning) does not appear to be a very important consideration for a business environment. Given a reasonable measure of stability and some promise of market protection, the Guatemalan business community has determined its investment decisions on profit margins and not on the basis of firm or representative governments.

Nevertheless, dictatorial administrations ARE identified by the Guatemalan business community as desirable or "best" for the economy. With hard-handed leaders of State it is assumed that capital has moved more freely, labor has been held in check, political unrest suppressed, and the businessmen have gained greater concessions and incentives in their operations. And, since this is in many respects true, it is not surprising that the "political situation" was the one issue most frequently cited as a problem by Guatemalan industrialists interviewed during this study, i.e., during a period of political control by a left of center representative government. Yet, such opinions seem strange in light of the fact that industrial interests--both foreign and domestic--have generally fared well under constitutionally elected Guatemalan governments.³ However,

³The obvious exceptions to this statement are the United Fruit Company and International Railways of Central America. These two operations, once co-owned by the same

it must also be noted that although the Industrial Revolution has progressed under all governments since 1944, the most dramatic achievements were made under military regimes.

The Industrial Prologue: 1838-1945

Guatemala became a Republic at the beginning of the Industrial Revolution, but industrialization was one change that the country postponed. Meanwhile the economic and political environment developed out of chaos, revolution, and incipient civil war. Since its inception in 1838 and until 1944 dictators have thrived in this nation, running it more like a private estate than the republic it is alleged to be. But, four of these caudillos (strong men) particularly stand out, Rafael Carrera (1838-1865), Justo Rufino Barrios (1871-1885), Manuel Estrada Cabrera (1898-1920), and Jorge Ubico (1931-1944). These men controlled the political life of Guatemala for 78 of the 107 years between 1838 and 1945. Because they influenced many of the initial changes ushered into the country, in many respects they also set the pattern for today.

Rafael Carrera, charismatic, illiterate, and hard-handed tyrant that he was, ruled the Republic for twenty-seven years.

interests, have stood the brunt of attack against "foreign imperialism" and "Yankee exploitation" and, thus, served well as whipping boys for local nationalists.

An Indian himself, he was loved by his own kind but only very guardedly respected by the landholding class and foreigners. Extremely conservative in his views, Carrera firmly supported the church, protected property rights, and strictly maintained law and order. Under his able but ruthless administration more efficient farming was encouraged, transportation improved, and public administration was honestly pursued. After his death in 1865 weak conservative control continued for another six years, then the liberals seized power.⁴

From 1871 to 1898 Guatemala was ruled by liberal leaders. The foremost of these, Justo Rufino Barrios (1871-1885), was simply another dictator but in this case the Republic was fortunate as the despot was enlightened. Unlike the illiterate Indian Carrera, Barrios was a man of reason. He was also a staunch advocate of economic progress and a merciless wielder of personal power to insure such programs were carried through.⁵

Barrios demanded the best of the country and its people. During his rule governmental officials were firmly charged with the maintenance of law and order as well as the

⁴Hubert Herring, A History of Latin America (2nd ed. rev.), Alfred A. Knopf, 1963, pp. 452ff.

⁵Herring, op. cit., Rodríguez, op. cit., pp. 93ff., and Paul Burgess, Justo Rufino Barrios: A Biography, Dorrance and Co., Philadelphia, 1926.

productivity of the land and people of their respective regions. The goal was development of a strong national infrastructure and diversification of the productive sectors of the economy. Under his direction the first real programs of technological modernization were initiated, the budget was balanced, and the treasury restructured.⁶ No friend of the Indian, Barrios sought foreign immigrants and assistance to strengthen his programs. Moreover, this regime was noted for its particularly cordial and close ties with the private citizens and government of the United States.⁷ Evidence for the success of the Barrios programs is shown in the following quotations which adequately sum up the contributions made during his reign.

His various projects to stimulate the nation's economic body included railroads to the Pacific ports of San José and Champerico from Guatemala City and Retalhuleu respectively; roads to his beloved highlands, especially Quezaltenango; colonization and communication facilities for the interior area around Cobán; and a railroad outlet to the Atlantic coast, with an ambitious scheme for the development of the port of Livingston.⁸

Guatemala had no railways, no steamboats on its lakes and rivers, no plumbing installations,

⁶Ibid., and Vera Kelsey and Lilly de Jongh Osborne, Four Keys to Guatemala (rev. ed.), Funk and Wagnalls, 1967, pp. 210ff.

⁷Ibid.

⁸Rodríguez, op. cit., p. 96.

little agriculture machinery, no barbed-wire fences, no telegraphs, no tramways, and, of course, no telephones or electric lights because electric lights and telephones had not been invented. When Barrios was killed on the field of battle in April 1885, all these had been introduced into his country through his efforts and those of his Guatemalan associates with the help of foreigners and especially North Americans.⁹

In spite of the death of Barrios the liberals were able to continue their control in Guatemala until 1898. During this thirteen year period Barrios's economic programs were continued. As a result, economic productivity increased but primarily under foreign control. By 1896 a handful of foreign entrepreneurs had established a firm beachhead on the Republic's economic landscape.¹⁰ Few in number, they nevertheless controlled the largest and most productive segments of the economy. This pattern has not changed greatly to the present day.

Ugly and cruel despotism returned to Guatemala in 1898 with the dictatorship of Manuel Estrada Cabrera. This harsh caudillo ruled for twenty-two years. Aside from his personal gain, the period of police-state stability Cabrera ushered

⁹J. Fred Rippy, Latin America and the Industrial Age, G. P. Putnam's Sons, New York, 1944, p. 130.

