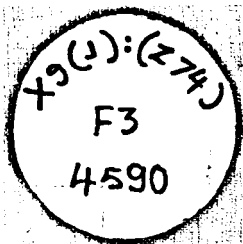


**THE LAND SYSTEMS
OF MEXICO**

GEORGE McCUTCHEN McBRIDE

AMERICAN GEOGRAPHICAL SOCIETY

RESEARCH SERIES NO. 12



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LAND SYSTEMS OF MEXICO

AMERICAN GEOGRAPHICAL SOCIETY

RESEARCH SERIES NO. 12

W. L. G. JOERG, *Editor*

THE LAND SYSTEMS OF MEXICO

BY

GEORGE McCUTCHEN McBRIDE, Ph.D.

University of California, Southern Branch

WITH A FOREWORD

BY

SEÑOR MANUEL GAMIO

Director de Antropología, Secretaría de Agricultura y Fomento



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TO
MY MOTHER

CONTENTS

CHAPTER	PAGE
FOREWORD, by SEÑOR MANUEL GAMIO, Director de Antropología, Secretaría de Agricultura y Fomento, Mexico	ix
PREFACE	xi
I INTRODUCTION.	I
II THE GEOGRAPHICAL SETTING	5
III THE HACIENDAS OF MEXICO.	25
IV THE RANCHOS OF MEXICO	82
V COLLECTIVE HOLDINGS IN MEXICO	103
VI DISTRIBUTION OF RURAL HOLDINGS AMONG THE PEOPLE OF MEXICO	139
VII THE AGRARIAN REVOLUTION	157
VIII CONCLUSION.	172
BIBLIOGRAPHY	182
INDEX	197

LIST OF ILLUSTRATIONS

FIG.		PAGE
1	Map of Mexico showing the natural regions	8
2	Map of Mexico showing the average annual rainfall	9
3	The Valley of Mexico, looking toward Lake Texcoco from Guadalupe facing	10
4	Northern, drier portion of the Valley of Mexico at Teotihuacán facing	11
5	Map of Mexico showing the population density	12
6	Map of Mexico showing the assessed value of rural property	13
7	Mountain pastures on the crests of the ridges in central Mexico facing	16
8	A characteristic <i>barranca</i> in the western escarpment of the Mexican plateau: Atenquique gorge between Tuxpan and Colima facing	16
9	Mount Orizaba, on the rim of the eastern escarpment of the Mexican plateau facing	20
10	Scene in the <i>tierra caliente</i> : Chietla in the state of Puebla at the foot of the southern escarpment of the Mexican plateau facing	21
11	Plan of a typical Mexican hacienda: Hacienda de la Magdalena y del Serano in the state of Colima	26
12	The owner's house and garden on a Mexican hacienda facing	28
13	Peon's hut on a Mexican hacienda facing	28
14	Peons cultivating an hacienda field facing	29
15	Bringing in the cattle on an hacienda facing	29
16	The Atlixco Valley on the edge of the Mesa Central, with its fine wheat fields in the background facing	36
17	Maguey hacienda in the Mesa Central near Mexico City facing	37
18	Sketch map showing the towns granted to Cortés in Morelos and México	46

FIG.	PAGE
19 Sketch map showing the towns granted to Cortés in Oaxaca and Veracruz	47
20 Ranchos in the heads of valleys that lead into the Valley of Mexico facing	100
21 Contemporary plan showing the type of holdings of a Spanish town on the northern frontier of Mexico in colonial times	110
22 An Indian settlement with its multitude of small holdings separated by lanes: the Valley of Maltrata in the eastern escarpment of the Mexican plateau . . facing	112
23 A scattered agricultural settlement of Indians in the Toluca Valley on the Mesa Central facing	113
24 Old Indian picture map showing the holdings of an individual facing	116
25 Typical pueblo and communal-holdings country near Laurel on the slopes of the Sierra de la Cruces . facing	117
26 Large estates on alluvial deposits bordering Lake Pátzcuaro in the southern part of the Mesa Central . facing	140
27 The Valley of Morelos in the southern escarpment of the Mexican plateau seen from Cuernavaca . . . facing	141
28 Taviche, one of the few districts in the Oaxaca plateau that are adapted to agriculture facing	146
29 A small farm among the Oaxaca hills facing	147
30 Map showing the large land grants in the territory of Baja California	152
31 Map of a Mexican hacienda showing portions detached, under the present agrarian reform measures, to be assigned as <i>ejidos</i> to adjoining pueblos	162
32 Plan of an <i>ejido</i> as divided into individual portions under the present agrarian reform measures	163
33 Sketch map showing land given to a pueblo as <i>ejido</i> under the present agrarian reform measures	164

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FOREWORD

Many factors contribute to explain the abnormal and deficient conditions of life which for several centuries have governed the development of almost all the Latin American countries: heterogeneity of ethnic, cultural, and linguistic character; one-sided laws, unsuited to the complex character and the diversified structure of society; deficient exploitation of the soil and unsatisfactory distribution of its products; and, as a consequence, extreme economic inequality. In a book published some time ago¹ I commented, although somewhat superficially, upon the effect of these factors, selecting Mexico as a representative country for such an analysis. Unfortunately the interesting theme which the agrarian problem presents was treated in an incidental and secondary manner—unfortunately, I say, because, in truth, the agrarian question has been the most powerful factor in the development, past and present, of the Mexican people.

In view of this fact, upon reading the manuscript in which Dr. George M. McBride, commissioned by the American Geographical Society, has studied and treated the agrarian problem in Mexico, I felt grateful surprise not only that such an important scientific institution was occupied in the study of one of the transcendental questions that affect my country but also to find in the work a profound knowledge of the matter treated and absolute moderation in the conclusions reached—qualities difficult to find combined, because, as to the first, the collection of scientific data for such a subject is so extremely difficult, both on account of the paralyzing effect of the European War and on account of the distance which has heretofore separated the scientific institutions of Mexico and the United States, and, as regards the second, because, in the midst of the social innovations which mark the present times, it is very difficult to distinguish

¹ Manuel Gamio: *Forjando patria (pro nacionalismo)*, Mexico, 1916.

between a just and necessary social reform and that which is the product of an exaggerated and objectionable radicalism.

The possession and the exploitation of the land has been the fundamental cause of the bad economic condition experienced by the Mexican people from the time of the Conquest to our days, as has been made evident by the relatively numerous studies of this subject. Unfortunately, almost all of these studies are incomplete, one-sided, or lacking in a dispassionate presentation. We do not hesitate to state that the present work is one of the best yet produced because of the scientific spirit which characterizes it and the moderation and judgment which give prestige to its concepts.

From the international viewpoint studies of this character are highly significant for the United States and particularly for Mexico, whose actual social and economic conditions are so little known abroad. We fervently hope that, stimulated by the American Geographical Society, other American scientific institutions may dedicate a part of their attention to procuring a just and disinterested knowledge of the problems that affect the Latin American countries—a noble task which will make clear to the people and the government of the United States the how and the why of the qualities and deficiencies of those countries, as also their future possibilities. Such a course would undoubtedly bring with it a better understanding between the peoples who occupy the northern and the southern banks of the Río Grande.

MANUEL GAMIO

PREFACE

It is a venturesome undertaking for any foreigner to attempt a description of the intimate customs and relations of a country, even though long residence has given him an opportunity to see the actual operation of its social institutions. There is much that does not appear on the surface—many details that come to the acquaintance only of those whose contact with the people and their ways is most intimate. This is particularly true in the case of less advanced peoples, such as the various Indian races, whose lives, and even their relations with the whites, are regulated by custom rather than by written law. Hence in spite of fifteen years spent in different parts of Latin America, as missionary, teacher, student, and traveler, during which time there were offered unusual opportunities to know the people, their customs, their ideas, their governments, their history, and the geography of their countries, by seeing the inhabitants in their homes, speaking with them in their own tongue, trading with them in the markets, renting and buying houses and lands from them; and in spite of a rather unique advantage in the way of becoming familiar with the source materials that deal with Latin American lands and institutions, through association with the Hispanic American Division of the American Geographical Society, the author still feels that it has required a certain amount of presumption on his part to attempt a description of such a fundamental problem as that related to the system of land tenure in one of those countries. He has tried, however, to describe conditions as he has actually observed them, during the twenty years in which he has been keenly interested in this basic question, and to interpret the facts in the light of his personal acquaintance with the country and its inhabitants, guided always by a sympathetic appreciation of the people whose institutions he is describing. If by so doing he has been successful in presenting a true picture of conditions in Mexico, in so far as they are related

to the system of land tenure, he will be satisfied, whatever other shortcomings or defects the work may show.

To the American Geographical Society for having made the present study possible and, especially, to the Director of that society, Dr. Isaiah Bowman, for his constant friendly guidance and encouragement, the author owes and hereby gladly acknowledges a debt of gratitude. Professor Frederick J. Teggart of the University of California and Mr. W. L. G. Joerg of the American Geographical Society rendered invaluable service in editing the manuscript, as did also Mr. Alan G. Ogilvie, recently chief of the Hispanic American Division of that society, in preparing the maps. Señor Manuel Gamio, Director de Antropología of the Secretaría de Agricultura y Fomento of Mexico, and Professor Moisés Saenz, formerly Director General de Instrucción Pública of Mexico, also kindly read the manuscript and made important suggestions. The former, moreover, allowed the author to see the proof sheets of his work, "La Población del Valle de Teotihuacán," in which various features of the land system of Mexico are traced through their historical development in that region; the conclusions reached by the author for Mexico in general are largely corroborated by Señor Gamio's findings in that particular district. Members of the Graduate School faculty of Yale University, where the study, in preliminary form, was presented as a thesis for the Doctor's degree, also offered helpful criticisms.

G. M. M.

The American Geographical Society
New York, July, 1923

CHAPTER I

INTRODUCTION

While the urban centers of Mexico have kept pace with other modern cities in many respects, the country districts have drowsed through the centuries, undisturbed, amid the seclusion of their intermontane fields, by events of peace or war that have substantially altered conditions of rustic life in other lands. Only within recent years has rural Mexico felt the current of world movements that have long ago, in most civilized countries, swept away certain primitive customs inherited from a distant past. Its social institutions are those transplanted from Spain at the time of the Conquest or the still older ones inherited from the Aztecs. The religion it practices is the type of Christianity—almost unmodified in dogma and in ritual—with which Cardinal Ximénez and the Most Catholic Kings were familiar. As to education, the common people live in much the same state of illiteracy that was general in Europe before the Renaissance. Politically, the *peón* is still a pawn, to be moved, in peace or in war, as the mind of the *patrón* or the *cacique* may determine. Economically, the district or the estate or the town or even sometimes the family is self-sufficing, producing its own food, making its own clothing, manufacturing its own tools, or bartering with neighbors for the few necessities that cannot be supplied from the domestic stock. The methods of agriculture, like the implements with which they work, are medieval.

In nothing is this backwardness of rural Mexico more marked than in the systems of land tenure employed and in the consequent relations which exist between the man who owns the land and the man who tills the soil. Over a large part of the country (as in other nations of Latin America) the land is held much as it was in Spain before the discovery of the New World—in that age when in Western Europe the feudal system of land tenure still

survived the decay of feudalism as a recognized institution. In other parts (the more distinctively Indian districts) the customs governing its possession belong to about the same period chronologically but correspond to that stage of a boriginal culture that was found in Mexico upon the advent of the white race.

Thus, in studying Mexico's land system, we are considering a very ancient institution, one whose roots lie buried in the past—the distant period in which white men first arrived upon the western hemisphere, bearing with them the customs peculiar to the lands and times from which they came, and the still more remote past when native American institutions were being formed in response to the demands of primitive society. Consequently the study must be partly historical, as we trace back the path over which the different methods of tenure have evolved into their present form and as we see the customs of long ago crystallizing into the institutions of today.

But the study of an agrarian system of a country is more than the mere tracing of its historical development. The land system of Mexico, like other social institutions anywhere, has either grown up out of the very depths of its physical environment or has, at least, been modified by adaptation to the habitat into which it has been transplanted. Since the character of that physical setting varies in the different parts of the country, we shall have to see how the method of tenure responds to the various environmental influences and, particularly, what result is obtained by the different systems in the several widely diverse geographical provinces of which the country is composed. Moreover, since Mexico is now in the midst of an attempted agrarian reform, it will be well to consider whether her contemplated innovations are adapted to the particular physical conditions presented in the various parts of the country. The study is thus geographical as well as historical.

Furthermore, the agrarian system of a country is closely related to its general social organization. When you answer the question "Who really owns the soil?" you lay bare the very foundations upon which its society is based and reveal the funda-

mental character of many of its institutions. The social stratification of the population, the systems of taxation, the code of laws, the distribution of privilege and opportunity among the various classes of the people, the incentives to individual improvement, and the rate of progress toward satisfactory living conditions are all directly affected and largely controlled by the manner in which the land is held and the degree to which it is distributed among the inhabitants.

A similar relation exists between agrarian systems and political institutions. Autocratic government almost invariably is associated with monopoly of the land, while democracy is either the fruit of its equitable distribution or is the means of bringing about the division of rural property among the people. Recent events show this. The old autocratic governments of central and eastern Europe found their strongest support in the land barons and survived just so long as the traditional system of large holdings could be maintained. But no republican government could hope to exist with the land (and its usual accompaniments of wealth and power) concentrated in the hands of a few. Consequently in many of the newly constituted democratic states, such as Poland, Czechoslovakia, Jugoslavia, Lithuania, Esthonia, and Latvia, one of the first problems that has demanded attention has been that of a redistribution of the land.

Not only the form of political organization but its stability as well is affected by the agrarian situation, particularly in an agricultural country. The proprietor is by nature a conservator of law and order. His interests are all with established institutions. His home and land, his crops and domestic stock are exposed in every outbreak of violence. He not only will seldom start revolution, but he can be counted on to oppose it. He needs peace for the security of his property. The propertyless individual, on the contrary, reckes little of political turmoil or the overturn of established systems. Individually he has nothing to lose. He may even gain by a completely new deal. This attitude is recognized in the industrial classes of our large cities, who have no permanent interests tied up in the plants in which they work.

It is equally true of landless agricultural laborers. Tenants or serfs are usually little loath to see constituted authority weakened or overthrown. Hence a nation composed largely of such elements is in perpetual peril, while one with a great body of independent landholders possesses at least one excellent guarantee of internal peace.

Because of these complicated relationships, a study of the agrarian system of a country throws light upon the economic, social, and political conditions that exist within its bounds and affords a good index to the basic organization of its society. Conversely, without a knowledge of the various forms by which the land is held, of the degree to which its possession is enjoyed by the inhabitants, and of the extent to which the systems of tenure are adapted to the peculiar physical environment, it is manifestly impossible to appreciate a nation's problems of government (domestic or foreign), the attitude of mind of its various social groups, the operation of economic conditions which affect its development, or the reasons that underlie popular demands for fundamental social reforms. Applied to Mexico, it follows that, for a real understanding of the Mexican people and their problems, it is essential that careful consideration be given to their system of land tenure, particularly in its relation to the geographical character of the several sections of the country.

CHAPTER II

THE GEOGRAPHICAL SETTING

In its geographical aspect Mexico is a land of great diversity. Topographically considered, it consists of a series of sharply contrasted highlands and lowlands with their intermediate slopes. Corresponding to the difference in elevation there are three major climatic zones, the cool uplands (*tierra fría*), the temperate middle altitudes (*tierra templada*), and the hot coastal plains (*tierra caliente*). Within each of these general divisions, moreover, there exist areas which differ in relief, temperature, rainfall, character of the soil, and natural resources. Under such widely varying conditions, plant and animal life in the several parts of the country presents marked differences, as does also man's use of the products of the land. Leaving out of consideration for the present purpose the exploitation of mineral resources and such matters as industrial and commercial development, we find that, from the agricultural and agrarian viewpoint, the country comprises a number of well-defined natural regions, in each of which the size of holdings, the systems of tenure, and particularly the results obtained by the different methods of tenure employed are affected by the respective physical conditions. These several natural regions will be considered in order.¹ They are shown on the map, Figure 1.

¹ For description of the topography of Mexico the following works are the most valuable:

A. L. Velasco: *Geografía y estadística de la República Mexicana*, 19 vols., Mexico, 1889-1897.

J. G. Aguilera: *Bosquejo geológico de México*, *Bol. Inst. Geol. de México* No. 4-6, Mexico, 1896.

Compte rendu de la X^{ème} session du Congrès géologique international, Mexico, 1906; especially pp. 227-248 and 1289-1350.

H. M. Wilson: *Topography of Mexico*, *Bull. Amer. Geogr. Soc.*, Vol. 29, 1897, pp. 249-260.

W. N. Thayer: *The Physiography of Mexico*, *Journ. of Geol.*, Vol. 24, 1916, pp. 61-94.
(For continuation of footnote, see next page.)

THE HIGHLANDS

The great plateau of Mexico contains approximately three-fourths of the total area of the republic. Rising from about 4,000 feet in the north to an average elevation of some 8,000 feet in the south-central area, altitude counteracts latitude with such nicety that the mean temperature over the entire plateau is nearly uniform. In recognition of natural differences based upon climate and topography, the Mexicans regard the highlands as divided into four distinct regions: the Mesa del Norte, the Mesa Central, the Mesa del Sur, and the completely separated upland of Chiapas. This classification may well be retained, since these regions constitute true geographical provinces, because of their physical diversity and the consequent diversity in conditions of human life.

THE MESA CENTRAL

In any consideration of the use of the land and of the forms of land tenure, the Mesa Central is by far the most important region of Mexico. Upon this plateau and its slopes relatively favorable conditions for human existence have resulted in a dense population, both in ancient and modern times (see Fig. 5). Climate and soil combine to make agriculture productive, and the region has been styled the *zona fundamental de cereales*. It is, in fact, the granary of Mexico, for the products of its soil must suffice not only for the subsistence of the people who live within its bounds but for the needs of other parts of the country. In fact, the life of the nation has always depended upon its crops of corn,

Continuation of footnote 1

E. M. Sanders: The Natural Regions of Mexico, *Geogr. Rev.*, Vol. 11, 1921, pp. 212-226.

Alice Foster: The Principal Geographic Divisions of Mexico, in C. C. Colby: Source Book for the Economic Geography of North America, pp. 342-355, Chicago, 1921.

Ernesto Wittich: Morfología y origen de la Mesa Central de México, *Bol. Soc. Mexicana de Geogr. y Estadística*, Ser. 5, Vol. 8, 1919, pp. 128-140.

Carlos Sapper: Sobre la geografía física y la geología de la península de Yucatán, *Bol. Inst. Geol. de México No. 3*, Mexico, 1896.

Ezequiel Ordóñez: Observaciones relativas á los volcanes de México, *Memorias Soc. Científica "Antonio Alzate,"* Vol. 8, 1894, pp. 183-196.

wheat, and beans. A consideration of the physical geography of this region will lead to an appreciation of the conditions that have operated to make the agrarian situation here of perennial importance.

The Mesa Central, in common with other parts of the great central plateau, rests upon a foundation of ancient crystalline and sedimentary rocks, which probably formed a low-lying land mass in early Cretaceous times. Ranges of folded mountains bordered the eastern and western coasts, converging toward the south. After erosion had progressed to advanced maturity over this area, reducing the landscapes to rounded, domelike hills, gently sloping ridges, and wide valleys, through which moved a network of sluggish streams, the entire mass appears to have been elevated several thousand feet, and a new cycle of erosion was inaugurated. Associated with the uplift, and continuing virtually to the present day, volcanic forces covered a large part of the land with eruptive materials of lava and ash, particularly along the western border and across a wide belt in the south. Hence, upon the ancient relief of gentle grade we find superimposed the more varied topography of a volcanic landscape. The region is characterized by a multitude of well-preserved cones, extensive beds of slightly disintegrated lava, and deep deposits of volcanic ash such as the *jal* from which the state of Jalisco takes its name. Through this superimposed material the ancient rock protrudes in places, the lines of its well-worn surface offering a striking contrast to the slight dissection of the recent deposits.

As a result of the extensive deposition of eruptive materials, several of the great rivers of ancient times seem to have had their courses blocked and their drainage areas changed into closed interior basins. Notable instances of this process appear in the basin of the Santiago-Lerma and of the rivers which occupied the Valleys of México, Hidalgo, and Puebla, with possibly another where still remains the string of lakes in Michoacán. Gradually these extensive depressions, serving as base level for the surrounding areas, were filled deep with waste brought down by the tributary streams and by volcanic matter that continued

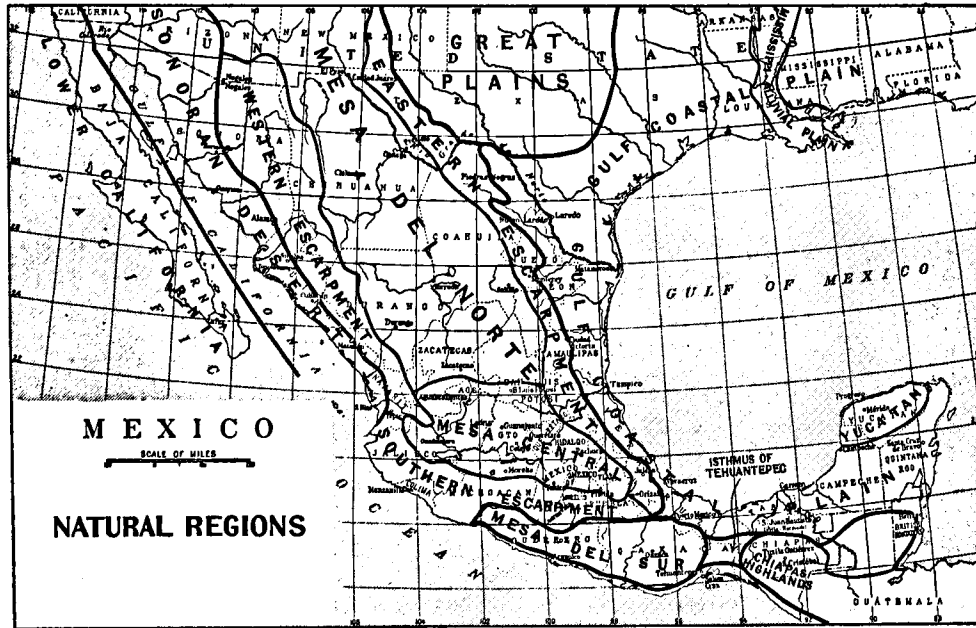


FIG. 1—Map of Mexico showing the natural regions. Scale, 1 : 24,000,000. (Adapted mainly from the maps in the publications by Thayer, Sanders and Foster cited in footnote 1.)

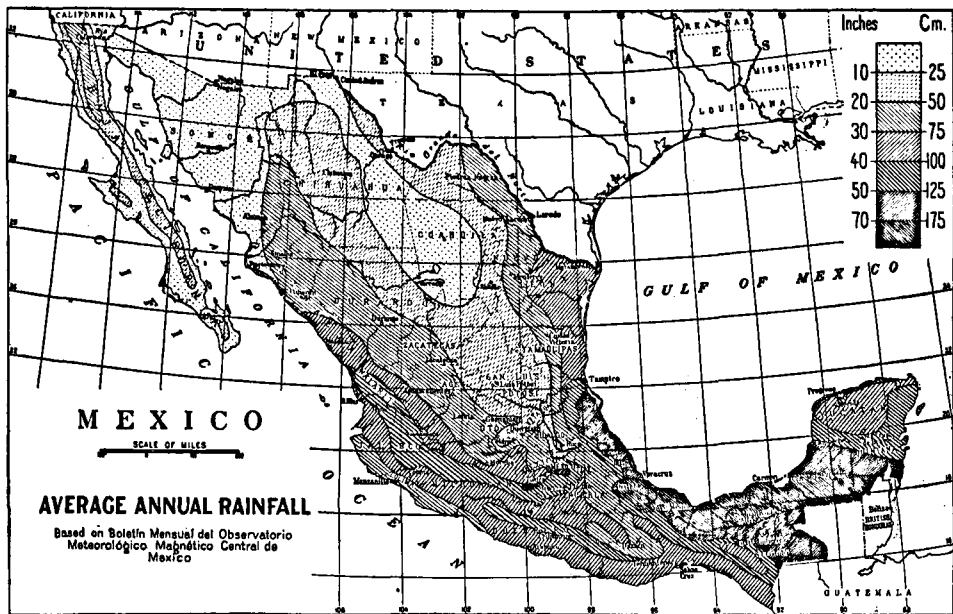


FIG. 2—Map of Mexico showing the average annual rainfall. Scale, 1: 24,000,000. (Based mainly on the annual rainfall maps for the years 1902 to 1913 inclusive published annually during that period in the *Boletín* cited in the title.)

to pour from scores of craters that dot the surface of the region.²

In time, however, some of the coastal streams were able to eat their way inland sufficiently to tap these enclosed basins. The Río Grande de Santiago cut back through its deep *barranca* to capture the great basin known as the Bajío of Guanajuato, Querétaro, and Jalisco; while the Río de las Balsas, uninterrupted in its work of erosion by the volcanic disturbances farther north, succeeded by means of its tributary, the Río Atoyac, in penetrating the Valleys of Puebla and Tlaxcala. Thus these inland areas were drained (only the Valley of Mexico among the larger depressions remaining without an outlet), and the rich deposits, laid down on the bottoms of earlier lakes, became clothed with vegetation. After the imposing symmetrical cones of Mexico's superb volcanoes, these extensive flat-bottomed valleys are the most characteristic feature of the landscape (Figs. 3 and 4). Outspread among the ancient domelike summits of the plateau, their rich verdure standing in strong contrast to the brown hues of the more barren hillsides, the snow fields of the high volcanoes, and the dark shades of occasional timber-covered ridges, these *bolsones* have, from earliest times, attracted man's attention as choice sites for cultivation and have long been most important centers of agriculture.

The Mesa Central has the climatic features that usually characterize tropical highlands.³ The long growing season makes at

² Borings in the Valley of Mexico, probably typical of other such valleys, show that the depression is filled, to a minimum depth of some 100 meters, with alternating deposits of sand, mud, clay, and volcanic materials (Antonio del Castillo: *Cortes geológicas de pozos artesianos en la Gran Cuenca de México*, Comisión Geológica de México, Mexico, 1893).

³ The climate of Mexico is best treated in the following:

José Covarrubias: *El clima y la población de la República Mexicana, en Varios estudios complementarios de las leyes agrarias propuestas por José Covarrubias y Fernando González Roa*, Mexico, 1914, pp. 11-23.

José Guzmán: *Climatología de la República Mexicana desde el punto de vista higiénico*, *Memorias Soc. Científica "Antonio Alzate,"* Vol. 20, 1903, Mexico, pp. 181-289.

Julius Hann: *Handbuch der Klimatologie*, 3rd edit., Vol. 2, Part I, Stuttgart, 1910, pp. 318-330.

Ellsworth Huntington: *The Relation of Health to Racial Capacity: The Example of Mexico*, *Geogr. Rev.*, Vol. 11, 1921, pp. 243-264.

G. B. Puga: *Consideraciones sobre la distribución general de las lluvias y en particular en la República Mexicana*, *Memorias Soc. Científica "Antonio Alzate,"* Vol. 16, Mexico, 1901, pp. 137-160.



FIG. 3—The Valley of Mexico, looking toward Lake Texcoco from Guadalupe, a town two miles north of Mexico City. Wastefilled, flat-floored intermontane basins such as this constitute the best agricultural land of Mexico.



FIG. 4—Northern, drier portion of the Valley of Mexico at Teotihuacán. A part of the Pyramid of the Sun appears in the foreground.

least two crops a year possible in many of the districts. The summers are temperate, the thermometer seldom registering over 90° F.; the mean temperature of the warmest month in Mexico City is 65°. The night hours are not so cool as to prevent the proper growth of wheat, corn, barley, and a great variety of vegetables. The winter season is mild; there are few days of freezing temperature except on the mountains. The mean of the coldest month in Mexico City is 53°. However, an occasional frost in early spring or late autumn inflicts heavy damage upon the crops.⁴ Upon the high slopes of the mountains that separate the great aggraded areas (above some 10,000 feet) low temperatures prevent cultivation of all but the most hardy crops, since, during a large part of the year, the thermometer frequently drops to freezing point at night.

Lack of water is the greatest drawback to agriculture throughout this region. Over most of its surface there is a precipitation varying from 20 to 30 inches a year (Fig. 2), but in districts sheltered from the easterly rain-bearing winds, as are many of the *bolsones*, the rainfall is lighter. The scarcity of moisture is, however, compensated to a certain extent by its seasonal distribution. There are distinctly marked seasons, wet and dry, the former extending usually from May to October. During these summer months almost daily showers occur over the southern part of the Mesa Central, diminishing in force and frequency toward the north and west. In winter rainy days are infrequent, occurring only when some storm center north of the Río Grande extends its influence far southward. In this season, therefore, the ground becomes dry and dusty, the grass dries up, and few crops can be grown except where irrigation is possible.

Thanks to the summer rains, agriculture can be carried on without the aid of irrigation in many sections of the Mesa Cen-

⁴ The great famine of 1784 is said to have been due to a frost in August which destroyed a large part of the crops (Alexander von Humboldt: Political Essay on the Kingdom of New Spain, transl. by John Black, London, 1811, Vol. 1, pp. 120-121). Great famines in pre-Conquest days are also ascribed to the loss of crops through midsummer frosts ("Historia de los Mexicanos por sus pinturas," in García Icazbalceta: Nueva colección de documentos para la historia de México, Mexico, 1891, Vol. 3, p. 252).

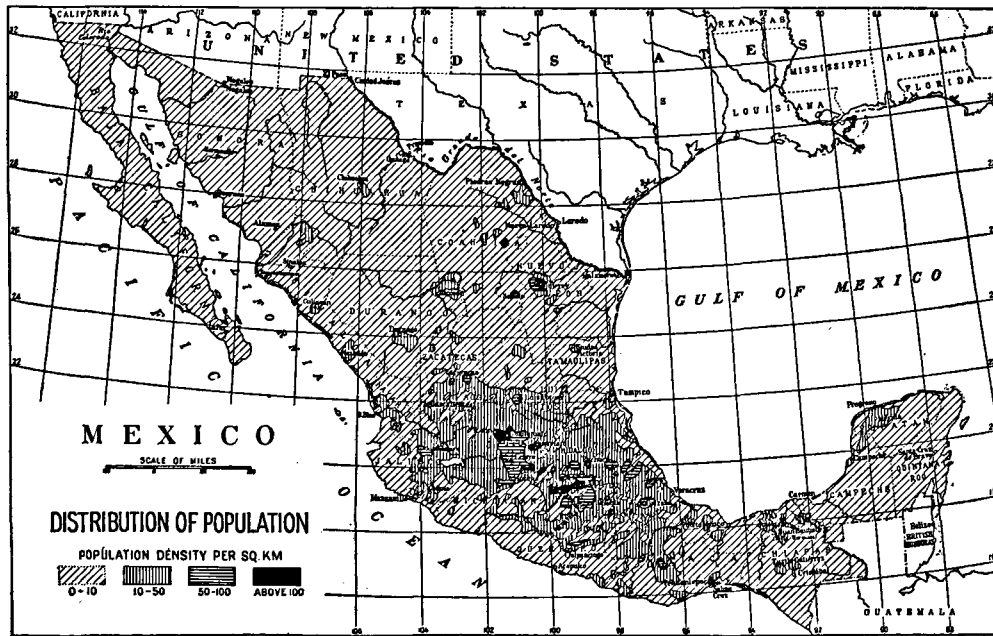


FIG. 5—Map of Mexico showing the population density, based on the Census of 1910. Scale, 1 : 24,000,000. (Generalized from a map prepared by the American Geographical Society.)

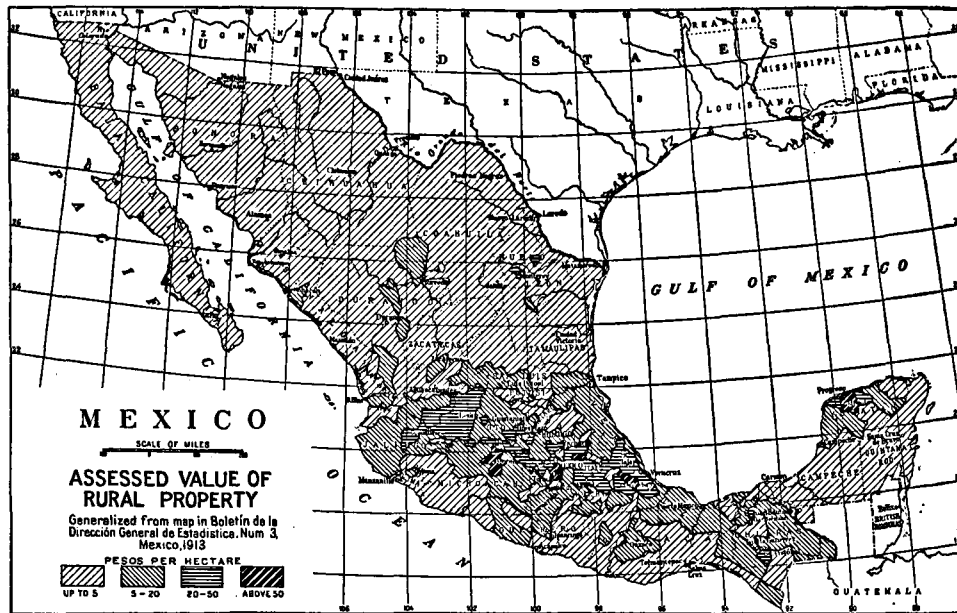


FIG. 6—Map of Mexico showing the assessed value of rural property. Scale, 1 : 24,000,000. (Generalized from the map cited in the title.)

tral. The amount of rain is, however, so limited and withal so uncertain, that, wherever possible, water is taken from the streams or stored in dams (*presas*) to supplement the scanty precipitation. From the earliest times, indeed, Mexican agriculturists have found it expedient to resort to irrigation. Even in the rainy season crops are often imperilled, for a decrease in rainfall, even though slight, leaves many fields too dry to yield a satisfactory crop. Furthermore, without irrigation it is impossible to take full advantage of the long tropical growing season. Fortunately sufficient rain or snow falls upon the mountains to form a number of permanent streams, and, though the porous character of the soil allows much of the water to disappear from the surface, there is still enough for irrigation, particularly in the lower parts of the aggraded depressions.

THE MESA DEL NORTE

The Mesa del Norte is a continuation of the basin and plateau country of Arizona, New Mexico, and western Texas. Beginning, approximately, where the Río Grande and the Gila River basins partially intersect the highlands, it rises gradually toward the south, confined between the Sierra Madre Oriental and the Sierra Madre Occidental. The Mesa del Norte consists chiefly of vast stretches of nearly level land, broken by occasional flat-topped but extensive remnants of a higher plain that has yielded over wide areas to an arid-land erosion. Topographically, there is no definite southern boundary to the Mesa del Norte, but the divide between the interior systems of drainage and the basins of the Pánuco and the Santiago may be taken as marking the boundary between it and the Mesa Central.

The difference between the two regions, so far as human occupation is concerned, lies principally in the rainfall. In the northern area the precipitation is so slight that agriculture is practically impossible without irrigation. Over most of the Mesa del Norte there is an annual rainfall of less than 20 inches (Fig. 2). Because of this aridity the principal use of the land, aside from mining, is for grazing, though here and there occur small areas

where local precipitation is sufficient to grow cotton or cereals. As the aboriginal peoples of Mexico had no domestic live stock, it is only since the introduction of European cattle that the region has had inhabitants other than scattered settlements of Indians. Even now, the Mesa del Norte, though comprising about one-half of the total area of the country, contains less than one-fifth of the population and shows vast expanses where the density is less than one person per square kilometer. In this arid north country the holdings are necessarily larger (except where irrigation is practiced) than in better-watered areas. There are also large districts where the land is of such slight value that it matters little who owns it or in what quantities it is held.

THE MESA DEL SUR

Both in topographic character and in climate, the Mesa del Sur is a distinct region. The extreme southern section of the great plateau of Mexico, comprising the Sierra Madre del Sur and the Oaxaca uplands, has been almost entirely severed from the main body of the highlands by extensive and long uninterrupted erosion. The Río de las Balsas, working eastward, and the Río Papaloapam, eating its way toward the west, almost meet in northern Oaxaca. Progressive elevation of the region has but served to intensify erosive activity in the many streams that descend from the interior, until at present there remain only steep-sloped valleys and narrow ridges, with little level ground either in valley floors or in interfluvial spaces. It is all what the Mexicans call *pura sierra*, a region of mature topography. The fact that this southern region has suffered little from volcanic activity also differentiates it in relief and in soil from the districts that border it on the north.

The rainfall over the Mesa del Sur shows a wide range of local variation, but, in great part, the region is situated within the zone of 20 to 40 inches a year (Fig. 2). The eastern slopes are, in general, better watered than the western and, consequently, have a more highly dissected surface, more mature topography, longer streams, and more complicated drainage sys-

tems. Hence they offer greater possibilities for human occupation. The western slopes are characterized by numerous short streams which reach the sea through deep gorges and between wider interfluvial areas. No large part of the Mesa del Sur is adapted to agriculture. The highly dissected plateau offers little level ground for cultivation, while, in many parts of the region, the rainfall is too light or too uncertain to be relied upon. Cattle raising has developed to a certain extent, but even this has been restricted by lack of extensive grassy plains. Yet in the limited areas suitable for agriculture groups of people have made their home for many centuries. The important aboriginal capital of Saachila, once the queen of the Oaxaca plateau, was situated in one of these fertile districts, as is also the present city of Oaxaca and its cluster of dependent villages.

THE CHIAPAS HIGHLANDS

The highlands of Chiapas form a distinct natural region, differing from the other plateau districts of Mexico in relief, climate, and natural resources and belonging rather to the upland system of Central America. Their extensive savanas offer rich pasture lands and good agricultural soil, while timber is exploited from the forests of the upper mountain slopes. From ancient times tribes of sedentary Indians have cultivated the more productive areas, and agriculture still remains the principal occupation of the people. Rural property is, consequently, highly prized, and great importance is attached to matters relating to the systems of land tenure.