¹⁰There were only 3,608 foreigners in Guatemala in 1896. Of this number 1,303 were Americans, 572 French, 532 Spaniards, 453 Italians, 399 Germans, and 349 English. Chester Lloyd Jones, Guatemala, Past and Present, University of Minnesota Press, 1940, p. 271.

in did provide a "safe" environment for foreign investment. At this time the United Fruit Company and the foreign coffee growers made their greatest advances. And, although their activities brought a tremendous capital gain to the Republic, since the state was Cabrera little filtered down to the people. Cabrera's reign ended in 1920; it was followed by a round-robin of weak presidents who ruled fitfully until 1931 and the coming of another long-term strongman.

Jorge Ubico, dictator of Guatemala from 1931 to 1944, was in many respects a very untypical Latin American despot. Although his regime was noted for its harsh maintenance of law and order, suppression of political opposition, and wooing of landholders and the large business interests, Ubico was honest and he imposed the same sense of honesty on the government. Under his rule Guatemalans built hospitals, public works projects, faced up to national health problems, balanced their budget, and restored their national credit in the world market. But, Ubico was no friend of labor and his government provided an environment of low wages, minimum land taxation, and anti-laborism for big business. As protector of the Indians he supposedly ended their debt peonage; however, his national police supervised and insured smooth work operations on the plantations. An enigma that was both hated and loved, Ubico was ousted from office by a military and student revolt in

1944.¹¹ Since then Guatemalan politics have revolved on the issues of social and democratic change; thus, 1944 is generally agreed to be the beginning of the Guatemalan Social Revolution.

The Political Environment Since 1945

Following short-lived attempts at military control Dr. Juan José Arévalo, a liberal and an intellectual, was elected president of Guatemala in 1945.¹² At the same time a new constitution was also drawn--one that was particularly liberal, democratic, and aimed at securing social justice for "all" the people. During the Arévalo era great progress was made toward social reform. Labor was given the right to organize, bargain, strike, and receive severance pay. Freedom of speech and press were allowed, women's suffrage was introduced and, for the first time, opposition political activity was encouraged. By chance, the period more or less paralleled a worldwide push toward "planned" social and economic development; for Guatemala it meant the introduction of the Democratic and Industrial Revolutions.

¹¹I have relied heavily on the personal opinions of people interviewed in Guatemala to compile this section. However, parallels may be found in: Herring, op. cit., Rodríguez, op. cit., and Kelsey and de Jongh Osborne, op. cit.

¹²This was the first manifestation of the Social Revolution. See: Juan José Arévalo, The Shark and the Sardines, Lyle Stuart, Inc., New York, 1961.

In the presidential election of 1950 Colonel Jacobo Arbenz Guzman, another social reformer, emerged victorious. He assumed office peacefully in 1951 when for the first time in modern Guatemalan history the transfer of presidential power was from one elected official to another.¹³ Another military man, one Colonel Francisco Javier Arana, was the popular candidate of the industrialists and the land owning class, but just prior to the elections he was assassinated. In the absence of competition, Arbenz easily secured the office. But, inexperienced and apparently politically naive, Arbenz fell under the influence of leftists including his wife who was an avowed member of the Communist party. Social reforms initiated by the previous regime were accelerated and, in fact, newer and more radical reforms were introduced. One of these, a controversial agrarian reform law, was meant to eliminate large landholdings. It was a scheme similar to the ejido system of Mexico, but it triggered a bitter and immediate response from the nation's landowners.¹⁴

¹³Indeed this physical transfer of power was staged in the soccer stadium at Guatemala City for all to observe.

¹⁴The term ejido is Spanish. In its literal interpretation it refers to land located "on the way out" of a village. In Spain this land was utilized in common by all people. Mexican ejidos, an institution evolved after the modern Mexican Revolution of 1917, are either individual or community landholdings that have come into being as a result of the division of property which has been expropriated.

The new land reform law, along with a fear of Arbenz's tendency to rely on leftist advisors and his apparent anti-American views, ultimately led to the toppling of the government. In time opposition grew toward Arbenz until only the labor unions still supported his programs. The business community, landowners, a majority of the intellectuals, much of the lower class influenced by the church and, most importantly, the army, stood against him. By 1954 Arbenz ruled Guatemala through fear. And, finally even that was not enough and his government was ousted by a small military force led by Colonel Carlos Castillo Armas, a Guatemalan army officer supported by the United States Government and other Central American states, i.e., Honduras and Nicaragua.¹⁵ With the Armas regime the character of the Guatemalan Social Revolution changed but it did not come to a complete halt. Meanwhile, the momentum of the Industrial Revolution carried economic development forward at an increasing rate.

Under Castillo Armas Guatemala returned to the pattern of a more rightist government. Leftists and their sympathizers were eliminated in the aftermath of an essentially

¹⁵It is significant that President Eisenhower concluded that U.S. intervention in Guatemala was one of the ten most important accomplishments of his administration in containing Communism. See: David Wise and Thomas B. Ross, The Invisible Government, Random House, New York, 1964.

bloodless coup as conservative authoritarianism was imposed on the country. Armas then turned to the matter of paying off his support debt to the U.S. Government, business interests, and the landowners. The liberal constitution of 1945 and the new agrarian reform law were suspended. Unions and left-wing political parties found their operations difficult if not impossible. Stability returned to Guatemala and the United States poured foreign aid into the country "to protect it from the dangers of Communism." Unfortunately, as the economic climate ameliorated for investment, the government proved to be corrupt and ineffective. Then, Armas was killed by an assassin's bullet in July of 1957 and the situation changed.