THE ESCARPMENTS

The several slopes that lead down from the Mexican plateau have played a part in the activities of man scarcely inferior to that of the upland surface itself. These slopes belong rather to the healthful highlands than to the insalubrious *tierra caliente*. As an aid to an appreciation of their influence upon systems of landholding, it will be well to consider briefly the physiographic character of the eastern, southern, and western escarpments, for, while they are of similar origin, they now present essentially dif-

ferent features. Erosion, operating in different areas with varying degrees of intensity, has produced surfaces that, in relief and in adaptability to human settlement, bear little resemblance.

THE EASTERN SLOPE

The uplift of the plateau, to which reference has already been made, exposed the eastern slope to a heavy rainfall. During the greater part of the year, the warm, moisture-laden winds from the Gulf of Mexico blow against this great 8,000-foot wall that borders the plateau on the east. The effect is heightened, furthermore, by the presence of lofty peaks, such as Orizaba (Fig. 9) and the Cofre de Perote, about whose summits storms are almost always raging. Precipitation along this escarpment ranges from 40 inches up (Fig. 2) and is distributed through the year, reaching a maximum in the summer months. As a result of this heavy rainfall erosion has been excessive. Everywhere streams are continually at work cutting their way deep toward the heart of the plateau, while the rain wash persistently carries down large quantities of débris from the moist hillsides. The amount of material which has thus been removed is enormous, and what once must have been great interfluvial spurs have now been reduced to poor, decayed remnants of their former grandeur. Between the ridges, with their harder rocks, numerous alluvial valley floors have been laid down. These are particularly fertile in places where, as at Orizaba and Maltrata, some obstacle has temporarily checked the downward cutting of the stream bed and has permitted the formation of a flood plain above the barrier. Though the hillsides and the crests of ridges of the eastern escarpment offer little tillable soil, these valley floors, with their rich deposits of *tierra negra*, are sufficient to make the regions which contain them rank high in agricultural possibilities, especially in the production of sugar, coffee, tobacco, and tropical or semi-tropical fruits.

THE SOUTHERN SLOPE

The southern escarpment of the Mexican plateau should be regarded as occurring, not beyond the Oaxaca uplands, but along



FIG. 7



FIG. 8

FIG. 7—Mountain pastures on the crests of the ridges in central Mexico.
FIG. 8—A characteristic *barranca* in the western escarpment of the Mexican plateau: Atenquique gorge between Tuxpan and Colima.

the *eje volcánico* lying between the 18th and 19th degrees of latitude. It is at this point that the highlands have been almost cut through by the Río de las Balsas and the Río Papaloapam. This has produced a well-defined east-and-west escarpment lying just south of the volcanic belt that virtually terminates the great Mexican plateau. So situated, the southern slope receives less rain than the eastern. The storms that originate upon the Gulfward side of the plateau or about the high, inland peaks of Malintzin, Popocatépetl, and Ixtaccíhuatl lose much of their moisture before reaching the southern escarpment. On the other hand sufficient rain falls upon the high volcanic ridge that drains into this region to form a number of small rivers. Though this southern slope is less deeply dissected than the eastern flank, since its base level is the Río de las Balsas rather than the sea, extensive valleys have been formed as tributaries to the Balsas depression. Consequently here, too, gently sloping, wide valley floors, with an abundant water supply and a climate that resembles constant spring, offer unusual attraction to the agriculturist and cause tillable lands to be highly prized and eagerly sought.

THE WESTERN SLOPE

Upon the western slope, extending from Colima to Sonora, the topographic and climatic conditions are quite different. Much of this stretch of territory partakes of the usual characteristics of westward-looking escarpments in the trade-wind zone, being deprived of moisture by the highlands in the rear. It is thus drier than other slopes of the plateau. In this area erosion has made little progress over the general surface of the land, but the downward cutting of the streams has been very rapid, as is to be expected in a semi-arid region that receives the greater part of its precipitation upon its upper slopes. Thus it comes that the characteristic features of the landscape along the western escarpment are the deep-cut *barrancas*, through which flow the few large rivers that cross its surface. Examples of such deeply incised streams are the canyons of Beltrán, Atenquique (Fig. 8), and of



FIG. 7



FIG. 8

FIG. 7—Mountain pasturee on the crests of the ridges in central Mexico.
FIG. 8—A characteristic *barranca* in the western escarpment of the Mexican plateau: Atenquique gorge between Tuxpan and Colima.

the Río Grande de Santiago. Many of the interfluvial areas are too dry for farming, and the *barrancas* contain a very limited amount of arable land. That which does exist in the valley bottoms and along the benches that border the canyons is usually of excellent quality, can be watered by means of simple canals, and enjoys a mild climate in which sugar cane, tobacco, coffee, and tropical fruits can be grown.

THE LOWLANDS:

Bordering the escarpments of the great plateau there is a belt of low country, partly coastal plain and partly the lower foothills of the mountains, which varies in width from a few miles to several hundred. This is the region which the Mexicans call the *tierra caliente*, or hot country (Fig. 10). It includes the Gulf coast, with the peninsula of Yucatán and the isthmus of Tehuantepec, and, on the west coast, the narrow belt of lowland that borders the sea. In general, it may be said that neither Indians nor whites have found the *tierra caliente* a congenial place to live, and, so far as is known, most of this region has always been sparsely populated.

THE GULF COAST

Most of the Gulf Coast, exposed to winds that blow from the ocean and that lose their moisture as they come in contact with the interior highlands, receives heavy rains during the greater part of the year. As a result, the enervating effect of extreme heat and humidity and the incessant attack of an ever-encroaching tropical vegetation render cultivation of the soil an arduous and discouraging task. Malaria and other tropical fevers have also played their part in deterring men from invading these districts. Exploitation of the oil deposits along this coastal belt within recent years has given new value to the lands, as has also the development of large-scale fruit culture in parts of Veracruz and Tabasco, while cattle raising has brought a sparse population to the drier northern districts, in Tamaulipas. However, the few inhabitants of the lowlands have concerned themselves compara-

tively little with maintaining continuous occupation of the land, and the problem of its ownership has seldom provoked serious difficulties.

YUCATÁN

There is one marked exception to the foregoing description of lands along the Gulf Coast, namely the northern part of the peninsula of Yucatán. This, on the one hand, lies farther north than most of the Mesa Central and, on the other hand, has no high mountains to precipitate moisture from the winds. Hence, in point of rainfall, it bears a closer resemblance to the semi-arid sections of northern Mexico than to the humid territories that adjoin it. Whereas in Tabasco and the coasts of Veracruz the precipitation is over 50 inches, barely enough rain falls in northern Yucatán to make the growing of cereals possible. The character of the soil, a porous coralline limestone, still further accentuates the deficiency. This comparative aridity, however, seems rather to have favored than to have hindered the occupation of the land, and, for many centuries, the region has been densely populated and has been the home of a relatively advanced civilization. Agriculture has been adapted to the climatic conditions and has afforded man a possible, if meager, means of subsistence. Furthermore, within the last quarter of a century, a newly created demand for binding twine in the great grainfields of Russia and the United States has opened up great possibilities of wealth in the dry limestone region of Yucatán and has made its aridity a still greater asset in the production of sisal. Thus Yucatán stands alone among the districts of the Gulf Coast in having valuable agricultural soil and in presenting keenly disputed agrarian problems.

THE WESTERN LITTORAL

If the Gulf Coast is too moist for human occupation, the western coast of Mexico is too dry. Almost all of the lowlands from Oaxaca to the mouth of the Colorado River are so cut off from rain-bearing air currents that they constitute a partial or com-



FIG. 9—Mount Orizaba, on the rim of the eastern escarpment of the Mexican plateau.



FIG. 10—Scene in the *tierra caliente*: Chietla in the state of Puebla at the foot of the southern escarpment of the Mexican plateau.

plete desert. Lying to the leeward of the Mexican plateau and too far south to profit from the westerly winds that bring winter rains to California, this region offers few attractions to the settler. The important towns that it contains are trade centers, serving as distributing points for wide areas. Isolated districts, such as the valleys of the Santiago, the Fuerte, the Yaqui, and the Mayo, where irrigation is possible, are the only regions where the soil is sufficiently productive to be worth contending for or where questions of tenure have become of vital importance. In these limited areas, however, the land often commands very high prices, and problems connected with its ownership are acute.

AGRICULTURAL LANDS

As is evident from the foregoing description, Mexico does not possess a large amount of arable land. The mountainous character of the relief, the scarcity of rainfall, the prevalence of undisintegrated volcanic deposits, and the presence of saline materials in the desiccated lake bottoms reduce the amount of land on the plateau that can be devoted to agriculture, while most of the lowlands are either too moist or too dry to make for successful farming. Although the country has a total extent of 767,198 square miles (491,006,720 acres) and had a population of 15,115,612 in 1910, the area under cultivation is relatively small, being but 30,027,500 acres (about two acres per person), while 120,444,200 acres are used only for pasture and 40,933,200 acres are in forest.⁶ The larger part of the remainder (299,601,820 acres) is regarded as virtual waste.

Most of the best agricultural lands of Mexico are found upon the Mesa Central and its adjoining slopes (Fig. 6). The extensive *bolsones* already described contain a large proportion of the nation's tillable soil. The Valleys of Toluca, Mexico, Querétaro, Guanajuato, Aguascalientes, Morelia, Guadalajara, Puebla and Tlaxcala are examples of these lands. In them are located many of the most productive rural properties

⁶ The Statesman's Year-Book for 1921, p. 1077; for 1923, p. 1132.

in the country. Next in importance come the lava flows and deposits of volcanic ash that have been sufficiently exposed to moisture to suffer disintegration upon the surface. These deposits afford large areas of productive soil, such as the red-earth hills of Michoacán and the more liquid brown flows of the Valley of Puebla. Moreover, the bands of piedmont that border the filled-in basins, though containing much sand and gravel and frequently suffering from lack of water, furnish excellent land for one of Mexico's principal crops, the maguey plant (*Agave americana*), from which *pulque* is obtained. If we add to these the rich, though restricted areas of alluvium found in the deep valleys that descend from the Mesa Central, we have the greater part of the tillable soil of the entire country.

No statistics are available to show the extent of these various kinds of land, but they may be estimated approximately as in Table I.

TABLE I—EXTENT OF ARABLE LANDS

		(In square miles)	
Aggraded surfaces of former closed basins in the Valleys of	{	Toluca	1,000
		Mexico	1,000
		Querétaro	1,000
		Guadalajara	3,000
		Aguascalientes	1,500
		Morelia	500
		Guanajuato	3,000
Puebla and Tlaxcala	2,000		
		13,000	
Piedmont deposits bordering	the above	1,500	
Decomposed lava surfaces in	{	Michoacán	5,000
		Puebla and Tlaxcala	1,500
		Jalisco	1,000
		7,500	
Alluvial pockets in the escarpment valleys	{	Morelos	1,000
		Veracruz	2,500
		Hidalgo	1,000
		Michoacán and others	1,000
		5,500	
Total		27,500	

These various areas of benignant climate and productive soil upon the Mesa Central and its escarpments have long been centers of populous settlements. It was upon these lands that the several agricultural tribes among the Mexican aborigines (the Toltecs, the Tlaxcaltecas, the Otomís, the Tarascans, and the Aztecs) developed their distinct but related cultures. Here, too, was probably the native home of maize (closely related to the common Mexican fodder, teosinte), for ages the staple food of all Mexicans and one of the most valuable contributions to the welfare of mankind made by the American continent. These pockets of fertile land were the first to be coveted by the Spaniards upon their arrival in Mexico, and they have since continued to be the most populous and productive districts of the country. Today some 40 per cent of all the inhabitants of Mexico live upon these lands or in centers immediately dependent upon them. Of the entire rural population (11,675,363 in 1910), about 5,000,000 live in the states represented by these areas. Ten of the principal cities of Mexico (Mexico City, Guadalajara, Puebla, León, Querétaro, Morelia, Aguascalientes, Orizaba, Jalapa, and San Luis Potosí) are situated in these districts and are directly dependent upon their agriculture, while many of the most important mining towns, such as Pachuca, Guanajuato, and El Oro, are near these same fertile areas and derive their food supply from them. The aggregate population of these large centers is not far from 1,500,000, which, added to the rural population mentioned, makes a total of some 6,500,000 people to be fed from the products of these lands.

Were the greater part of the Mesa Central and its escarpments (about 120,000 square miles) fit for cultivation the problem of the subsistence of this relatively dense population would not be so serious. But since, owing to the causes already mentioned, not more than twenty-five per cent of its surface is available for agricultural purposes, it is not surprising that the use and ownership of the land have here presented problems of the greatest difficulty. So long as there were unimproved lands in the restricted fertile spots of the Mesa Central, or so long as the soil

was capable of more intensive development, all was well. But when the growing population had occupied the narrowly confined areas and when once the limit of production with the known methods of cultivation was approached, there began an unremitting struggle for possession of the land. This struggle has been going on in Mexico not only during the past thirteen years but for generations and even for centuries. From what can be learned of the pre-Conquest history of the Mesa Central, it seems that during the century or more of Aztec domination, and even before, these lands had been the subject of dispute among the various Indian agricultural tribes. The keen demand for land resulted in the development of a well-defined system of tenure, long before the arrival of the white race upon the scene. The contest has never ceased. In these limited districts Indian and white, Mexican and foreigner, cleric and layman, rich and poor have engaged in a protracted struggle for possession of the available soil. It is upon this region, therefore, that attention is largely centered in any consideration of matters related to the land systems of Mexico, either in ancient or modern times.

There are, however, outlying regions in which questions of landownership and the distribution of productive soil are of constantly increasing importance. The expansion of population outward from this central territory has been accompanied by the development of agriculture or stock raising in the more arid lands of the north, in the narrow valleys along the western slope of the entire plateau, and even, to a limited extent, in the hot lands of the Gulf Coast, while in a few districts, such as parts of the plateau of Oaxaca, the highlands of Chiapas, sections of Sonora and Sinaloa, and, particularly, the northern portion of the peninsula of Yucatán, the natives had long been dependent upon the cultivation of the soil and had had their agrarian problems before the expansion of the white race into their countries. Consequently the land problem is a national one, most vital in the populous central part of the country but of growing importance also in the outlying regions.

CHAPTER III

THE HACIENDAS OF MEXICO

The haciendas of Mexico are the most conspicuous feature of the land system of the country. They give to agricultural Mexico its distinctive cast, and, by their great size, create the impression that the entire land is divided into vast rural estates. These properties, indeed, are the only type of agricultural holding immediately visible to the traveler in many parts of Mexico, just as the *hacendado* is the only type of agriculturist whose interests reach beyond the immediate neighborhood of his home. As will appear later, there are other kinds of holdings, particularly in the more remote districts, but it is the hacienda that first attracts attention, and its prominence justifies its consideration in the first place.

THE LANDS OF THE HACIENDA

Many of the haciendas are of very great extent; it is estimated that 300 of them contain at least 25,000 acres each; 116 have not less than 62,500 acres; 51 have approximately 75,000 acres; while 11 are believed to have 250,000 acres apiece.¹ The Mexican hacienda seldom contains less than 2,500 acres—whether situated in the arid plains of the north, where land is worth little or nothing, or in the densely settled areas of the Mesa Central, where the price of land is high even in comparison with that of agricultural lands in other countries. In places one may see the low stone boundary walls of a single farm running as far as the eye can reach, over hills, valleys, and plains and a traveler on horseback may journey for several days in crossing one of these vast estates.

The great size of these holdings is due, in part, to the fact that

¹ J. R. Southworth: *El directorio oficial de las minas y haciendas de México* (title also in English: *The Official Directory of Mines and Haciendas*), Mexico, 1910.

the typical hacienda (Fig. 11) aspires to be self-sustaining, and the variety of a countryside is taxed to render it independent. Hence, for the many different products required, different kinds of land must be included within its limits. In the first place, a large acreage of valley land is needed for the production of grain. These hundreds or thousands of acres of arable land form the nucleus of the estate. An *hacendado* would not, however, be satisfied to hold valley lands alone; for, in his economy, the products of the hills are only less important than those of the lowlands. Thus, the farm requires a supply of water, for irrigation as well as for the live stock; the hacienda must, therefore, include some stream, which should be controlled up to its headwaters in order to assure the undisputed use of the supply. Again, grazing land is needed for the herds of cattle, horses, sheep, and goats; this is found upon the parklike mountain sides and the alpine meadows (Fig. 7). Timber, also, is a prime necessity and is derived either from the deciduous trees that grow along the lower mountain slopes or from the pine forests that clothe the tops of the higher ridges. The products even of the waste land are likewise essential, since from this are obtained stone and lime for building purposes, clay for adobe huts, coarse grass for thatched roofs, salt, and the wild fruits and herbs which are gathered for household use. The administration of such extensive properties necessarily presents great difficulties. To facilitate management many of the larger ones are divided into several units, styled *estancias* or *ranchos*, each under its own *mayordomo*. Even with such subdivision most of the haciendas are too vast to be developed intensively, and large areas lie completely unused. This is particularly the case where hilly country impedes communication, as upon the dissected slopes of the plateau and on the Mesa del Sur.

THE PEOPLE OF THE HACIENDA

The haciendas are settlements complete in themselves. Indeed, few of these estates have less than a hundred, while many of them have as many as a thousand inhabitants. In Michoacán there are two haciendas, Huaracha and Buenavista, each of

which maintains over two thousand persons; while in Morelos, México, Puebla, Durango, Veracruz, Querétaro, and Chihuahua there are others in which the number is not much smaller. Furthermore, the haciendas are all named; they appear on the maps; and they are important units of public administration, often being incorporated as *municipios*. They include all the customary accessories of an independent community, such as a church, a store, a post office, a burying ground, and sometimes a school or a hospital. Workshops are maintained, not only for the repair but even for the manufacture of machinery and of the numerous implements required upon the estate. The permanent population consists of an *administrador*, one or more *mayordomos*, a group of foremen, and the regular peons, together with the families of these individuals. Besides these, there are several classes of hangers-on, less permanently attached to the farm. Among the latter are usually a priest or two, clerks, accountants, store-keepers, hired shepherds and cattlemen, and often a number of families who rent small pieces of land from the hacienda. Over this aggregation the owner presides in a more or less patriarchal manner, the degree of paternal care or of tyranny varying with the character of the individual and with that of his superior employees.

THE HACENDADOS

In colonial times nearly all the owners of these large estates were Spaniards—*conquistadores*, explorers, and government officials. During the War for Independence (1810–1821) most of these Spaniards were compelled to leave the country, and, in many cases, their properties passed, by means more or less irregular, into the hands of creoles or mestizos. The *hacendados* have, however, always been predominantly of European descent.² Since this group of landed proprietors has, at all times, composed the highest social class in Mexico, its members have tended to intermarry or to become affiliated with the foreigners who have settled in the country. In recent times many foreigners have

² Andrés Molina Enríquez: *Los grandes problemas nacionales*, Mexico, 1909, p. 80 ff.



FIG. 12



FIG. 13

FIG. 12—The owner's house and garden on a Mexican hacienda.
FIG. 13—Peon's hut on a Mexican hacienda.



FIG. 14



FIG. 15

FIG. 14—Peons cultivating an hacienda field.

FIG. 15—Bringing in the cattle on an hacienda.

acquired landholdings in Mexico, most conspicuous among the number being Spaniards, who, enriched by successful ventures in trade or in the mines, have invested their fortunes in the old Mexican estates which from time to time have come upon the market. During the prosperous days of the Díaz régime, Americans from north of the Río Grande not infrequently acquired possession of some large hacienda.

The life of a Mexican *hacendado* is a curious mixture of primitive rusticity and modern luxury, of self-indulgence and fatherly solicitude for his dependents, of stern administration of paternal discipline and an intermittent supervision of his *mayordomo* and numerous foremen. The *hacendado* lives in a spacious *casa de hacienda*, built of stone or adobe and roofed with red tiles (Fig. 12). Flower gardens adorn the large open patios, while fruits and vegetables of several climates are grown in nearby plots. Some one or several patios are devoted to the needs of the farm, the rooms opening into them serving as granaries, tool sheds, workshops, and sometimes even as stables. The doors and windows of the house are usually heavily barred, and in most cases the entire establishment is surrounded by a high, thick wall. In fact the *casa* of an *hacendado* must serve not only as a dwelling but as a place of defense, either against the bandits who have always infested the hills of Mexico or, in case of an uprising, against the owner's own tenants. But the typical Mexican landowner spends relatively little of his time within this citadel. He usually maintains a residence in the capital or some other large city, where he spends the greater part of the year. If the income of his property makes it possible, he may go to Europe or to the United States. Only during the most active seasons, while planting or harvesting is in progress or on some special occasion, does he remain long upon his estate. In his absence the management devolves upon the *mayordomo* or *administrador*. The *hacendado* is, therefore, less an agriculturist than a landowner, less a farmer than an absentee landlord, and his interest in the property is due less to its economic possibilities than to its character as an ancestral estate.

THE PEONS

The laborers on the haciendas, in most parts of Mexico, are of Indian blood or are mestizos in whom the Indian element predominates, although many of these have abandoned their aboriginal costume and have forgotten their native tongue. The purity of race of the peon is most strongly marked in the regions where, as in the Mesa Central and Yucatán, the Spaniards found the country already settled with an agricultural population which could be reduced to serfdom. In other parts of the country, notably upon the semi-arid plains of the north, where the aboriginal element alone has never been able to thrive and where, as a consequence, no such supply of native labor was found, the white element predominates among the *brazos*, or hands, employed upon the estates.

The peons upon a Mexican hacienda are theoretically free. They have been so ever since the War for Independence and, to a large extent, since the early colonial period. As a matter of fact, however, many of them are held upon the estate in a bondage no less real because it is sanctioned only by custom and enforced only by economic conditions. In the first place, many of these peons have proprietary claims on the land which they and their ancestors have occupied and cultivated for generations. While, it is true, their tenure has no legal status, it has generally been recognized by the owners of the haciendas and has survived in custom because it has proved advantageous to the landlord no less than to the native. Furthermore, the peons feel an attachment to the land that a stranger unacquainted with their psychology can hardly appreciate. Upon it their ancestors have lived for many generations, have followed the one occupation of tilling these fields, and have looked to the owner as their patron. As a result, the peons not only feel that the land belongs to them but that they belong to it, and a deep-rooted sentiment binds them to the estate. In the second place, the peons have, until recently, been bound to the haciendas by a system of economic bondage which was tacitly concurred in by the officers of the law. This system

was designed by the Spaniards, in colonial times, to replace the explicit slavery which the crown prohibited. By a system of advance payments, which the peons were totally unable to refund, the *hacendados* were able to keep them permanently under financial obligations and hence to oblige them to remain upon the estates to which they belonged. Occasionally, indeed, a neighboring *hacendado* might agree to take over the debt that was owing, but, in such a case, the peon merely experienced a change of masters and a removal from the surroundings to which he was attached. The system of payments in advance is prohibited in the new Constitution of 1917, but, until agrarian conditions undergo a complete change, it will probably survive in spite of the law, as it has for sixty years in defiance of the Constitution of 1857. Furthermore, the peons are bound to the haciendas by mere necessity. Were they to leave, there is no unoccupied land upon which they might settle; and, if this were to be found, they have neither tools, seeds, stock, nor savings with which to equip farms of their own. During the recent revolution, when land was offered free to peons of Nuevo León, few of them were able to take advantage of the opportunity (so residents of the district say) because of this complete lack of capital.

The daily wages paid to the peons who work on the haciendas have always been very low. The law of 1656 fixed at three reales the amount to be paid to an Indian who was bound by debt. Humboldt reported that, in 1804, the country laborers in Mexico received about 28 centavos. Poinsett, in 1822, stated that wages in central Mexico varied from 25 to 50 centavos. Romero, in 1891, gave 36 centavos as the average, for the whole country, of the daily wages paid to field hands. The wages of the peons remained at that level until near the close of the Díaz administration, although, in the meantime, the peso had sunk to about half its earlier value. At the beginning of the twentieth century the increasing demand for labor was making itself felt, with varying results in different parts of the country, so that the scale of wages showed a considerable range. In Aguascalientes, Nuevo León, and San Luis Potosí a minimum of 19 or 20 centavos per day

was being paid, while in regions where labor was scarce, as in Morelos, Sonora, Chiapas, and Baja California, the daily wage ranged from 65 centavos to 1.50 pesos.³ The Constitution of 1917 has provided for the fixing of a minimum wage, but as yet the conditions in the rural districts have prevented the application of this regulation.

The wages of the peon are seldom paid in money. Ordinarily for his labor he is given a due bill or time check to be negotiated at the store maintained by the hacienda—with obvious results. On the other hand, the actual wage earned is not the only compensation that the peon receives. Certain perquisites, if one might so describe them, have been established by custom, which alleviate the lot of the Indian laborer. Thus he occupies a hut upon the estate without being called upon to pay rent. He is usually allowed a *milpa*, a piece of land for his own use, and this may provide at least a part of his living. Moreover, while he is forced to resort to the hacienda store, he enjoys a credit there sufficient to tide him over in the event of a general crop failure. Actually, however, so meager is the compensation received by the peon that he is kept in the most abject poverty, and few opportunities of escape from the bondage imposed by the established system ever present themselves. Obviously, this situation has greatly encouraged the emigration of rural laborers from Mexico to the southwestern part of the United States. Official figures given by the U. S. Bureau of Immigration show that between 1899 and 1919 there was an average yearly movement of 10,320 immigrants from Mexico into this country, in addition to the seasonal migration.⁴ These figures are thought to

³ On the subject of wages and labor conditions, cf. Matías Romero: *Labor and Wages in Mexico*, in his "Mexico and the United States," New York, 1898, pp. 495-558; Wallace Thompson: *The People of Mexico*, New York, 1921, pp. 348-370.

The preceding figures in this paragraph are based on the following references: Alexander von Humboldt: *Political Essay on the Kingdom of New Spain* (transl. by John Black), London, 1811, Vol. 2, p. 480; [J. R. Poinsett:] *Notes on Mexico Made in the Autumn of 1822*, Philadelphia, 1824, p. 145; Matías Romero: *Artículos sobre México publicados en los Estados Unidos de América . . . en 1891-1892*, Mexico, 1892, p. 126.

⁴ *Annual Report of the Commissioner General of Immigration, [1919-1920]*, Washington, 1920, p. 49.

represent only a part of the actual movement, since conditions on the border make it easy for the immigrant to avoid registration. The full tide of emigration of Mexican laborers is thought by some to reach as high as 100,000 a year.⁵ The problem has repeatedly demanded the attention of Mexican officials, both state and federal, but no means has been found for limiting the exodus. In an interview accorded the writer, Señor Pastor Rouaix, ex-Minister of Agriculture, declared that the movement was directly traceable to the land system existing in Mexico; that the largest migration was from the states of Querétaro and Michoacán, where the hacienda system is particularly well developed; and that, in his opinion, emigration would continue until the Mexican peon was enabled to possess a house and land of his own.

The Mexican peon usually lives in a village. This is either a settlement of laborers established upon the hacienda itself or an Indian *pueblo* that lies surrounded by, or at the edge of, the estate. Of recent years some *hacendados* have adopted the plan of building new settlements for their peons, and occasionally these groups of huts, erected on a common plan and constructed of brick and corrugated iron, may be seen in orderly array in some open space about a *casa de hacienda*, in striking contrast with the cluster of little adobe houses scattered among ancient groves of scraggly, gnarled trees and remains of stone walls that characterize the typical Mexican *pueblo*. The home of the peon and his family generally consists of a single-roomed hut (Fig. 13), which contains, by way of furnishings, little more than the pile of mats and blankets upon which the family sleeps, with possibly a home-made table, some rough chairs, a wooden chest or two for the trinkets and clothes worn on fiestas, and the inevitable candles burning before the picture of some saint or of the Virgin. The peon has neither corrals nor outhouses attached to his dwelling; he needs no such additional buildings, since he possesses neither implements nor stock of his own save the ubiquitous pig and a few fowls. The only thing that gives the place the aspect of a home is the presence of plants that are grown around it, for,

⁵ Wallace Thompson, *op. cit.*, p. 67.

next to his children and music, the Mexican loves flowers. Indeed, in traveling through the country, the presence of yards, outhouses, and gardens about the dwellings is evidence that one has passed from an hacienda into a region of small independent holdings.

The foregoing description of labor conditions applies chiefly to the haciendas on the Mesa Central, parts of the plateau of Oaxaca, the highland of Chiapas, and in the agricultural section of the peninsula of Yucatán, regions where the system of large agricultural holdings has reached its highest development. In other parts of the country conditions are different. In the Mesa del Norte, including the states of Chihuahua, Coahuila, Nuevo León, Durango, Zacatecas, and parts of San Luis Potosí, where the native population has always been limited in numbers, the system just described has not become general. As stated earlier, this part of the country was occupied only after the arrival of the Europeans, and the men who actually cultivate the land have never been attached as serfs to the soil. The same may be said of the other regions that were settled chiefly after the arrival of the Spaniards, such as the grasslands on the Gulfward slope in Tamaulipas, San Luis Potosí, and northern Veracruz, and the arid or semi-arid escarpment along the western coast. In the humid *tierra caliente* of Veracruz, Tabasco, Campeche, and the isthmus of Tehuantepec plantations have also been developed within recent times. Here, again, there was no established agricultural population upon which the newcomers might rely; and, in this case, labor was forcibly recruited from uncivilized Indian tribes, which were often reduced to virtual slavery, from the *enganchados*, or laborers kidnapped on the plateau, and from the Yaquis who were expelled from their lands in southern Sonora.⁸

THE PRODUCTS OF THE HACIENDA

As has been said, the haciendas usually include among their products all that the owner and his numerous dependents may require. A variety of crops must, therefore, be cultivated. On the

⁸ J. K. Turner: *Barbarous Mexico*, Chicago, 1910, pp. 37-48.

other hand, there are generally certain crops to which special attention is given. The distribution of these varies with the altitude, the amount and seasonal character of the rainfall, the quantity of water available for irrigation, the nature of the soil and its drainage, and the established customs of the peons. Furthermore, it varies with the size and the character of the holdings, as certain crops are best suited to cultivation on a large scale.

The most characteristic large-farm products of Mexico, outside of cattle, are *pulque*, sugar cane, wheat, *henequén*, cotton, and rice. Corn (maize) is also grown in large quantities on all haciendas, more particularly on those that occupy the alluvial lands north of Lake Chapala, the lower alluvial beds of the Valleys of Mexico and Toluca, the Bajío of Guanajuato, and the districts of Morelos and Tabares in Guerrero. The haciendas of Yucatán formerly produced much corn, but, in the drier northern areas, they have recently devoted the greater part of their lands to *henequén*. Few haciendas of the north or the west cultivate corn on a large scale. The haciendas which grow wheat as their principal crop are situated chiefly upon the Mesa Central, especially in the districts about Lake Pátzcuaro (Fig. 26) and Puruándiro in northern Michoacán, the Bajío of Guanajuato and the Valleys of Atlixco (Fig. 16) and Huejotzingo in the state of Puebla. This crop depends very largely upon irrigation; it is due to this fact that wheat production has been left primarily to the large farms, which command a better supply of water and can construct adequate systems of reservoirs. The preference of the Indian for corn, which has always formed the staple of his diet, has also tended to limit the production of wheat to the haciendas. Scarcity of labor and the extreme heat prevent any extensive cultivation of wheat in the *tierra caliente*. Scarcity of water limits its production in the north and west principally to valleys that can be irrigated, such as those of the Conchos and Nazas in Chihuahua and those of the Sonora, the Altar, and the Matape in the state of Sonora.

Second in value only to the cereal crop is the production of

pulque, the national alcoholic beverage (Fig. 17). The range of the maguey, from which the juice to make *pulque* is extracted, is limited almost entirely to the highlands. The territory in which it is most extensively cultivated for the production of *pulque* is restricted to the Mesa Central, and only in a few areas is it cultivated on a large scale as an hacienda crop. It grows best on a well-drained soil, such as is found on the piedmont slopes about the Valley of Mexico; but it grows also on soil that is too shallow for other crops, especially where a thin layer of earth overlies the ancient rocks or the more recent lava flows. The zone of maguey production centers about Mexico City, where the largest market for *pulque* is found. Since the juice ferments very rapidly and must be consumed within some 48 hours after its extraction from the plant, it is shipped daily into the Mexican cities, especially the capital, as milk is into cities in other lands. The district most noted for its immense *pulque* farms is the Llanos de Apam, the broad, gently sloping pass that connects the Valley of Mexico with that of Tlaxcala. On this plain, where the three states of Hidalgo, México, and Tlaxcala meet, and upon the gentle inclines that bound the Valley of Mexico on the northwest, thousands of acres of excellent soil are given over to the cultivation of the maguey.

Sugar cane occupies three distinct zones in Mexico and is grown under quite different conditions in each. In the alluvial valley floors that lead down from the Mesa Central toward the Gulf, especially in those of Orizaba, Córdoba, and Cosamaloapan, the cane fields are seldom irrigated, since these regions receive an abundant rainfall. In the Valley of Morelos precipitation is insufficient, but the high mountains to the north furnish numerous streams, which are utilized to supplement the rainfall. On the still more arid west coast irrigation is almost exclusively depended upon, and the sugar farms are limited to the river valleys.

Henequén is grown on a commercial scale only in a restricted district, the northern section of Yucatán. Here the porous lime-



FIG. 16—The Atlixco Valley on the edge of the Mesa Central, 20 miles southwest of Puebla, with its fine wheat fields in the background.



FIG. 17—Maguery hacienda in the Mesa Central near Mexico City. From the juice of the maguery plant is made *pulque*, the national beverage of Mexico.

stone soil, light rainfall, and dry atmosphere have been found particularly favorable for the proper development of the fiber. It has usually been considered a large-farm product. In fact, the initial expense in building the tramways used to transport the leaves to the cleaning mills, the cost of machinery for extracting the fiber, and the long wait of four or five years before a harvest can be obtained require a large initial outlay. It should be observed, however, that the haciendas in Yucatán are not so extensive as those in other parts of the country, averaging only a few hundred acres each.

The cotton plantations of Mexico are situated chiefly in the arid Laguna region, on the borders of Durango and Coahuila. In this district an extensive area of rich alluvial soil which has accumulated in the *bolsones* that lie along the Nazas River has been planted in cotton, water being supplied by a system of canals which utilizes the summer floods in these otherwise desert streams. The climate of this region has been found almost ideal for cotton growing, since the summer is long, there are seldom any rains that might injure the bolls, and frosts are rare during the growing season. On the west coast, in the valleys of the Yaqui, the Mayo, the Fuerte, and the Santiago Rivers, there are also cotton haciendas; as also in the drier districts of northern Veracruz. Rice, tobacco, and coffee are grown upon haciendas chiefly in the warmer regions, such as the Valle Nacional at the northern base of the Oaxaca upland, the isthmus of Tehuantepec, and the middle slopes of the state of Veracruz.

A large number of the haciendas are cattle ranches. This is particularly the case in certain well-defined regions, whose distribution is largely determined by the rainfall. As a rule, haciendas are not devoted to stock raising where the annual precipitation is sufficient for agriculture. This eliminates most of the central and southern parts of the plateau, as it does also the humid *tierra caliente* of the eastern coast. The Spaniards, in the beginning, made many unsuccessful attempts to give these regions a pastoral character, both by introducing European cattle and by transplanting from Spain the *mesta*, an institution

whose chief function was the protection of the sheep owners against the feudal landlords and peasant farmers, with whom they naturally came into conflict because of the seasonal migrations of their herds. However, with its dense population settled upon limited areas of productive soil, central Mexico has always remained agricultural, and cattle raising has developed on the haciendas as an adjunct of agriculture rather than as a separate industry. On the other hand, in the north, upon the semi-arid plains that comprise the states of Chihuahua, Coahuila, Durango, and Tamaulipas, the great estates have been devoted principally to live stock. The same is true of the drier hills of the western slope of the Mesa Central and of the rough country that comprises the lower sections of Michoacán and Guerrero. Pasture lands are found also upon the gentle, well-watered slope that leads down from the plateau through the states of San Luis Potosí, Tamaulipas, and northern Veracruz. In all of these regions there are large estates where, in normal times, the land is given over almost entirely to grazing. As will be observed, these are the regions which, up to the Spanish conquest, had remained practically uninhabited. Of little value to the aboriginal people, they became of importance only upon the introduction of cattle, and their development has followed in response to the new cultural features brought by Europeans. As a consequence, the conditions of life have been little affected by native influences; the employees are mestizos, who are neither bound to the soil nor have any customary claims upon it.

THE ECONOMIC VALUE OF THE HACIENDA

In the eyes of the Mexicans the value of an hacienda does not lie in the money return yielded by the annual crops. The actual return in money is often very small. With intensive cultivation the broad acres might be made to yield a large income; but, with an absentee owner, a hired administrator, and poorly paid peons, the typical Mexican hacienda yields little more than enough to feed its numerous population. The economic value to the owner lies rather in the supplies which it furnishes, the cheap service

which it provides for his household, and the amount of money which he can obtain on a mortgage. As Molina Enríquez says, "La hacienda no es negocio."⁷

At the present time two important factors are operating to affect the economic value of the Mexican hacienda. On the one hand there is the "unearned increment." This increase is likely to be rapid in a country such as Mexico, where most of the habitable areas are already densely settled and where the amount of arable land is so reduced that the agricultural products in an average year barely suffice for the domestic consumption. On the other hand under the present system of cultivation the productivity of the land seems to be decreasing at a rather alarming rate. Humboldt estimated that the average yield of corn lands on the Bajío of Guanajuato, in his time, was 150 grains for each grain planted, which has been reckoned as a yield of 75 hectoliters per hectare, or about 86.1 bushels per acre. This is probably an exaggeration, but, even so, it suggests an actual return far above the present yield, which may be taken for the same region to be between 8 and 10 hectoliters per hectare, or from 9 to 12 bushels per acre. For typical agricultural lands near Monterrey an estimate of 7 to 25 bushels per acre has been given, varying with the amount of water supplied.⁸ This would represent a decline in productivity of at least 50 per cent within about a century and a quarter. It is not at all surprising that under the present system, "the most wasteful of extensive cultivation," the soil should become exhausted. With no careful administration, with the poorest of poor labor, with no attempt at rotation of crops—except that intended to get two or three crops from the same area each year—with little attention to the use of artificial fertilizers, the lands of the haciendas cannot but deteriorate. Furthermore, the ruthless cutting of timbered areas leaves the slopes of the hills denuded, exposes them to gulying during the tropical showers of the summer time and to abrasion by the strong mountain winds. Except in the districts where small holdings prevail,

⁷ Molina Enríquez, *op. cit.*, p. 90.

⁸ On these estimates see Wallace Thompson, *op. cit.*, pp. 145-146.

and where care of the land is necessarily more imperative, one sees little effort made to conserve the resources of the farm lands or to introduce improvements in the methods of agriculture. The deterioration involved cannot but tend to offset in some degree the natural increase in the economic value of the properties.

THE SOCIAL VALUE OF THE HACIENDA

The hacienda has, however, a social value which far outweighs its economic worth in the eyes of the average Mexican. Every Mexican aspires to be a landowner; and the life of the *hacendado* holds a charm unrivaled by the attractions of any other occupation. The elements which make this appeal are sufficiently obvious: pride of proprietorship, a minimum of toil, the leisurely oversight of an estate, and unlimited opportunity for the exercise of authority over humble servitors. Furthermore, the life of the *hacendado* offers ample occasion for the display of fine horses, expensive trappings, and picturesque accouterments; while the rounds of supervision call for periods of life in the open and provide the subtle attraction of occasional personal hardships and dangers. Herein lies the real value of a Mexican hacienda to its owner. The *hacendado*, the "man on horseback" of whom Blasco Ibáñez often speaks in his characterization of Mexico, is the real hero of the nation. A large rural estate is the goal of ambition of every true Mexican, and the sentimental value that attaches to these holdings is an influence in the life of the nation that far eclipses the economic value of the properties.⁹

THE PLACE OF THE HACIENDA IN THE LIFE OF THE NATION

The haciendas and their owners have, in most respects, dominated the life of Mexico. This domination is less economic than social or political. Opinions differ as to the proportion of the nation's food supply that is derived from the haciendas and from the smaller properties. Statistics that would settle the question

⁹ Molina Enríquez, *op. cit.*, p. 85 ff.

have, apparently, never been compiled; but, even if the smaller farms supply the greater part of the food for public consumption, it is the haciendas, with their greater ability to hold their produce for a favorable price, that control the markets. In matters of wages and conditions of work the haciendas also exert a determining influence.

The social and political influence of the haciendas is more direct and powerful. Throughout the history of Mexico the landholding class has generally dominated social conditions. It has set the standards of morals, education, and amusement for the middle class and has determined the conditions under which the manual laborer must live. Moreover, the great landholders have ruled the country. This small class, numbering 8,000 to 10,000 proprietors, has at all times exercised a preponderant influence in national affairs and has usually been in control in individual states. In truth, while the Indian element has through its politico-agrarian pueblo and its *caciques* maintained a fair degree of local self-government, the great landholders have been the only group in the country whose training and experience have fitted them to deal with the larger aspects of national government. In the colonial period their influence constantly thwarted the benevolent measures of the home government; and since the birth of the republic legislation has been dictated by them, and largely in their interest. If, as has sometimes happened in revolutionary periods, landholders were unable to prevent the enactment of laws opposed to their interests, they have usually succeeded in controlling the enforcement of the objectionable laws. In the War for Independence they blocked the democratic tendencies of Morelos and Hidalgo and substituted for these leaders the aristocratic régime of Iturbide. In the middle of the nineteenth century the great proprietors supported Maximilian in his struggle against the Juárez reform movement. Though ultimately defeated in that contest, they succeeded later in nullifying the agrarian program by their influence in the land legislation of the Díaz administration. Working hand in hand with the clerical party, they have uniformly constituted the con-

servative element, opposing, as contrary to their interests, most of the liberal measures put forward.¹⁰

It must, however, be remembered that the development of the natural resources of the country has been chiefly due to the landholders and their associates, the foreign capitalists. To their efforts Mexico owes the building of roads; the construction of railways; the erection of splendid government buildings, executive mansions, legislative halls, schools, museums, and theaters; as well as the creation of parks, boulevards, and public monuments. Irrigation has been carried on largely by the landholders, and many of the mines have been developed by them or their foreign associates. It is a record of achievement that would elicit enthusiastic praise if one could but forget the system of landholding and of labor upon which this program of improvements has been based. At present, as for short periods during the War for Independence and during the Reforma, the *hacendado* class is out of the saddle. Most of their farms are either abandoned and in ruins or are held and worked by some favorite of the revolution. It remains to be seen whether the dispossessed landholders will not re-establish their influence in time to thwart the agrarian program of the revolution and to gain control of the government before their system can be overthrown.

ORIGIN AND HISTORY OF THE HACIENDA

Many of the haciendas in Mexico trace their origin to the extensive grants of land made in the early years of the Spanish conquest and have often remained in the possession of the same family. The system by which they are held also dates from the early colonial period and has thus become a deeply rooted institution. Because of the permanence of this system of *latifundia* in Mexico and because of its powerful influence in the life of the nation, it will be well to trace briefly its historical development.

The aim of the Spaniards in their conquest of the New World was threefold. First of all, they sought to extend the realm of

¹⁰ See the description of *los criollos señores* in Molina Enríquez, *op. cit.*, pp. 38-39; Fernando González Roa: *El aspecto agrario de la Revolución Mexicana*, Mexico, 1919, pp. 61-75.

the crown. This was the primary motive assigned for the initial voyage of Columbus, as for most of the expeditions of exploration and conquest undertaken by his successors. Next in importance, and closely associated with it, was the zeal for bringing pagan nations to a knowledge of the Christian faith. Even in the midst of invasions, wars, plunderings, and massacres the Spaniards never forgot this purpose. The third motive which prompted the Spanish occupation of the New World was the acquisition of wealth. These three aims directed the Spaniards in their settlement of the New World and in the establishment of what eventually became the characteristic system of land tenure in Spanish America.

THE ENCOMIENDAS

After the occupation of Mexico the system of *encomiendas* and *repartimientos* was introduced to serve these aims. The system was not new, having been employed earlier in the conquest of the Balearic and the Canary Islands and in the reconquest of southern Spain from the Moors. As first established in the western hemisphere, the system of *encomiendas* or *repartimientos*¹¹ consisted in the distribution of the Indians among the conquerors. To each colonist was assigned a certain chieftain with his followers, and these were obliged to till lands, work mines, or carry burdens for the *encomendero*. The assignee was strictly enjoined to instruct his Indians in Christian doctrine and in the ways of civilization, as well as to treat them justly and to protect them when necessary.¹² To the kings of Spain the system offered an effective means for reducing the native inhabi-

¹¹ These grants of Indians were at first called *repartimientos*. Then, perhaps in order to mollify the opposition of Queen Isabella, they were termed *encomiendas* (signifying that the Indians were entrusted to the Spaniards' care). In the West Indies, and some other parts of America, they came to be termed *repartimientos* when assigned for the first time and *encomiendas* when subsequently allotted. In Mexico the word *repartimiento* was used in later years to signify the allotment of Indians made to a Spaniard for service in the mines, corresponding to the *mita* in Peru; while the term *encomienda* was applied only to the grants of Indian villages with the service of their inhabitants. See Antonio de León Pinelo: *Tratado de confirmaciones reales de encomiendas*, Madrid, 1630, Part I, Ch. 1.

¹² Bartolomé de las Casas: *Historia de las Indias*, Madrid, 1875-76, Vol. 2, pp. 346-351.

tants to subjection and to Christian practices. Introduced first in the West Indies, the *repartimiento*, by reason of the severity of the service demanded, had practically depopulated the islands within a few decades. It had, however, effectually brought the islands under Spanish authority, had given the invaders possession of the soil, and had provided them with labor whereby they could live without performing manual work, which the inherited notions of the Castilians rendered distasteful and which the climate of the tropics made almost impossible.

In the conquest of Mexico the Spaniards had at once been led past the coast lands and had established themselves upon the temperate uplands of the Mesa Central. Here they had found an agricultural people, who for centuries had occupied and tilled the fertile but restricted *bolsones* and valleys of the plateau and prized the soil as their chief possession. Furthermore, the Spaniards found, in the Aztec empire, a system of tribute already established, by which the emperor and his associated chieftains had drawn revenue from conquered districts. The existing system suited well the needs of the Spaniards, and, replacing the Aztec chiefs in political control, they collected the tribute formerly paid to the Aztec emperor. In one important feature the plan of partition adopted in Mexico differed from that previously employed in the West Indies. In the earlier case the unit of allotments in the *encomiendas* and *repartimientos* had been the individual *cacique*, such and such a *cacique* and his followers having been assigned to each Spaniard.¹³ Among the sedentary Mexicans, the unit of place was substituted for that of kinship and allotments were made, not by *caciques*, but by villages, each Spaniard receiving a village or a group of villages as his *encomienda*. The numerous towns that composed the Aztec empire were promptly distributed among the conquerors, each grantee being allowed to collect for himself the tribute of his district, consisting usually of the natural products of the land. These grants of tribute districts became what Amunátegui¹⁴ calls *las*

¹³ Bartolomé de las Casas, *op cit.*, Vol. 2, p. 373.

¹⁴ Domingo Amunátegui y Solar: *Las encomiendas de indígenas en Chile*, Santiago de Chile, 1909-10; Vol. 1, p. 174; Vol. 2, p. 71.

encomiendas territoriales, to distinguish them from the grants of the services of Indians unattached to lands. The *encomenderos* in Mexico were, moreover, permitted to exact certain personal services from the Indians entrusted to them, such as labor in the household and in the fields and attendance upon the grantee when the latter visited the estate.

The *encomienda* was intended primarily as a means whereby the Spaniards might live in the new land and might utilize the services of the Indians in the development of its resources. At the same time, royal orders strictly enjoined that the persons and property of the natives should be respected by those placed over the various districts.¹⁵ Within a brief period, however, the system lost its original character and became simply a method of land tenure, since the colonists soon came to look upon the districts assigned to them as being virtually their own and to regard the native agriculturists as their serfs. The process of this evolution was facilitated by the fact that overlordship of the land with peasant cultivators had long been one of the characteristic features of agrarian institutions in Castile, where large tenanted estates were in part a result of the feudal organization of society in preceding centuries and in part a consequence of the pastoral character of Spain's arid *meseta*.¹⁶ Following this precedent, a system of overlords came into existence in Mexico wherever the Spaniards found a native people already settled on the land; and, before the close of the first half-century of occupation, a large part of the inhabited region of Mexico was held in *encomiendas*.

The individual allotments were often on a princely scale. Cortés himself was rewarded with a vast concession. It included 22 towns (each with its surrounding lands), representing a population of 23,000 vassals. The territory comprising this grant lay in what is now the states of Morelos, Oaxaca, Puebla, México, and Veracruz (Figs. 18 and 19) and included a large part of

¹⁵ Recopilación de leyes de los reynos de las Indias, 3rd edit., Madrid, 1774, Book VI, Chs. 8-15.

¹⁶ Francisco de Cárdenas y Espejo: Ensayo sobre la historia de la propiedad territorial en España, Madrid, 1873.

the inhabited area of the first two. These lands, among the choicest in Mexico, contained part of the rich alluvial lands of Atlixco, now famous for its irrigated wheat farms (Fig. 16); the Valley of Cuernavaca, to this day the richest center of cane

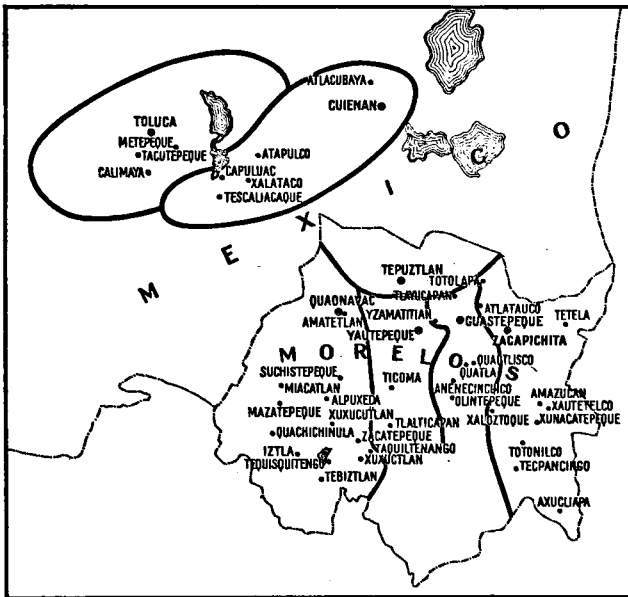


FIG. 18—Sketch map showing the towns granted to Cortés in Morelos and México and the approximate area of the land included in the grants. Scale, 1 : 1,630,000, or about 25 miles to the inch. (Based on the second reference in footnote 17.)

production in the entire country; and the fertile valley lands around the present city of Oaxaca. We can only roughly estimate the extent of the grant thus made, but the king of Spain is said to have remarked, when friends of Cortés asked for further favors, that the conqueror already held estates greater

than those of some European dukedoms. The areas claimed must have amounted to not less than 25,000 square miles and contained a total population of some 115,000 people, if we accept the interpretation which Cortés himself insisted upon,

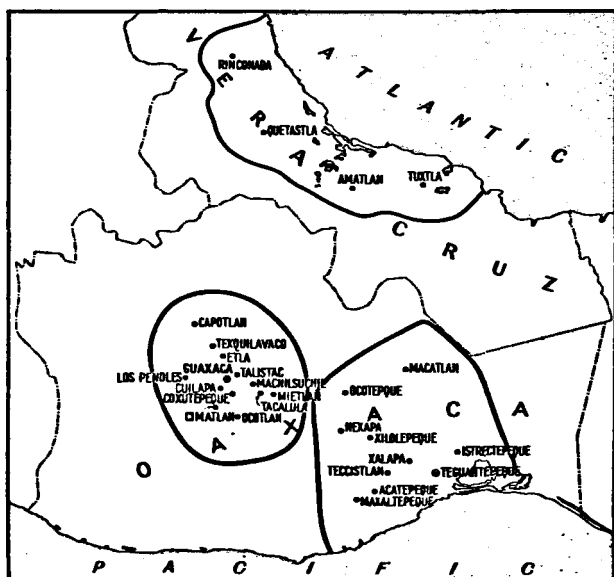


FIG. 19—Sketch map showing the towns granted to Cortés in Oaxaca and Veracruz and the approximate area of the land included in the grants. Scale, 1:5,850,000, or about 97 miles to the inch. (Based on the second reference in footnote 17.)

namely that the "23,000 vassals" mentioned in the grant referred only to the free heads of families.¹⁷ The royal decree grant-

¹⁷ Vicente Riva Palacio: *México á través de los siglos*, Mexico, [1887-89,] Vol. 2, pp. 182-183. A list of the towns and districts granted to Cortés may be found in a petition presented by him to the Audiencia in 1532. See *Colección de documentos inéditos . . . del Real Archivo de Indias*, Vol. 12, Madrid, 1869, pp. 554-563.

ing these estates specified that Cortés should have the lands and vassals, the woods and the pastures, all waters, both running and standing, and complete civil and criminal jurisdiction—all the rights, in short, which belonged to the crown itself in the aforesaid lands. In addition to these vast estates, Cortés also held a number of mining properties in Zacatecas, Sultepec, Taxco, and Tehuantepec. His entire possessions were formed into a *mayorazgo* (an entailed estate) in 1535, so that the property should pass entire to his heir and remain in the family undivided. As late as the beginning of the nineteenth century this property remained almost intact, and contained 15 *villas*, 157 *pueblos*, 89 *haciendas*, 119 *ranchos*, 5 *estancias*, with 150,000 people.¹⁸

Another example of the extensive grants made to Spaniards was the entire *alcaldía*, or district, of Tula, in the present state of Hidalgo. This district with its eight *pueblos* and nearly 300 Indian families was held by the Duke of Atrisco. It was a fertile region producing an abundance of grain and fruits which were sold in the markets of Mexico City. Excellent lime was also produced here and shipped to the city in large quantities. The town and district of Xochimilco was given as *encomienda* to Pedro de Alvarado, the trusted lieutenant of Cortés. The grant contained the fertile alluvial lands beside Lake Xochimilco and many of the famous "floating gardens." The district was densely populated; it contained at that time some 30,000 people and supplied 2,500 soldiers for the army with which Alvarado conquered Guatemala. Another entire province was held by Juan Jaramillo, the husband of the famous Marina. This was Xilotepeque, in which, according to López de Velasco,¹⁹ there were about 26,000 tributary Indians, making a total population of not far from 130,000 people, distributed in seven districts, with many towns and scattered settlements. One of the greatest of the *encomiendas* territorially was that given to Juan de Villaseñor y Cer-

¹⁸ Fernando Navarro y Noriega: Memoria sobre la población del reino de Nueva-España [1814], *Bol. Soc. de Geogr. y Estadística de la República Mexicana*, Ser. 2, Vol. 1, 1869, pp. 281-291; reference on p. 289.

¹⁹ Juan López de Velasco: Geografía y descripción universal de las Indias, recopilada . . . desde el año de 1571 al de 1574, publicada . . . por don Justo Zaragoza, Madrid, 1894, p. 197.

vantes. It consisted of almost the entire state of Guanajuato, as at present constituted, an area of over 10,000 square miles. The region is now one of the principal grain-producing centers of the country, with a population of something more than a million people. At the time of the Conquest it was far less populous than now, for the Chichimecas, who occupied the greater part of it, were not settled agriculturists. Within a short time, however, valuable mines were discovered in the now famous mining district of Guanajuato, and the rich though somewhat arid plain, called the Bajío became one of the most important farming regions of the country. Some of the *encomiendas* were so large—for example that of Jaramillo—that the king gave orders to have them reduced in size. Apparently his commands were disregarded, for a good authority states that only a few towns were taken away from individuals as a result of this order.²⁰

Not all of the *conquistadores* received *encomiendas* on the scale described. Many of them had to be content with much smaller favors; particularly when the number of deserving persons increased rapidly as a result of frequent expeditions to conquer outlying districts. The smaller grants often consisted of a group of villages, in some cases of a single pueblo; and, at times, even a single town might be divided between two *encomenderos*.

Duration of Encomiendas

As originally granted, the *encomiendas* could be revoked at the pleasure of the king. With the growing permanence of possession and, particularly, when the conquest of Peru had extended Spanish dominion over another great area inhabited by sedentary agriculturists, this practice was gradually altered. In 1536, by the Law of Succession, grants were extended to include the entire life of the grantee (or that of his wife) and the lives of his children—that is for two generations or “two lives” (*dos vidas*, as it was expressed in Spanish).²¹ At the expiration of this period the *encomiendas* were supposed to revert to the crown and might

²⁰ León Pinelo, *op. cit.*, p. 83.

²¹ *Ibid.*, p. 5.

then be bestowed upon some other person. As a matter of fact, their permanence was already assured, at least in the minds of the colonists. This became apparent when the "New Laws" of 1542, which had provided for the total abolition of the *encomiendas* and for the complete reform of colonial administration in America, met with such stormy opposition in Mexico and Peru that their repeal was found necessary.²²

To avoid any possible lapse of their grants, a strong effort was made by the colonists, in 1555, to obtain a decree from the king making the *encomiendas* perpetual. The benevolent Las Casas was able to block this move; but, in 1559, a third life was added when the king permitted, though he did not officially sanction, the retention of *encomiendas* by the third generation. Some twenty years later a plea was made for a further extension, but no royal decree was obtained until 1607, when formal sanction was given to the third life and a fourth life was granted. After a lapse of another twenty years, in 1629, the matter again came up, and a fifth life was added.²³ Thus, generation after generation, during a whole century, the titles to *encomiendas* were extended, with the natural result that they came to be regarded as possessions of the family by which they were retained.

PEONÍAS AND CABALLERÍAS

Some of the Mexican haciendas owe their origin to other forms of grant. Not all Spaniards who came to New Spain after the Conquest were accommodated with large tribute districts. There were many who, for one reason or another, received outright grants of land, but without vassals. These grants were of two kinds: *peonías* and *caballerías*, so called originally, because they were rewards to soldiers of the two arms of the service, the *peones* (infantry) and the *caballería* (mounted troops). The same terms had been used earlier to designate the rewards in land that were given to soldiers who aided in the reconquest of Spain from the Moors. As applied in the West Indies and, later,

²² The New Laws of the Indies, [edit. and transl. by] Henry Stevens and F. W. Lucas, London, 1893, pp. xc-xci.

²³ *Ibid.*, p. xcii.

in Mexico and other colonies, these grants were made, perhaps for the first time, specific in size. A *cédula* of June 18, 1513, established standards of land grants to be made in the entire New World. According to this, a *peonía* was to consist of the following lands:²⁴ (1) a building plot (*solar*) 50 by 100 feet; (2) agricultural land containing 100 *fanegas de labor* for wheat and 10 *fanegas* for corn (equal to about 35 or 40 acres in all); (3) two *huebras*²⁵ of land for orchard and eight for a timber plot; (4) pasture for 10 hogs, 20 cows, 100 sheep, and 20 goats—this we may estimate as from 30 to 50 acres. The *peonía*, then, was supposed to represent the amount of land of different kinds sufficient to maintain a single family in modest circumstances and would probably comprise something over 100 acres, varying, however, according to the character of the land. Persons of greater merit were to be given an allotment of land five times that of the *peonía*. This was called the *caballería*, although it was apparently not restricted, in the colonies, to mounted troops. It comprised, apparently, some 165 acres of arable land, with pasture sufficient to support over 700 cattle of different kinds. The entire grant would probably contain from 500 to 1,000 acres of land, according to its character.

In these grants of *peonías* and *caballerías* it was specified that the distribution should be made in such manner as to give each person some of the best, some medium, and some poor land. Improvement and four years' occupation were to give full title to the property. Both the *peonías* and the *caballerías*—in fact, any grant of land alone—came to be called a *merced*, a favor from the king. In the long run these grants formed the nucleus about which the recipients accumulated additional holdings. The means by which this aggrandizement was effected were various, but consisted usually in the seizure of Indian holdings,

²⁴ Mariano Galván Rivera: *Ordenanzas de tierras y aguas*, etc., 5th edit., Mexico, 1855, pp. 105-107, and 206-212; Aniceto Villamar: *Las leyes federales vigentes sobre tierras, bosques, aguas, ejidos, colonización*, . . . , 2nd edit. . . . con una reseña histórica de la propiedad territorial en México, por el lic. S. Moreno Cora, Mexico, 1910, p. 16; M. G. Reynolds, *Spanish and Mexican Land Laws*, St. Louis, Mo., 1895, p. 43.

²⁵ A *huebra*, or *yugada*, was as much land as a yoke of oxen could plow in a day, about half an acre.

in marrying Indian women who were owners of property, or in the occupation of unclaimed lands.

HACIENDAS FROM OTHER SOURCES

Some haciendas are said to have been created from the holdings of the Aztec chieftains (*cacicazgos*). These lands, if held in fee simple, with tenants attached, as seems to have been the case in certain instances, would easily have been converted into *señoríos*, with which the Spaniards had been familiar in their own country. Upon such holdings the colonists merely replaced the fallen Indian chiefs as overlords. Zorita, writing about 1560, says that "all the nobility have now lost their lands, their serfs (*mayeques*), and their renters, and are very poor."²⁶ These lands the Spaniards treated as legitimate spoils of war, and they were appropriated to form the estates of the conquerors.

Large Mexican estates were created in still other ways. Thus a number were formed by purchase from the Indians. This procedure was followed, more particularly, in the province of Tlaxcala, where the Spanish authorities had decreed that no *encomiendas* should be granted, because the Indians had allied themselves with Cortés and had aided him in the overthrow of Montezuma. The hacienda called Santa Anna Atoyascalco, in Tlaxcala, may be taken as typical of such farms. It had its beginnings in the gift of a piece of land made, in 1582, by an Indian woman to a Spaniard who had befriended her and her husband. Other plots were added to it, during the following years, some by purchase, some by gift, some by inheritance.²⁷ Such transfers of land from Indians to whites were supposed to be made only after the approval of the Viceroy had been obtained,²⁸ but, with the disorder that prevailed in the early years of the Spanish domination, the titles thus acquired were frequently imperfect, as subsequent events showed.

²⁶ "Están tan pobres que no tienen que comer, y están desposeídos de sus señoríos y tierras y renteros y *mayeques* . . ." (Alonso de Zorita: Breve y sumaria relación, in Joaquín García Icazbalceta: Nueva colección de documentos para la historia de México, Vol. 3, Mexico, 1891, pp. 71-227; reference on p. 168.)

²⁷ For data regarding this property I am indebted to Mr. W. O. Jenkins, of Puebla, who kindly permitted me to look over the ancient title deeds in his possession.

²⁸ León Pinelo, *op. cit.*, p. 171.

DISTRIBUTION OF THE EARLY HOLDINGS OF THE SPANIARDS

The large holdings acquired by the Spaniards in the years immediately following the Conquest (both the *encomiendas* and the estates which had been formed in other ways) were located, directly or indirectly, in response to certain geographical influences.

By the end of the first half-century (1572) the number of *encomiendas* that had been granted to individuals in New Spain was said to have been 507, yielding annually the sum of 400,000 pesos in tribute. The crown still held 320 tribute districts, reserved for the king's revenue and yielding him 50,000 pesos per year. The entire number of *encomiendas* was distributed as in Table I:²⁹

TABLE I—DISTRIBUTION OF "ENCOMIENDAS" IN 1572

REGIONS	RESERVED BY THE KING	BELONGING TO INDIVIDUALS	TOTAL
I. Audiencia de Mexico			
Archbishopric of Mexico (including 13 central provinces) .	60	126	186
Bishopric of Tlaxcala (including Veracruz)	61	66	127
Bishopric of Oaxaca .	68	82	150
Bishopric of Michoacán (including Colima)	79(?)	15(?)	94
II. Audiencia de la Nueva Galicia (including Jalisco, Zacatecas, and regions slightly explored to the north and west)	52	52	104
III. Gobernación de Yucatán (including Tabasco)	...	130	130
IV. Victoria (Campeche) . .	...	36	36
	320	507	827

²⁹ Compiled from López de Velasco, *op. cit.*, pp. 182-282. The author uses the word *repartimientos*, showing that at this date the terms were almost interchangeable.

In the general distribution of *encomiendas* geographical factors operated indirectly. These tribute districts were of value only where the more advanced tribes provided a source of revenue and where the services of sedentary Indians might be utilized in fields, mines, and households. They were limited, in the main, to the territory occupied by the Nahuatl tribes of the Mesa Central, the territory of the Mayas in Yucatán, and a few favored areas on the Oaxaca plateau, where, as we have seen, conditions of climate and soil favor human habitation. In the highland regions the combination of a genial temperature, sufficient rainfall, and productive soil had made concentration of population possible under aboriginal conditions; and the same factors influenced in turn the distribution of the Spanish grants. In the northern part of Yucatán the relatively light rainfall, as compared with other sections of the *tierra caliente*, had been the controlling factor in the growth of a dense Indian population and affected similarly the establishment of *encomiendas*.

Within these general regions where the Indian population centered the lands occupied by the newcomers were selected with reference to certain changes caused by the new economic factors which were being introduced. In several important respects the use of the land by the colonists differed from that of the native civilization which they were displacing. Perhaps the most important innovation made by the Europeans who settled in Mexico was the introduction of domestic animals. With beasts of burden, draft animals, and extensive herds of cattle, none of which the Indians had ever possessed, conditions of life in Mexico underwent a great change. The plow, drawn by oxen or mules, replaced the crude spade of the native and made possible a better and more extensive cultivation of the soil. Human burden-bearers gave way to trains of mules and horses or to the great ox-carts of Spain, which greatly facilitated travel and transportation. The herds of horned cattle and of horses, sheep, and goats made grasslands (hitherto unutilized) of little less value than the arable ground. Furthermore, when some of the rich mineral deposits of Mexico were discovered soon after the Con-

quest, new centers of population sprang up which gave an unheard-of importance to even the slightly productive soil in adjacent lands where supplies for the miners might be raised. The introduction of European plants also affected conditions of living. Of these the most important, in their effect upon the use of the land, were wheat and rice; while the demand for sugar and the consequent development of cane culture (already known in Mexico) brought added value to lands suitable for its growth. In their eager exploitation of the mineral resources of the country the Spaniards extended their settlements into the mountainous regions where the natives had seldom penetrated. The new cities of Guanajuato, Pachuca, San Luis Potosí, and Zacatecas, with numerous other mining towns, sprang up, each one becoming the nucleus about which clustered agricultural holdings wherever a patch of arable soil could be found. The search for mines also pushed the line of settlements far to the north, opening up for Spanish occupation large areas of territory that had heretofore been but the home of wandering tribes.

The introduction of cattle made it essential that extensive grasslands should be included in the holdings of the Spaniards. By 1572 many such regions had been appropriated or had been secured by grants. There were herds upon the pastures of the province of México, where the Valley of Toluca and the luscious meadows of the mountain heights (Fig. 7) attracted the Spanish herdsman. The plain of Ozumba, still a notable stock-raising district, had also been occupied by cattle. In the valley of Tepeaca, among the hills of Michoacán and Jalisco, upon the flat *bajío* of Guanajuato (at that time but slightly cultivated), and upon the *sabanas* of Yucatán and Tabasco, the Spaniards held large herds, either upon their own *estancias* or upon the unoccupied areas between Indian holdings.³⁰ The desire for land suitable for the cultivation of wheat, rice, and sugar cane is seen

³⁰ López de Velasco, *op. cit.*, pp. 182-282, gives many data regarding the use the Spaniards were making of the land, the crops they were cultivating, etc. By 1550 the crown had already found it necessary to issue decrees protecting the unfenced fields of the Indians from the encroachment of Spanish cattle farms. See "Recopilación," Book IV, Ch. 12, Law 12.

also to have guided the Spaniards in their selection and to have influenced the distribution of their holdings. While the uncertain rainfall of the Mesa Central usually suffices for a fair yield of corn, these newly introduced crops were found to require irrigation. Hence the haciendas which were devoted to the cultivation of these products were established in districts where a sufficient supply of water was available. Most notable among these districts were those of Cuernavaca, where the large estates of Cortés were early given over to cane culture; the Valley of Puebla, where the still famous region of Atlixco (Fig. 16) was declared to be "the finest wheat land in the world;" the more temperate parts of Oaxaca; the rich lands about Lake Pátzcuaro (Fig. 26); the region about Guadalajara; and a few isolated valleys near the mining centers of Durango and Zacatecas. These regions are still largely devoted to the cultivation of the same crops.

CONFIRMATION OF LAND TITLES

So numerous and extensive did these large estates become that there was little good land left, either for the aborigines who did not live on the farms or for the agricultural towns that the government was forming wherever a new settlement of Spaniards could be established. In order to check this evil and, at the same time, to protect and perfect the titles to lands rightfully acquired, the Spanish government adopted a series of measures providing for the examination of all deeds. The first steps in this direction were taken in 1571; in 1631 and 1643 a more general examination of titles was made; while similar measures followed in 1674, 1716, and 1754. Many of the haciendas in Mexico date their titles from these confirmations, which were called *composiciones*.

A *composición* theoretically consisted of the measurement and demarcation of the property in question, as well as the correction of any flaws in the title. Detailed measurements of properties were at first attempted, but they were seldom carried to completion; indeed, the estates were frequently so extensive that an exact survey of their lands was almost an impossible task. Moreover, the boundaries between properties, as between the political

divisions of the country, were often formed by a barren, uninhabited range of mountains, an infertile lava flow, or a profound chasm. In such cases there was little need of more than nominal bounds. The titles, too, were often so indefinite as to make recognition of the boundaries impossible.

One of the earliest attempts to make such a survey was undertaken in the district of Chalco, in the Valley of Mexico, which was thought to contain a large amount of land that had been illegally occupied and that should still belong to the crown. The cost of demarcation was great, both in time and money, and so little public land was actually found that the king received only an insignificant return for the expenditure involved. After this failure the property owners in Huejotzingo and Atlixco (the fertile wheat districts in the Valley of Puebla) arranged that a *composición* should be accorded to their holdings collectively. On payment to the royal treasury of the sum of 16,000 pesos title to the lands they then held was confirmed by royal decree, thus securing them against any imperfections that might have existed formerly and against any further occasion of having their titles questioned (1643). The properties in the province of Pánuco and in the *corregimiento* of Huejutla were likewise confirmed *en bloc* by a *composición* in the same year, the holders being obliged to pay into the treasury the sum of 6,200 pesos. By these acts the crown ceded its rights to all lands lying within these districts, declaring that there no longer existed within their limits any *baldíos* (unclaimed lands) whatsoever and establishing the safest of guarantees for the landholders.³¹ At a much later date (1757) titles to the properties within the province of Tlaxcala were also confirmed collectively, with the same declaration that there no longer existed *baldíos* of any kind within its bounds. When, during the Díaz administration, a commission was appointed to seek out and survey the public lands in Tlaxcala, the *hacendados* invoked this ancient guarantee and secured its confirmation.³²

³¹ Joaquín Maniau Torquemada: *Compendio de la historia de la Real Hacienda de Nueva España, escrito en el año de 1794*, Mexico, 1914, p. 23; Fabián de Fonseca and Carlos de Urrutia: *Historia general de Real Hacienda, Mexico, 1851*, Vol. 4, pp. 398-428: "Ventas, composiciones y confirmaciones de tierras y aguas."

³² The list of properties thus confirmed is contained in the so-called Libro Rojo (Red Book) de Tlaxcala, which is in the possession of every *hacendado* in the state.

SUBORDINATE TENURE OF THE INDIAN TENANTS

As we have seen, most of the *encomiendas* consisted of villages or groups of villages in which the aborigines continued to hold their lands in common, subject to the grant made by the Spanish crown. The gradual change of character suffered by the larger unit carried with it a modification of the smaller, and the Indians passed from the status of free communal landholders to that of serfs bound more or less strictly to the hacienda upon which they lived. The transformation was gradual and, in many cases, must have been almost imperceptible. It was, however, completed and legalized by the *composición*, under which legal title definitely passed from the hands of the aboriginal community. The Indians remained on the estates with certain rights of occupancy, recognized by custom, and in conformity with the mutual interest of landlord and laborer, but the ownership was now vested in the conquering race.

Upon haciendas that had been formed in other ways peons were also to be found, their presence being explained by the absorption of their lands into the hacienda, the occupants remaining as tenants upon the estate. In other instances the natives, having lost the lands they had formerly cultivated in common, had been obliged to seek permission to settle upon the holdings of Spaniards. Under these conditions they received, as part of the wage for the labor which they contributed to the farm, a hut (or the right to build one) and a small plot of ground which they might work for themselves. Prolonged residence and uninterrupted use, in such cases, established a claim in the mind of the Indian, who knew little of the law of real property and concerned himself only with its possession and use. Thus in various ways subordinate rights grew up, established and hedged about by custom, which defined, more or less clearly, the relations of tenant and landlord.

ENTAILED ESTATES

During the colonial period, when once a large estate had been formed in Mexico, either by the transformation of an *encomienda*

into a farm or by other means, it ordinarily remained unbroken. This stability was due to two facts: first, an *encomienda* might not be divided, and, second, the general practice was to create a *mayorazgo* (an entailed estate). No sooner would a colonist acquire a fortune, whether from trade, mining, the tribute of Indian villages, or the product of his farms, than he would seek a title of nobility and with his title would go the estate, which must then remain undivided. Distinguished services to the crown were also rewarded by the bestowal of a title, accompanied by the creation of a *mayorazgo*, and often with a large grant of land or of tribute villages.³³ It was this custom of forming *mayorazgos*, a custom which prevailed until the era of independence, that was largely responsible for the preservation of large estates in Mexico. Aggregation was constantly going on; division of property was almost impossible.

ENTAILED ECCLESIASTICAL ESTATES

Another manner in which lands were accumulated and held inalienably was the acquisition of real estate by the various ecclesiastical corporations. Spain had long been accustomed to this concentration of property in the hands of the church, and, though legislation was enacted from time to time tending to check the practice, it is said that nearly half of the land in Spain in the sixteenth century was held by the clergy. Measures were taken to guard against such a situation in Mexico, the recipients of lands being forbidden to sell them to church, monastery, or "any other ecclesiastical person."³⁴ Not even a site for a monastery or other religious institution could be obtained without a special permit from king or viceroy. In spite of these measures, however, the church gained possession of large estates in various ways. Cortés himself began the practice of bestowing property upon religious institutions. In his will he endowed the Hospital de Nuestra Señora de la Concepción, now called the Hospital de

³³ The method of forming *mayorazgos* is prescribed in "Recopilación," Book II, Ch. 33, Law 20; see also Book IV, Ch. 3, Law 24.

³⁴ "Recopilación," Book IV, Ch. 12, Law 10: "no las puedan vender á Iglesia, ni Monasterio, ni á otra persona Eclesiástica."

Jesús Nazareno, in the city of Mexico, said to be built upon the spot where Cortés and Montezuma first met. Cortés also established schools and convents in Coyoacán and provided funds for their support. His example was followed by others, so that, by this means and by taking mortgages upon real estate, the church in Mexico began the acquisition of very extensive properties, which it continued to hold undivided for several centuries.

ABOLITION OF ENCOMIENDAS

In the later years of the colonial period steps directed toward the breaking up of these vast accumulations of land in the hands of a few persons were taken, the most significant being the abolition of the *encomiendas* and the confiscation of the property of the Jesuits. The abolition of the *encomiendas* was a gradual process; it was begun by the *real cédula* of July 12, 1720, but was not completed until the end of the century, during the reigns of Charles III and his son.³⁵ By the end of the eighteenth century agricultural production had declined alarmingly both in the mother-country and in the colonies. This decadence was ascribed by the learned Jovellanos and other students of economic conditions, to the excessive inequality in the distribution of the land.³⁶ In Mexico this inequality was marked. The instruction given by the viceroy Revilla Gigedo to his successor calls attention to this fact and states that there were in Mexico at that time several *hacendados* each of whom possessed enough land to form an entire kingdom.³⁷ The abolition of the *encomiendas* was intended to begin the dismemberment of these large holdings. Enforcement of the measure was delayed by the

³⁵ Amunátegui y Solar, *op. cit.*, Vol. 2, pp. 227-266: "Abolición de las encomiendas en el virreinato del Perú," etc. In this account the report of the president of the Gobierno de Chile, Don Ambrosio O'Higgins, throws much light on the process by which the *encomiendas* were abolished. The *encomiendas* in Yucatán and Tabasco had been excepted from the general order abolishing the system in the American colonies, and only in 1785 (Dec. 16) was a *cédula* issued providing that they, too, should be abolished (Maniau Torquemada, *op. cit.*, p. 42).