Six months of political chicanery followed Armas's death, then another military man, General Miguel Ydígoras Fuentes, was elected as chief-of-state. An admirer of Jorge Ubico, Ydígoras attempted to emulate the style of the old dictator, but he lacked the honesty and savoir-faire which had been characteristic of the former caudillo. The Ydígoras government was corrupt, tightly controlled, and harsh in its tactics. An alleged vehement anti-Communist, the new president in actuality encouraged the development of several leftist parties in order to divide and conquer

his opposition.¹⁶ In the final analysis, therefore, it appears that his action really encouraged the build-up of strong extremist elements within the Republic, an unfortunate turn of events for a country already beset with serious social problems as it confused the goals of the Guatemalan Social Revolution.

In the Armas-Ydígoras years between 1954 and 1959-- at a time when U.S. assistance to Latin America was little more than a trickle, i.e., a total of about \$200 million-- the United States poured almost \$55 million into Guatemala alone.¹⁷ This money represented outright grants, loans, and also technical assistance programs to agriculture, health, education, the military and industrial productivity. Then, in 1959, Ydígoras introduced his own brand of economic change, a program of land expropriation and business seizure aimed primarily at foreigners with the profits going into the pockets of the president and his personal entourage. While Ydígoras looted the country, social unrest boiled. Not only were businessmen and landholders dissatisfied, but the urban folk as well. Freedoms of speech and press were

¹⁶The anti-Communist stance of Ydígoras was self-proclaimed in a book he published in the United States. See: My War With Communism, Prentice-Hall, New York, 1963.

¹⁷Ydígoras went so far as to maintain a lobby in Washington. Using scare tactics, he was able to extract large amounts of foreign aid to "fight the Communists." In reality, however, the U.S. Congress merely served as a funding agency for his political survival.

curtailed and riots and bombings flared as the government came under attack from all sides.

In 1960 two young army officers, Lieutenants Marco Antonio Yon Sosa and Luis Turcios Lima, spearheaded an unsuccessful leftist assault on the Ydígoras regime. Failure forced them into guerrilla operations in the hinterland. And, by 1962 they effectively controlled much of the territory, communications, and transportation in the northeast states of Zacapa and Izabal. But, the two leftist guerrilla chiefs--by now avowedly true Communists--could not agree on matters of doctrine and the movement, divided against itself and hounded by the government, was forced to make a tactical withdrawal from the field of battle. Unable to topple Ydígoras themselves, the leftists had to rely on the greater strength of right-wing elements to accomplish the task.

Dissatisfied conservative interest groups were largely responsible for the textbook military coup which swept the Ydígoras government from power in 1963. The leader of the movement, Colonel Enrique Peralta Azurdia, proved to be honest, able, and responsive to the country's social and economic needs. It was also the beginning of a new nationalistic period for Guatemala, a time when Guatemalans thumbed their noses at U.S. aid and the doctrinaire social reforms of the Alliance for Progress. Under Peralta's

benevolent military dictatorship stability returned and, as business activity and new investment increased, the country prospered.¹⁸ Control measures exerted by the government did not prove to be extreme; although, leftist political activity was declared illegal, the constitution was suspended, and censorship was practiced on a wide scale.¹⁹

Shortly after Peralta seized power the leftists renewed their guerrilla activity. Yon Sosa led one group, the MR-13, and Turcios Lima the other, the F.A.R.²⁰ Action again focused in the northeast where the Communists re-established loose control over a broad area in the Sierra de Las Minas region. Here, they ambushed small military units sent in pursuit, hampered communications and transport between the country's Caribbean ports and the capital, and instigated a program of calculated terror designed to discredit the government and gain support for

¹⁸It should be noted that the Peralta period paralleled the initial thrust of the Central American Common Market, a program for regional economic development.

¹⁹This section and subsequent sections dealing with the political situation in Guatemala during the 1960's were distilled from personal observations and discussions with Guatemalan citizens and U.S. foreign service personnel while I was in residence in Guatemala.

²⁰The designation MR-13 refers to the revolutionary movement of November 13th whereas F.A.R. (Fuerzas Armadas Revolucionarias) is the abbreviation for "Revolutionary Armed Forces."

their cause. Violence, however, brought few converts and large-scale popular support failed to materialize for the guerrillas.

By 1964 Guatemalan liberals were clamoring for a return to constitutional government. Elections were finally held in March of 1966 and a middle-of-the-road liberal candidate, Julio César Méndez Montenegro, former Dean of the Guatemalan School of Law, was declared the winner.²¹ However, Congress ultimately had to decide the vote because no candidate had a majority. Indeed, Méndez Montenegro garnered only 41 per cent of the ballots cast. Violence continued to wrack the country in spite of the apparently honest election of a constitutional government. In fact, amnesty offered to the Communist guerrillas by the new president during July through September of 1966 was rejected and answered with stepped-up acts of rural and urban terrorism. On taking office Méndez Montenegro thus found himself sitting on top of a political powder keg. The more conservative elements of the country demanded stability at any cost while, conversely, leftist idealistic revolutionaries pressed for some sort of utopian and immediate solution to the Republic's social and economic problems or, at the least, a rejuvenation of the Social Revolution. Forced to satisfy both

²¹ Méndez Montenegro represented the Partido Revolucionario (Revolutionary Party) of Arbenz and Arevalo.

groups without antagonizing either, Méndez Montenegro became popularly viewed, and probably unfairly, as an ineffective national leader.

The U. S. Government played an extremely important role in supporting the Méndez Montenegro regime. In an effort to control rural violence, special counter-guerrilla troops and peasant vigilantes were trained and outfitted by the U.S. Military Advisory and Assistance Group. And, there is no question that the efforts of these counter-guerrilla measures have proved successful. Military and para-military forces complemented by Civic Action Groups and massive rural development projects have made the hinterland relatively secure. As a result, the guerrillas have been forced to abandon their field campaign in favor of hit-and-run terror tactics in the cities.