³⁶ Gaspar Melchor de Jovellanos: Informe . . . al Real y Supremo Consejo de Castilla en el expediente de ley agraria, Madrid, 1795, pp. 148-149.

³⁷ Conde de Revilla Gigedo: Instrucción reservada . . . sobre el gobierno de este continente . . . [1794.] Mexico, 1831, p. 102.

opposition of the Spanish colonists, although, at this time, there was nothing like the violent opposition which had been shown in the earlier attempt to do away with the system. The *encomiendas*, as a matter of fact, had radically changed in character: they were no longer, as at first, temporary territorial grants, and the repeated *composiciones* had confirmed the white man's hold upon the land. The only significance that the measure now had was to give the Indians a theoretically greater liberty in contracting for their services. This freedom was short-lived, for, even before the system of *encomiendas* had entirely disappeared, a new bondage had been forged for the tenant in the system of advanced payments for his services, to which reference has already been made. The abolition of the *encomiendas* did not return the lands to the original possessors, nor did it legalize their claims even to a subordinate tenure. In most cases the Indians remained on the haciendas, bound to the land by long-established custom and by the system of indebtedness.

Nevertheless, the first successful attempt against the system of large holdings in Mexico dates from this period. Up to the middle of the eighteenth century everything had favored the accumulation of land in a few hands. *Encomiendas* which could not be divided, *mayorazgos* which preserved intact the holdings of the aristocracy, the concentration of property in the hands of the clergy, all had contributed to the maintenance of large holdings. Now, however, the spirit of democracy that was sweeping over the Western world seems to have affected, in some degree, even the institutions of Spain and her American colonies. From this time forward, for a full century, there was a slow but almost uninterrupted movement in Mexico toward the division of the land and the creation of small holdings.

THE CONFISCATION OF JESUIT ESTATES

The other attempt to modify the system of large holdings, in the latter part of the eighteenth century, was that directed against the property of the Jesuit order.

In 1767, when it was decided that all the Jesuits should be expelled from the Spanish dominions,³⁸ the opportunity to seize their wealth was welcomed by the crown. They had held a large number of haciendas in Mexico, nearly all of them of great size and many of them among the most productive in the country. In spite of a strong popular opposition, these properties were confiscated and placed under a Dirección General de Temporalidades³⁹ charged with their disposition. At least 128 of the holdings were offered to the public, either undivided or broken up, on convenient terms of payment, with titles guaranteed in perpetuity. The estates offered for sale were distributed as follows:⁴⁰

Bishopric of México	41
Bishopric of Puebla	53
Bishopric of Oaxaca	2
Bishopric of Valladolid	15
Bishopric of Guadalajara	3
Bishopric of Durango	14

Religious opposition and other considerations made the sale of these estates proceed slowly, and some were still unsold at the close of the colonial régime. In the meantime they were administered and cultivated under the direction of the Real Hacienda (Treasury Department) of the viceroyalty. The confiscation of these estates is recognized to have been one of the most important measures in the division of the land in Mexico and in the breaking up of the system of mortmain.

NUMBER AND DISTRIBUTION OF LARGE ESTATES AT THE END OF THE COLONIAL PERIOD

In New Spain, at the end of the colonial period (1810), there were 4,944 large farms (3,749 haciendas and 1,195 *estancias de ganado*, i.e. cattle ranches), distributed as shown in Table II.⁴¹

³⁸ For the proclamation of expulsion see Riva Palacio, *op. cit.*, Vol. 2, pp. 836-839.

³⁹ *Ibid.*, Vol. 2, p. 843.

⁴⁰ Fonseca and Urrutia, *op. cit.*, Vol. 5, pp. 227-233.

⁴¹ Navarro y Noriega, *op. cit.*, pp. 290-291.

THE HACIENDAS

63

TABLE II—DISTRIBUTION OF LARGE HOLDINGS IN 1810

REGION	HACIENDAS	ESTANCIAS DE GANADO	TOTAL
<i>Intendencias</i>			
México	824	57	881
Guadalajara	370	118	488
Puebla	478	14	492
Veracruz	60	...	60
Mérida (Yucatán)	563	756	1,319
Oaxaca	83	5	88
Guanajuato	445	29	474
Valladolid (Michoacán)	311	115	426
San Luis Potosí	124	18	142
Zacatecas	108	16	124
Gobierno de Tlaxcala	139	...	139
<i>Provincias Internas de Oriente</i>			
Gobierno del Nuevo Reino de León	23	...	23
Gobierno del Nuevo Santander .	...	...	...
Gobierno de Coahuila	32	22	54
Gobierno de Texas . . . . .	...	2	2
<i>Provincias Internas de Occidente</i>			
Durango	155	32	187
Arizpe (Sonora)	34	11	45
Nuevo México . . . . .	...	...	...
<i>Californias</i>			
Gobierno de la Antigua ó Baja California . . . . .	...	...	...
Gobierno de la Nueva ó Alta California . . . . .	...	...	...
Total	3,749	1,195	4,944

As is evident, the greater part of the haciendas were situated upon the Mesa Central, within the intendencias of México (including the present states of México, Morelos, Querétaro, Hidalgo, and Guerrero), Guadalajara (comprising the present

state of Jalisco as well as Nayarit and part of Colima), Puebla, and Valladolid (Michoacán). The only marked exception appears in the case of Yucatán, where much the same agrarian conditions exist as on the Mesa Central. The intendencies of Zacatecas and San Luis Potosí, bordering the Mesa Central on the north, also show a considerable number of haciendas. Thus we see that, as the presence of native labor largely determined the general distribution of the *encomiendas* and of the lands first acquired by the Spaniards, the same factor remained one of the principal influences in the distribution of haciendas after three centuries of occupation by the Europeans. Upon the humid coasts of Tabasco and Veracruz, among the hills of Oaxaca, and upon the dry plains to the north—in fact, in any region where a native agricultural population did not thrive sufficiently to furnish a supply of laborers for the large estates—very few haciendas existed. The cattle farms, at the end of the colonial period, were located chiefly on the grasslands which the Spaniards had occupied in the regions lying near their other holdings. Thus Yucatán, Jalisco, and Michoacán present the largest number of these estates. But the foregoing table shows also that cattle farms were being established upon the northern plains, particularly in Durango, Coahuila, and San Luis Potosí. Data for Nuevo Santander (Tamaulipas) would probably have indicated a number of cattle farms there, since not many years later an observant traveler says that “the plains are almost totally devoted to the pasturage of cattle.”⁴² Maps published about the end of the eighteenth century⁴³ show that in some cases the roads that led from the city of Mexico influenced the distribution of haciendas, since the Spaniards preferred to live in contact with their fellows, rather than in secluded districts among the Indians. The most notable example of this is the road leading to Acapulco, which is bordered on either side by haciendas.

⁴² G. F. Lyon: *Journal of a Residence and Tour in the Republic of Mexico in the Year 1826*, London, 1828, Vol. 2, p. 252.

⁴³ It is interesting to note that Humboldt's maps, published in 1804, begin to indicate the location of haciendas, whereas in earlier maps the rural population is marked as inhabiting pueblos.

AGRARIAN ASPECT OF THE WAR FOR INDEPENDENCE

The War for Independence in Mexico was not simply a political revolution. It had a social aspect and was influenced by underlying economic conditions. It has long been recognized that the Mexican people revolted less against the authority of the crown than against the dominance of *gachupín* (Spanish) influence in the colony. Probably nowhere in the New World had the Spanish monopoly of property, position, and opportunity been carried to such an extreme as in New Spain. The land system was largely responsible for this, since it had permitted one element—the 10,000 people of Spanish extraction—to become masters of the greater part of the country. This small group had deprived the Indians of their holdings or had allowed them to remain upon their lands as serfs under the new proprietors; it had left the mestizos almost entirely landless—and this in a country whose main dependence was upon agriculture. It was against this monopoly that the people of New Spain rose in arms—"proletarios contra propietarios." Other factors—restriction of trade, prohibitions against education, limiting of industries, and monopoly of political office—entered into the case; but the chief cause of the social, economic, and racial inequality and the consequent unrest was the system of land tenure. Observers of many different types, foreign and native alike, agreed in denouncing the evils arising from the system. Abad y Queipo, the bishop of Michoacán, insisted that the land system was productive of grave ills for the country.⁴⁴ Humboldt exclaimed: "Mexico is the country of inequality. Nowhere does there exist such a fearful difference in the distribution of fortune, civilization, cultivation of the soil, and population."⁴⁵ "One legal evil is felt in Mexico, as it is in Spain," another writer remarked. "The greater portion of the land, especially the larger tracts of it, is granted in what is called *mayorazgos*, a species of entail which prevents alienation or the division of land into smaller allotments, such as would be suit-

⁴⁴ Quoted in González Roa, *op. cit.*, p. 64.

⁴⁵ Alexander von Humboldt, *op. cit.*, Vol. I, p. 184.

able for the purchase and the improvement of the class of small capitalists."⁴⁶ Alamán says that, in 1820, many of the Mexicans thought that the Europeans should be exterminated and their property confiscated.⁴⁷ Hidalgo, whose following was principally made up of Indians, seems to have believed that the spoliation of the Indians had been one of the great evils under Spanish rule. Among other measures enacted for the improvement of their condition, he decreed that the communal lands of the Indians should be returned to the aboriginal owners and reserved for their use.

RESULTS OF INDEPENDENCE UPON THE LAND SITUATION

The War for Independence gave vent to the pent-up hostility against the Spanish landholders, and during the entire eleven years of conflict they and their properties suffered at the hands of the revolutionists. The end of the war, however, did not find the evils of the system abated. The establishment of the monarchy, with Iturbide as emperor, brought to the head of the nation an *hacendado*, whose family belonged to the landed aristocracy of Michoacán. One of the "guarantees" offered in his Plan de Iguala (1821), upon which the empire was based, provided for the union of Mexicans of European descent and Europeans and for the protection of their property—the latter clause being understood as a guarantee that the existing land system would be maintained.⁴⁸ The system, with its accumulation of land in a few hands, actually was maintained much as in colonial times. Many of the estates formerly held by Spaniards had now passed into possession of native-born Mexicans, either creoles or *metsizos*. In part this change of ownership had come about in a regular way, by confiscation and grant or by sale, under direction of the constituted authorities. In part

⁴⁶ Nicholas Mill: *The History of Mexico*, London, 1824, pp. 52-53.

⁴⁷ Lucas Alamán: *Historia de Méjico*, Mexico, 1852, Vol. 5, p. 60.

⁴⁸ *Ibid.*, Vol. 5, pp. 119-120, and Appendix, pp. 8-13. Article 13 of the proclamation issued by Iturbide, explaining the Plan de Iguala, is as follows: "Las personas de todo ciudadano y sus propiedades serán respetadas y protegidas por el gobierno."

it had probably been less legal in form. In either case it represented no change in the system.

Nevertheless, certain important changes did result from independence and from the establishment of a government more in sympathy with democratic ideas. Under the new régime the Indians secured legal equality with the whites, and their new status as citizens of a republic, with rights theoretically equal to those of the *hacendados*, gave them a somewhat greater liberty in contracting for their services. At the same time, however, they lost the protection which the kings of Spain had always at least attempted to give the Indians while they were rated as minors. Another important modification in conditions, brought about at the time of independence, was the abolition of the *mayorazgos*. Under the more democratic government established in Spain by the adoption of the Constitution of 1812, the Spanish Cortes passed a law, on September 27, 1820, completely abolishing the practice of entailing the estates of the nobility. Owing to the state of war that existed in the American colonies, this law was not published in Mexico. On August 9, 1823, however, legislation was enacted by the Mexican Congress declaring that all *mayorazgos* had terminated in Mexico upon the promulgation of the aforesaid measure in the mother country. This act permitted the breaking-up of the great estates which had been held during colonial days and resulted in the division of some of those properties. But it did not entirely do away with the practice, for many of the old families prided themselves, as they still do, upon maintaining their estates intact.

DISTRIBUTION OF ECCLESIASTICAL PROPERTY

Another development of the early years of the republic was a renewed attack upon the possessions of the church. Since the suppression of the Jesuits under Charles III, indeed, the demand for a further distribution of church lands had not ceased. Public appetite for them had been whetted by the sale of the Jesuit haciendas, some of which still remained unsold at the end of the colonial period and were being disposed of, sometimes as a

whole, sometimes divided into small farms.⁴⁹ The example of the mother country encouraged efforts to obtain the distribution of church lands in Mexico. By a royal decree in 1813 all the vast properties of the Spanish Inquisition had been nationalized and provision made for their sale. In 1836 similar action was taken in Spain regarding the properties held by the religious orders which had been declared abolished. The leaders of liberal thought in Mexico sought to follow these examples and carried on a vigorous campaign against the great accumulation of land in "dead hands."

No accurate statistics are available regarding the amount of property formerly held by the church in Mexico, but it is generally agreed that it was very large. At the close of the colonial period Humboldt had estimated that the different ecclesiastical institutions controlled property valued at 44,500,000 piasters (some \$65,000,000). Shortly after the War for Independence a good authority considered that not less than half of the real estate in the country belonged to the clergy, while estimates made some years later ranged from 179,000,000 to 300,000,000 pesos. So extensively were private properties mortgaged in favor of the church that it is said that there was hardly a big farm in the whole republic which was entirely free from some such encumbrance.⁵⁰

Under the administration of Santa Anna no progress was made in the attempt to distribute the church property; but, at the opening of the war with the United States, a law was passed on January 10, 1847, empowering the government to take over ecclesiastical property to the value of 15,000,000 pesos. A few days later the government took steps to put into effect the authorization thus conceded, ordering the confiscation of church property in the Federal District and the state of México in

⁴⁹ As an example of the latter case may be mentioned the hacienda of San Lorenzo, in the province of Puebla, which was offered for sale to the inhabitants of the town of Chachapalcingo upon easy terms of payment.

⁵⁰ Alexander von Humboldt, *op. cit.*, Vol. 1, p. 232, and Vol. 3, pp. 99-100. See also L. G. Labástida: *Colección de leyes, decretos, reglamentos . . . relativos á la desamortización de los bienes de corporaciones civiles y religiosas*, Mexico, 1893, p. xii.

order to obtain the first installment of 10,000,000 pesos. This amount was to be apportioned as follows against the several dioceses:

Archbishopric of México	5,000,000 pesos
Bishopric of Puebla	2,000,000 pesos
Bishopric of Guadalajara	1,250,000 pesos
Bishopric of Michoacán	1,750,000 pesos

Santa Anna, however, at once repealed the law, and further advance in this direction was made impossible until after the close of the war and his final overthrow in 1854.

In 1856 clerical encouragement of uprisings against the newly organized liberal government led the president, Ignacio Comonfort, to order that the property of the Bishopric of Puebla should be taken over and applied to the payment of costs occasioned by these revolts.⁵¹ Successful in this move, the Reforma government proceeded to carry out its long-cherished plan for the distribution of the entire property of the church. On June 25 of the same year the national congress passed, almost unanimously, the law of *desamortización*. The measure provided that all real estate held by civil or religious corporations should be adjudged in severalty to the persons to whom it was rented or leased, at a price corresponding to the sum which, at six per cent interest, would yield an annual income equal to the amount being paid as rent. Properties not so leased or rented should be sold at auction in presence of a governmental authority. The law forbade the subsequent sale of these holdings to any religious corporation.⁵² These measures were not to apply to properties used directly for religious or civil purposes, such as church buildings, convents, episcopal residences, colleges, hospitals, orphan homes, public markets, municipal buildings, and lands such as the *ejidos* which were held for the common use of people living in a town. Three months were allowed for the disposal of the properties to be alienated, after which the government would proceed to take over those remaining unsold.

⁵¹ Labástida, *op. cit.*, p. xxxi.

⁵² *Ibid.*, pp. 1-129.

In spite of energetic protests on the part of the church and its sympathizers, the liberal party persisted in its plans, and, when a new constitution was adopted in 1857, a provision was included as Article 27, disqualifying civil or religious corporations from holding real estate.

NATIONALIZATION OF CHURCH PROPERTY

The strong opposition offered by the conservatives to this program of the reformers resulted finally in the Three Years War. In this, the clergy and the conservative element, chiefly composed of the large landholders, were arrayed against the liberals, who, with Benito Juárez at their head, were supported by the Indians and the landless in general. It was in these circumstances that Juárez decided, July 12, 1859, to declare the complete nationalization of all ecclesiastical property. Here there was no provision for indemnification. It was simply decreed: "Entran al dominio de la nación todos los bienes que el clero secular y regular ha estado administrando con diversos títulos."⁸⁸ Though some such plan had long formed a part of the liberal program, it was under the stress of military necessity that the measure was finally adopted. The plan was also carried out amid the confusion of civil strife. Military leaders were often entrusted with the task. When in need of funds they resorted, sometimes with due authorization, sometimes without it, to the expedient of disposing of any church property available—the property of the enemy, as they regarded it. State governors and other officials were later empowered to sell such lands as remained. Much of this property was sold for a fraction of its real value or was virtually given away by those who were entrusted with its care. Later, when the Reforma party was driven from the city of Mexico and defeated in the north, many of the papers dealing with these transactions disappeared, while accident and vandalism, during the protracted civil war and the French intervention, destroyed many other public records and

⁸⁸ "All property administered, under divers titles, by the regular and the secular clergy, shall hereby enter into the power of the nation" (*Labastida, op. cit.*, p. 137).

scattered the materials of the archives.⁵⁴ As a consequence of all this, there could but result a great deal of confusion in the disposal of the confiscated church lands, and many properties undoubtedly came into possession of those who had no other right to them than that of occupation. Several attempts were made, at a later time, to straighten out the tangle, but without great success until 1892, when the government extended a confirmation of possession, similar to the *composiciones* of colonial times, to all holders of nationalized lands.⁵⁵

One of the principal objects of the *desamortización*, that of creating, from the ecclesiastical estates, a large number of small holdings, was in part accomplished. In Mexico City alone during one year (1861) there were disposed of 1,436 *fincas* (some of these properties were probably city houses, rather than farms), and in the entire republic during the same year the transactions in such properties amounted to 16,000,000 pesos. The properties were distributed among many individuals. How sweeping this reform measure was became apparent during the reign of Maximilian, when, in response to an order requiring the registry of all transfers of real estate made as a result of the laws of disentail and nationalization, no less than 37,000 transactions were recorded.⁵⁶ The church lands that were disposed of later would probably bring the number up to 40,000 or perhaps above it. Few properties comparable to the limited holdings common in France or the United States resulted from this reform, for there was no systematic attempt to partition the confiscated haciendas. Nevertheless, the number of landowners must have been increased by many thousands, the fruits of the nationalization of church lands falling, mainly, into the hands of the mestizos.

RENEWED LAND MONOPOLY

The system of large holdings suffered severe vicissitudes during the War for Independence and in the Reforma period. The

⁵⁴ *Ibid.*, pp. xxvii-xxviii.

⁵⁵ Law of Nov. 8, 1892, *ibid.*, p. 170.

⁵⁶ *Ibid.*, pp. xxvi-xxvii.

opposite trend came into prominence during the closing decades of the nineteenth century and particularly in the latter part of the Díaz administration. This period was marked by the greatest prosperity that Mexico had ever known. Commercial and industrial activity surpassed anything experienced in the country, either in colonial times or the preceding period of national existence. Mines that had long been known but never developed were now opened up. Foreign men and foreign money were attracted to the country, contributing the capital and the enterprise that Mexico had long needed for the exploitation of her numerous and varied resources. Railroad construction was pushed as never before. Though fostered by government, the development of the railways followed the system prevalent in the United States of tapping the most productive regions rather than that common in the other Latin American countries of reaching out into new lands for the purpose of stimulating settlement.⁵⁷ The effect of these new conditions upon the agrarian situation was to increase the value of the lands already under cultivation rather than to relieve the demand by opening up new areas of development. Hence real estate now became of great prospective value. As a consequence, there followed an era of land grabbing, not so much for the exploitation of the soil as for speculation. The agrarian problem thus became still more acute, particularly in the Mesa Central and its tributary districts.

To satisfy this greatly stimulated demand there were several sources from which lands might be obtained. In the sparsely populated regions—the desert west coast, the arid or semi-arid northern plains, and the great forested *tierras calientes* of the Gulf slope and the isthmus of Tehuantepec—there were still large unclaimed areas, the *realengos* of colonial times, the *baldoíos* of the republic. These contained vast tracts that were as yet unappropriated but which might some day be of great value. The same was true of large areas in such states as Michoacán

⁵⁷ For a description of this period of prosperity and its effect upon land values, see Bernard Moses: *The Railway Revolution in Mexico*, San Francisco, 1895, pp. 38-72.

and Guerrero, where the Spanish population had never been dense and where there were large districts with only a sprinkling even of Indian inhabitants. There were also, in many parts of the country, lands which had been occupied for a long time without proper titles. This was the case with some haciendas, the acquisition of which, in whole or in part, had been irregular; and it was true also of many pueblos and Indian settlements where formal incorporation had been neglected. In all classes of property, moreover, it was thought that there were lands of considerable extent over which possession had been extended without warrant. These lands technically belonged to the nation.

MONOPOLY OF PUBLIC LANDS

Under the land laws of the Reforma speculation in public lands had been possible only by evading the intent of their provisions. There existed a legal check upon such operations. Hence, when the era of prosperity had increased the demand for real estate, new legislation was sought by the speculators. The government yielded to the wishes of this group, and a measure was enacted by which public lands might be acquired in large amounts.

The law of December 15, 1883,⁵⁸ among other provisions, authorized the executive to contract with surveying companies to locate and measure *baldíos* and to give them, in recompense, a third of the lands which they might survey. While the companies were not permitted to dispose, in blocks greater than 2,500 hectares, of the lands which they acquired, they were allowed to obtain and hold very large tracts in payment for their services. This provision initiated a movement for monopolizing public lands which in later years assumed colossal proportions. Within the next ten years some 50,000,000 hectares of public lands were located and surveyed in this way, giving the companies over 16,000,000 hectares as their share.⁵⁹ By far the

⁵⁸ F. F. de la Maza: Código de colonización y terrenos baldíos de la República Mexicana, Mexico, 1893, pp. 936-945.

⁵⁹ J. L. Cossío: Cómo y por quiénes se ha monopolizado la propiedad rústica en México, Mexico, 1911, p. 65.

greater part of this acreage was held in immense tracts for speculative purposes.

In March, 1894, a still more radical measure was adopted. This was the so-called Law of Colonization,⁶⁰ ostensibly promulgated with the laudable aim of opening up lands for settlement. In reality it opened the floodgates for uncontrolled seizure of lands by speculators. The law provided that all public lands should be divided into four classes: *baldíos*, *demasías*, *excedencias*, and *nacionales*. *Baldíos* were defined as lands which had never been lawfully alienated by the nation or legally destined to public uses. *Demasías* were lands held by individuals within the established bounds of their respective properties, but which were in excess of the amounts specified in the deeds. *Excedencias* were lands held by individuals during twenty years or more, bordering on the owner's lawfully held property but not included within the bounds specified in the deeds. *Nacionales* were *baldíos* which might be discovered, marked and measured by a public commission or by companies duly authorized for that purpose; also *baldíos* for which claims might have been filed illegally or which had been abandoned after being awarded. Any of the first three classes of lands might be acquired by any inhabitant of the republic, without limit as to the amount. A former provision requiring settlement upon the public lands acquired was abolished, as was also that which forbade their alienation in lots larger than 2,500 hectares. Furthermore, the measure was made retroactive in that it annulled any penalties which might have been incurred for violation of these restrictions. As may be seen, the aim of Juárez, which had been to favor genuine colonization of waste lands by small proprietors, was completely thwarted. This new law could have but one result, that of creating a monopoly of public lands in the hands of a few individuals, and this is what actually occurred. Individual filings, for what might be called "homesteads," were completely overshadowed by the unlimited acquisition of lands by large companies, chiefly for speculation.

⁶⁰ Villamar, *op. cit.*, pp. 161-204.

Whereas in the five years from 1890 to 1894 there had been issued respectively 297, 373, 219, 161, and 246 individual titles for public lands, in the five following years, 1895 to 1899, there were but 67, 66, 108, 180, and 140 titles respectively. In the same five years (1895-1899), on the other hand, 1,822,920 hectares of public land were given to companies in recompense for the discovery and survey of *baldíos*. During the Díaz régime, up to 1906, there were disposed of in this way 10,713,946 hectares (about 26,500,000 acres) of the national land.

Under a provision of the same law grants were made to individuals or companies for the ostensible purpose of colonization. Few settlements actually resulted; but public lands, in this way also, passed rapidly into the hands of the speculators. In Chihuahua, according to figures published by Señor González Roa,⁶¹ over 14,000,000 hectares were given out to seven concessionaires; nearly 5,000,000 hectares, in Coahuila, Nuevo León, Tamaulipas, and Chihuahua, were given to a single concern; in the state of Durango, two grantees were allotted almost 2,000,000 hectares; in Tabasco, a single person received 720,000 hectares; in Oaxaca, four concessionaires took up more than 3,200,000 hectares; and, in the state of Puebla, one received 76,000 hectares.

It should be pointed out that much of this land would be of no benefit to a small holder and would never be of great value to the recipient, even for large-scale development. Other sections could be developed only by means of expensive irrigation projects, which in Mexico have been undertaken by large holders (with or without state aid) instead of by the government itself, as in the United States. There were other parts, however, which were capable of cultivation on a small scale and which, in time, under the system of sales established by the Reforma government, would probably have been settled by a great number of small proprietors.

By the end of the Díaz administration there remained no public lands in twelve of the states and in the Federal District, while in six of the remaining states there was but little left.

⁶¹ *Op. cit.*

Nine states, however, had still more than a million hectares each.

Table III shows the distribution of Mexican public lands by states in 1912.⁶²

TABLE III—DISTRIBUTION OF PUBLIC LANDS IN 1912

Aguascalientes	hectares
Baja California	1,500,000
Campeche	1,544,000
Chiapas	281,400
Chihuahua	3,103,000
Coahuila	995,000
Colima	
Distrito Federal	
Durango	1,164,854
Guanajuato	
Guerrero	1,100,000
Hidalgo	1,800
Jalisco	
México	
Michoacán	
Morelos	
Nuevo León	
Oaxaca	
Puebla	
Querétaro	
Quintana Roo	3,820,000
San Luis Potosí	92,476
Sinaloa	168,000
Sonora	5,350,000
Tabasco	365,580
Tepic (Nayarit)	1,600,000
Tlaxcala	
Veracruz	1,409,682
Yucatán	185,041
Zacatecas	140,845
Total	22,821,678

The scramble for land, unfortunately, was not limited to the unclaimed lands on the frontiers of the republic. The law of 1894 made it possible for anyone to denounce and file a claim for

⁶² *Memoria de la Secretaría de Fomento, 1912-1913*, pp. 475-477.

occupied lands that had no registered titles or where these were imperfect. This measure, as has been pointed out above, was designed to recover for the nation the so-called *demasías* and *excedencias*. But the law also reiterated the provision which rendered communities and civil corporations incapable of possessing real estate. This not only exposed to denouncement the lands irregularly occupied but also classed with them the communal holdings of incorporated pueblos and most of the lands held by the less regularly organized Indian settlements. State governors were now instructed to continue the partition of these communal lands, which had been ordered in 1857 but had not been carried into effect. On the face of it, by the establishment of the Gran Registro de la Propiedad (Great Land Registry), ample provision was made whereby the holder of any property might have his titles recorded and perfected in case they were defective. Even the lands for which no documentary evidence of possession was forthcoming might be registered, provided satisfactory evidence of effective possession were presented. Thus a legal method was set up for clearing all imperfect titles, and many of the *hacendados* took advantage of this opportunity. Unhappily, most of the Indians and many of the *rancheros* disregarded the security offered them, in some cases through neglect, but, in most instances, because in the remote, unfrequented districts where they lived the significance of the law was not understood. As a result, their holdings were legally exposed to denouncement and became the object of attack by all who sought to file on public lands.

NUMBER AND DISTRIBUTION OF LARGE HOLDINGS IN 1910

Table IV, compiled from the Census of 1910, shows the number of haciendas in Mexico at that time, and their distribution by states.

TABLE IV—DISTRIBUTION OF HACIENDAS IN 1910

Aguascalientes	38
Baja California	11
Campeche	137

LAND SYSTEMS OF MEXICO

TABLE IV—(Continued)

Coahuila	287
Colima	40
Chiapas	1,067
Chihuahua	223
Distrito Federal	20
Durango	223
Guanajuato	534
Guerrero	91
Hidalgo	197
Jalisco	408
México	396
Michoacán	380
Morelos	40
Nuevo León	506
Oaxaca	117
Puebla	381
Querétaro	135
Quintana Roo	3
San Luis Potosí	210
Sinaloa	37
Sonora	310
Tabasco	635
Tamaulipas	187
Nayarit (Tepic)	43
Tlaxcala	116
Veracruz	153
Yucatán	1,167
Zacatecas	153

Table IV takes no account of the size of the estates other than the fact that they are classed as haciendas. The most complete figures showing the approximate extent of haciendas are found in "The Official Directory of Mines and Haciendas," by J. R. Southworth (Mexico, 1910). This work gives only a partial list of the haciendas of the country and does not contain statistics for all the states. However, figures, said to be based upon information supplied by the governors of the different states, are given for a number of the political divisions of the republic. These statistics include lists of the principal rural properties, with their respective extent in hectares. Although admittedly incomplete, and necessarily indicating the size of the farms

approximately only, this work enables us to form an idea of the distribution of the land in the states for which data are provided. From its figures Table V has been compiled to show the number of very large properties in these states.

TABLE V—NUMBER OF LARGE HOLDINGS IN SOME STATES IN 1910

STATE	1,000	5,000	10,000	25,000	50,000	100,000	200,000	400,000
	OR MORE HECT.	OR MORE HECT.	OR MORE HECT.	OR MORE HECT.	OR MORE HECT.	OR MORE HECT.	OR MORE HECT.	OR MORE HECT.
Aguascalientes	31	8	19	3	..	..	..	..
Morelos	22	10	9	3	..	..	..	..
México	64	17	10	2	2	..	..	..
Oaxaca	89	31	18	8	2	..	..	..
Sinaloa*	293	86	37	7	1	1	..	..
Jalisco	453	120	46	10	1	..	..	..
Colima	29	18	13	6	1	..	..	..
Durango†	135	110	90	47	25	7	2	1
Michoacán	102	53	29	17	12	2	..	..
Veracruz	393	136	65	13	7	1	..	..
Totals	1,611	589	336	116	51	11	2	1

* District of Mazatlán lacking.

† Data regarding Durango must be exaggerated in some cases, as the area given for the haciendas exceeds the entire area of the state.

The large holdings in these different parts of the country have been created and maintained in response to different influences. Some of these are directly geographical, while others bear only an indirect relation to the character of the physical environment. We have seen that, in the older sections of the country, it was not so much the immediate influence of the climate or the nature of the land that determined the location of the first large Spanish estates as it was the presence of a subject race whose labor could be utilized. Again, where such a population existed, the distribution of haciendas depended, first, upon the available supply of

water, since the European crops which the Spaniards introduced required irrigation, and, secondly, upon the distribution of grasslands for their flocks and herds.

In the more recently occupied parts of the country, however, the influence of physical conditions has been more direct. The northern tier of states, which in 1800 were but sparsely occupied by white men, now contain a large number of haciendas, the group of states comprising Tamaulipas, Nuevo León, Coahuila, Chihuahua, Sonora, and the territory of Baja California showing a total of 1,513. The number has been greatly increased also in Durango, Zacatecas, and San Luis Potosí, whose northern districts properly belong to this same natural region. Throughout this northern country the haciendas have been formed chiefly as cattle ranches, and their great extent is due primarily to the light rainfall and the scanty vegetation which render wide ranges for the stock necessary. Again, parts of this region have been developed as a result of the construction of large irrigation works, whereby the fertile, but hitherto desert, lands in the *bolsones* have been made available for the production of cotton and wheat. This accounts for some of the large estates created in the Laguna district, now famous for its cotton, and for some wheat farms in the valley of the Conchos and in Coahuila. Speculation, too, has caused the accumulation of large areas of land along the northern border of Mexico, in the hope that an overflow of population from the United States or perhaps from central Mexico itself, might make these lands of value.

In the timbered coastal plains of Veracruz and Tehuantepec quite different factors have influenced the formation of large estates. In the early days of the republic this region was almost entirely unoccupied. Since that time, with the growing demand for tropical products in the world's markets, certain accessible areas have been brought under cultivation, attention being given to the growing of coffee, tobacco, sugar cane, and fruit. Other large holdings in this *tierra caliente* region have been acquired because of the speculative value of the timber they contain.

This is noticeable in the vast estates that are held in the region of the tropical rain forests of southern Veracruz and the adjoining sections of the isthmus of Tehuantepec. Little of this timber has as yet been exploited. In the southern part of the state of Tamaulipas and in the bordering districts of Veracruz large tracts of land have been acquired in recent years for the exploitation of petroleum deposits.

The western slope of the plateau contains the smallest number of haciendas of all of the natural regions in Mexico. With the exception of the fertile valleys, cultivated for many generations by the Yaquis and neighboring tribes in Sonora, there is little land along this slope that is suitable for agriculture on a large scale; the greater part of it is even too dry for cattle raising. Thus the states of Colima, Nayarit, and Sinaloa, with the territory of Baja California, contain altogether little more than a hundred haciendas.

From Tables IV and V it may be seen that the system of haciendas has now become general throughout Mexico. It has extended beyond the Mesa Central, the highlands of Chiapas, and the peninsula of Yucatán, to include the *tierra caliente*, the semi-arid plains of the north, and, to a limited degree, the dry western slopes of the plateau.

With their system greatly strengthened during the latter part of the Díaz administration, the haciendas absorbed many of the holdings of Indian communities and pueblos in the older and more densely settled sections of the country and, at the same time, received complete confirmation of their own possessions. In the great plains of the north and the extensive tropical lands of Tehuantepec and the Gulf Coast blocks of public lands were added to the already vast areas held in large estates. The haciendas became, more fully than ever before, the most characteristic feature of the agrarian system of Mexico, and, at the close of the Díaz régime, they completely dominated agriculture, modified the social conditions that prevailed in the country, and very largely controlled the political life of the nation.

CHAPTER IV

THE RANCHOS OF MEXICO

The second characteristic feature of the land system in Mexico is the rancho. Like the haciendas, the ranchos are individual properties as distinguished from the communal holdings which, as we shall see later, are found in certain parts of the country. The term "rancho" is used in several different senses in Mexico. In the northern states and in the grasslands of the plateau slopes it is sometimes applied to a large stock farm, containing many hundreds or even thousands of hectares. In central Mexico the term is used, in general, to designate small holdings as contrasted with the large haciendas. According to popular usage, in some districts at least, a property that contains less than 300 *fanegas de labor* (about 1,000 hectares) is called a rancho; while anything above that amount is termed an hacienda. There does not, however, seem to be any generally recognized dividing line between the two kinds of property, and a large farm that has been accumulated about an original small holding is still often called a rancho. The most common usage of the word is that which signifies a small rural property, worked by the owner himself, with the aid of his immediate family. This is the sense in which the term will be employed in the present discussion.

Ranchos are found, either singly, occupying isolated valleys or nooks in the hills, or in groups, forming aggregates of several score or hundreds of families. These latter groups are sometimes called *rancherías*, but it is of importance to distinguish them from the settlements of peons upon the haciendas and from the communal villages, to each of which the same term is frequently applied. The rancho, as also the *ranchería* (when the term is applied to a group of ranchos), is independent alike of the haciendas and of the agrarian communities.

The typical rancho in Mexico is barely large enough for the support of a single family. The actual size necessarily varies with the character of the soil and of the climate. With good land and sufficient rainfall, a few hectares, carefully cultivated, will suffice for the simple needs of an average family. The same is true of land that can be irrigated. In the drier districts, where rainfall is either uncertain or scanty, a larger area is required, perhaps some 15 or 20 hectares. If the property is situated in a grazing district and is devoted chiefly to cattle raising, a still larger extent must be occupied.

In general, the ranchos are not entirely given over to any one product but combine cultivation of the soil with stock raising on a small scale. The primary aim of the *ranchero* is to produce the necessities of life for his family, and only secondarily does he attempt to raise either stock or crops for market. The crop most commonly grown on the ranchos throughout Mexico is corn (maize). Almost every small farm in the country makes this its staple product, since it forms the main item in the diet of the nation. Beans and chili (red pepper) are likewise characteristic crops. Little wheat, rice, or sugar cane is cultivated, as these products are seldom used by the common people of Mexico.

THE RANCHEROS

The owners of the Mexican ranchos are mostly of mixed blood. In recent years small individual holdings have, occasionally, come into the possession of Indians, and here and there a European may be found who has acquired a small property, especially for fruit raising or truck farming, but the vast majority of the *rancheros* are mestizos. It is noticeable that, while these small farmers live, oftentimes, in remote parts of the country and employ, ordinarily, the same methods of cultivation as are used by the Indians, they have kept their heritage of the Spanish language and something of the Spanish tradition. They do not consider themselves Indians, even though there may be a high percentage of aboriginal blood in their veins. In point of fact they look down upon the Indian as an inferior being; and, as

they intermarry strictly with their own kind, they have come to form a special element in the population. Neither Indian nor European, they stand between the pure-blooded natives of the aboriginal communities and the *hacendados*. They are the typical Mexicans of the rural districts.

In contrast with the *hacendado* the owner of a rancho is a real agriculturist. He lives on the land, works it himself, and depends for his living upon the crops which he cultivates. His methods are often primitive, but he works the land intensively, getting out of it all that it will yield him and conserving its quality to the best of his knowledge. Little of his land stands idle, except in fallow. Even if, as occasionally happens, prosperity enables him to add to his small holdings or to accumulate land enough to form an hacienda, he does not forsake the life of a farmer but continues to live upon his place, improving it with better houses, constructing irrigation works, or introducing more stock and better implements. He is thus the agriculturist of the country in a far truer sense than the *hacendado*, whose chief interest, as we have seen, is an assured revenue and the prestige which he may derive from possession of an estate and who, as a rule, lives upon his farm only a few weeks or days each year.

LABOR

Little labor other than that of the owner and his immediate family is employed upon the rancho. In case of need, as at planting time or harvest, the help of neighbors may be obtained in return for similar assistance lent them, or laborers from the nearby villages may be employed. The *ranchero* thus corresponds more nearly to the owner of a "homestead" in the United States than does any other class in Mexico.

In many instances the *ranchero* not only has no need for hiring others to help in his farming, but he has time to spare from his own small fields and seeks other employment himself. Not infrequently, indeed, he must earn wages to supplement the meager produce of his land; in such cases there is generally work

to be found on adjoining haciendas or in the mines. *Rancheros* who live near enough to the border often cross over into the United States for a few months, in response to the urgent demand for laborers during the harvest season. This "swallow" migration of Mexican laborers, partly the more independent peons from the northern haciendas and partly *rancheros*, has become an established feature of border life. The *ranchero* and his family must also, of necessity, spend a part of their time in home industries, since their tools, farm implements, household furniture, and even their clothing must often be of their own make.

LAND TITLES

The titles by which the land of *rancheros* is held are frequently imperfect, if not altogether lacking. For many of these farms deeds undoubtedly have existed; but, in being handed on from generation to generation, the properties have been divided and subdivided or have been sold without the transactions having been formally registered. As a result the titles are now most difficult to establish.

METHODS OF CULTIVATION

The methods of cultivation employed on the rancho differ little from those of the average hacienda. Oxen (yoked by the horns) are generally used as draft animals, being better suited than mules to the small fields and the rough lands that compose the holdings, while they are more easily maintained upon the coarse grass that is often the only feed available. The plows in use are of home construction, sometimes possessing an iron share, sometimes without even that improvement. As a rule, the crops of a rancho depend entirely upon rainfall, but sometimes small *presas* are made, either to pond the waters of a permanent stream or to catch the run-off from a hillside and thus supply water for irrigation. Farms which occupy low-lying parts of the plateau or which are situated below the level of the highlands can sometimes produce two or even three crops per year, but, upon the higher parts of the Mesa Central, frosts occur late in spring and

early in the autumn, preventing the growth of more than one crop.

TYPICAL RANCHOS

A description of some typical ranchos may serve to give an idea of the character of these small holdings and of the life led by their owners. For this purpose the *ranchería* called La Puerta de Medina may be taken as an example. This group of ranchos is situated in the Mesa Central in the upper part of the valley of the Lerma (Santiago) River, about 9,000 feet above the sea and not far from the prosperous gold mines of El Oro. It is composed of a number of small independent holdings, nearly a thousand in all. The area covered by the *ranchería* is about 10 by 15 miles in extent. The individual ranchos are of varying size: one of them contains about 250 hectares, but the majority are much smaller, and, in fact, many do not contain more than a few hectares each. The soil is rich but rather dry, and the season without frost is so short that only one crop can be raised. To supplement the scanty rainfall many small reservoirs have been constructed, at heavy cost in labor, if not in money. A great many stones are found embedded in the soil, and these have had to be dug out and piled in heaps along the edges of the fields or built into the house, stables, and fences, much as in the boulder-strewn glacial lands of New England. Each little farm has its dwelling, built of stone or of adobe, usually plastered over, and well whitewashed. Roofed with bright red tiles and set in the midst of neatly kept yards or vegetable gardens, with corrals for stock, outhouses for the farm implements, and granaries, these little homesteads give an appearance of modest comfort that sharply contrasts with the bare huts of the peons on an hacienda. It gives the general landscape, too, a very different appearance from that where haciendas stretch mile after mile without a single dwelling. Districts such as these are the only areas in the whole country where the rural population is scattered over the land instead of being concentrated in villages.

The small farms in this group of ranchos raise little more than is required for their own use. Any surplus is usually stored up against a bad year, though the farmers do sell a part of their produce in the mining camp of El Oro. If, as is not infrequently the case, the land which the *ranchero* holds is too small to provide for the needs of his family, he rents additional acreage, on shares, from neighbors or from some nearby hacienda. Money for the few wants which the farms will not supply the *rancheros* obtain by laboring on the haciendas, by burning and selling charcoal, or by spending some of the winter months in the mines. As a rule, also, they raise for market a few cattle and sheep or goats, fencing off small lots for them on the farms or entering into arrangements with the *hacendados* whereby the stock may graze upon the waste lands of the great estates.

The *rancheros* in La Puerta de Medina say that many attempts have been made to obtain possession of their lands but that they have been able to resist the encroachment of the *hacendados* by combining among themselves to buy any holdings that were for sale. They have thus been able to maintain their position as independent proprietors, instead of being forced to attach themselves as peons to the haciendas. Until recent years the people of this district were quite removed from contact with the rest of the country. Now, however, the railway leading from Mexico to Morelia passes through their valley, and every traveler, as the train descends the steep escarpment from the grasslands of the Toluca valley, looks down upon the smiling landscape of these diminutive and well-kept farms. The railroad so facilitates transportation that the lands along its route will be increasingly valuable.

The life in such a community of small holders, though still very primitive, is socially and economically far above that of the peons on the haciendas. The rancho contains the seeds of progress. Its owner is an independent property holder and responds, gradually if slowly, to the stimulus of proprietorship. The *rancheros* in La Puerta de Medina, of their own initiative and entirely without aid from state or federal government, have

organized a school which is conducted by a teacher paid from their own pockets in a modest building which they themselves have constructed.

ORIGIN AND HISTORY OF THE RANCHOS

Many of the ranchos in Mexico owe their origin to grants of land made to Spaniards in the early colonial period. Some of them, in all probability, date back to the Conquest itself. We have seen that the Spanish crown rewarded some of the *conquistadores* with large tribute districts, which later developed into haciendas, and that others received grants of land alone, which, in some cases, the holders extended until large estates had been formed. There were, however, some grants, particularly of the smaller class known as *peonías*, which did not follow this course but remained of their original size or, in the course of time, were divided. These are the properties which came to be known distinctively as ranchos. Their first owners had, apparently, been agriculturists in Spain, either among the small freeholds of Asturias or in some of the numerous agrarian communal pueblos of Aragón and Castile. They were real farmers and were content to settle upon these small holdings, to live in the primitive way that their Indian neighbors lived, and to marry the native women. Even in the early years of the colony there were said to be many such persons (*labradores*) scattered about among the Indian towns or working tillable lands which they had taken up. This group is the more worthy of attention since it is almost the only example, in the New World, of Spaniards becoming real colonists and actually cultivating the soil with their own hands.

As, from the beginning of Spanish colonization, the best of the lands were occupied by the haciendas or by the Indian communities, the small farmers were usually forced to settle in the more inaccessible districts, among the hills, or upon the fringe of the populated part of the country. They may be said to correspond to the "poor whites" among the great plantations of our own Southern States or to the struggling small farmers amid the large sugar estates of the British West Indies. They differ from

the mountain whites of the United States, however, in that they did not preserve their racial purity: by the end of the colonial period the *rancheros* had become mestizos. Centuries of contact with the Indians on almost equal terms have left few individuals of pure Spanish blood among them, though they preserve the Spanish language—often the Spanish of the sixteenth century—and European costume, adapting it to the peculiar needs of their new environment. The extension of settlements towards the north, during colonial times, was accompanied by an increase in the number of these small holdings, although a large part of the population that settled in the northern territories occupied the agricultural or pastoral towns that were organized by the crown, during the whole period of colonial administration. In these the holdings were communal and did not become individual property until the second half of the nineteenth century.

At the end of the colonial period (1810) there were said to be 6,684 ranchos in Mexico, distributed as shown in Table I.¹

TABLE I—DISTRIBUTION AND NUMBER OF RANCHOS IN 1810

Intendencias

México	871
Guadalajara	1,511
Puebla	911
Veracruz	157
Mérida	312
Oaxaca	269
Guanajuato	416
Valladolid	708
San Luis Potosí	431
Zacatecas	438
Gobierno de Tlaxcala	68

Provincias Internas de Oriente

Gobierno del Nuevo Reino de León . . . . .	...
Gobierno del Nuevo Santander . . . . .	...
Gobierno de Coahuila	44
Gobierno de Texas	8

¹ Fernando Navarro y Noriega: Memoria sobre la población del reino de Nueva España, *Bol. Soc. de Geogr. y Estadística de la República Mexicana*, Ser. 2, Vol. 1, 1809, pp. 281-291; reference on pp. 290-291.

LAND SYSTEMS OF MEXICO

TABLE I—(Continued)

Provincias Internas de Occidente

Durango	184
Arizpe (Sonora)	356
Nuevo México . . . . .	...

Californias

Gobierno de la Antigua 6 Baja California
Gobierno de la Nueva 6 Alta California

Total	6,684
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As will be seen from the table, most of these small holdings were situated in the same general regions in which the Spaniards had established great estates. Of the total number, 5,954 were in the intendencies covering the agricultural lands of the Mesa Central; about a third of the remainder were in Yucatán; while the Oaxaca region contained several hundred. The only marked exceptions to this distribution are represented by the fertile valleys of Sonora and of Durango. Though data are lacking in regard to several of the northern districts, we know that the population there was still very sparse at the end of the colonial period.

INCREASING IMPORTANCE OF THE RANCHOS

During the entire colonial period and up to the middle of the nineteenth century the ranchos played an insignificant part in the life of Mexico. It was only after the Reforma, instituted by Benito Juárez and his associates, that they became a conspicuous feature of the land system. In the years immediately following the War for Independence several attempts were made to colonize the outlying regions of the young republic. Thus, in the early twenties, plots of land upon the frontier regions were offered to soldiers who had seen service in the patriot armies, on condition that they would settle upon them. In the isthmus of Tehuantepec a new province was created, and a general distribution of lands was authorized on October 14, 1823. A common soldier was to receive a plot of 250 *varas* on each side (a little over 10

acres), and lands were to be given to others according to their rank. In the following year measures were adopted providing for the colonization of extensive public lands on the northern frontier. Here, since the country was arid and a larger area would be required for the support of a family and as the region was better suited to cattle raising than to agriculture, the tracts offered settlers were larger, though they were still supposed to constitute small holdings. The law specified that no person should receive more than one square league (nine square miles) of irrigable land, four square leagues of land without irrigation, and six square leagues of pasture lands. While the response to these offers on the part of Anglo-Saxons from east of the Mississippi was prompt, the Mexicans were slow to take advantage of the opportunities presented. In fact, so large a proportion of the settlers in this new region were foreigners that, in 1834, the government considered it necessary to make still greater efforts to induce its own citizens to settle upon these holdings, in order that the territories might not pass completely into the hands of immigrants from the United States. An urgent invitation was issued, addressed particularly to those who had rendered military service to the republic but extended even to those who were in rebellion against the existing government. In addition to land, implements were to be given free to each prospective national settler, and a small daily wage was to be paid during the first year to every member of his family. Although these measures came too late to prevent the province of Texas from passing into the power of Americans, they did serve to increase the number of Mexican settlements in the northern part of the country and by 1854, in spite of the loss of extensive territory resulting from the war with the United States, the number of ranchos had more than doubled as compared with those in existence at the end of the colonial period. But even the 15,085 ranchos, which were said to exist in 1854 were insignificant, either in respect to the area occupied or the number of inhabitants, as compared with the 6,092 haciendas at the same date.

AGRARIAN REFORMS OF JUÁREZ

A new impetus was given to the formation of small rural properties by the democratic movement that marked the Reforma, in the middle of the nineteenth century. Although the movement under Juárez has been known chiefly for the changes which it introduced in the relations between church and state, the agrarian reforms inaugurated were also of far-reaching importance. As we have seen, at the same time that the large holdings of the church were confiscated and partially broken up, the communal holdings of Indian settlements and the organized pueblos of the mestizos were likewise dissolved, and it was ordered that the lands should be allotted in severalty to their respective occupants. The law of disentail passed in 1856 decreed that neither civil nor religious bodies might hold any property that was not devoted to public use. The Constitution of 1857 incorporated this provision among its articles and made it applicable to all lands held by such corporations, including even the *ejidos*, which were used in common by the people. The explicit aim was to create a large body of small proprietors, to counterbalance the economic, social, and political influence of the large holdings. As soon as the war against French intervention was over and the country had returned to peace conditions, the systematic execution of these measures was undertaken. The enforcement of the provisions proceeded slowly, for the inhabitants of the towns and communities were generally opposed to the step and disregarded the law as long as possible. I have been unable to find figures showing the amount of land so allotted in severalty prior to 1877, but an authoritative work² gives the number of ranchos in the entire republic in 1876 as 13,800, an actual reduction from the number existing in 1854. Allowing for inaccuracies in one or both cases, it would appear that few of the communities had at that date been broken up. The transformation of holdings from communal to allodial was, however,

² Antonio García Cubas: *The Republic of Mexico in 1876*, transl. by G. F. Henderson, Mexico, 1876, p. 24.

more rapid in subsequent years. Table II shows the results accomplished by this reform measure between 1877 and 1893.³

TABLE II—LAND ALLOTMENTS IN SEVERALTY FROM 1877 TO 1893
(Areas in hectares, ares, and square meters)

STATE	NUMBER OF TOWNS WHOSE LANDS WERE DISTRIBUTED	NUMBER OF INDIVIDUAL TITLES	AREA OF LAND ALLOTTED	AVERAGE SIZE OF LOTS
Baja California	1	110	1,508. 82. 00	13. 71. 66
Campeche . . .	1	27	1,590. 98. 31	58. 92. 53
Coahuila . . .	1	347	39,267. 49. 16	113. 16. 27
Durango . . .	1	16	4,556. 39. 66	284. 77. 47
Sinaloa . . .	3	195	5,629. 29. 69	28. 86. 81
Sonora . . .	38	4,501	239,588. 45. 02	53. 23. 00
Tabasco . . .	22	1,939	12,865. 21. 97	6. 63. 49
Yucatán . . .	33	3,899	42,219. 38. 13	10. 82. 82
Zacatecas . .	1	247	1,016. 00. 00	4. 11. 33
Total . . .	101	11,281	348,242. 03. 94	30. 86. 98

It is of interest to observe that the greater part of these newly formed small individual properties, created from the former communal holdings, were located in the regions which had been settled long after the Conquest and where the population consisted chiefly of mestizos, while in the regions of strong Indian influence, such as the Mesa Central and Oaxaca, the pueblos still clung to their ancient communal system and the number of ranchos was not greatly increased. In Yucatán only did the Indian element appear to yield to the demands of the new legislation. The size of the new properties indicates that they may be described as "homesteads," as they averaged but little over 30 hectares each (75 acres). They varied in extent in response to the physical character of the region in which they were situated. In the semi-arid lands of the northern plains (Durango

³ *Anuario Estadístico de la República Mexicana, 1893*, Mexico, 1894, pp. 561-563. "Noticia de los títulos extendidos gratis según la ley de 14 de Diciembre de 1874. . . ."

and Coahuila) the average size of the allotments was 199 hectares (497 acres). These were probably cattle lands. The individual holdings created in the still more arid regions of Baja California, Sonora, and Sinaloa and in Zacatecas, all of them probably depending upon irrigation, averaged but 25 hectares. Those in the humid coast lands of Tabasco and Campeche contained 33 hectares, and those of Yucatán little over 10 hectares.

In succeeding years the movement continued, until by 1906 there had been added to the small individual holdings the appreciable number of 19,906 (8,625 between 1894 and 1906)⁴ created from the land held by pueblo communities. This, as we shall see later, represented only a part of the increase brought about by the Reforma legislation.

CREATION OF RANCHOS FROM PUBLIC LANDS

Another important feature of the agrarian reform introduced by Juárez was the settlement of public lands, which up to his time had met with very little success. The law of July 20, 1863, modeled somewhat after the homestead law of 1862 in the United States, provided that any one might denounce and file a claim for unclaimed land to the extent of 2,500 hectares, which would then be awarded him as allodial upon the payment of a nominal sum on easy terms.⁵ The applicant, however, was obliged to settle upon the lands claimed, with at least one person for every 200 hectares, and to maintain such occupancy for a period of ten years. During the life of Juárez and the duration of the Reforma government little progress was actually made in this direction, but a movement was inaugurated which, in the years immediately following, brought a large amount of waste land under settlement. Table III shows the amount of public land thus disposed of, the average size of the concessions, and the number of proprietors benefited up to the year 1883, when, as we have seen, the public-

⁴ Cuadro sinóptico informativo de la administración del señor general Don Porfirio Díaz . . . hasta 1909, Dirección General de Estadística, Mexico, 1910, p. 74.

⁵ F. F. de la Maza: Código de colonización y terrenos baldíos de la República Mexicana, Mexico, 1893, pp. 729-735.

land policy, under the government of General Díaz, began to suffer radical changes.

TABLE III—DISPOSITION OF PUBLIC LANDS FROM 1866 TO 1883⁴
(Areas in hectares)

STATE	NUMBER OF TITLES GRANTED	EXTENT	AVERAGE SIZE
Baja California	305	773,058	2,535
Campeche	358	612,375	1,708
Coahuila	49	170,103	3,471
Chiapas	491	341,289	695
Chihuahua	192	446,380	2,325
Durango	25	81,789	3,272
Jalisco	2	44,995	2,497
Nuevo León	3	152,908	50,969
San Luis Potosí	1	2,500	2,500
Sinaloa	166	391,084	2,356
Sonora	273	795,777	2,915
Tabasco	1,188	350,839	295
Tamaulipas	38	71,826	1,890
Veracruz	1	6	6
Yucatán	87	63,118	725
Zacatecas	3	705	235
Total	3,182	4,298,752	1,351

It will be seen that in this entire number of grants, 3,182 in all, covering over 10,000,000 acres of public lands, there were few states in which the allotments had averaged over the 2,500 hectares specified by the law and that, in the states where the limit had been passed, the excess was generally slight. The state of Nuevo León, where a few large grants had been made, shows the only marked departure from the policy of disposing of the public domain in small lots. It is evident that these figures repre-

⁴ *Anuario Estadístico de la República Mexicana, 1893*, Mexico, 1894, pp. 553-560: "Noticia de las adjudicaciones hechas de terrenos baldíos, . . ." The decimal parts of the hectares have been disregarded.

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(Areas in hectares)

STATE	NUMBER OF TITLES GRANTED	EXTENT	AVERAGE SIZE
Baja California	305	773,058	2,535
Campeche	358	612,375	1,708
Coahuila	49	170,103	3,471
Chiapas	491	341,289	695
Chihuahua	192	446,380	2,325
Durango	25	81,789	3,272
Jalisco	2	44,995	2,497
Nuevo León	3	152,908	50,969
San Luis Potosí	1	2,500	2,500
Sinaloa	166	391,084	2,356
Sonora	273	795,777	2,915
Tabasco	1,188	350,839	295
Tamaulipas	38	71,826	1,890
Veracruz	1	6	6
Yucatán	87	63,118	725
Zacatecas	3	705	235
Total	3,182	4,298,752	1,351

It will be seen that in this entire number of grants, 3,182 in all, covering over 10,000,000 acres of public lands, there were few states in which the allotments had averaged over the 2,500 hectares specified by the law and that, in the states where the limit had been passed, the excess was generally slight. The state of Nuevo León, where a few large grants had been made, shows the only marked departure from the policy of disposing of the public domain in small lots. It is evident that these figures repre-

^a *Anuario Estadístico de la República Mexicana, 1893*, Mexico, 1894, pp. 553-560: "Noticia de las adjudicaciones hechas de terrenos baldíos, . . ." The decimal parts of the hectares have been disregarded.

sent genuine colonization—the establishment of a large number of small proprietors and the settlement of an extensive area of hitherto unoccupied territory. The settlements were made, too, chiefly in the parts of the republic where population had formerly been sparse, i.e. in the warm southern lowlands, along the arid west coast, and in the semi-arid states of the northern mesa.

The following years saw a continuance of this settlement of public lands by small farmers, and 4,828 individual titles were issued under the provisions of this law between the years 1884 and 1906. Thus, from this particular legislation, there resulted a total of 8,010 new holdings, which brought under settlement 11,011,669 hectares of the formerly unoccupied public domain.

Summing up the results of the agrarian reform instituted by Juárez and his associates, so far as the creation of small properties is concerned we find that, up to 1906, there had been distributed to individual holders 19,906 lots of what had been communal holdings and that 8,010 new properties had been formed from the public lands, making a total of 27,916 newly created holdings, most of which were ranchos. To this number we may add 357 grants to *labradores pobres* (poor laborers) in different parts of the public domain and 832 titles granted to colonists,⁷ bringing the number of recently formed, small, individual properties up to about 29,000, or almost double the number of ranchos existing in the entire republic in 1854.

The actual settlement of public lands in small lots suffered its first serious check in 1883, when, as has been noted, surveying companies were allowed to file claims for a third of all the lands they measured. The so-called Law of Colonization, enacted in 1894, marked a still further departure from the homestead policy, by removing all limits to the amount of land that might be acquired by an individual. By these concessions the public lands that were suitable for colonization were rapidly exhausted, and the possibility of further homestead settlements was virtually ended.

⁷ Cuadro sinóptico informativo, pp. 73-74.

GROWTH IN SIZE OF RANCHOS

By these various means the number of ranchos in Mexico has gradually increased, particularly since the period of the Reforma. At the same time, however, two active influences have been at work tending toward the concentration of these small holdings into larger ones. The first influence has already been noted in connection with the development of haciendas, which, in many cases, have absorbed small adjoining properties. There has also been a marked tendency toward the accretion of the ranchos. Many of the holdings allotted in severalty to the members of a former community were very small—too small, indeed, to make them suitable for independent farms. In many cases these have been combined to form more workable properties. Furthermore, many of the recipients of the newly created individual holdings parted with their titles, sometimes through ignorance, sometimes through shiftlessness. This alienation has taken place most frequently among the aborigines, who have often but the crudest notion of property rights and are usually satisfied with possession and use of the land. The better-educated mestizos, those already holding ranchos, and the inhabitants of the small agricultural towns have, in many instances, bought these small properties for a mere bagatelle and have thus formed larger holdings, often with the Indian tenants still attached to the land as peons. In this way many of the ranchos have come to be haciendas, in fact if not in name, with several score or sometimes several hundred persons living on them. So common has this growth of the rancho become that the term is losing something of its original significance as a farm worked by the owner himself. As a net result the total number of separate properties in the country has been reduced, and thus to some extent the effect of the measures intended to reform the agrarian system has been counteracted.

NUMBER OF RANCHOS IN 1910

The present number of ranchos in Mexico and their distribution by states are shown in Table IV, compiled from the Census of 1910.

LAND SYSTEMS OF MEXICO

TABLE IV—DISTRIBUTION AND NUMBER OF RANCHOS IN 1910

Aguascalientes	467
Baja California	1,096
Campeche	159
Coahuila	823
Colima	294
Chiapas	1,806
Chihuahua	2,615
Distrito Federal	60
Durango	2,458
Guanajuato	3,999
Guerrero	1,621
Hidalgo	1,448
Jalisco	6,888
México	460
Michoacán	4,138
Morelos	100
Nuevo León	2,310
Oaxaca	382
Puebla	878
Querétaro	515
Quintana Roo	24
San Luis Potosí	1,535
Sinaloa	2,914
Sonora	1,286
Tabasco	1,172
Tamaulipas	2,892
Tepic (Nayarit)	1,669
Tlaxcala	108
Veracruz	1,801
Yucatán	639
Zacatecas	1,382
Total	<u>47,939</u>

DISTRIBUTION OF RANCHOS

In the general distribution of ranchos several factors seem to have operated. In the first place, there are few of these properties in regions where Indian influence is strong, as in the states of Tlaxcala, México, Oaxaca, and Puebla. The Indian pueblos have always resisted the disentanglement of the communal properties and, openly or covertly, have succeeded in retaining their com-

munal holdings. In all other regions there are many ranchos, the number varying greatly in the different states. The most conspicuous block is that which is included in the contiguous states of Jalisco, Guanajuato, and Michoacán. In the territory included within this group of states there is found an aggregate of 15,025, or nearly a third of the number in the entire republic. Much of the land of these states is too hilly for the successful administration of haciendas, and many parcels of productive ground have been formed into small holdings. Moreover, in this area the Indian influence has not been strong enough to prevent the dismemberment of the communal pueblos which had been formed after the Spanish conquest. Furthermore, along the west coast and in the arid northern states, in both of which regions Spanish settlement had taken the form of landholding pueblos, there are many ranchos at present, although the restricted amount of arable land makes agriculture a secondary occupation.

Within these general regions the distribution of ranchos has depended very largely, but inversely, upon the factors that have influenced the distribution of haciendas. In other words the ranchos are generally situated in lands that are unsuitable for larger holdings. Thus, the hilly districts where the tillable ground is found in small, widely separated plots do not lend themselves to the formation of haciendas but are generally occupied by ranchos (Fig. 20).

Moreover, as has already been pointed out, the *hacendados* devote much of their land to the cultivation of wheat, sugar cane, and rice by means of irrigation. Where water in sufficient quantities permits the cultivation of these crops few small properties have survived. They remain, as a rule, only where cultivation is dependent upon rainfall alone or where the supply of water suffices to irrigate only a few small fields. The ranchos are thus, as a rule, situated upon the higher slopes or along the upper parts of river courses among the numerous diminutive affluents; they occupy the small terraces, the narrow flood plains, or the alluvial fans that characterize these sections of a

stream. To say that a man is a farmer of *río arriba* is usually equivalent to saying that he is a *ranchero*, since those of *río abajo* are almost always *hacendados* with large holdings.

Distance from markets and from routes of travel also has played a part in the distribution of the ranchos. Since most of the land lying along the principal roads and railroads and in the vicinity of larger towns has been taken up by haciendas, the ranchos are found, predominantly, in districts apart from the main routes of travel and large centers of European population. This fact has made them far less conspicuous than the haciendas and has contributed to a common underestimate of their numbers and of their importance in the life of the nation.

PLACE OF THE RANCHO IN THE NATIONAL LIFE

As compared with the number of *hacendados*, the *rancheros* form by far the greater proportion of rural proprietors in Mexico, the respective numbers being 47,939 of the latter as against 8,245 of the former. Only in Yucatán and Tlaxcala are there more haciendas than ranchos; in every other state in the republic the *rancheros* are far the more numerous, often being in the proportion of 10 to 1. The ratio in the amount of property held is very different, since one hacienda is frequently as large and as valuable as many ranchos.

The economic importance of the ranchos in the life of the nation is very hard to determine. Thus there is a great difference of opinion in regard to the proportion of food which they contribute to the general supply, and statistics are lacking that might determine the facts in the case. This much is certain, that so long as the crops of the ranchos and pueblos yield well there is an abundant food supply, but when these crops fail, either because of unfavorable weather or because of destruction by revolutionary bands, the country must import cereals and sometimes actually faces starvation. The crops raised by the haciendas, though probably from a greater acreage and much more secure from drought, do not suffice to feed the nation.

Socially the ranchos are of still greater importance. Although



FIG. 20—Ranchos in the heads of valleys that lead into the Valley of Mexico. Haciendas on the flat lands lower down.

the influence of these small holdings has as yet been slight in molding general social conditions in the country, they have provided real homes for a large number of the common people. While the conditions of life among the *rancheros* are not on a par with those enjoyed by the large landowners, they are far better than those of the peons upon the haciendas. The wants of the *rancheros* are not numerous, and, although their life is primitive in many districts, there is little real privation among them, except during occasional bad years. The food and the housing conditions suffice for their requirements, while the money received from the sale of produce or from the employment of spare time provides for the limited purchases necessary. Moreover, the families of many of the *rancheros* find it possible to obtain at least an elementary education, either in the villages near which they live or in schools maintained by the co-operation of the *rancheros* themselves. In addition, probably the greatest social advantage offered by the ranchos is the intangible sense of dignity and independence engendered by proprietorship. The *ranchero* is a free man; he is free to dispose of his holdings and to make any change of environment or circumstances which may improve his condition. In all these respects the life of the *ranchero* is in striking contrast with that of his fellow tiller of the soil, the peon.

Politically, the ranchos are coming to play a more and more important part in the life of the republic. For many years the owners of the small rural holdings either did not exercise the privileges of citizenship at all or were completely overshadowed, in politics, by the power of the *hacendados*. But, with the growing number of ranchos, the gradual increase of the medium-sized holdings, and the extension of education to some of the rural districts, the influence of this group is beginning to be felt. From constituting an element entirely outside of the political life of the nation, the *rancheros* are coming to exert an influence that will have to be reckoned with. They are gradually forming a middle class, a development which will render the political situation in Mexico very different from that existing in most of

the other Latin American countries, where no such rural middle class exists. Like the property holder everywhere, the *ranchero* will become a conservator of law and order. He is opposed to revolutionary movements of all kinds; and what he most desires is to be left alone, to cultivate his few acres in peace, unmolested by the march of troops or the raids of rebel bands. The attitude of a typical *ranchero* in the state of México illustrates the political interests of his class. When asked if many of the young men from the neighboring ranchos had gone into the revolution, he replied that his fellows took no interest at all in the affair; that they were all right as they were and did not like such *revueltas*; all they wanted was to be let alone—the typical attitude of the property holder, large or small. Unfortunately, this rural middle class has hitherto been too weak in numbers and influence to withstand either the powerful group of *hacendados* or the far more numerous class of landless mestizos. Nevertheless, the number of *rancheros* has gradually increased from 6,684 in 1810 and 15,085 in 1854 to 47,939 in 1910, while the present reform bids fair to add very materially to their numbers, if it does not actually destroy the system of large holdings. Had Mexico during her one hundred years of independence possessed a greater proportion of small proprietors, her history might have been to a lesser degree a record of frequently recurring revolutions. The *ranchero* constitutes one of the most powerful stabilizing forces that the country can possess.

CHAPTER V

COLLECTIVE HOLDINGS IN MEXICO

In addition to the forms of allodial tenure described in the preceding chapters, there exists in Mexico still another mode of tenure, one that represents a conception of property which seems curiously out of place in the world today. This is the system of collective holdings,¹ which, although legally abolished years ago and gradually disappearing as modern economic individualism penetrates deeper and deeper into the rural life of Mexico, is still quite common in certain parts of the country. It has been, in some instances, openly preserved in defiance of legislation, but frequently it has been maintained covertly, under the guise of individual titles vested in some trusted *cacique*. Among the Indian population this traditional form of tenure is the only one clearly understood, and its revival is earnestly desired by many as a means of ameliorating the present insupportable conditions of the poorer agriculturists.

Collective holdings in Mexico exist in several different forms. Some of them are held by incorporated villages, the title to the land resting in the village itself. Others belong to unincorporated settlements of Indians, in which the lands are held in common but without legal title. Still others consist of legally constituted rural properties held by groups of individuals, each possessing a share or shares, somewhat after the fashion of a stock company.

CONDUEÑAZGOS

The *condueñazgo* (joint ownership), as this third class of collective holdings is termed, is of less importance than the other two, although quite common throughout Mexico. The basis of the joint ownership is a property, originally held by a single indi-

¹ For literature on collective holdings in Mexico, see the Bibliography.

vidual, which has been divided and subdivided by inheritance, sale, or other process of transfer, until now it is owned in shares by a number of persons. One title still covers the entire property, since the transactions by which it has been partitioned have been carried out without the prescribed legal formalities. The purchaser of a share in one of these holdings obtains the right to occupy and cultivate any unused portion of the property and to enjoy the use of pastures, woods, waters, quarries, or other common resources of the place. In the event of such a property being broken up each shareholder receives his proportion of the land or of its purchase price. In some instances these *conduenias*, through a long process of division and subdivision, have lost title under the original holding and consist at present of more or less irregularly held individual plots of cultivated land, with common possession and use of the pastures, woodlands, and wastes. Holdings of this type really constitute *rancherías*, since they comprise a group of small individual properties, but they still retain certain communal features.²

LANDHOLDING TOWNS

Mexico has always been a country of villages. The distribution of the arable soil in isolated pockets, oases set in the midst of barren hills or desert volcanic deposits, has tended to foster settlement in groups rather than in scattered farms. Cortés observed this as he marched from the coast up to the capital, and every traveler since his day has been able to note the same fact. Furthermore, since the Conquest, the insecurity of life in the country districts has obliged people to keep together for common defence. There has seldom been a time in Mexico when the solitary dweller would be safe from the raids of bandits who occupy the hills. Possibly as a result of this close association in communities, much of the land has been held by towns and used collectively by their inhabitants. Some of these towns were of Indian origin and merely adapted their earlier organization

² Andrés Molina Enríquez: *Los grandes problemas nacionales*, Mexico, 1909, p. 119-121.

to the system of their conquerors. Others were founded by the Spaniards as they gradually extended their occupation over the country. In the course of time, however, the two types have gradually approximated to a common form, but, since they have sprung from different origins and have remained distinct during a great part of their history, it will be more convenient to deal with them separately.

SPANISH SETTLEMENTS

The conquest of Mexico led to a redistribution of the inhabitants and to the formation of new centers of population. No sooner had the country been pacified than the Spaniards inaugurated a policy of founding new towns. Some of these, such as Mexico, Tlaxcala, and Texcoco, were, it is true, nothing more than the reorganization of existing cities, but a great many were erected upon new sites. Thus the necessities of defence led to the establishment of military outposts on the frontier or among the more restless Indian tribes. The connections of the conquerors with the sea led to the creation of new routes of travel and to the development of new centers of trade. Furthermore the interests of a new religion called for new establishments. Changed economic conditions rendered many of the older sites unsuitable and gave importance to hitherto unoccupied places. Thus Puebla, halfway house to the coast, sprang up, and the neighboring Indian city, Cholula, decayed. Antiquera (now Oaxaca), which was more accessible from Mexico, became the metropolis of the plateau which Zaachila had once dominated. Valladolid (the modern Morelia) supplanted Tzintzuntzan, the ancient capital of Michoacán, as a better strategic position for holding the province. Aboriginal Tula faded into insignificance as compared with the Spanish city of Querétaro. Toluca, amid its fine pasture lands, which had been mere wastes before the introduction of European cattle, eclipsed the old agricultural town of Malinalco. Ports, such as Veracruz, Tampico, Acapulco, sprang up along the coasts; while mining towns, such as Pachuca, Guanajuato, Zacatecas, and San Luis Potosí, began to appear

among the mountains where the aborigines had found nothing to interest them. The cultivation of wheat, sugar cane, and European fruits gave rise to new towns in the fertile valleys of Atlixco, Orizaba, and Morelos and in the more healthful spots along the seaboard. Even in the more arid districts of the north settlements grew up where there was grass enough for cattle or where water could be found for irrigation.

It was but natural that many of these new settlements, particularly those established in centers of agricultural production, should take on the character of the Castilian agricultural villages with which the conquerors and their home government were most familiar. The towns of Castile had been, from very ancient times, landholding bodies, possessing more or less extensive territories. Thus, every town had what were known as *propios*, lands owned by the village itself and administered by the town officers. These *propios* were rented year by year, and from the income thus obtained the expenses of local government were met as well as the taxes levied on the community by higher authorities. In addition to these cultivated lands each town possessed an area just outside the city gates that was styled the *ejido* (from Latin *exitus*). This ground was used for a great variety of purposes. It contained the pound for stray cattle as well as the public threshing floors and places where the villagers might winnow their grain in the open air. It contained the public rubbish heap and the village slaughter pen. Upon it the farmer might unload the crops brought in from the fields or might keep his hives of bees. Parts otherwise unoccupied served for playgrounds and loafing places. No building might be constructed upon this land, nor might it be cultivated. The custom of maintaining the *ejido* for the common use of the inhabitants had been recognized, if not established, by the law of the Siete Partidas (1256-1265).

In addition to the *propios* and *ejido* the villages possessed the *pastos comunes* or *dehesas* for the common pasturage of flocks and herds. The villagers zealously guarded these common grasslands against encroachment for other purposes and against

invasion by the migrant herds of sheep which twice a year crossed the country between the winter-grazing lands in the valleys of the south and the highland pastures of the central plateau. If, as occasionally happened, some part of the common was broken and cultivated, it reverted to the use of the community as soon as the crop was cut, and the cattle of the villagers were turned out upon the stubble.

Woodlands, open to the free but restricted use of the community, were also held by many of the towns. These were called *montes*, as they were usually situated on the hillsides which were suitable neither for pasture nor for tillage. Upon their preservation and careful administration depended the supply of fuel, both wood and charcoal, for the townspeople, as well as the supply of timber for building purposes.

These Castilian pueblos were the model of all towns founded by the Spaniards in America. Royal orders issued by Charles V and Philip II³ provided regulations to be followed in the establishment of new villages. After specifying in detail the factors to be considered in the selection of town sites (climate and situation in respect to coast, rivers, lakes, mountains), it was ordered that great care should be exercised in the choice of a place where there would be fertile lands adjoining, where pasture would be available, where there would be an abundance of timber for fuel and for constructions, and where a supply of water would be assured for the people and for their fields. The site having been selected, the town was to be laid out in an orderly fashion and lots assigned to the settlers; the *empresario*, or person founding the town, was to be allowed one-fourth of all lots, the remainder to be distributed equally. The tillable land lying about the town was also to be allotted to the settlers, the recipient of a village lot being also entitled to a *suerte* (lot) of agricultural land. It would seem that, at first, these plots were given to the colonists on the same terms as were their *solares* (building lots) and became their individual property (*cosa suya propia*) if occupied

³ Recopilación de leyes de los reynos de las Indias, 3rd edit., Madrid, 1774, Book IV, Chs. 5, 7, 12.

within three months and properly "proved up" within four years. The individual allotments were originally limited to five *peonías* or three *caballerías* (500-1,500 acres). Before these individual allotments were made, however, lands were to be set aside for the common use of the inhabitants, including pasture grounds (*dehesas*) sufficient for the cattle and *ejidos* sufficiently extensive for any probable future growth of the settlement. The remaining lands included in the town grant were to remain *baldíos* (public and unoccupied lands reserved by the crown for future grants), except that from these latter were to be selected certain portions as *propios*, the income from which would be used to defray the expenses of village administration. The common lands were to be administered by the town council, an elective body which was to be formed in every case as soon as the settlement was made.