The urban areas of Guatemala, and particularly Guatemala City came under increasingly intense terrorist pressure in late 1966. With the new threat police units were expanded in size, training programs stepped-up, and equipment modernized--all at U.S. expense with U.S. advisors thrown in for good measure. Almost simultaneously, however, the government's problem compounded as ultra-right-wing counter-terrorists, La Mano Blanca (the White Hand), launched their own program

of reprisal against the leftists.²² Undeclared civil war raged as both groups posted lists of "enemies of the people" to be "executed"; not infrequently the same names appearing on both extermination lists but for different reasons! Matters appeared to come to a super-heated boil in January of 1968 when two top U.S. military advisors were cut down in a hail of gunfire on one of the main streets of the capital. These men had been the architects for the defeat of the Communists in the northeast departments. Then, in September, the senior member of the American Mission, the U.S. Ambassador himself, was murdered. As of 1969 the country still lay in the grip of a disorganized civil conflict reminiscent of the days of open gangland warfare in the U.S. during the 1920's... in both cases power was sought through brute force methods. But the question is: What effect has this violence and instability had on the development of industry?

Politics and Businessmen

Unquestionably, volatile politics have been a characteristic of the Guatemalan environment since the independence

²²This group represents the interests of the Guatemalan counterpart to the military-industrial complex and the John Birch Society of the United States. For a candid appraisal see Henry Giniger's column in the June 16, 1968, Sunday Supplement of the New York Times.

period. Within the Republic violence simply has been a way of life. Dictatorial regimes have been the rule; these provided temporary stability and a chance for personal violence on the opposition. Democratic governments are more recent (post World War II), but these have only served for brief intervals between changes in dictators or the all-too-familiar military juntas. Yet, somehow, an industrial landscape has developed within this milieu of passion and disorder. And, as a matter of fact, the country's most meaningful advances toward economic modernization seem to parallel its period of greatest turbulence, the years from 1945 to the present.

But isn't political stability necessary for modernization and economic development? On the basis of the Guatemalan experience, the answer is a resounding NO. Indeed, it is even very likely that when industrialization comes to such traditional societies stability CANNOT BE EXPECTED. The demands for the fruits of industry have grown persistently stronger as improved communications have made people more aware than ever of the differences in their society. This dissatisfaction with traditional political and economic institutions has made all efforts at modernization risky; however, they have also been most profitable. The profit potential has even been enhanced by crisis conditions, but it only attracts entrepreneurs who can face the challenge without being intimidated.

In Guatemala the bulk of the men willing to ride the tigers of development have been foreigners. In most cases it would even be fair to class them as "economic soldiers of fortune." They have come for economic gain, but they have also unwittingly (as well as knowingly) modified the political character of the country. Industrial development has increased the pace of urbanization; therefore, more people move from villages and traditional ways into a metropolitan environment with a decidedly more modern atmosphere. These people also become more aware of their role in the political process as they have more communication in the urban centers. Thus, the industrial innovator triggers a whole series of cultural shockwaves simply by establishing a plant and giving a man a job.

When entrepreneurs invest large sums of money in operations in Guatemala, it is in their best interests to see that this capital outlay is not lost. Consequently, as time goes by, industrialists seek a stronger voice in the political life of the country. Democracy, it must be noted, may not result; however, given time, viable democratic institutions might develop. There is no guarantee that the Industrial Revolution will bring a Democratic Revolution, but certainly it is bringing social change to Guatemala.

Political stability does not appear to be a prerequisite to industrial development. Although economics and politics

are well-known bedfellows, in development the primary considerations are economic and technical. And, since more money can be made where risks are the highest, industry may seek out such high-risk environments. Once a plant is in operation, however, economic conditions can change. And, then, political stability may be more important with passing years--especially when the entrepreneur becomes embroiled in domestic politics. Regardless of the political situation, though, the motive for profit and the desire for power positions within the economy emerge as significant influences on the development of Guatemala. Indeed, what is good for industry is frequently assumed to be good for the country.

CHAPTER XI

THE GUATEMALAN INDUSTRIAL ENVIRONMENT:

ECONOMIC CONSIDERATIONS

In the latter part of the nineteenth and the early twentieth centuries, Europe and North America were economically transformed by the Industrial Revolution. After independence from the Iberians and during the same period Latin America was stabilizing into a region specializing in agricultural and raw material production for export. At this time the Central American region became a part of the world order. Trade no longer was solely restricted to Spain and goods moved freely within the global economy without limitations as to commodities or countries involved. In time, because of its capabilities and subsequent development, Central America became a reservoir of agricultural produce for the industrial world, a role that was maintained well into the twentieth century. The region thus escaped Spanish domination only to be tied even more firmly to the fortunes of the rapidly developing industrial nations. As a result, Central America became politically and economically dominated by foreign interests, particularly those of the United States.

The economic position of Central America did not change

greatly until after World War II. Then, in analyzing their condition, the Central American Republics realized that there was a growing gulf between themselves and the industrialized states, an economic gap caused by the rapidly rising cost of imported manufactured goods while the prices for agricultural and raw material exports increased but haltingly. However, the development of a new market situation brought some meaningful modifications into their economy.

The Market Factor or Profit Motive

It is the desire for personal power and the profit motive, either potential or real, that motivate industrial development in a capitalistic economy. Both of these elements are always present to a greater or lesser degree, but observation in Guatemala indicates that the influences of power and profit were not keenly developed until attempts were made for expansion of the Republic's domestic and external markets. Indeed, industrial development did not truly advance in Guatemala until after the Central American Common Market (CACM) came into existence. Thus, the creation and subsequent growth of the CACM as a source of new markets was the major motivation to the industrialization of the country.