Throughout the colonial period expansion into the hitherto unoccupied parts of Mexico was generally accompanied by the founding of such landholding pueblos. Although the first settlements on the frontier were usually in the form of missions or *presidios* (military establishments), both of these were regarded as temporary organizations which, it was expected, would eventually give place to pueblos. In California, Sonora, and other parts of the northwest, which were organized late in the colonial period, the pueblo was also the unit of organization, although the agrarian conditions differed somewhat from those in the earlier towns. These later pueblos differed from the earlier in two particulars: first, the *ejido*, with its *suertes* of land for the settlers, contained four square leagues instead of one (an evident response to the aridity of the climate), and, second, both Indians and whites inhabited the same town, though in separate sections. In these later pueblos there was no individual ownership in the full sense. Ultimate title to all lands was reserved by the crown. The settlers enjoyed only the usufruct, with rights of inheritance. The allotment to each Indian head of a family was one agricultural lot (*suerte*), generally measuring 100 by 200 *varas*; and an Indian governor, or headman, received two. The Span-

ish settlers were given two lots each (sometimes four), while the priest received five, and three were set aside for the captain-general of the settlement. After these plots had been held and worked for five years titles were given to the holders, but the lands were still inalienable. In case the agricultural plots were not cultivated within two years they reverted to the crown. In brief, the grants did not involve a complete surrender of the rights of the crown over a part of the *herencia real* but constituted simply a permission to use the land, in perpetuity, upon certain conditions. All lands not included in these grants remained crown property. In case anyone wished for an extension of the tillable land, parts of these *realengos* could be leased in perpetuity upon the payment of two pesos per year for each *suerte*.

In the prairie regions of Texas, Coahuila, and New Mexico the land was distributed upon a different plan. The pueblo was still the unit of the system, but it was not so much an agricultural settlement as the seat of a pastoral colony. Consequently we find the land grants gauged by the amount of grassland needed rather than by the area to be cultivated. As in all grazing districts, the holdings were large, and the league replaced the *vara* as the unit of measure. In the territory lying along the Río Grande, Escandón and Borrego in 1749-1755 established a series of settlements that were typical of the Spanish expansion in the prairie country. At the Villa de Laredo in 1755 a small group of settlers, some thirteen families, was assigned 15 square leagues (86,400 acres) of pasture lands. At the Rancho de Dolores a temporary grant was made to the colonists of 50 *sitios de ganado mayor* (equivalent to 216,920 acres), until permanent concessions could be obtained. The usual method followed was to make a large grant which should be held, at least for a time, in common. This generally consisted of 2 *sitios de ganado mayor* (8,677 acres) per family, 2 *sitios de ganado mayor* and 12 *caballerías* (1,269 acres) for the captain in charge of the settlement, and 4 *sitios de ganado mayor* (17,354 acres) for *ejido*, besides whatever additional land should be needed in case a mission was attached to

the town. It was always the ultimate intention to distribute these large communal grants, but the colonizers believed that a community of interests would help to hold the settlement together during the first trying years. It was sometimes many years, however, before the division was made.

Thus, to a certain extent in central Mexico and to a greater degree in the peripheral states occupied at a later period, the landholding towns established by the Spaniards formed one of the recognized features of the agrarian system (Fig. 21). All of these villages held certain lands which were owned, administered, and used in common by the inhabitants. These were, as we have seen, the *dehesas* and the *ejidos*. The agricultural plots within the area of their jurisdiction were either held as allodial by the inhabitants or were allotted to individuals for their use, in which case the title remained in the village or, ultimately, in the crown. During the entire colonial period no important modification was made in this method save such gradual changes as took place because of the changing character of the population.

INDIAN PUEBLOS

Side by side with these towns there existed in Mexico, and still exist today, many landholding Indian villages. Some of these date only from the reorganization of the political system after the Conquest, but some of them are survivals of the aboriginal social system which was found in Mexico at the advent of Europeans. These Indian agrarian towns merit consideration, partly because of the historic interest which attaches to them as representative of the ancient Mexican culture and partly because they have strongly influenced the entire land system as it now exists in Mexico.

When the Spaniards entered Mexico they found the Indian inhabitants in many different stages of advancement and, consequently, with varying ideas of land tenure. The more or less nomadic tribes that inhabited the plains of the north, the mountains of the Sierra Madre Oriental, and some of the coastal regions had little or no conception of ownership in land, since

they subsisted chiefly by hunting or by collecting the seeds and fruits of plants which they had no part in producing. These tribes made, at most, but temporary use of patches of ground for their rudely planted fields of corn, abandoning the fields as soon as the crop had been gathered. The dimly defined domain of the tribe was shared on equal or almost equal terms by all its members. On the other hand, the Nahuas of the Mesa Central and the Mayas of Yucatán, with a number of other Indian tribes that had come under their influence, had developed agriculture as the basis of their society. Occupying as they did the fertile *bolsones* of central Mexico and the productive limestone lands of Yucatán, possession and use of the tillable land was of such vital importance that there had been worked out a definite system of land tenure, in which the rights of possession were clearly established.⁴ While the influence of the less advanced Indian tribes has been negligible in the history of landholding in Mexico, that of these more cultured tribes has been potent—so potent, in fact, that it has given a distinctive stamp to the entire system.

Before the coming of the Spaniards the population in the productive areas of Mexico was organized in "tribes." Each tribe was made up of a number of smaller units, which were kinship groups, or "clans." These kinship groups were known to the Mexicans as *calpulli*.⁵ The households composing the *calpulli* were settled closely together; and several distinct *calpulli* were generally grouped together in a village.

The use of the term *calpulli* is, however, not always unambiguous. Bandelier states that the word was "also used to designate a great hall or house, and we may therefore infer that, originally

⁴ On this subject the principal authority is A. F. Bandelier: *On the Distribution and Tenure of Lands . . . Among the Ancient Mexicans, Repts. Peabody Museum of Amer. Archaeology and Ethnology, Harvard University, [2nd edit.] Vol. 2, 1876-79, Cambridge, 1880, pp. 385-448.* Cf. T. T. Waterman: *Bandelier's Contribution to the Study of Ancient Mexican Social Organization, Univ. of California Publs. in Amer. Archaeology and Ethnology, Vol. 12, Berkeley, 1917, pp. 249-282.* Each of these papers gives exhaustive references to the original authorities, and Waterman adds a careful and extensive bibliography.

⁵ Bandelier, *op. cit.*, pp. 401-405; and especially Waterman: *op. cit.*, pp. 252-256; section on Clan Organization in Ancient Mexico, pp. 252-256.



FIG. 22—An Indian settlement with its multitudes of small holdings separated by lanes: the Valley of Maltrata in the eastern escarpment of the Mexican plateau, six miles west of Orizaba.



FIG. 23—A scattered agricultural settlement of Indians in the Toluca Valley on the Mesa Central, 35 miles west of Mexico City.

at least, all the members of one kinship dwelt under one common roof.⁶ The Mexican pueblos must not, however, be thought of as "joint tenement houses," resembling the communal dwellings which characterize the settlements found among the Pueblo Indians of Arizona and New Mexico. As found by the Spaniards, they appear to have been clustered agricultural settlements rather than compact villages or towns. They were unlike the great tenements of the Pueblo Indians, inasmuch as each house was a small, separate dwelling, set usually in the center of a patch of cultivated ground.⁷

A further difficulty arises from the fact that the Spaniards usually translated *calpulli* by the word *barrio*, signifying "district" or "ward." Without question the *calpulli* were primarily kinship groups, but the organization of these units seems to have been modified in character through the settlement of the Indians upon the land as sedentary agriculturists. What originally had been kinship groups later on became place units, the land that was occupied tending to supersede blood relationship as the bond of union. In this connection it is of importance to notice that the Spaniards had made allotments of Indians in the West Indies on the basis of kinship groups, the *repartimientos* having been made by *caciques*. In Mexico, on the other hand, they employed a place unit, the pueblo, for the same purpose.⁸ It is obvious that with this precedent it would have been more natural, had kinship been the conspicuous bond of union, for the conquerors to have employed their earlier method in the later

⁶ Bandelier, *op. cit.*, p. 401; Waterman, *op. cit.*, p. 253. Cf. L. H. Morgan: *Ancient Society*, New York, 1877, p. 536; John Fiske: *The Discovery of America*, Boston, 1892, Vol. 1, p. 95, note.

⁷ Cortés speaks frequently of the small houses of the Mexicans and of villages with many dwellings (The Despatches of Hernando Cortés, transl. by George Folsom, New York, 1843, pp. 53, 54, 57, 71, 163, etc.). Alonso de Zorita (*Breve y sumaria relación*, in Joaquín García Icazbalceta: *Nueva colección de documentos para la historia de México*, Vol. 3, Mexico, 1891, p. 172) says the houses were *pequeñitas* (very small). The *cédula* of July 12, 1695, fixing the bounds of the Indian pueblos, says that in many of the native towns the houses were built 30 or 40 *varas* or even a quarter of a league apart (see F. F. de la Maza: *Código de colonización y terrenos baldíos de la República Mexicana*, Mexico, 1893, pp. 28-30).

⁸ For the distribution of Indians by pueblos, see Juan López de Velasco: *Geografía y descripción universal de las Indias*, publicada por Don Justo Zaragoza, Madrid, 1894, pp. 182-282.

circumstances. The fact that kinship groups, as such, do not appear in the *repartimientos* made in Mexico seems conclusive evidence that the *calpulli* had already become, in large measure, a territorial unit.

The lands held by the *calpulli* were of several kinds. In the first place there was an area surrounding each village that was called the *altepetalli* (literally, the town land). This seems to have included all the lands of various kinds that were held by the various kinship groups constituting the settlement. It was divided into sections, each *calpulli* holding its own well-defined part of this general area and using it independently of the other groups in the town.⁹ It may be surmised that a large part of this *altepetalli* was not under cultivation but served as hunting grounds, timber lands, rock quarries, and so forth. Any member of the *calpulli* might use the untilled areas belonging to his district, being entitled (with certain restrictions) to hunt, fish, cut wood, or gather grass for roofing, mats, and other household purposes. There were no common pastures, since the aboriginal Mexicans did not possess domestic cattle. There did exist, however, certain well-defined rights to the use of water for irrigation purposes—rights so equitably adjusted that the Spanish crown recognized the Aztec code and made it a basis for the regulation of water rights in colonial Mexico.¹⁰ The *altepetalli* would thus seem to correspond very closely to the *ejido* of the present-day Indian pueblo. The fact that there existed any such unit as the *altepetalli* would also seem to indicate that the village itself, as distinguished from the individual *calpulli* composing it, had already become a recognized territorial division.

Within the area occupied by individual *calpulli* tillable plots were distributed among the various family heads of the kinship group. These assignments for the support of families were known as *tlalmilli* and were called *heredades* (inheritances) by the Spaniards. They do not appear to have been allotted each

⁹ Bandelier, *op. cit.*, pp. 404, 419, 423, 425 (note 95).

¹⁰ "Recopilación," Book IV, Ch. 17, Law 11.

year, as were those in the somewhat similar ancient Inca communities, but were held permanently by a family, the land passing by inheritance from father to sons. Only such parcels were assigned annually as might be left vacant by the extinction of a household, the removal of an occupant, the abandonment of a plot by its former holder, or as increase in the number of households rendered new allotments necessary.¹¹ The size of the *tlallmilli*, or individual allotments, varied, no doubt, in different places, according to the amount of land available for distribution and the number of persons among whom it had to be apportioned. It must also have varied with the character of the soil, with the amount of rainfall, and with the supply of water for irrigation. Since, however, the land was held and cultivated by the *maceguales* (the free inhabitants of a town who held allotments) simply for the purpose of supplying their immediate needs and to provide a small surplus for barter in the village market, we may reasonably assume that the holdings were quite small, probably not averaging over two or three hectares.¹² It would seem that the usual custom was for each recipient of these village lands to cultivate the land himself. The individual plots were usually marked off one from the other (Fig. 24), as are the holdings of the Indians today, by low stone walls, rows of the thorny agave, narrow lanes, or ditches that served the double purpose of drainage or irrigation canals and boundaries. *Calpulli* was divided from *calpulli* and pueblo from pueblo in much the same way. Indian laws imposed heavy penalties, that of death sometimes, for the removal of a landmark.¹³

¹¹ Bandelier, *op. cit.*, pp. 424, 426, 427 (note 90), 429.

¹² During the viceroyalty of Antonio de Mendoza (1535-1550) some lands which had been occupied by Cortés in the Valley of Toluca were returned to the former Indian holders, and to each was allotted a piece measuring 100 *varas* by 50, or about eight acres for each holder. This would probably represent the typical size of the Indian plots (Zorita, *op. cit.*, p. 223). In order to supplement the meager income from such small plots of ground, the Indians probably occupied spare time in the production of certain articles of home manufacture, as do the inhabitants of Mexican towns today. Querétaro is now known for its polished opals; León, for its fine laces; Celaya, for its *cajetas* (boxes of condensed milk); Guadalajara, Cuernavaca, and Puebla, each for a special kind of pottery; Uruapan, for its lacquered work, etc. The lists of objects sent to the Aztec rulers as tribute would seem to indicate that the ancient villages specialized in much the same way.

(For footnote 13, see p. 116)

In addition to the plots of land which were assigned to individuals, fields were set aside for special public purposes, such as the production of supplies for the maintenance of the local chief, for the entertainment of official visitors, for the payment of tribute to the higher chieftains, for the prosecution of wars, and for the support of religious institutions and the priesthood.¹⁴ These lands were, properly speaking, the commons of the *calpulli*, since they were held and administered by that body and were worked by all the people in common, the whole community turning out together to cultivate the plots or to gather the harvest and store it in the village granary. From accounts left of the customs of those days we know that this community labor was performed with zest and good spirit, songs, jokes, and rough play making the task light, as is still the case on some of the haciendas.

The most important of these public plots were those cultivated for the kings and called *ilatocatlalli* (lands of the chief). These were to be found in every village and were naturally the best of the lands. A standard size for them seems to have been four hundred "measures"¹⁵ on each side, making a field of some 163 acres. Occasionally double this amount was contained in the fields set aside for this purpose. Of scarcely less importance were the *tecpantlalli*, or plots whose crops were devoted to the care of the *tecpán*, the house belonging to the community where the chief lived. These lands were cultivated by a special class of people, the *tecpantlaca* or *tecpantouhqui* (people of the palace),

¹⁴ Statement of Friar Andrés de Alcobiz, Sept. 10, 1543, in García Icazbalceta, *op. cit.*, Vol. 3, p. 313; Jerónimo Román y Zamora: *Repúblicas de Indias*, . . . reimprimas, según la edición de 1575, Madrid, 1897, Vol. 1, p. 285 (Colección de libros raros ó curiosos que tratan de America, Vol. 14-15). "Tenía pena de muerte el que arrancaba y quitaba los mojones de los términos de los pueblos."

¹⁵ *Ibid.*, *op. cit.*, pp. 419-423.

¹⁶ *Ibid.*, p. 420. The number 400 was said to be a perfect number among the Aztecs. Their tribute was often paid in units of this number, and frequent mention is made of land plots measuring this size. Frequent reference is made by early Spanish writers to an Indian land measure which the Spaniards translated *brasa* (fathom), or simply "measure," and which was said to have been, not the span of the outstretched arms, but the distance from foot to outstretched hand, or approximately 80 inches. The deed for the first parcel of land composing the hacienda de Santa Anna Atoyascalco, in Tlaxcala, refers to this measure as "según el uso de los Indios de esta provincia."

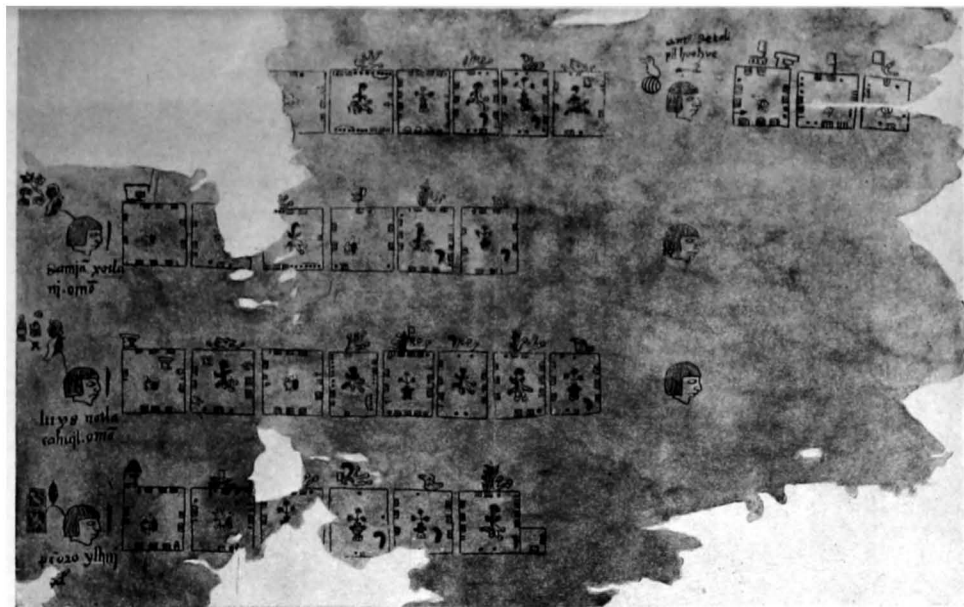


FIG. 24—Old Indian picture map showing the holdings of an individual, either allodial or, more probably, individual allotments in a *calpulli*. (From Pl. 13 in paper by Eduard Seler cited in footnote 16.)



FIG. 25—Typical pueblo and communal-holdings country near Laurel on the slopes of the Sierra de las Cruces, the range which bounds the Valley of Mexico on the west.

said to be plebeians, but enjoying exemption from all save nominal tribute. Such lands were probably as numerous as the *tlatocallalli* and of much the same character.

Neither these public plots nor the parcels assigned to individuals might be alienated under any circumstances. Not even the chiefs or the emperor might take them from the *calpulli*. They might, however, be rented, either to those of the same group or to outsiders. The rent paid was a share of the crops raised, and this (now called *aparcería*) is still the usual method followed in Mexico. The proceeds were devoted to public uses.¹⁶

VARIATIONS FROM THE COMMUNAL SYSTEM IN ANCIENT TIMES

These communal holdings formed the basis of the land system in Aztec Mexico. It has been maintained that no other form of tenure was recognized, that the distribution of the land was everywhere upon an equal basis, that its administration was completely democratic, and that the lands of nobles, to which we find many references, were only public *calpulli* plots assigned to them for revenue.¹⁷ It may be that this had been true of earlier periods in Mexico, but there seems little doubt that, before the time of the Conquest, certain modifications had been introduced which were gradually destroying whatever equality had formerly existed in the distribution of the land and in the social organization that was based upon it. There is evidence that, before the arrival of the Spaniards, these modifications were already reducing the importance of the Indian village as the

¹⁶ The village kept a record of the lands belonging to it and of the uses to which they were assigned, indicating by means of colors and ideographs the persons who held individual plots. See Francisco Javier Clavigero: *Historia antigua de México*, traducida del Italiano por J. Joaquín de Mora y precedida de noticias bio-bibliográficas del autor, por Luis González Obregón, Mexico, 1917, Vol. 1, pp. 353-354; and Eduard Seler: *The Mexican Picture Writings of Alexander von Humboldt in the Royal Library at Berlin*, in *Mexican and Central American Antiquities, Calendar Systems, and History: Twenty-four Papers by Eduard Seler, E. Förstemann, Paul Schellhaas, Carl Sapper, and E. P. Dieseldorff*, transl. from the German under the direction of C. P. Bowditch, *Bur. of Amer. Ethnology Bull.*, 28, Smithsonian Instn., Washington, D. C., 1904, pp. 123-229; especially pp. 200-209, and Pl. 13 (here reproduced as Fig. 24).

¹⁷ Banelier, *op. cit.*, pp. 447-448.

classic landholding unit of the country and were creating a form of tenure that closely resembled the individual holdings of post-Conquest days.

An early departure from the communal system, in which each family held and worked an assigned plot of the commons, was the growth of estates with serflike tenants attached to the soil. On these estates cultivation was carried on by peasants, who were known specifically as *mayeques*, *tlalmatecas*, or *tlalmaites*.¹⁸ These cultivators might neither move from the land nor might they be removed from it. They were bound to the soil; and, in case of a transfer of the estate, the peasants went with the land upon which they lived. Conversely, they enjoyed rights of occupancy the terms of which were established by custom and respected by the proprietor or overlord. For the use of the soil they paid a share of the crops to the landlord and rendered him certain personal services, such as supplying him with the wood and water required for his household. He, in turn, was responsible for their protection and welfare. The *mayeques* were free from the tribute paid by the *maceguales* (holders of communal lands) and were under no obligation to aid in the cultivation of the public plots.

Writing in 1538, Cortés gives a description of the conditions upon which the tenants lived on certain estates at that time. Each of the laborers, he says, received a piece of land for cultivation and a place upon which he might build a hut; in return, he worked on the farm of the landlord. Some of the tenants were also required to provide, at stated times, articles such as homespun cloth, loads of wood, and turkeys; others were obliged to attend the landlord when he traveled and to carry his burdens; others, again, wove cloth, both to make up the tribute which the landlord had to pay and for the use of his household. The women also rendered personal service in the landlord's household. So faithfully, indeed, has custom maintained these services which the Mexican tenant was bound to

¹⁸ Zorita, *op. cit.*, pp. 156-169. Bandelier, *op. cit.*, p. 437, thinks that the *tlalmaites* became "vassals" only after the Spanish conquest.

render, that this account, written four centuries ago, is an excellent description of the relation existing today between *patrón* and peon on almost any large property in Mexico.¹⁹

The number of persons who thus occupied and cultivated the lands of other Mexicans was so large that the Spanish officials were early forced to recognize their status as different from that of the communal landholders and to exempt them from the obligation, imposed upon the *maceguales*, of paying tribute.²⁰ In 1563 their number was estimated at not less than 100,000,²¹ but the number had increased since the Conquest.

The estates here referred to, and described by the Spaniards as *tierras y vasallos patrimoniales*, were said to have existed from very early times and to have remained in possession of certain families from generation to generation.²² Indeed, this method of landholding appears to have been quite common. All the chiefs, high and low (of which there were said to be at least 3,000), as well as other persons, held such estates before the Conquest, and many of them retained their holdings for some years thereafter.²³ In some cases the possessions of the chiefs were inherited whether or not son succeeded father in his official position. The estates were not entailed but might be divided among the heirs as the father saw fit.²⁴ Apparently the lands might be alienated but in no case transferred to *maceguales*.

Other estates were attached to certain public offices and constituted part of the perquisites enjoyed by the officials.²⁵

¹⁹ Colección de documentos inéditos . . . del Real Archivo de Indias, Vol. 3, Madrid, 1865, pp. 540-543.

²⁰ Licenciado Valderrama, visitador de la Real Audiencia de México, in statement to Philip II, in 1564. He says that in one Indian town which had 3,000 *vecinos* there were 1,900 *terrasgueros*, as the Spaniards called these tenants (Colección de documentos inéditos, Vol. 4, p. 361).

²¹ Martín Cortés (son of the conqueror), statement to Philip II, in 1563, "Sobre los repartimientos y clases de tierras de Nueva España" (Colección de documentos inéditos, Vol. 4, pp. 440-462).

²² Zorita, *op. cit.*, pp. 80-81.

²³ *Ibid.*, p. 162: "Todos estos Señores, supremos é inferiores, y otros particulares tenían tierras propias patrimoniales, y en ellas sus *mayerques* ó *halmaites* . . ."

²⁴ *Ibid.*, pp. 80-81, 157, 162-163. The custom seems to have varied in regard to this procedure. In some places the first-born is said to have inherited the holdings of his father. Cf. Bandelier, *op. cit.*, pp. 429-430.

²⁵ Bandelier, *op. cit.*, pp. 427-428, 430-431.

Since, however, the offices usually passed from father to son, even these latter holdings came, more or less permanently, into the possession of certain families. Most of the lands thus held by the nobles were seized and occupied by the Spaniards.

The private individuals ("otros particulares") referred to as possessors of estates may have been the class of persons described by Cortés in 1538.²⁶ He says that some of the *vecinos* of pueblos, particularly near the city of Mexico, held extensive parcels of land, even as much as 1,000 or 2,000 "measures" (possibly from 1,020 to 4,080 acres). The tenants on these lands paid rent and rendered services on the same basis as the *mayerques*.

At the time of the Spanish conquest the communal system of landholding was thus actually in process of being submerged in some parts of Mexico. Another phase of this modification of the older system is to be seen in the extensive overlordships of pueblos or groups of pueblos which had become general in the ancient kingdom of Texcoco. Districts had been granted to the chiefs or nobles surrounding the king, under a system of tenure which may well be described as feudal. The Spaniards called these overlordships *señoríos*, and the list of the *señoríos* of Texcoco has been preserved, showing about thirty in all, each of which consisted of a number of villages.²⁷ In the kingdom of México (as distinguished from the federation of México, Texcoco, and Tacuba) a similar system was in operation. In this case districts comprising one or more pueblos were held by the chiefs, to whom tribute was paid. These possessions, or fiefs, carried a certain jurisdiction over land and people and were heritable.²⁸

²⁶ Colección de documentos inéditos, Vol. 3, pp. 540-543. Eduard Seler, in his discussion of the Indians who became "chieftains" of the native part of Mexico City after the Conquest, speaks of Xochiquentzin (1532-1536) as one "who was also not a prince of the blood, but had only been a large landowner" (*Bur. of Amer. Ethnology Bull.* 28, Smithsonian Instn., Washington, D. C., 1904, p. 167).

²⁷ Fernando de Alva Ixtlilxochitl: *Obras históricas*, publicadas por Alfredo Chavero, Mexico, 1802, Vol. 2, pp. 167-171.

²⁸ Ramírez de Fuenleal, writing in 1532, says that Montezuma held a number of fiefs in the territory which the Mexicans had conquered and that he distributed these among his chief men. He calls attention to the fact that the Mexicans, in their island home, could not have lived but for these districts assigned them after each conquest (Henri Ternaux-Compans: *Voyages, relations et mémoires*, Paris, 1840, Vol. 10, pp. 243-257).

In the years following the Spanish conquest some Mexican nobles continued to hold these ancestral estates. Others presented petitions to the king of Spain or his representatives claiming pueblos or groups of pueblos as holdings which were recognized as having long been in the possession of their families.²⁹ So thoroughly, indeed, had the system become rooted in the country that the Spaniards adopted it as the basis of their own distribution of the land; the conquerors merely replaced the fallen Mexican chiefs and continued to receive from the inhabitants of the towns the tribute, labor, and other personal services that had been rendered to their aboriginal predecessors.³⁰

From the description already given of the haciendas in Mexico at the present time it is easy to see that, in the relationship existing between the patron and the peon, there is a survival of the customs that characterized the tribute districts of the Aztecs

²⁹ An illustration of this latter may be found in the petitions sent by Indian nobles to Charles V in 1532, in which they specify the pueblos they had held and the manner in which they had come by them. The document was signed in the presence of the archbishop, who was also president of the Audiencia, the other *oidores* also serving as witnesses and certifying that the statements in the petition were reported to be true (Ternaux-Compans, *op. cit.*, Vol. 8, pp. 261-269). Many other such petitions are recorded.

³⁰ In presenting an argument for the existence of a more advanced form of land tenure in Mexico than that of the *calpulli*, I have departed from the conclusion reached by Bandelier in his study of the methods of land tenure among the ancient Mexicans. I believe, however, that the authorities cited by Bandelier himself establish the fact that the distribution of land was neither so equal nor upon so democratic a basis as he conceived it to have been and that the organization of society in general, in the later years of the Aztec period, was not so free from undemocratic features as he believed. I may call attention more particularly to the difficulty he finds in explaining the holdings of the "nobles" (*op. cit.*, p. 413, note 56; p. 421, note 79; p. 427, notes 99 and 100). He himself can but admit that the relationship between the *moyeques* and the *pillalli* is still "somewhat obscure and confused in some points." Absorbed in the effort to show the similarity that existed between the ancient Mexican institutions and those of the Indian tribes in other parts of the North American continent, he apparently failed to observe the gradual transformation that had been taking place, more especially after the Aztec tribe started on its series of conquests. The change that was being wrought by the pretensions of the Aztecs has not, however, escaped the notice of other modern ethnologists. Almost all Mexican writers on the ancient organization of the Indians (naturally approaching the subject with a rather intimate understanding of native customs) agree in the view that whatever democracy had existed in pre-Aztec times was rapidly giving way before the ambitions of the tribe from Tenochtitlán. Many foreign students hold the same opinion. Waterman (*op. cit.*, p. 274), says:
(continued on next page)

and the still more ancient *mayeque* holdings, only slightly modified by the introduction of European ideas. In both cases we find a primary and secondary tenure clearly marked. But in pre-Conquest days the tenure of the tenant was probably more firmly established than now, since it was then less far removed from the original period when the land had been held by the individual as an allotment from the community. Yet, today, the terms upon which the land is held, the obligations assumed by the patron, the duties of the tenant, as well as the form and character of the rent paid, are almost the same on many haciendas as were those prevailing in Aztec times. The hacienda is the legitimate successor of the large holdings in aboriginal Mexico.

The innovations in the ancient land system introduced by the Aztecs and other conquerors were undermining, but had not destroyed, the communal method of holding lands. The proportion of territory occupied by the tenanted estates was probably small as compared with that held by the *calpulli*, while the tribute districts were only beginning to take on the character of landed property. The landholding village certainly remained the dominant unit in the agrarian system of central Mexico. It continued to be so for many years after the Spanish conquest, both

Continuation of footnote 30.

"The Aztec war-chief was probably well started on the road to becoming a king but had not yet arrived." Morgan (*op. cit.*, p. 534) admits that "the aristocratic element in society began to manifest itself in feeble forms among the chiefs, civil and military." John Fiske (*op. cit.*, Vol. 1, p. 118) thinks there had been taken "a decided step toward kingship of the ancient type as depicted in the Homeric poems." M. H. Saville (in notes to the "Narrative of Some Things of New Spain . . . Written by the Anonymous Conqueror," New York, 1917, p. 86) says that "to give a man vassals was to make him the feudal lord of one or more villages. Many writers have denied the existence of the feudal system in Mexico, but it seems probable that it existed, though it may not have been hereditary." Paul Radin (*The Sources and Authenticity of the History of the Ancient Mexicans, Univ. of California Publ. in Amer. Archaeology and Ethnology*, Vol. 17, Berkeley, 1920, pp. 147-148) affirms the growth of monarchical tendencies in the times of the last Aztec rulers, as he does also the division of the Mexican people into sharply separated classes, which apparently marked the complete departure of the Mexicans from their primitive social democracy. H. J. Spinden (*Ancient Civilizations of Mexico and Central America*, New York, 1917, p. 185) says "the evidence that aristocracies existed is too strong to be overthrown." There seems to be little reason for doubt that, in late Aztec times, the distribution of the land was unequal and that, associated with this economic inequality, there existed also social and political inequality, where the conquering Aztecs had gained control.

in the parts of the country which had not yet been appropriated by the whites and, particularly, in the more distant or more mountainous regions where the whites seldom penetrated. Some of the Indian pueblos still to be found in out-of-the-way sections of Mexico are the direct successors of the *calpulli* of ancient times.

INDIAN TOWNS REORGANIZED UPON A SPANISH BASIS

Most of the landholding pueblos of present-day Mexico owe their continued existence to the recognition (tacit or expressed) extended to them by the Spanish crown after the overthrow of the government of Montezuma. With its customary willingness to adapt their new political organization to the ideas and practices of the more advanced native peoples, the Spanish government recognized the collective system of landholding which had prevailed among the agricultural Indians of Mexico, modified it slightly to make it conform more nearly to Castilian institutions, and gave it a legal status by the enactment of appropriate legislation.

It has already been pointed out that, while many of the Indian villages had been included in the *encomiendas* given to Spanish settlers, there were many others which remained independent. The latter were treated as direct vassals of the crown, and the tribute which they had formerly paid to Montezuma and his associates went to the king of Spain. Consequently, it was to the interest of the king to see that these pueblos were protected from the constant pressure of their European neighbors. The decrees issued regarding the lands of Indians arose partly from the desire to protect existing towns from encroachments by the Spaniards and partly from the necessity of providing land for the hitherto migratory tribes which were now being gathered into settlements.²¹ In 1567 the Marqués de Falces, third viceroy of New

²¹ During the administration of the first viceroy, Antonio de Mendoza (1535-1550), the king had ordered that all Indians who lived scattered about the country should be gathered together in towns which should be established for them. The process was slow, and much other legislation was added to the original decree ("Recopilación," Book VI, Ch. 3).

Spain, issued an ordinance the substance of which was later incorporated in *cédulas reales*, providing that each Indian town, old or new, should be assured sufficient lands for the maintenance of its inhabitants. Each settlement was to have, in the first place, an ample town site, or *fundo legal*, as it was called, which was to measure at least 600 *varas* in each direction from the door of the church.³² This was supposed to provide sufficient space for the construction of all necessary dwellings. Beyond this, according to the *cédula real* of December 10, 1573, there was to be kept an *ejido* measuring in all one square league.³³ This allowance for *ejido* and *fundo legal* was a minimum. The viceroy was instructed to see that more was given if necessary—in fact, as much as the Indians required for their proper maintenance. The *ejido* included within its bounds the agricultural plots of the inhabitants, the common wood lots, and the pasture land for the cattle of the village. These were all inalienable and were to be administered by the town council. The local governing body was recognized by the Spanish authorities; in fact, its members represented the inhabitants in any dealings with the government, collecting the tribute and, in the name of the town, paying this to the king's agent. Thus the communal system of pre-Conquest days was carried forward into the period of Spanish domination and was recognized and protected by the laws, becoming, indeed, an integral part of the Mexican colonial land system. In this disposition of the town lands we may observe a transformation of the *ejido*, which, from being a relatively small unoccupied space at the entrance to the village, had become, in Mexico, the wide area that includes all of the communal lands of the town. It is, in reality, the *altepetallli* of pre-Conquest days, modified some-

³² So the original ordinance had been worded. Later the king ordered that these 600 *varas* should be measured from the last house in the town, thus giving the inhabitants additional land. In 1695 the first method was restored, in response to a protest made by Spanish settlers.

³³ F. F. de la Maza, *op. cit.*, pp. 25-30. In Yucatán and Sonora, in the settled parts of which the rainfall is so slight as to require larger areas for agriculture or pasture, the *ejido* was to contain four square leagues instead of one.

A Spanish league is approximately three miles.

what by new conditions and by contact with European civilization, rather than the *ejido* as still preserved in the towns of Spain and among a few of the villages or cities of some Spanish-American countries.³⁴

Unfortunately many of the Indian settlements did not take advantage of the opportunities offered to obtain formal recognition of their holdings in conformity with Spanish law.³⁵ Some of them were too remote from contact with Spanish officials to make any attempt toward reforming their land system; some were not yet sufficiently advanced in culture to appreciate the need of proper titles for their holdings. These unrecognized towns or loosely organized settlements continued to occupy their lands (when not absorbed into Spanish properties) during the colonial period and after the establishment of the republic. In fact, many such settlements exist today under the names of *congregaciones*, *rancherías*, *barrios*, or *vecindarios rurales*, holding their lands collectively and allotting them to members of the village, without titles of any kind save the rights established by occupancy or the testimony of chiefs and neighbors. Except in the less developed sections of the coastal lands, particularly in the state of Veracruz and among the more inaccessible mountains, there are thought to be few such landholding communities, since they have been able to offer less resistance to the encroachments of the whites and the mestizos than those villages which obtained documented titles to their possessions.³⁶

³⁴ In Quito, where life in many respects follows the simple ways of sixteenth-century Spain, the public park and recreation ground at the entrance of the city is still commonly spoken of as the *ejido*. Even in Mexico City the plaza where the new legislative palace is being built is sometimes spoken of, or was until recently, as the Plaza del *Ejido*.

³⁵ The viceroy Revilla Gígedo in his Informe to his successor (dated June 30, 1794) says that few Indian pueblos had taken advantage of the offer to have their lands confirmed; during his administration, 1789-1794, not a dozen had applied to him (Instrucción reservada que el conde de Revilla Gígedo dió á su sucesor en el mando sobre el gobierno de este continente . . . , Mexico, 1831, p. 102).

³⁶ Molina Enríquez, *op. cit.*, pp. 115-119. The Census of 1910 gives 946 *congregaciones* in Veracruz alone, and Fernando González Roa (El aspecto agrario de la Revolución Mexicana, Mexico, 1919, p. 241) reports that 937 pueblos in Oaxaca retain their lands. According to the Census of 1900 there were 2,082 fully organized Indian communities in the entire country.

PUEBLO VERSUS HACIENDA

During the entire history of Mexico since the Conquest the pueblo as a landholding unit has played an important rôle. This is true more particularly of the Indian pueblo, which has always been obstinate in its adhesion to the collective method of tenure and in its resistance to private encroachment and to official attempts to break up this time-honored system of the aborigines. Thus the pueblo may be regarded as the rival of the hacienda and, to a lesser extent, of the rancho. In the struggle for supremacy the hacienda and the rancho have generally won. There has been a constant tendency to absorb whole pueblos into the great farms or to consolidate their fragments to form a modern rancho. Just as in earlier times some of the individual towns became, first, tribute districts, then, *mayerque* estates; so, after the Conquest, the *encomiendas* were gradually transformed into private holdings tenanted by peons. Furthermore, many farms extended their bounds, by fair means and foul, to include neighboring agricultural villages. More frequently still, the hacienda acquired the lands of the villages, leaving their former holders to live as before but employing them as hired laborers, more or less in subjection to the landowner. Thus the communal holdings gradually decreased in extent.

The encroachment, however, was not entirely on the side of the hacienda. Many of the landholding towns were aggressive. With the "insatiable hunger for the land" which has characterized the Mexican Indians from time immemorial, they took advantage of opportunities to occupy parts of the great farms near them. Whether from a sense of having been robbed of their inheritance or from the same motive that prompted the Spaniard to extend his holdings, they often sought means of seizing upon bits of the white man's farm. In this attempt the towns frequently had the support of the Spanish authorities—at least of the king. One of the commonest ways in which appropriation was effected was to take advantage of the Spanish laws regulating the formation of independent villages. In order to encourage the creation of free towns, with their communal lands administered by the

village council and paying a tribute directly to the king, a royal *cédula* provided that a town might be organized at any place where a sufficient number of people were settled. This privilege might be exercised even though the site of the town should be on private property. A town so founded enjoyed full rights to apply to the viceroy for a confirmation of its organization and for a grant of land, including the 600 *varas* to constitute its *fundo legal*, a square league for its *ejido*, and whatever other common lands were required for the comfortable subsistence of its people. This right was not infrequently exercised, to the great annoyance of landholders whose property was confiscated in order to provide lands for the newly formed pueblo.³⁷ One result of this practice was that the large landholders felt obliged to limit the population on their farms, lest those who worked there as peons should claim their right of forming an independent town at the expense of the estate. The privilege was sometimes abused, land being obtained from an hacienda without a town being formed.³⁸

BLENDING OF SPANISH AND INDIAN VILLAGES

While the Mexican pueblo of today is the direct successor of the ancient Aztec town, one important modification was introduced into its organization as the result of the Spanish conquest: the kinship bond which was the basis of the Indian village has almost, if not entirely, disappeared. It has been pointed out that, even before the Spanish conquest, the *calpulli* was apparently becoming a place unit. This change was accelerated by the confusion that resulted from the presence of the Spaniards and from the system of enforced service in the armies, in the *encomiendas*, in the cities, and, above all, in the mines. The

³⁷ The titles to the Hacienda de Santa Anna Atoyascalco, already referred to, record an unsuccessful attempt on the part of the Indians (1720) to obtain land for the formation of a pueblo.

³⁸ Francisco Pimentel: *La economía política aplicada á la propiedad territorial en México*, Mexico, 1866, p. 56.

It is said that in 1810 the Indians who lived in the pueblo of San Andrés, province of Chalco, obtained lands for their village by this means—lands which they themselves had sold to an *hacendado* some years before in order that, with the funds they might build the village church.

introduction of foreign diseases and the great epidemics which followed also aided in the destruction of the ancient order. It is probable, moreover, that the reduction of Indian settlements to organized pueblos was attended by a disregard of kinship ties. Many *calpulli* were thus completely exterminated, while the Indians who survived were often scattered far from their original homes.³⁹ Furthermore, the civil organization, which in the Aztec pueblos had been based upon kinship, did not long survive the Conquest. The *caciques* and the *calpixquis* (tribute collectors) were gradually replaced by individuals who owed their appointment either to the *encomenderos* or to the crown officials. These new officers oftentimes were *maceguales* or, worse still, the servants (Moors or negroes) of the Spaniards. The authority of the *caciques* was thus undermined, if not destroyed; they themselves were left without resources; and the kinship groups were disrupted. The *maceguales*, in spite of their attachment to the lands where their ancestors had lived, began to move from place to place to escape the cruelty of the Spaniards, to avoid the extortions practiced by the newly constituted authorities, or in resentment at the added burdens imposed by their own chieftains. It ultimately became necessary for the Spanish crown to legislate against their continual migrations.⁴⁰

Because of these various influences the villages soon came to lose their former character as groups of closely related families, and as a result mere residence served to establish among them the right to hold a share of the village lands. If blood relationship still exists as the basis of such communal privileges, it is very obscure and any such influence is but dimly discerned by an outsider. A *vecino* at present is but a member of one of the

³⁹ The town of Xochimilco claimed that of the 3,000 warriors which they had supplied for the expedition undertaken by Cortés into Pánuco and for a similar expedition made by Alvarado into Honduras and Guatemala, not one had returned (Colección de documentos inéditos, Vol. 13, pp. 293-294).

⁴⁰ See "Recopilación," Book VI, Ch. 3, Laws 18-19. See also "Colección de documentos inéditos," Vol. 4, p. 440 ff., where Martín Cortés states (1563) that the Indians move from place to place, abandoning their pueblos on the least grievance received at the hands of their chieftains. See also Zorita, *op. cit.*, pp. 95-96, 99-100.

established families that reside in the town. Apparently the clan and the clan names have disappeared entirely, although some diligent student may yet be able to find vestiges of these kinship terms in local pueblo organizations.⁴¹

The modifications introduced into the organization of the Indian towns by Spanish legislation, by the gradual breaking up of the kinship groups, and by the progressive mingling of the two races brought about a close resemblance between the Indian pueblos and the towns which the conquerors had founded. At the same time, the latter organizations, in adapting themselves to the peculiar conditions of the country, approximated more and more closely to the native villages about them. Thus there was developed a type peculiar to the country, neither Indian nor Spanish, but a combination of the two, the Mexican pueblo of today. In regions where the aboriginal influence was strong the Indian features prevailed, while in districts settled after the Conquest by Europeans or mestizos the characteristics of the Spanish towns were better preserved. Most of the latter, as we shall see, have now lost their agrarian character, so that to speak of the landholding pueblos of Mexico today is almost equivalent to saying *pueblos de Indios*, since the mestizo towns that still hold lands are far more Indian than Spanish in racial character, whatever their origin may have been.

ABOLITION OF COMMUNAL HOLDINGS

Until the middle of the nineteenth century the landholding pueblo was one of the principal features of the agrarian system of Mexico. Its death knell was sounded by the Reforma. This movement attempted to solve the age-long problem of unequal distribution of the land by breaking up the estates held in mortmain by the clergy, by the colonization of public lands in small lots, and by reducing the communal lands of the villages to allodial lands. It was the Reforma constitution, adopted under the

⁴¹ I am inclined to believe that traces of such kinships may be found in some of the towns. I heard of rival factions in some villages that may have had their origin in a diversity of ancestry among the early inhabitants. In Peru and Bolivia there are still vestiges of the ancient lines that divided towns into different family groups.

leadership of Juárez in 1857, that instituted the allotment in severalty of all communal property. The law of *desamortización*, passed in 1856, had contained a clause exempting from its provisions the *ejidos* and other lands destined exclusively to the public use of the pueblos. Consequently these common lands were not affected by that measure. But, when the new constitution was adopted in 1857, no such exemption was included, and it was provided by that document, as we have seen, that no civil nor ecclesiastical body should acquire or administer any other property than the buildings devoted exclusively to the purposes for which that body existed. All communal property was to be granted in severalty to the individuals holding the respective plots.

It is of some importance to examine the number, character, and distribution of the pueblos which would be affected by this legislation. A careful estimate based upon various official counts showed that, in 1810, there existed in the entire country 4,682 pueblos and 95 *villas*.⁴² Table I shows the number and distribution of these *villas* and pueblos.

⁴² Fernando Navarro y Noriega, Memoria sobre la población del reino de Nueva España, *Bol. Soc. de Geogr. y Estadística de la República Mexicana*, Ser. 2, Vol. 1, 1860, pp. 281-291; reference on pp. 290-291.

The term *villa* was generally applied to towns founded by the Spaniards; *pueblo* to Indian settlements.

COLLECTIVE HOLDINGS

131

TABLE I—DISTRIBUTION AND NUMBER OF "VILLAS" AND PUEBLOS IN 1810

REGION	VILLAS	PUEBLOS	TOTAL
<i>Intendencias</i>			
México	15	1,228	1,243
Guadalajara	7	326	333
Puebla	1	764	765
Veracruz	5	147	152
Mérida (Yucatán)	2	276	278
Oaxaca	5	928	933
Guanajuato	4	62	66
Valladolid (Michoacán)	3	309	312
San Luis Potosí	2	49	51
Zacatecas	2	28	30
Gobierno de Tlaxcala . . . . .	..	110	110
<i>Provincias Internas de Oriente</i>			
Gobierno del Nuevo Reino de León	4	16	20
Gobierno del Nuevo Santander	18	11	29
Gobierno de Coahuila	7	7	14
Gobierno de Texas	1	2	3
<i>Provincias Internas de Occidente</i>			
Durango	8	168	176
Arizpe (Sonora)	7	138	145
Nuevo México	3	109	112
<i>Californias</i>			
Gobierno de la Antigua ó Baja California . . . . .	..	2	2
Gobierno de la Nueva ó Alta California	1	2	3
Total	95	4,682	4,777

At the time of the Reforma the number of pueblos had not greatly changed. Official statistics give the total in 1854 as 4,709, with 193 *villas* and 119 *congregaciones*, making the total of such agrarian corporations 5,021 in the entire country, distributed by states and territories as shown in Table II.⁴⁸

⁴⁸ *Anales del Ministerio de Fomento*, Vol. 1, 1854, Mexico.

TABLE II—DISTRIBUTION AND NUMBER OF AGRARIAN CORPORATIONS
IN 1854

STATE	VILLAS	PUEBLOS	CONGREGACIONES	TOTAL
Aguascalientes . . . . .	...	6	...	6
Coahuila	6	...	7	13
Chiapas	7	98	...	105
Chihuahua	18	136	...	154
Durango	4	17	41	62
Guanajuato	4	62	...	66
Guerrero	2	325	...	327
Jalisco	26	258	17	301
México	15	1,181	...	1,196
Michoacán	5	258	...	263
Nuevo León	29	4	...	33
Oaxaca	2	821	...	823
Puebla	4	627	...	631
Querétaro	5	36	11	52
San Luis Potosí	1	{ data lacking }	...	1
Sinaloa	3	68	...	71
Sonora	10	87	...	97
Tabasco	13	35	...	48
Tamaulipas	4	25	...	29
Veracruz	7	141	35	183
Yucatán	7	252	...	259
Zacatecas	12	35	1	48
Distrito Federal	1	50	...	51
Baja California . . . . .	...	10	...	10
Colima	1	13	7	21
Tehuantepec	5	53	...	58
Tlaxcala . . . . .	...	109	...	109
Isla del Carmen	2	2	...	4
Total	193	4,709	119	5,021

A comparison of these figures with the preceding table is difficult and unsatisfactory, because of changes which had been made in the political units. However, little or no change in the number of towns is to be observed in political divisions such as

Tlaxcala, Guanajuato, and Veracruz, where the boundaries had remained about as they were at the earlier date. It may, therefore, be inferred that the number of rural centers had neither increased nor decreased to any marked degree in the parts of the country which had been densely populated in 1810. It would follow, therefore, that the additional towns appearing in the later return must have been situated, for the most part, upon the northern plains, along the west slope, and upon the Gulf Coast. The entire number of towns in these regions was little over 1,000, while those situated within the old Indian areas constituted nearly four-fifths of the total number. Most of these *villas*, *pueblos*, and *congregaciones* were agricultural towns, and their *ejidos*, containing the common lands and the cultivated plots assigned to individuals, probably averaged not less than one square league each, making the aggregate of the area thus held about 45,000 square miles.

It was these communal holdings that the Reforma government proposed to break up, transforming into individual proprietors all those who had held allotments from the *pueblos* and distributing the lands that had been retained for common uses among the inhabitants of the towns. The consequences of the legislation were evidently unforeseen. President Juárez (himself an Indian) and the men who framed the Constitution of 1857 were sincere friends of the aborigines. Their object was not to despoil but rather to stimulate and even force the economic development of the large Indian element in the nation by removing it from the lethargic atmosphere of communal life and by offering the incentive of individual proprietorship. These leaders hoped, also, to counterbalance the power of the large landholders by creating a middle class composed of small farmers—a development which they believed essential, if they were to create a true democracy in place of the oligarchy which had hitherto dominated Mexico.⁴⁴

The operation of the measure accomplished this twofold aim only to a limited extent. Among the towns of mestizos where

⁴⁴ See Justo Sierra: Juárez, su obra, y su tiempo, Mexico, 1905-06, pp. 143-152.

Spanish ideas dominated there was a ready response to the reform. In many cases the holders of allotments from such towns had already, in fact, if not in name, become actual owners of their lands. "Each inhabitant," says a statistical report on Sonora and Sinaloa in 1849, "cultivates a piece of land which in times past belonged to the municipality but which they have been acquiring gradually either as their own or in permanent usufruct."⁴⁶ To these people the reform measure meant but a confirmation of titles to lands which they had long held practically as their own. Individual property was no novelty to them, and they responded readily to the process of transformation of the town holdings into allodial holdings. We have already seen that the towns from whose lands ranchos had been created were situated chiefly in sections of the country settled after the Conquest and consequently occupied by mestizos.

Some of the Indian towns responded in like fashion to the reform; but, in general, it was opposed by most of the Indian pueblos and even in the mestizo towns where the Indian influence was still strong. Unaccustomed to any other system than their ancient communalism and unable to understand the significance of the attempted measures, they made every effort to oppose or evade the execution of the law. If forced to comply with its provisions, they either evaded its intent by accepting disentail of the communal holdings and immediately afterwards transferring their deeds to a trusted member of the community; or, when government officials arrived to carry out the distribution of their holdings, they rose in arms and submitted only when overcome by troops.

Unfortunately, even where carried out, the reform measures did not usually accomplish their purpose of bringing the Indian into economic conditions more favorable for his development. Failing to understand the significance of the change or unable to rise to the plane of individual proprietorship, the inhabitants of many towns lost their holdings almost as soon as they received

⁴⁶ José Agustín de Escudero: *Noticias estadísticas de Sonora y Sinaloa, Mexico, 1849*, p. 38.

them. Some became the prey of unscrupulous speculators; others found themselves unable to weather a bad year and were obliged to part with their allotments for a mere fraction of the real value; while, too often, the documents for their allotments never reached the Indians at all but remained in the hands of some corrupt official or some dishonest neighbor who soon claimed and obtained the land.⁴⁶ Thus many agricultural pueblos were left with nothing save the ground occupied by their houses (the *fundo legal*).

As a result of these various influences the landholding pueblos have greatly decreased in numbers since the middle of the last century and have lost much of their importance in the agrarian system of Mexico. As we have seen, however, they still survive in certain out-of-the-way parts of the country where the Indian influence has remained strong. This is noticeable in the secluded parts of the Mesa Central (Fig. 25) and of the Mesa del Sur. In the states of Oaxaca, Guerrero, Jalisco, Veracruz, Tlaxcala, and parts of Puebla the landholding pueblos are not at all uncommon. In some of these places they still retain the name of *barrios*, given by the Spaniards in translation of the Mexican term *calpulli*, and the place names on the maps are about equally divided among haciendas, ranchos, pueblos, and *barrios*.

At present it is not improbable that the pueblo may regain something of its former importance. There is a widespread recognition of the fact that, in spite of the good intentions of

⁴⁶ The numerous circulars sent out by the government regarding the distribution of the town lands throw much light on the abuses which were committed. These circulars are published in Labástida's work (L. G. Labástida: Colección de leyes, decretos, reglamentos . . . relativos á la desamortización de los bienes de corporaciones civiles y religiosas . . . , Mexico, 1893).

The story told me by an American missionary who had lived among the Indians of Guerrero is probably typical of the attitude of the Indians in a multitude of cases. Some Indians who belonged to his church had sold their newly acquired titles to a neighboring hacienda owner. Little realizing what the transaction signified, they had continued to cultivate their fields as formerly. When the new owner finally refused to allow them to plant their corn on the lands and when they found that the political authorities gave them no redress, they took matters into their own hands and one night dispatched the new owner with their *machetes*. Jailed for a time, but finally released, they returned to their little Presbyterian chapel and, led by one of their number, an officer in the church, sang songs of praise for the success of their venture and for their deliverance from the oppressor.

the Reforma administration, the law providing for the reduction of communal to allodial property has not had the desired result. Without question, this distribution of lands has been one of the great causes contributing to the accumulation of land in large estates and the impoverishment of the small agriculturists. The government which has been established as an outcome of the ten years' revolution is now attempting to undo some of this harm and is restoring to many of the towns the *ejidos* which they had lost and making grants to others where there is evident need of agricultural lands for the inhabitants. The expressed intention of the government is not to reconstitute the pueblos as communal landholders in perpetuity but only to allow a collective use of the land until a suitable plan can be perfected for allotting the lands in severalty in such a form as to protect their holders. It will, doubtless, be many years before the Indians will be ready for such a step, and the pueblo may be expected to take its place as one of the principal features of the land system in Mexico.

THE PLACE OF PUEBLO HOLDINGS IN THE NATIONAL LIFE

Something has already been said of the importance of the village in relation to the distribution of the population of Mexico, but certain points should be emphasized. The vast majority of the rural population, which itself constitutes 78 per cent of the total, lives in settlements of 4,000 inhabitants or less. It is easy to see, then, that so long as the pueblos held land they represented the most important element of the agricultural population. Actually, they produced relatively little for general consumption, but, by supplying the food and the necessities for their own inhabitants, they sustained the greater part of the population of the country. With the conversion of communal property into individual holdings, however, a large part of the contribution formerly made by the pueblos had to be made by the ranchos. However, in the distinctively Indian districts, where the communal system is still retained, the products of the pueblo lands are the main dependence of the inhabitants.

The pueblos have also played an important rôle in the economic life of the nation, as the main source of supply of free agricultural labor. The peons on the haciendas do not generally suffice for the urgent demands of the harvest season, and their work must be supplemented by that of laborers hired from the adjacent villages or ranchos. Since the abolition of communal holdings employment on the haciendas has often become the most important, if not the only, means of support for most of the inhabitants of the pueblos. Many *hacendados* have recruited laborers from this free but needy population of the pueblos for permanent service upon their farms. By transferring them and their families from village to estate and retaining them as *acasillados* (housed tenants), they have changed the status of the laborer from that of a free, village agriculturist to that of a debt-bound peon. On the other hand, since the loss of their communal holdings, many of these villagers have become renters of land. Some of them, in fact, remain upon the plots of ground which they had formerly cultivated as holdings of the commune, paying rent to the new owner. Others obtain a piece of land from a neighboring hacienda or rancho for cultivation.

Socially and politically the communal landholders have played a very inconspicuous part in the life of the nation as a whole. They have formed what may be regarded as a sub-merged class. Taking little interest in anything beyond their own community and content to cultivate their patches of land by obsolete methods, they have contributed little to the progress of the country. The communal organization has, it is true, provided for the simple needs of its members, enabling them to subsist in a degree of comfort and independence; but it has offered little incentive to the individual to better his condition. Though nominally free citizens of the republic, with rights equal to those of any white man, the Indians and mestizos of the pueblo communities seldom take any part in the political life of the nation.

There is one sphere, however, in which the political rôle played by the pueblo has been of great significance. This is in the local

government of the individual towns. Incapable, apparently, of grasping the idea of the larger national unit, the inhabitant of the Mexican village has always been jealous of his rights in the management of town affairs. In fact, however we may seek to account for it, the local government of the pueblo in Mexico is a striking example of successful, if not extremely efficient democracy. This is the more striking when contrasted with the constant turmoil that has marked the life of the nation. It is true that the affairs of the town are often dominated by a single individual, the local *cacique* or principal citizen, but it is also true that this leader knows the bounds of his authority and is restrained from overstepping them by well-established custom which he seldom dares to violate. While, to outward appearance, the rule of this individual is a form of tyranny and while the direct use of suffrage is seldom resorted to, the local government of a Mexican pueblo is quite completely in the hands of the people themselves, and the will of the inhabitants generally controls the action of their leaders. Although true democracy has never yet existed in the affairs of the nation at large, it is well preserved in local matters, and, when the day comes that these villagers can grasp the concept of a larger political unit, it will find them well schooled in the practice of self-government. The obstacles to that wider outlook are primarily physical and lie in the character of the country, with its habitable regions widely separated by formidable natural barriers which have restricted contact between the various districts. While fostering self-sufficiency in local affairs, these natural obstacles have tended to develop an extreme sectionalism that has made the welding of the country into one nation as yet impossible. When these geographical obstacles shall have been overcome, as they are being overcome, in part, by the construction of roads and railroads, Mexico will find in the pueblos one of the greatest strongholds of a democratic state.

CHAPTER VI

DISTRIBUTION OF RURAL HOLDINGS AMONG THE PEOPLE OF MEXICO

Having considered the different forms of landholding in Mexico, we may now turn to inquire how the land is actually distributed among the people who use it or, rather, how it was distributed in 1910, the last year for which statistics are available and since which time the entire land system has been in a state of transition. This examination will give an idea of the conditions which prevailed at the end of the Díaz régime—conditions which were, in large measure, responsible for the ten years' revolution. For this purpose certain states may be selected as representative of several natural regions of the country, viz. the Mesa Central, the Mesa del Sur, the lowlands of the Gulf Coast, the slopes of the plateau, the semi-arid plains of the north, and the still more arid west coast.

Of these various regions the most important is, as has been pointed out earlier, the Mesa Central. The states of México, Michoacán, and Aguascalientes, though presenting a variety of physical conditions, will serve as representatives of this general division.¹

THE STATE OF MÉXICO

The state of México lies almost entirely on the high plateau and offers agricultural and agrarian conditions that are typical

¹ The data for this study are taken from the Census of 1910 (Tercer censo de población de los Estados Unidos Mexicanos verificado el 27 de Octubre de 1910, 3 vols., Dirección de Estadística, Secretaría de Agricultura y Fomento, Mexico, 1918-20; references in Vol. 1, Ch. 1, Section 12, and Vol. 2, Ch. 2; also, for number of ranchos and haciendas, the pamphlets on each state entitled "División territorial de los Estados Unidos Mexicanos formada por la Dirección General de Estadística," Secretaría de Fomento, Colonización e Industria [or, de Agricultura y Fomento] Mexico, 1912-18) and from J. R. Southworth: El directorio oficial de las minas y haciendas de México, México, 1910. The latter is the only publication where it has been possible to find even approximate figures for the area of haciendas in Mexico at the present time.

of the Mesa Central. The tillable lands are situated chiefly on the alluvial soils of the Valleys of México and Toluca and upon the bordering piedmont slopes. Corn, *pulque*, beans, and wheat are the principal crops. The state has an area of 2,390,900 hectares (9,230 square miles) and a rural population of 831,347, which is 84.0 per cent of the total population of the state.² Landed property is distributed as follows:

Farms of 50,000 hectares or more	2
Farms of 25,000 hectares but less than 50,000	0
Farms of 10,000 hectares but less than 25,000	8
Farms of 5,000 hectares but less than 10,000	7
Farms of 1,000 hectares but less than 5,000	47
Total	64

Of these holdings the largest contains 98,248 hectares, and the second in size, 64,192 hectares. The total number of farms with more than 1,000 hectares is 64, and the entire area covered by them is 457,272 hectares. According to the census, there are 396 haciendas in all; hence most of them must be under 1,000 hectares. In the state there are also 460 ranchos, bringing the total number of rural owners of property up to 856. It would thus appear that there are about 165,413³ heads of families who own no land. It should be noted, however, that there are 620 pueblos in the state, with a population of 672,804, representing some 135,000 heads of families. Some of these towns still hold lands in common. If we reduce the total of the landless by one-third to account for these communal holders (which would appear to be a very liberal allowance), we should still have over 100,000 heads of families entirely without land, as against the 856 proprietors who hold all the land that is owned by individuals.

MICHOACÁN

Michoacán is one of the foremost agricultural states in the republic and may be taken as typical of the western districts of

² The Census of 1910 classes all the people inhabiting towns of 4,000 population or less as rural.

³ Taking the total number as 166,269, a figure arrived at by dividing 831,347 (the rural population as given above) by five. It is believed that this represents an approximately correct estimate.



FIG. 26—Large estates on alluvial deposits bordering Lake Pátzcuaro in the southern part of the Mesa Central.

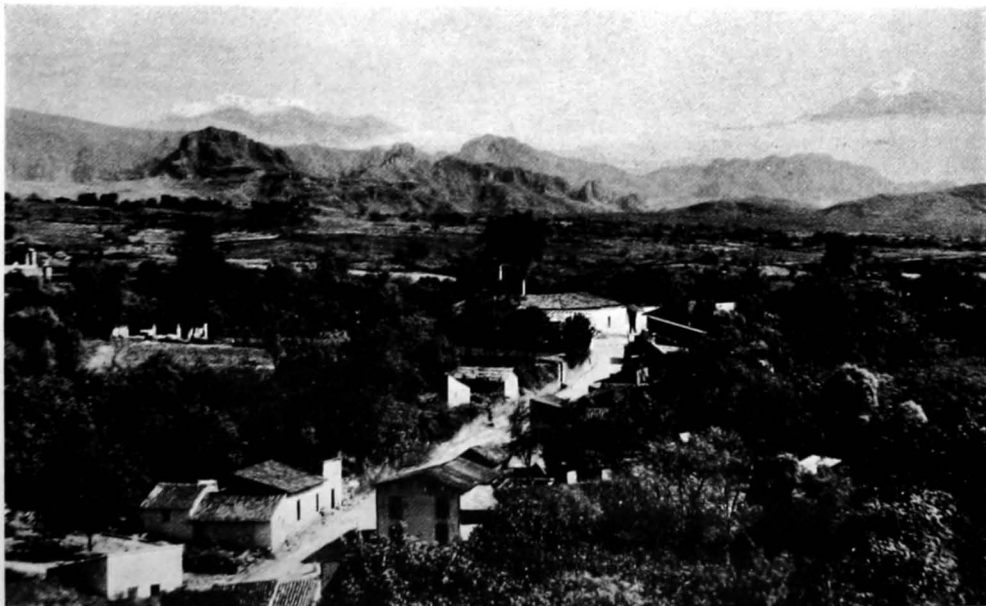


FIG. 27—The Valley of Morelos in the southern escarpment of the Mexican plateau seen from Cuernavaca, the outskirts of which are visible in the foreground.

the Mesa Central. Its surface is composed chiefly of hills and valleys, but, about Lakes Chapala and Pátzcuaro (Fig. 26), there are a few high plains, which are part of or adjoin the extensive *bajío* of the Santiago-Lerma basin. It is in this northern part that the most productive lands are situated, the southern and western parts being quite undeveloped. Parts of the highlands are irrigable, and the hills everywhere receive some moisture from the clouds that frequently form about them. Upon the volcanic soil that covers most of the hills and in the higher parts of the alluvial valleys that descend southward toward the basin of the Río de las Balsas the usual plateau crops are cultivated. Corn and wheat predominate, the production of the latter being restricted in general to the haciendas.

The rural population is given as 828,947; this represents 83.6 per cent of the total number of inhabitants of the state and includes, as estimated, 165,789 heads of families. Of this number there are 4,138 *rancheros* and 380 *hacendados*, making a total of 4,518 rural property holders and leaving over 160,000 heads of families without land. If, in this case, we deduct one-third of the number to allow for an uncertain number of heads of families who may enjoy use of communal holdings among the 239 towns, there would still be left over 100,000 who have no share in the land of the state. In contrast with this numerous class of landless families, there are the following large haciendas:

Farms of 100,000 hectares or more	2
Farms of 50,000 hectares but less than 100,000	10
Farms of 25,000 hectares but less than 50,000	5
Farms of 10,000 hectares but less than 25,000	12
Farms of 5,000 hectares but less than 10,000	24
Farms of 1,000 hectares but less than 5,000	49
Total	102

The total area of these 102 estates amounts to 1,635,253 hectares, giving an average of 16,032 hectares for each. The two largest contain 145,739 and 100,000 hectares respectively. With such inequality in the distribution of the land and with such a

large class of entirely landless agriculturists, it is little wonder that there has been a marked emigration from the state.

AGUASCALIENTES

The state of Aguascalientes represents the drier sections of the Mesa Central, having a yearly rainfall (Fig. 2) of 20 to 30 inches (almost entirely in the summer). Its farms produce the usual crops of the plateau—corn, beans, wheat, red pepper, barley, and potatoes. In the central and western parts streams carry enough water for irrigation, the rest of the state being dependent chiefly upon rains.

Of the total population of 120,511, 70,507, or 58.5 per cent, is classed as rural. Property is divided as follows:

Farms of 25,000 hectares or more	3
Farms of 10,000 hectares but less than 25,000	19
Farms of 5,000 hectares but less than 10,000	8
Farms of 1,000 hectares but less than 5,000	1
Total	31

These 31 haciendas contain 436,000 hectares, the largest having 40,000 and the smallest 3,000. The average for the 31 is 14,065. Besides these large farms there are 474, mostly ranchos, under 1,000 hectares, but no detailed statistics are available as to their size. Of the 70,507 rural inhabitants, with some 14,100 heads of families, there are but 505 property owners. To this number may be added perhaps 2,000 holders of communal lands in the 1 *villa*, 4 *pueblos*, and 41 *congregaciones* of the state, leaving, however, about 11,500 heads of families that own no land.

MORELOS

Turning now to the slopes of the central plateau, where, as we have seen, there is less land that is suitable for agriculture, we may take the state of Morelos as representing the better-watered lands of the eastern and southern slopes (Fig. 27), while Colima will serve as a type of the drier western descent.

Although its valleys are wider than those on the Gulfward side

DISTRIBUTION OF RURAL HOLDINGS 143

and its rainfall not so heavy, the small state of Morelos is typical of the *tierra templada* of the middle altitudes. It is, in fact, the only state that lies entirely upon the slopes, Veracruz, San Luis Potosí, and Hidalgo all containing parts either of the plateau or of the coastal plain. The total area of Morelos is 491,000 hectares. Of this extent, 224,349 hectares are included in haciendas and ranchos. The remainder of the area (and, indeed, a considerable part of that included in these properties) is rough and almost useless land, since the state contains a series of ridges entirely unfit for agriculture of any kind and of little value even for pasture. It has been estimated ⁴ that not over 10 per cent of the surface of the state is arable. The distribution of the land is as follows:

Farms of 25,000 hectares or more	3
Farms of 10,000 but less than 25,000 hectares	6
Farms of 5,000 but less than 10,000 hectares	1
Farms of 1,000 but less than 5,000 hectares	12
Farms of 100 but less than 1,000 hectares	19
Total	41

The total area of these 41 farms is 222,249 hectares. There are also (according to Southworth) 68 farms under 100 hectares, whose total area is 2,100 hectares.

It is of interest to note that the aggregate extent of the three largest haciendas (31,077; 29,480; and 38,697, respectively) is 99,254 hectares, nearly 1,000 square kilometers, or more than 45 times as much as the 68 small farms added together. Each of these three large estates contains more than three times as much land as the sum total of the 87 farms which measure less than 1,000 hectares each. Moreover, two of the largest haciendas, Santa Clara and Santa Anna, belong to one owner, making a total area in his possession of 68,177 hectares (170,442 acres, or over 266 square miles), which is more than seven times the area covered by the 87 farms under 1,000 hectares each. In Morelos the large estates not only contain most of the land, they also

⁴ Francisco Bulnes: *The Whole Truth About Mexico*, New York, 1916, p. 88.

hold the best of it. They occupy the fertile alluvial deposits in the valleys which can be irrigated—the sugar lands—while the small holdings are situated chiefly upon the less productive and almost sterile slopes of the various ridges.

The rural population of the state numbers 139,467, this being 77.7 per cent of the total. Of this number about 28,000 are heads of families, and, among these, not more than 140 are individual property holders (Table IV, p. 78; Table IV, p. 98). There are also very few communal holdings, as Morelos is one of the regions where the hacienda system has been most fully developed. The heads of families who own no land are peons upon the sugar estates, either *acasillados* or hired for the harvest season. A small number rent pieces of land from the haciendas.

In spite of the serious social and political effects inevitable in such an unequal distribution of the land, it is unlikely that successful cultivation of sugar cane could be carried on with small holdings. Certainly either state aid or co-operative organization on a large scale would be necessary to supplement the resources of the individual in the construction of irrigation works and in providing machinery for the milling of the crop. Much of the land belonging to the haciendas, occupied provisionally by the peons during the revolution, is being planted in corn instead of sugar cane, and a large part of the state would probably revert to corn cultivation if distributed in small holdings. Thus a change of tenure would, in all probability, entail a change in the products of the farms, and the hacienda crops would give way to those typical of the small holdings.

COLIMA

Colima is representative of the more arid western slope of the plateau, in the central part of Mexico. Its territory has a warmer climate and a lighter rainfall than that of the highlands. Scarcity of water renders much of its surface unfit for agriculture or even for cattle raising. The population depends upon the products of the few fertile valleys where irrigation is possible and where corn, sugar cane, rice, and beans are the principal crops,

DISTRIBUTION OF RURAL HOLDINGS 145

and upon its herds of cattle that graze on the dry interfluvial spaces. The total area of the state is 588,700 hectares. Of this area, 354,900 hectares are included in 43 haciendas;⁵ 29 of these are over 1,000 hectares and altogether contain 348,950 hectares; the other 14 average but 425 hectares each. The rural population comprises 67.6 per cent of the total and numbers 52,556. There are therefore 10,511 heads of families. Only 334 of these have any rural property, leaving some 10,177 entirely without land. The 13 pueblos in the state may account for a few communal holders, but certainly very few, since this is not a region where Indian communities flourish. The larger number of the property holders is accounted for by the 294 ranchos enumerated in the census.

OAXACA

The state of Oaxaca may be taken as typical of the country in the Mesa del Sur. It is principally hill country, with few large valleys. The rainfall is light in most parts but generally sufficient for the cultivation of corn. Wheat, sugar cane, and rice, when cultivated, usually require irrigation. They form only a small proportion of the product of the state, corn being the great staple crop. The Census of 1910 gives the number of haciendas as 117; Southworth lists 120. The distribution of the land is as follows:

Farms of 50,000 hectares or more	2
Farms of 25,000 hectares but less than 50,000	6
Farms of 10,000 hectares but less than 25,000	10
Farms of 5,000 hectares but less than 10,000	12
Farms of 1,000 hectares but less than 5,000	58
Total	88

The area of these 88 largest haciendas is given as 769,048 hectares; one of them contains 77,500 hectares and another, 50,908. There are listed in the census 382 ranchos, making a total of 499 individual properties. On the other hand, the rural

⁵ The Census gives 40 haciendas; Southworth gives 43. As a matter of fact there are only 29 different owners listed by Southworth, some individuals holding several properties.

population numbers 901,442 (86.7 per cent of the total), with 180,288 heads of families. Of these, then, there were 179,789 without individual property. Conditions in Oaxaca are rendered less serious than in other states by the fact that many of the pueblos have retained their communal holdings. But even with allowance for this, the vast majority of the rural inhabitants have no land which they can work or upon which they can live as their own. They have no other lot open to them than to live as peons upon an hacienda, or as hired laborers maintaining their families upon meager wages, or as renters under the conditions described in preceding pages.

VERACRUZ

As representative of the moist *tierra caliente* along the Gulf we may take the state of Veracruz, most of which lies within this warm lowland zone. As a whole this large state is sparsely populated, its density per square kilometer being only 15, as compared with 46 in Tlaxcala, 32 in Puebla, and 41 in the state of México. Its rural population is 887,369 (78.3 per cent of the total) and varies greatly in density. Thus there are from 30 to 40 persons per square kilometer in the most thickly settled regions, such as Córdoba, Orizaba, and Coatepec, but only from 3 to 4 per square kilometer in the hot, forested regions of Minatitlán, Acayucán, and Cosamaloapan in the south (Fig. 5). The average rural density for the whole state is 12 per square kilometer.

The principal agricultural products of Veracruz are corn, coffee, sugar, and rice. In the northern lowlands and on the lower slopes large numbers of cattle are raised. The forests of the south have been little exploited as yet but are rich in cedar, pine, oak, and mahogany. A number of the properties in the north are of great value for the petroleum deposits that the subsoil contains.⁶

⁶The Mexican Constitution of 1917 declares that petroleum deposits are (as metallic minerals have always been considered in Spanish law) the property of the state and do not go with ownership of the surface. Foreign investors who had bought oil lands before this position was definitely taken by the Mexican government have protested to their home governments against the retroactive application of this legislation, and the question is still in debate.



FIG. 28—Taviče, one of the few districts in the Oaxaca plateau that are adapted to agriculture.



FIG. 29—A small farm among the Oaxaca hills.

DISTRIBUTION OF RURAL HOLDINGS 147

As would be expected in a territory so sparsely populated and having such large areas covered with timber or grass, Veracruz contains many extensive properties. The following table shows the number of these large estates:

Farms of 50,000 hectares or more	7
Farms of 25,000 hectares but less than 50,000	6
Farms of 10,000 hectares but less than 25,000	52
Farms of 5,000 hectares but less than 10,000	71
Farms of 1,000 hectares but less than 5,000	257
Total	393

The total area of these 393 large haciendas amounts to 2,622,073 hectares. The Census of 1910 lists only 153 haciendas but gives the number of ranchos as 1,801, apparently including in this latter number most of these properties under 5,000 hectares. This gives a total of 1,954 property holders in the entire state. To this number should be added those who possess shares in the 946 *congregaciones* and 166 *pueblos*. Even if we allow a third of the rural heads of families (59,158) for this number (a very generous allowance), it still leaves approximately 116,000 of the rural families entirely without lands of their own or shares in communal holdings, while among the *hacendados* there are 65 persons who hold estates each of which measures 10,000 hectares or over.

SINALOA

In direct contrast with the moist, hot lands of the Gulf Coast are the states of Sinaloa and Sonora and the territory of Baja California. In these states, which constitute most completely the desert region of Mexico, successful agriculture can be carried on only by means of irrigation and so must be limited to the valleys of rivers, such as the Sinaloa, Fuerte, Yaqui, Mayo, Sonora, and Altar.

Sinaloa, the most favored of these three districts, since it lies far enough to the south to receive some of the rains enjoyed by the better-watered Nayarit region, has an area of 7,138,000 hectares. Much of this land, however, is unfit for agriculture. The

narrow, sandy, and excessively hot coastal belt is given over largely to groves of palm, mango, poplar, and brazilwood; the middle slopes are covered with a scant forest of cedar, oak, and other timber; the cold summits of the mountains, still largely unexplored, are left to the great pine forests that extend over into Durango. The haciendas and ranchos of the river valleys produce corn, wheat, cotton, sugar cane, and tobacco, as well as a great variety of tropical fruits.

The rural population of 278,423, or 86.0 per cent of the total, is composed chiefly of mestizos, there being few Indians in the state save the scattered tribes high up in the mountains. With some 55,685 heads of families in this rural population, there are but 37 haciendas and 2,914 ranchos, making a total of 2,951 rural proprietors and leaving about 52,734 without holdings of their own. Even among the inhabitants of the 107 pueblos there are probably very few who have access now to communal lands. According to the statistics available, there were in the state, in 1910, the following large farms, including haciendas and large ranchos (omitting the *distrito* of Mazatlán):

Farms of 50,000 hectares or more	0
Farms of 25,000 hectares but less than 50,000	5
Farms of 10,000 hectares but less than 25,000	30
Farms of 5,000 hectares but less than 10,000	41
Farms of 1,000 hectares but less than 5,000	189
Total	265

The total area of these 265 farms was 1,337,337 hectares, making an average of 5,046 hectares each. Much of the land included in these areas, of course, is of little or no value and is left entirely waste. A part would never be of any value as agricultural holdings, large or small, while other parcels would afford subsistence for a few families if worked with as great care as is usually given to the small plots held as individual possessions.