The influence of market areas as a location factor for

industrial activities is now commonly recognized and well established.¹ In spite of any other consideration an industry must always ultimately aim its efforts at a consumer. This is a basic truth for the manufacturer whether he is a skilled artisan specializing in the production of handicraft goods or a mass producer of machine-made commodities. Yet business success is not always measured in terms of sales. Branch operations of big international businesses open in places like Guatemala for expansion of their technostructure as much as for profit.² This creates more openings in the upper echelons of the organization where decisions are made. In short, the presence of many large firms in developing countries may be explained as attempts to achieve organizational success, not maximum financial gains. Nevertheless, market is

¹See for example: Chauncy D. Harris, "The Market as a Factor in the Localization of Industry in the United States," Annals of the Association of American Geographers, Vol. 44 (1954), pp. 315-348; Edgar M. Hoover, The Location of Economic Activity, The McGraw-Hill Book Co., New York, 1948, chapters 2-4; Melvin L. Greenhut, Plant Location in Theory and Practice, The University of North Carolina Press, Chapel Hill, 1956, chapters 2, 4, and 6; and E. Willard Miller, A Geography of Manufacturing, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1962, pp. 6-7.

²See: John K. Galbraith, The New Industrial State, Signet Books, The New American Library, Inc., New York, 1967, pp. 71ff. Technostructure is defined to include all who participate in group decision-making or the organization which they form (p. 82).

industry's justification for existence.

One characteristic of market areas is that they vary in size in accordance with the nature of the products that they handle. In one instance commodities may be bulky or perishable so that the industries that manufacture such goods are usually locally oriented, as is the case, for example, with producers of ice, ice cream or bakery products. On the other hand, a trade region may span one or several nations, particularly if the goods for sale are durable--such as tires--or have a high value in relation to their bulk as do transistors and watches. In the competition for consumers the sales battleground an industry selects is largely determined by the area it expects or hopes to command with its operations. The scope of business activity may be local, regional, international or a combination of such trade areas. All of these markets are observable in Guatemala.

In Guatemala the typical local market is a small rural settlement made up of agricultural folk living within a subsistence economy. In this world money is dear as these people really live on the margins of a true money economy. In such settlements the houses, shoes, clothing, and food have traditionally been produced from locally obtained materials. The village, where one exists, usually consists of a few houses, a church, a municipal building, perhaps a

jail, and a few small commercial enterprises clustered about a central square. It is an isolated community which neither buys nor sells much in areas outside its immediate limits. Moreover, those goods that do come from the "outside," i.e., the urbanized areas, are usually the flashy trinkets of a completely different world--radios, flashlights and similar unnecessary goods--that serve as needless expenditures to drain away what little capital the rural area may possess. Here, market is more of a social than an economic function.

The concept of market in an economic sense is more meaningful in the urbanized parts of Guatemala; these appear as islands of development in a general sea of poverty. This is the "other" world where the chief pools of sophisticated consumers are found, the urban centers that are the only real participants in the regional, national and international market places available to the country. Like its rural counterpart, this urban habitat has its clutch of government, business and ecclesiastical edifices about a central square. However, where the rural community had maybe 250-500 inhabitants, the city possesses perhaps 5,000 or more. One city, the national capital, holds better than 14 per cent of the nation's populace. It is not only the largest urban place but the center of the nation as well--indeed, it dominates all the country's activities. Larger than all other cities in the Republic combined, Guatemala

City is the economic, political, and social heart of the nation.

In looking at such market places industry will generally gravitate its plant location toward the site where it can best serve the bulk of its buyers. Conversely, if a place lacks the potential for market an industry may simply avoid it. Modern manufacturing largely relies on economy of scale operations that can only be developed where there are enough consumers to bring industry's resources into full play. If a given market has a small capacity, that is, if the area a plant serves is unable to absorb what it is capable of producing, the sphere of sales must, of economic necessity, be expanded. Of course, when more distant markets are sought new costs are added to the price of the manufactured article in the form of transport expense. The acknowledgment of this situation and a general demand for industrialization within the entire region ultimately brought manufacturing into all of Central America.

The Development of Economic Cooperation in Central America

Economically the states of Central America have shared a common bond. Indeed, the economic profile of the region is one of similarity between states, a likeness that extends from the most basic of resources right down to end products.

Each country is primarily agriculturally oriented and all rely heavily on one or two export crops for foreign exchange. Further, since the types of commodities produced individually tend to be the same for all, i.e., bananas, coffee, sugar, and cotton, the republics have been forced to compete with each other on the world market. These products, of course, are subject to the fickle demands of international buyers, a dependence that has made Central America extremely vulnerable to price fluctuations beyond its control. As a result of such factors the entire region has been plagued by two common economic problems: monoculture and a heavy dependence upon importation of all classes of manufactured goods.

By itself each Central American state could provide industry with only a minuscule market. Once united, however, the region presented a larger and more attractive field for investment, a combined market area slightly larger in size than California or about equal to that of France with an aggregate population of approximately 14 million (Table 13). First, though, it had to be recognized that the problems of each country were really community problems and could only be solved through a common course of action. In the case of agriculture, for example, diversification and the formation of a collective front in the world market were suggested. But, the question of independence from foreign

TABLE 13
CENTRAL AMERICA: AREA AND POPULATION, 1967

Country	Area in Square Miles	Population in Millions
Costa Rica	19,700	1.60
El Salvador	8,200	3.04
Guatemala	42,042	4.72
Honduras	43,200	2.44
Nicaragua	57,000	1.72
(Total CACM)	(170,142)	(13.52)
Panama	29,208	1.33
Grand Total	(199,350)	(14.85)

Source: U.S. Agency for International Development of the U.S. Department of State. Based on official Census estimates for 1967.

manufactured goods was a different matter. Industrial imports can be replaced through industrialization and import substitution but--only to the point where it is economically feasible. Individually no Central American republic could sustain either one of these solutions. Moreover, this was particularly true with respect to the kinds of manufacturing that were desired and needed to fill each country's demands for industry. Cooperation was dictated in order to achieve industrialization. All this, of course, depended upon the creation of a new and larger trade zone, specifically an economic union with open borders to encourage free trade among its members.

In the years immediately following World War II Central America was ripe for an attempt at economic union. For this area at least, the war had been a boon as the demands for aid to the Allied cause brought increased dividends to the region. Moreover, the war also stimulated the development of many new activities since the normal traffic for most manufactured goods was effectively severed. In terms of readiness then, by 1945 Central America was primed for a change in its economic outlook.

Before Central America could acquire modern technology, however, it was necessary to produce an environment that would attract industry, i.e., a larger and more secure market. In this effort they had the strong support of the

United Nations and the United States.³ Furthermore, in the creation of such a trade area Central America needed only to look to the experiences of other nations to find models for emulation. Prior successes in developing economic alliances had already been scored in Europe, specifically in the British Commonwealth and the BENELUX Customs Union. It only remained for the first steps to be initiated.

The Creation of the Central American Common Market

By mid-1951 the events that ultimately resulted in the creation of the CACM were actually underway. In June of that year the Ministers of Economy of Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua met together

³One very interesting and common misconception of many industrialists and Central Americans hinges on the issue of how much support the U.S. has given the CACM. In numerous interviews I was told that the CACM was developed: "to provide a new sales area for American industry." Proof of this allegedly exists in documentary form as "the founding documents for the economic union were drawn up in English BEFORE being translated into Spanish." After carefully checking into such allegations I am convinced that they are unfounded and definitely false. The U.S. has been interested in developing economic union within the region, but in principle it has also been against some of the CACM programs, e.g., the integrated industry concept which U.S. advisors see as a granting of monopoly and a threat to private enterprise. However, it must be noted that foreigners do control the industry and they are also the ones who have taken advantage of the opportunities offered by the CACM. In a sense, therefore, the economy is rigged, but the job is a piece of Central American handiwork... it was not dictated by foreigners, particularly North Americans.

at Mexico City. Out of this meeting came Resolution No. 9 of the Fourth Session of the United Nations Economic Commission for Latin America (ECLA). At the time, the declaration was a mere dream based on a common faith but, importantly, it served as the initial push:

...to develop the agricultural and industrial production and the transportation systems of their respective countries in such manner as to promote the integration of their economies and the creation of larger markets through the exchange of their products, the coordination of their development plans and the creation of enterprises in which all the countries or some of these countries be interested.⁴

A second important move toward Central American economic integration came in October of 1951. At that time the Charter of San Salvador was signed which established a body to develop the policies and objectives of the hoped for economic union. With this act, the Organization of Central American States (ODECA) was created. As an institution it proved to be a political battleground, but it also served to promote further understanding between its five members.⁵

⁴The Central American Common Market, Vol. 2, Publication of the Permanent Secretariat of General Treaty of Central American Integration (SIECA), Guatemala, April, 1964, p. 19.

⁵For details on the development and role of ODECA, see: Frank L. Keller, "ODECA: Common Market Experiment in an Underdeveloped Area," Journal of Inter-American Studies,

At Tegucigalpa, Honduras, in 1952 the organization of the CACM became reality with the formation of the Central American Economic Cooperation Committee. It was this group that nursed the union through its first growing pains. Not only did it direct the formative studies upon which the CACM came to be based but the Committee also established a training school for public administrators, the Advanced School of Public Administration for Central America (ESAPAC), and founded a regional economic research unit, the Central American Institute for Industrial Research and Technology (ICAITI).⁶

By the late 1950's the development of a Central American economic union was all but assured. In 1958 the significant move came with the introduction of the first major treaty, the Multilateral Treaty of Central American Free Trade and Economic Integration. Initial response to the document was excellent, as evidenced by the fact that all five countries signed the agreement within the year, but unfortunately Costa Rica later failed to ratify it.

Vol. V, No. 2 (April, 1963), pp. 267-275; and, James L. Busey, "Central American Union: The Latest Attempt," The Western Political Quarterly, Vol. XIV, No. 1 (March, 1961), pp. 49-63.

⁶ Joseph Pincus, The Central American Common Market, Regional Office for Central America and Panama (ROCAP), Agency for International Development of the U.S. Department of State (U.S. AID), Guatemala, 1962, p. 73.

Two years passed; then, in December of 1960, the key measure for implementing regional economic integration was finally presented. This treaty, the General Treaty of Central American Economic Integration, was accepted by all states in the CACM by 1962. Implementation of the terms of the treaty subsequently followed and the CACM became a reality.⁷

Several agreements and protocols have added cohesiveness to the CACM integration matrix since 1958. And, significantly, all of these efforts have served as a means of further enhancing the attractiveness of the region for industrial development. Of these works, two of the major documents are the Agreement for the Management of Central American Integration Industries signed in 1958 and the Agreement for Equal Importation Taxes ratified in 1959. The former paper created a special incentive system for those industries dedicated to service within the region while the latter standardized customs duties to be imposed on all countries outside the membership of the CACM.⁸

⁷Unofficial translations of these treaties have been published and may be found in: Economic Integration Treaties of Central America, Regional Office for Central America and Panama (ROCAP), Agency for International Development of the U.S. Department of State (U.S. AID), Guatemala, April, 1966, pp. 1-20, 69-81.

⁸Ibid., pp. 21-60.

In order to develop the sort of environment that would be attractive to industry the CACM countries set out to accomplish two basic goals. First, and most importantly, Central America was to become a free trade area for all goods of internal origin and a pool for integrated industrial activity. Through this action regional industry could gain the benefits of a greatly expanded market and also avoid unnecessary duplications in its efforts.⁹ Secondly, an immediate program was directed toward the stimulation of new developments in the individual and collective infrastructure, i.e., public works projects such as transportation, communication, power, housing, health, education, and welfare. This insured that an adequate underpinning might be built for accelerated industrial development. Such efforts also had the advantage of shoring up already existing activities besides encouraging the hoped for new ones.

The first goal of the economic alliance, the creation of a greater market for regionally produced goods, has now been completed. This was accomplished in two steps:

⁹The integrated industry concept, which essentially is a granting of monopoly within the CACM market area, has been one of the key issues for discussion in the region. At the present time, much to the relief of the free trade advocates, it does not appear to be working as planned. Small market and technological factors seem to be more important determinants of monopoly power. See: Castillo, op. cit., pp. 143-153.

(1) internal trade barriers were relaxed for all goods produced within the area, and (2) a general agreement was established on the construction of a united front in the form of a uniform external tariff wall. The second goal of the alliance, the evolution of Central America's economy and infrastructure is something yet to be achieved. There is no longer any question as to whether or not the market will work--it is working and its impact is being felt throughout the region. Because of it, economic modernization is taking place at a phenomenal rate. Industry, in particular, has ridden high on this tide of change.

Incentive Legislation for Industrialization
in the CACM

Each of the CACM countries has enacted legislation to encourage industrial development, but they also operate together under a unified and equalized system of industrial development laws. Doled out liberally for specified time periods, the benefits under these laws include total or partial exemption from import duties, income taxes, and property taxes. In order to qualify for these benefits a firm must: (1) use modern and efficient methods in the processing of raw materials or semi-finished products, (2) produce goods necessary for other productive industries, (3) satisfy basic consumer needs, (4) replace articles being imported in quantity, or (5) increase the volume of

exports. As a rule, the industrial incentive laws of each country are generally equal in granting benefits to industry. All appear to be very loosely interpreted to encourage investment.¹⁰

Guatemala's industrial incentive legislation was passed into law in the late 1950's. Under the terms of this edict, the Industrial Development Law of 1959, new or expanding industries which might be recognized as beneficial to the country may be granted the following benefits:

New Industries:

1. Exemption for a period of ten years from import duties on construction material for erecting plants, machinery and equipment and raw materials, fuel (excepting gasoline) and lubricants, containers and semifinished goods for assembly, provided these items are indispensable and cannot be obtained or substituted locally.
2. Exemption for the first five years, and a reduction of 50 per cent for the next five years in income and other tax obligations, including taxes on dividends and other beneficial payments made to stockholders, provided the stockholders are either exempt from the payment of income tax to a foreign country or such country has a tax treaty with Guatemala.

Existing Industries Which Might Expand:

1. Exemption for a period of five years from payment of import duties on materials for

¹⁰During my field period in Central America a theater in Guatemala City applied for reclassification under the industrial incentive law. Because it had remodeled by putting in new seats and painting, the owners reasoned that they could claim a "new" or "expanding" industrial status. Absurd as it may seem this request was honored!

construction and maintenance and plant machinery and equipment, provided these items are indispensable and cannot be obtained or substituted locally.

2. Deduction of the new investment for the purpose of calculating income subject to income tax.
3. Amortization over a period of three years of losses suffered in previous years for the purpose of calculating profits subject to income tax.
4. A reduction of 50 per cent in income tax for a period of five years, provided the enterprise can prove that the additional investment represents at least a 50 per cent increase in the gross book value of its total fixed assets.¹¹

The Impact of the CACM on Industrialization in Guatemala

The creation of the CACM brought striking changes in the industrial structure of Guatemala. In 1968, for example, of all Guatemalan firms employing more than twenty-five workers some 63 per cent were production oriented to the overall CACM region.¹² These manufacturers produced all sorts of goods representing essentially every major industrial group except basic metal products and

¹¹Centro de Desarrollo y Productividad Industrial, Industrial Development Law (Ley de Fomento Industrial Decree No. 1317), Guatemala, Centro America (undated).

¹²Based on personal interviews, 1967-1968. These are firms claiming at least "some" of their sales outside Guatemala.

machinery. Clearly, the market for Guatemalan manufactured goods extends beyond its national borders.

Industrialists interviewed in Guatemala felt that the tax incentives, privileges in import and export and other such advantages made possible by the CACM, were about equal for all of its member states. In light of this, the selection of a plant location in Guatemala boiled down to the issue of service to the largest percentage of the market sector and ease of transport and communication throughout the region as well as to other world areas. Here, Guatemala has the advantage over the other CACM countries as its borders encompass at least one-third of the population in Central America and it also has excellent transport connections with the United States, Europe, and the rest of the CACM. Accordingly, the CACM appears to have had a profound influence on the process of industrialization in Guatemala. In this development incentive legislation played a key role since it effectively erected a protective umbrella over new industries locating within the area. Most importantly, the Central American Common Market encouraged industrialization in Guatemala as it definitely enhanced the market potential of the Central American region as a whole. The actual market may not be developed now, but investors believe the potential is there. And, in the long run, it is this perception that counts; it was the motivating force that brought development in the first place.

CHAPTER XII

THE GUATEMALAN INDUSTRIAL LANDSCAPE:

SOME CONCLUSIONS

Industrialization is a relatively recent and an increasingly important factor in the evolution of the Guatemalan economy. Although it accounts for a limited share of the gross national product, manufacturing is dynamic and offers hope for improving the well-being of Guatemalans. Traditionally, exports from Guatemala have focused on agricultural products, namely, bananas, coffee, sugar, and more recently, cotton. The goods processed by domestic manufacturers have been mainly directed to consumers within the Republic itself. These are primarily light industrial products and consumable items.

Guatemala's present manufacturing structure comprises many small firms oriented to cheap hand labor, the country's most plentiful and frequently abused resource. But relatively few manufacturing activities--the larger industries--really control the economy. Many of the existing medium-sized firms will grow and add to the number of larger operations already in existence. Indeed, as the regional population grows and the demands for the fruits of industry increase, greater numbers of new industries of all size can be expected.

Within Guatemala manufacturing locates either in the national capital or one of the country's regional market centers. Guatemalan industrial growth depends upon continued development of these and other markets capable of consuming its goods. In this regard, the Central American Common Market has had a profound influence on the location of industry in Guatemala. Most of the country's largest manufacturers are oriented to the regional market, and they are located with the opportunities of that market in mind. Transportation is important for market development and improvements in this area will continue to be needed. For the present, domestic raw materials and natural resources appear limited, but processes utilizing both old and new elements are constantly being found so that today's junkpile might be tomorrow's treasure. In the end, market represents the major factor affecting the development of industry.

Since World War II Guatemala has experienced rapid advances in economic modernization. The strongest impetus to this development, however, came in the 1960's with the formation of the Central American Common Market. Industrialists have found the market, though small, to be attractive and dynamic. As a result, industrialization came to Guatemala and so did changes in the culture and the landscape. Both are acquiring the homogenized character

familiar of advanced industrial societies--something which may not be wholly desirable from an esthetic point of view.

In the development of Guatemala's industrial landscape one group particularly stands out, the foreign innovators. These men introduced industry and economic modernization to the Republic as they brought the infusion of capital and technical know-how necessary for the successful initiation of industrial operations. The real industrialists in the country are not Guatemalans; they are foreign nationals or members of the international business community which has no national allegiances whatsoever. Their goals are material wealth--the capitalistic motivation--and power. Market was the lure that brought them to the area. Individually foreign businessmen came to Guatemala to make money. As a group, they were ambitious, willing to work, and... perhaps most importantly, ready to risk their capital, time, and lives in quest of their goals. If they helped to modernize the country it was really coincidental; the first concern of the entrepreneur was business success.

Foreign innovators brought more than industry to Guatemala, though. They brought new approaches to old problems as well. Where industry already existed, they improved it. Technicians streamlined production and introduced new sales promotion programs. Moreover, outside of the factories the foreigners' activities also affected

Guatemalan land and life. Where he went the innovator modified the landscape, yet it also changed him. Innovation had to pass through the matrix of culture provided by Guatemalan society--its sociological, psychological, political, and economic influences--and these presented the foreigner with new challenges that had to be faced and solved in order to insure his survival as a businessman. In many respects these men are frontiersmen; indeed, many see their roles in Guatemala in such a light. But the frontier is not well defined because in reality it is one of human creativity and utilization.

Although more research will be required to substantiate any general hypothesis for Latin America, the Guatemalan experience in economic development has been one of foreign domination. The tigers of change have been unleashed in Guatemala because of the diffusion of industrial technology. The men who ride these tigers--the ones who understand and direct most of the efforts at industrialization and modernization--are foreigners. For good or for ill, those less familiar with the development process--the Guatemalans--have fallen prey to both the men and the beasts. Thus, industrialization in the Republic is really economic imperialism, a form of neo-colonialism resulting as much from a lack of nationalistic initiative as from foreign exploitation. Those who ride the tigers cannot be mild men.

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APPENDIX I

ENCUESTA DE INDUSTRIAS

Depto.: _____ Municipio: _____ Código: _____

1. Nombre de la industria: _____

2. Dirección _____

3. Número de personas empleadas:

(a) Oficina _____ (b) Fábrica _____ (c) Todo _____

(d) Total de salarios pagados en un año _____

4. Productos: _____

(a) Volúmen de materias primas (1 año) _____

(b) Origen de las materias primas _____

5. Esta industria existe desde: _____

6. Los propietarios de la industria son:

(a) Guatemaltecos: _____

(b) Norteamericanos: _____

(c) Europeos: _____

(d) Centroamericanos: _____

(e) Otros: _____
(especificar país)7. Personas extranjeras empleadas (número y puestos): _____

8. Inversión de capital por extranjeros:
(Si 6 no) _____
(a) Especificar país _____
(b) Valor en Q. _____
9. La producción es para:
(a) Venta local _____
(b) Venta solo en Ciudad de Guatemala _____
(c) Venta en Mercado Común C.A. _____
(d) Venta internacional _____
(especificar País)
10. Forma de transporte de sus productos:
(a) Camión _____
(b) Ferrocarril _____
(c) Otro (especificar) _____
11. Porqué se estableció la fábrica aquí: _____

12. Hay planes para ampliar la producción con nuevas facilidades en el futuro? _____
(a) Esto será deversificación o expansión? _____
(b) Necesidad de financiamiento estimado? _____
(1) Construcción: Q _____
(2) Nuevo Equipo: Q _____

- (3) Mano de Obra: Q _____
(4) Capital: Q _____
(5) Otro: Q _____
(especificar)

(c) Fuentes de financiamiento:

(Especificar)

- (1) Nacionales: _____
(2) Regionales: _____
(3) Extranjeros: _____

13. Mayores problems:

- (a) Con empleados: _____
(b) En las fuentes de materias
primas? _____
(c) En las fuentes de energía? _____
(d) En las maquinarias? _____
(País de origen para la maquinaria)

(e) En el transporte de productos?

(f) En la venta? _____
(g) Con financiamiento? _____

14. Cuales cree usted que son los mayores problemas para
industrias en Guatemala? _____

15. Estimación del valor agregado de la industria:

Q. _____

FECHA: _____

REPRESENTANTE: _____

BEB:mos

Typist: Myrna Montgomery

Permanized

PARCHMENT

100% COTTON FIBER

U.S.A.