SONORA

Sonora is largely desert or would be so but for irrigation. Even the light precipitation enjoyed by the other western states of

DISTRIBUTION OF RURAL HOLDINGS 149

Mexico is lacking over most of its surface, almost the entire state having less than 10 inches of rainfall annually (Fig. 2). Consequently here, too, all agriculture, save the primitive dry farming of certain Indian tribes, is limited to the areas to which water can be carried from the several rivers that cross the state. A natural consequence is that, while there exist a few vast holdings, such as the hacienda of San Rafael del Alamito, which contains some 120,000 hectares, and extensive concessions acquired from public lands, the greater part of the properties that are actually cultivated are relatively small. According to Southworth there were 77 properties that measured over 1,000 hectares in extent. These were divided as follows:

Farms of 50,000 hectares or more	1
Farms of 25,000 hectares but less than 50,000	2
Farms of 10,000 hectares but less than 25,000	4
Farms of 5,000 hectares but less than 10,000	13
Farms of 1,000 hectares but less than 5,000	57
Total	<u>77</u>

To this we should add several large concessions resulting from the survey of public lands, as follows:

To one individual (in several concessions)	1,796,437 hectares
To another individual	208,507 hectares
To another individual	113,981 hectares
To another individual	<u>20,284 hectares</u>
	2,139,209 hectares
Add the total area of the 77 large estates	<u>485,765 hectares</u>
Making the total area in the hands of 81 owners	2,624,974 hectares

On the other hand, there were 310 haciendas in the state (most of them under 1,000 hectares) and 1,286 ranchos, most of them quite small. In addition to the haciendas and ranchos mentioned there are 279 *labores* (small, incompletely organized holdings) and 398 *congregaciones*, mostly of the Mayo, Yaqui, Pima, and Opata Indians who inhabit the districts of Alamos, Guaymas, Arizpe, and Magdalena. These *congregaciones* probably represent

several thousand holders of communal lands. Thus the state contains a few very large holdings, and a relatively large number of small properties, corresponding respectively to the great areas of almost complete desert and the productive irrigated lands along the rivers.

The rural population is 219,563, being 82.7 per cent of the total in the state. With some 43,913 heads of families among this rural population, there are but 1,875 who were proprietors in 1910, with perhaps some 10,000 holders of communal lands, leaving over 32,000 landless families.

BAJA CALIFORNIA

Geographical conditions in Baja California resemble those of Sonora. The peninsula is largely desert, although in the northern district there are some good pasture lands and the summit of the central mountain range is covered with a growth of pines extending some 150 miles from north to south. The peninsula is composed largely of rough mountain lands, highly dissected by the occasional rains that occur, and there are a few deep, narrow valleys where water is available for irrigation and where corn, wheat, sugar cane, cotton, and a variety of fruits and vegetables are grown. In the northeastern corner of the territory a small section of the fertile alluvial bed of the Colorado offers soil similar to that of the Imperial Valley across the border. Irrigation is being extended over these lands.

This territory offers the best illustration of the results obtained by the public-land policy adopted during the administration of President Díaz, as it also shows the fruits of the Reforma legislation in the relatively large number of small holdings. The population had always been exceedingly sparse, and the land long remained almost entirely undeveloped save in a few of the oases found along the river beds. The few settlements established in the peninsula up to 1854 consisted of 10 pueblos (chiefly agricultural towns), 23 ranchos, and 42 haciendas.⁷ Under the legislation

⁷ *Anales del Ministerio de Fomento*, Vol. 1, Mexico, 1854.

DISTRIBUTION OF RURAL HOLDINGS 151

permitting the survey and delimitation of public lands almost the entire territory passed into the hands of land companies, in very extensive concessions.⁸ Although the ostensible purpose of such concessions was the colonization of these undeveloped lands, little actual settlement took place. By 1910 there was little land left in the peninsula which had not been included in these grants (Fig. 30), and the number of proprietors was insignificant as compared with the size of the territory. According to the census of that year there were but 11 haciendas, instead of the 42 listed in 1854. There were, however, 1,096 ranchos, and probably some of the properties formerly classed as haciendas were included in this number. Southworth lists 77 properties of 1,000 hectares or more, distributed as follows:

Farms of 50,000 hectares or more	0
Farms of 25,000 hectares but less than 50,000	0
Farms of 10,000 hectares but less than 25,000	5
Farms of 5,000 hectares but less than 10,000	8
Farms of 1,000 hectares but less than 5,000	64
Total	77

To these we should add the large concessions mentioned, consisting of four grants of, respectively, 5,394,989 hectares, 2,488,315 hectares, 1,496,455 hectares, and 702,268 hectares (Fig. 30).

The rural population in 1910 was 46,736 (or 89.4 per cent of the total) and represented some 9,347 heads of families. Since, including these four large landholders, there were but 1,111 property owners, this would leave about 8,236 heads of families who owned no land. The 28 pueblos and 6 *congregaciones* may reduce this by a few hundred, but, even though the proportion of proprietors is relatively large as compared with other parts of Mexico, a large number of the rural population remains which has no share in the ownership of the soil.

⁸ See Charles Nordhoff: *Peninsular California*, New York, 1888. This is a description of the territory and an account of the concessions which were made to some of the land companies.

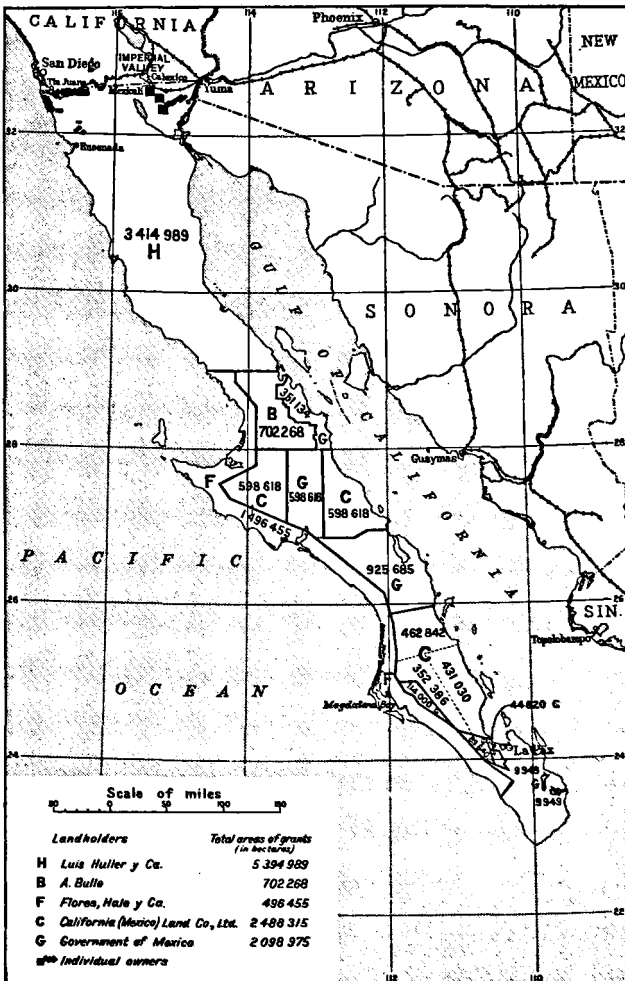


Fig. 30—Map showing the large land grants in the territory of Baja California. Scale, 1:10,000,000. (From map entitled "Baja California: Terrenos deslindados por empresas autorizadas por el Gobierno," 1:2,000,000, Dirección Agraria, Secretaría de Fomento, [Mexico], 1913.)

GENERAL ESTIMATE OF NUMBER OF LANDHOLDERS

That the states examined are not exceptional in the distribution of the land among the people but are typical of the situation existing in the entire country is brought out by Table I (p. 154).⁹

From the facts regarding the individual states studied and from the data included in Table I it is evident that in none of the varied natural regions of the country is there anything like an equal distribution of the land among the rural inhabitants. Whether we consider the well-favored sections of the Mesa Central and its eastern and southern slopes, the heavily forested, wet tropical lands of the Gulf Coast, the arid western and northwestern littoral, or the scantily watered plains of the north, we find everywhere great accumulations of land in a few extensive holdings, a very limited number of small farms, and an uncertain, though reduced, amount of collectively held property. In all sections the percentage of landless inhabitants is exceedingly high.

The development of the system of extensive holdings and this unequal distribution of the land among the inhabitants can hardly be ascribed to the peculiar character of any particular region, since it prevails throughout the country. It would seem to be due, rather, to more general causes. In a measure it may be regarded as a response to the influence of the tropics, where the white man has generally found manual labor impossible. Again, the aridity prevailing in most parts of Mexico has made agriculture difficult except through the initial investment of large capital. The presence of a backward race, attached to the soil and dependent upon its cultivation, has been an important co-operating factor. These influences have favored the establishment and

⁹ The number of individual property holders is obtained by adding the number of ranchos and the number of haciendas as given in the Census of 1910. The heads of families are reckoned as one in five of the rural population. If the number of agriculturists as given in the Census be taken as a basis for calculation, the percentage of the landless is still higher. This is probably because many children are classed as agriculturists. No figures can be given for the number of persons who share communal holdings. In the states of the center and south, in which the Indians are numerous, the percentage of the totally landless might be reduced considerably; in other states very little.

LAND SYSTEMS OF MEXICO

TABLE I—GENERAL STATISTICS OF LANDHOLDINGS IN 1910

STATE	RURAL POPULATION	PER CENT OF TOTAL	HEADS OF FAMILIES	PROPERTY HOLDERS	PERCENTAGE OF HEADS OF FAMILIES WHO OWN INDIVIDUAL PROPERTY	PERCENTAGE OF HEADS OF FAMILIES WHO HOLD NO INDIVIDUAL PROPERTY
Aguascalientes	70,507	58.5	14,101	505	03.6	96.4
Baja California	46,736	89.4	9,347	1,111	11.8	88.2
Campeche	63,351	73.1	12,670	297	02.3	97.7
Coahuila	239,736	66.2	47,947	1,110	02.3	97.7
Colima	52,556	67.6	10,511	334	03.1	96.9
Chiapas	361,246	82.3	72,249	2,911	04.0	96.0
Chihuahua	315,329	77.7	63,066	2,883	04.5	95.5
Durango	407,577	84.4	81,515	2,681	03.2	96.8
Guanajuato	776,443	71.7	155,289	4,533	02.9	97.1
Gerrero	545,183	91.7	109,037	1,712	01.5	98.5
Hidalgo	590,796	91.4	118,159	1,645	01.3	98.7
Jalisco	932,235	77.1	186,447	7,296	03.8	96.2
México	831,347	84.0	166,269	856	00.5	99.5
Michoacán	828,947	83.6	165,789	4,518	02.7	97.3
Morelos	139,467	77.7	27,893	140	00.5	99.5
Nuevo León	263,603	72.2	52,721	2,893	05.4	94.6
Oaxaca	901,442	86.7	180,288	499	00.2	99.8
Puebla	896,618	81.4	179,324	1,259	00.7	99.3
Querétaro	200,211	81.8	40,042	650	01.6	98.4
Quintana Roo	9,109	100.0	1,822	27	01.4	98.6
San Luis Potosí	488,894	77.9	97,779	1,745	01.8	98.2
Sinaloa	278,423	86.0	55,685	2,951	05.3	94.7
Sonora	219,563	82.7	43,913	1,875	04.2	95.8
Tabasco	175,247	93.4	35,049	1,707	04.8	95.2
Tamaulipas	198,770	79.6	39,754	3,079	07.7	92.3
Tepic (Nayarit)	139,273	81.4	27,855	1,712	06.0	94.0
Tlaxcala	157,110	85.3	31,422	224	00.7	99.3
Veracruz	887,369	78.3	177,474	1,954	01.1	98.9
Yucatán	249,061	73.3	49,812	1,806	03.6	96.4
Zacatecas	406,214	85.1	81,243	1,535	01.9	98.1

maintenance of the system of *latifundia* which was introduced into the American colonies from sixteenth-century Spain, whereby possession of the soil has been monopolized by a small number of proprietors while the great majority of the population are left entirely without land.

The existence of a large landless class has characterized Mexico since the time of the Spanish conquest. The aborigines, little accustomed to individual ownership of land, were unable to retain their holdings when confronted by representatives of a higher civilization. Their village properties were gradually absorbed in large tracts by the whites, and they themselves were obliged to remain as serfs upon the estates of others or to live as agricultural laborers without lands of their own. This process of dislodging the aboriginal owners, which had continued uninterrupted during the three centuries of Spanish administration, was accelerated, after the middle of the nineteenth century, by the breaking up of the agrarian communities. Thus a large part of the Indian population, numbering some 5,000,000 persons, has been left without agricultural holdings.

In this condition the mestizos, particularly those with a large proportion of native blood, have generally shared the lot of the Indian. Many of them are inhabitants of towns which have lost their former collective holdings and in which the *vecinos* (as these villagers are styled in Mexico) have been compelled to rent land from the adjacent haciendas or to hire themselves out as laborers upon these farms. Others are employed as *mayordomos* on the large estates, as herdsmen attached to the cattle ranches, or as mechanics about the farm shops. Although independence from Spain greatly ameliorated their former condition and the agrarian program of the Reforma gave ranchos to a great number, the failure to divide most of the confiscated properties left the great majority of the mestizos as landless as before.

By 1910 the rural inhabitants of Mexico who held no individual property were probably more numerous than they had been at any previous time in the history of the country. Thus, in this important respect and in spite of the marked material develop-

ment of the country, Mexico was in a worse condition than she had ever been even during the most stationary periods of the Spanish domination.

With such an unequal distribution of the land and with so large a proportion of the rural population entirely without a proprietor's natural interest in the preservation of order, force alone could be relied upon in Mexico to maintain the existing institutions. Even the iron hand of a dictator and the drastic methods of the *rurales* could only postpone the day of reckoning. The first sign of weakening on the part of the established authority could but result in chaos. Writing in 1909, Señor Molina Enríquez, after stating that the Reforma had sought to achieve in Mexico what the French Revolution had accomplished in that country—the creation of a large class of small proprietors—proceeded to remark: "To which we add that the Revolution in France not only disentailed the lands of the clergy but also of the nobility. Such an achievement we should like to see in the cereal zone of Mexico, and it is necessary that it should be brought about; and it will be, either by the peaceful measures which we suggest or by a revolution which sooner or later must come."¹⁰ Agrarian reform was inevitable.

¹⁰ Andrés Molina Enríquez: *Los grandes problemas nacionales, Mexico, 1909*, p. 124.

CHAPTER VII

THE AGRARIAN REVOLUTION

Though agrarian reform was not the principal aim set forth by Madero when he launched the revolution that overthrew the Díaz régime, it was the most fundamental part of his program. It was, in fact, this that made the greatest appeal to the mass of the people in Mexico. Of "effective suffrage and no re-election" the peon and the village agriculturist knew little and cared less; but the cry of "lands for the people" awakened a ready response. Many knew what the phrase meant, for only recently had they lost their independent holdings, the plots which their ancestors had cultivated, or the *ejidos* where the free villagers had worked and played together. Others knew little of what it meant to have a plot of soil which they might call their own and remembered only in a vague way that it was a dream long cherished by the grandfather or the grandmother, who could remember a time when their families had not been indebted bondsmen. But once the call to retrieve the lost privileges of the past had been boldly sounded and once the promise had been made that the people should have the land, the revolution became no ordinary political disturbance. It stirred the rural population to its very depths and roused the abject peons to fight against the masters before whom, ordinarily, they had stood with head uncovered and downcast eyes, as Cortés had seen the common men of Montezuma's time stand before their king. Even the faithful old house servants who had loved and cared for the *patrón's* family now thought of all the wrongs that they had suffered and joined the reckless younger lot in open rebellion or a sullen obedience that foreboded ill to the system that the master represented.

All may not agree that the problem of the land lay so deep

about the roots of the revolution; but few, of whatever political creed, will disagree with the statement that the agrarian system was responsible for the conditions which made the upheaval possible. The situation would have been different if Mexico had had a great number of small proprietors, with a proprietor's devotion to law and order, and if the Díaz administration had not countenanced the despoiling of many small holders, who, notwithstanding the irregularity of their legal claims to the land, were justified in expecting the full protection to which, as the rightful owners, they were entitled. Furthermore, the revolution would have been impossible but for the vast army of Indians and mestizos who had neither soil, crops, houses, nor cattle that would suffer in the turmoil and who welcomed the chance to gain plunder or perhaps a confiscated hacienda by rousing the other landless hordes against the government that made such conditions possible. The revolution was against Díaz; Díaz had created this situation (or permitted it); and one of the principal faults of his régime had been its treatment of the land problem. The author of one of the many Mexican works upon this subject says that, in 1911, when the rebellion was just beginning to offer serious threat, General Díaz himself admitted in conversation that the agrarian situation was the cause that lay back of the entire revolution and that he was ready to spend all the accumulated funds of the treasury in an effort to remedy conditions.¹ But it was then too late. The agrarian revolution was on, and Díaz had lost the chance to carry forward the program of land reform which he had inherited from Benito Juárez.

As the revolution continued, its program became more clearly defined. In outward appearance it had been largely political at the beginning. Personal ambition, too, at times obscured the real aim of the movement. But either the leaders have followed, though haltingly, a definite trail, or, more probably, the people have forced the movement into a well-defined channel. The one important plank in the revolutionary platform at present is the reform of the land system. "By the solution of that problem,"

¹ Zeferino Domínguez: *The Trouble in Mexico*, n. p., 1914, p. 15.

well-informed, thoughtful Mexicans assert, "any government in Mexico now stands or falls."

Again, the term "agrarian revolution" is justified by the results being obtained. No other great reform is being accomplished. "Effective suffrage," "no re-election," "Mexico for the Mexicans," and other such slogans are little nearer realization today than in the times of Díaz. But land is being given to the people. Madero began it, though not in a way to satisfy the impatient demands. Villa undertook it as a brigand would divide the booty. Zapata, in Morelos, made it his one great aim, though many of his half-savage followers seemed bent only upon vandalism. Carranza, early in his administration, began the systematic distribution of lands among the towns. Luis Cabrera, advocate sometimes of far less commendable innovations, set himself determinedly to accomplish an agrarian reform. Pastor Rouaix and Villareal have tried, with the poor organization they could command, to carry forward the program. De la Huerta, General Calles, and Obregón include this in all their important declarations of purpose, and under their direction progress has been made toward a real agrarian reform.

As in the War for Independence and in the nationalization of church lands, some properties have merely changed owners. In some cases this transference has been irregular—the mere occupation of haciendas from which the owners have fled. It is but the transfer from a peace-loving Científico to some covetous military chieftain of the revolution or to the leader of bandit hill-men. In some cases, too, the inhabitants of towns have taken possession of hacienda lands, with or without the consent of local authorities.

But there has also been an orderly and systematized distribution of the land with at least a semblance of justice. Leaders of the revolutionary régime have decided that Mexico will take a long step toward stable government and the general progress of her people when she can create a large class of small proprietors and remove the peril of a monopoly of the land. Consequently they seek means of securing lands which can be made available

for the people and hope to prevent a return to the system of large holdings.

DISTRIBUTION OF LAND UNDER THE PRESENT
REFORM MEASURES

Several plans are being followed. In the first place, public lands which had been given out to companies or individuals in violation of the laws are being reclaimed for the nation, to be divided up into small holdings. According to official reports, over 15,000,000 hectares had thus been restored to the nation up to the end of 1918.³ Again, the government has taken over haciendas which had been mortgaged in favor of the agrarian credit institution, the Caja de Préstamos, established by the government a few years before the revolution. Other estates have been seized (*intervenidos*) by the revolutionary government on the grounds that the owners were enemies of the country and so had forfeited their property. A part of this process has been carried out regularly, a part without due legal procedure. It is impossible, at present, to know the amount of land so taken over. Some of these estates have been divided up, some are held for later partition, some are probably still in the hands of individual military leaders who are profiting by the disordered conditions that resulted from the civil war. In part, this acquisition of land represents no reduction in the size of holdings, being merely a transfer from one landlord to another; in part, however, it will contribute in a legal way to increase the number of small proprietors.

Something has been done also toward securing land for distribution among agricultural villages (*pueblos*, *rancherías*, *congregaciones*, communities, etc.) on the old system of communal holdings (Figs. 31-33). Carrying out the provision of the decree issued by Carranza on January 6, 1915, and the plan established in Article 27 of the Constitution of 1917, as regulated by the law of *ejidos* issued December 28, 1920, and the later Regla-

³ *Boletín extraordinario de la Secretaría de Agricultura y Fomento*, Mexico, 1919, pp. 14 and 15.

mento Agrario of April 10, 1922,³ many towns have been given *ejidos*, either those which they had lost in past years, as already described, or new lands (Fig. 33). Official publications show this work to be going on in a fairly well-ordered way. There exists a Comisión Nacional Agraria and, in addition, a local commission in each state. The state commissions receive applications from the pueblos, study them, and forward recommendations to the national commission. This latter body then decides on the merits of the case, and, if land is available, those villages needing it are supplied. Many towns have had their petitions for *ejidos* refused because they were principally commercial or industrial in character and so could show little need for agricultural lands.⁴

The size of these grants varies according to the number of the purely agricultural population of the town, the character of the land, and the amount available. The usual area aimed at for a pueblo is the traditional one square league (about 4,387 acres), but many towns receive less and a few at least double that amount. The allotments made to individuals (Fig. 32) from this group-holding vary from 3 to 24 hectares, according to the character of the soil and particularly according to the water supply. Lands that can be irrigated by simple processes are given in the smallest amounts (3 to 5 hectares); those in regions of scant precipitation are distributed in larger blocks (4 to 6

³ The first-mentioned documents may be found in the Apéndice al Tomo Primero (No. 10) del *Boletín de la Comisión Nacional Agraria*, Mexico, 1918, while the law of *ejidos* and the Reglamento Agrario appear in the *Diario Oficial* of January 8, 1921, and April 18, 1922, respectively.

⁴ In visits made to nine of the state agrarian commissions it was interesting to observe the varying character of the individuals who composed them. Some were avowed radicals; others (perhaps a half of those met) were sane, thoughtful students of conditions in Mexico; others, again, were impractical theorists; while still others were mere office-holders, little interested in anything but the salary they received. The methods employed differed as widely as did the personnel of the commissions, varying all the way from complete neglect to well-ordered systems of mapping and registration. The satisfactoriness of the results obtained will probably vary just as greatly, unless the federal government can and does see that all state commissions are properly constituted. Government regulations provide that no national or local officials shall receive grants of land from these agrarian commissions and that no person whose property is liable to be affected by the agrarian measures shall be a member of the commission in whose jurisdiction the property is situated.

hectares); while other lands, especially in very arid regions or in very hilly districts may be awarded in lots two or three times the size of lots of better character. These amounts are those

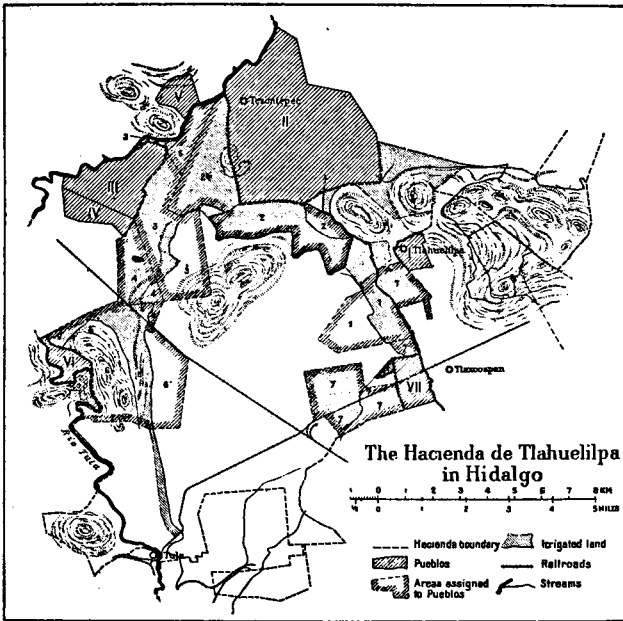


FIG. 31.—Map of a Mexican hacienda showing portions detached, under the present agrarian reform measures, to be assigned as *ejidos* to adjoining pueblos. Scale, 1:250,000. Roman numerals indicate the land already occupied by the pueblos, corresponding Arabic numerals the portion of the hacienda assigned to each. (From an original manuscript map furnished by the Comisión Nacional Agraria.)

which are considered necessary to support a family in the very poor condition in which the average Mexican laborer lives. The land given to these towns is most often taken from adjoining haciendas (Fig. 31), sometimes from ranchos, occasionally from

council representing the inhabitants of the place. This council will allot to each family, so far as possible, an individual plot for cultivation. This field may be held and worked, as in an-

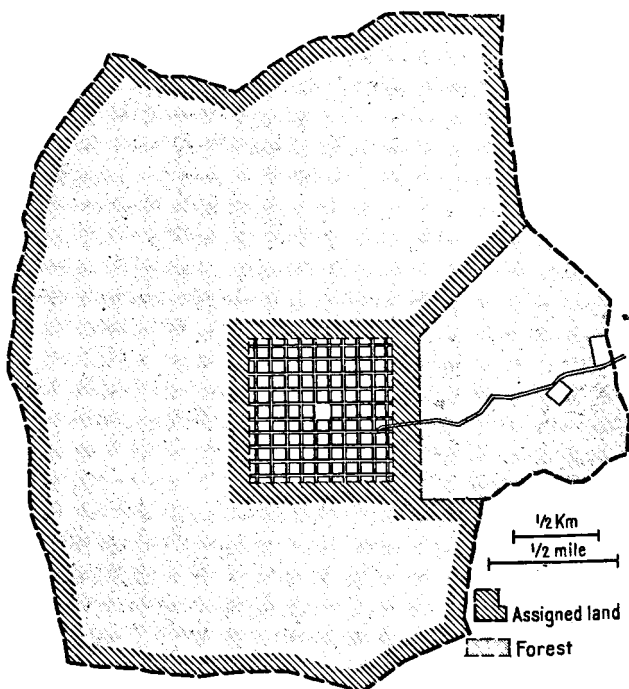


FIG. 33—Sketch map showing land given to a pueblo as *ejido* under the present agrarian reform measures: Kancab in the municipality of Tekax, Yucatan. Scale, 1:40,000. (From an original manuscript map dated March, 1919, furnished by the Comisión Local Agraria of Yucatan.)

cient Aztec times, but may not be alienated. It is the expressed intention of the government to distribute these individual holdings in severalty after a time, but with the proviso that none may be alienated until the lapse of a fixed number of years.

That portion of the *ejido* which is unassigned is to be used by the inhabitants in common for pasture, wood lots, quarries, etc. The thought is that communal holdings in this form will both protect the natives from abuse and will gradually develop the sense of proprietorship, when there will be little fear that the individual holdings will be lost, as formerly, through ignorance or inability to grasp the notion of private landed property.

Table I shows the number of towns which received these *ejidos* up to July, 1920, and their distribution by states.⁵

TABLE I—NUMBER OF PUEBLOS HAVING RECEIVED "EJIDOS" UP TO JULY, 1920, IN THE RESPECTIVE STATES

Aguascalientes	1	Michoacán	10
Baja California	3	Nayarit	3
Campeche	11	Oaxaca	9
Coahuila	1	Puebla	52
Colima	5	Querétaro	3
Chiapas	2	San Luis Potosí	4
Distrito Federal	6	Sinaloa	2
Durango	8	Sonora	2
Guanajuato	7	Tlaxcala	25
Guerrero	5	Veracruz	27
Hidalgo	21	Yucatán	3
Jalisco	16	Zacatecas	2
México	15		
		Total	243

Between December 1, 1920, and September 1, 1921, 225 pueblos were given *ejidos* by the administration of President Obregón, as indicated in Table II, and 92 more during the following fiscal year to September 1, 1922.⁶

⁵Compiled from the *Revista Agrícola*, published by the Dirección General de Agricultura, Secretaría de Agricultura y Fomento, Mexico, 1917-20, and from the *Boletín Mensual de la Comisión Nacional Agraria*, 1917-20.

⁶"Informe Presidencial," in the *Diario Oficial*, September 7, 1921, and September 23, 1922. Data are lacking for the period from July to December, 1920, but it was officially reported that, during July and August of that year, the administration of Provisional President de la Huerta gave *ejidos* to 40 pueblos (*Diario Oficial*, September 3, 1920). Press reports indicate that since September, 1922, there has been an acceleration of the process of land distribution, as much as 500,000 hectares having been partitioned during a single week in June, according to figures published by the Comisión Nacional Agraria (*New York Times*, July 3, 1923).

LAND SYSTEMS OF MEXICO

TABLE II—NUMBER OF PUEBLOS HAVING RECEIVED "EJIDOS" BETWEEN DECEMBER 1, 1920, AND SEPTEMBER 1, 1921

STATE	PUEBLOS	HECTARES
Baja California	5	26,755
Coahuila	4	11,028
Colima	1	4,080
Chiapas	4	7,225
Chihuahua	2	4,453
Distrito Federal	1	754
Durango	8	76,824
Guerrero	4	2,483
Guanajuato	3	11,876
Hidalgo	35	62,122
Jalisco	16	27,737
México	12	11,269
Michoacán	10	16,688
Nayarit	7	28,449
Oaxaca	6	4,785
Puebla	32	51,419
San Luis Potosí	5	21,180
Sinaloa	16	66,619
Sonora	6	35,797
Tabasco	2	1,006
Tlaxcala	23	13,780
Veracruz	12	18,765
Yucatán	6	32,125
Zacatecas	5	18,882
Total	225	556,101

From this table it will be seen that the towns were allowed an average of 2,523 hectares each as their *ejido*. There were said to have been some 249,000 persons benefited by the distribution of these lands, with an average allowance of about 9 hectares per family. From the tables it will also be seen that by far the largest number of towns which have received *ejidos* are situated in the states whose principal agricultural lands lie upon the Mesa Central or its slopes. When we remember that the towns in the more recently settled peripheral states were those which

most readily submitted to the reduction of their communal holdings to allodial holdings and now see that few of these towns have received them back, it is evident that the Mesa Central, with its large Indian population, is the great stronghold of the communal system.

In addition to the means of securing land just mentioned, the government plans to reclaim waste lands (deserts, swamps, and shallow lake-bottoms) and to distribute them in small holdings, as well as to construct extensive irrigation works in order to obtain more land that may be distributed among the people.

RECENT STATE LAWS BEARING ON AGRARIAN REFORM

According to the national constitution adopted in 1917 the individual states are empowered to enact agrarian reform legislation. Political conditions have as yet prevented the carrying out of this program on a large scale. However, certain states have issued laws looking toward the breaking-up of great estates and the creation of a large number of small proprietors. Several, in fact, had taken such action without waiting for national authorization.

In Michoacán a law was enacted on March 5, 1920, the principal features of which are as follows: All land in the state is divided into four classes: (a) irrigated lands;⁷ (b) unirrigated agricultural lands; (c) forests; (d) grass, hilly, or swamp lands. No individual or society may hold more than the following: (a) of irrigated lands 400-600 hectares; (b) of unirrigated agricultural lands 800-1,200 hectares; (c) of forests 1,200-1,800 hectares; (d) of grass, hilly, or swamp lands, 2,400-3,600 hectares. All persons who own properties larger than the limit stipulated may select, within a stated time, the portion not exceeding those dimensions which they wish to keep, being obliged to offer the rest for sale or request the state government to do so. The

⁷ In this class are included only those lands which are at present under irrigation or which require no machinery to obtain water for irrigation.

price is to be the assessed value plus 10 per cent and plus the value of any improvements introduced. Purchasers of the lands so sold may make the payments in twenty yearly instalments. Transfer of property and recording it in the state registry shall be entirely free of all taxation. No one may purchase irrigated or unirrigated agricultural lands greater than the eighth part of that allowed the present holders, or forested, hilly, or swamp lands greater than the fourth part of that so allowed.

We have seen (p. 141) that at present 102 owners in Michoacán hold 1,635,253 hectares in estates above 1,000 hectares, averaging 16,032 hectares each. Even though much of this land is of the lower grades, the law would compel a large part of it to be put on the market, enough to provide for some 3,000 or more new holdings (of the maximum size, or a far larger number of small portions). Much of this is capable of being developed as small farms, since the summer rains and mists are sufficient over most of the state to ensure a crop without irrigation. It will be noted that in this law there is no attempt to establish a communal system but only to break up the excessively large estates which have retarded the economic and social development of the state and to create in their stead numerous small, independent farms. Owing to the many changes in government, little has been accomplished as yet toward carrying out the provisions of this new measure.

In Zacatecas a first agrarian law was enacted in 1917. As its measures proved impracticable, it was repealed on September 16, 1919, and replaced by another, the principal features of which are as follows:⁸ Lands surrounding centers of population (most of which centers are agricultural and so occupy fertile spots in the generally arid territory of the state) are to form zones of *fraccionamiento* within which no one may hold more than 2,000 hectares. The size of these zones is to vary according to the population of the town, being in each case a square of from 8 to 24 kilometers on each side. Within this area all excess in properties above

⁸ Suplemento al Número 22 del *Periódico Oficial del Gobierno del Estado de Zacatecas*, Sept. 16, 1919.

2,000 hectares is to be divided and sold in plots of from 7 to 50 hectares of *temporal* (unirrigated farming land) and from 50 to 500 hectares of pasture land, but only if there are applicants for the land. Irrigated land, if under cultivation, need not be divided. In areas outside of the zones of *fraccionamiento* no limit is put to the amount of land that may be held. Arable land outside the zones of *fraccionamiento*, if left uncultivated for five years, may be taken over by the government for partitioning among applicants. Terms of payment are about as in Michoacán.

Here, too, there is no effort to establish communal holdings. The aim is to create some small, some medium-sized, and some large properties, varying in size according to the character of the land, its use by the owner, and the need on the part of the inhabitants.

In both of these laws we see a full recognition that the size of the holdings must depend upon the character of the lands and an effort to adapt legislation to the conditions created by that factor.

Another state which has enacted agrarian legislation is Yucatán. Here the old law by which a peon could be held for debt was repealed,⁹ land that had been acquired illegally was returned to the state, and additional land was bought (forcibly) from the large holders to be paid for in 50-year gold bonds bearing 4 per cent interest. A plot of 40 acres was allotted to each head of a family, for the first few years provisionally, merely on condition of its being worked, but later to be assigned in severalty. It is said that of the 50,000 heads of families, 40,000 applied for these lands.¹⁰

Durango, Coahuila, San Luis Potosí, Querétaro, and Sonora have also enacted legislation along much the same lines as the

⁹The national constitution of 1917 also makes it unlawful for any one to be held for debt, thus removing the bond that has practically made the peon a slave. It seems, too, that this law is actually effective in eradicating the practice. If it continues to be so, that in itself should go a long way toward breaking up the *latifundia* in Mexico, since the hacienda could not exist but for the peon.

¹⁰"Many Mexican Problems Solved in Yucatán," published by the Latin America News Association, New York, n. d.; and Salvador Alvarado: The Agrarian Law of Yucatán, Mérida, 1915. Later administrations have been less radical, with the result that many of the *hacendados* have regained possession of their estates.

states mentioned, looking toward the creation of small or medium-sized holdings, the limitation of large properties, the better distribution of the land among the people, and the more complete utilization of the arable areas. Moreover, several states have distributed lands to the pueblos, either provisionally or in a permanent form.¹¹

PROPOSED NATIONAL AGRARIAN LAW

A national agrarian law has been under discussion in the Mexican Congress.¹² This measure, prepared and submitted by the Secretaría de Agricultura y Fomento, provides, not for the complete alienation of lands from the haciendas, but for the compulsory and permanent renting, at a specified rate, of any holdings containing more than a fixed number of hectares. The amount of land that may be retained for his own use by the owner of a large holding, as well as the size of the plots to be rented to individuals, is regulated in accordance with the climate of the region in which the property is located, the character of the land itself, the supply of water for irrigation, and the use to which the land is put. For this purpose the country is divided into four sections, the hot, temperate, cold, and desert zones, and the land is classed as poor pasture, good pasture, unirrigated agricultural land of first and second grades, and irrigated land of first and second grades. In addition, the lands already devoted to the production of certain crops, such as sugar cane, *henequén*, coffee, maguey, are grouped in special classes.

This measure would allow the title to the lands to remain with the present owners but would give actual permanent possession of portions of the large estates to tenants, thus retaining a form of dual tenure, but with the obligations of the tenant limited to a cash payment instead of the giving of service or of a share of the crops. It would thus be a step away from the

¹¹ Informe rendido por el General M. M. Diéguez, Gobernador Constitucional de . . . Jalisco, Feb. 1, 1919, Guadalajara, pp. 28-29.

Informe que rinde al H. Congreso del Estado de Sonora el C. Adolfo de la Huerta, Mérida de Yucatán, 1917, pp. 22, 24, 51.

¹² See *The Mexican Review*, Jan., 1921, p. 38.

feudalistic system prevailing at present, in which tenure is bound up with service, and would be a marked advance toward the formation of an independent agriculturist class, without actually establishing the cultivators as proprietors. In this it apparently aims, by legislation, to make the development of the agrarian system in Mexico follow the course taken by the feudal tenures in European countries, where the substitution of money payment for personal service was the intermediate step between serfdom and the freehold of the cultivator. Since actual possession of the land rather than property rights is what principally concerns most of the people of Mexico, the measure thus far meets the demand for the use of the land under improved conditions without resorting to confiscation, or laying the burden of indemnification upon the government, or exposing the undeveloped Indian to the dangers of full proprietorship. It thus marks a step in advance but presents the difficulty of creating a very large class of renters, a class which can hardly be expected to contribute greatly either toward increased agricultural production or toward the social and political welfare of the country.

If it should result in tearing the Indian element loose from its traditional settled life upon the soil and should create a floating population of renters, it would spell disaster to the nation, for, thus unattached, the Indians would probably become in the country districts what the *léperos* of Mexico's large cities are to those urban centers, a plague and a peril to society. Mexico's safety depends, in very large measure, upon its success in keeping the Indian on the land.

In these various ways the co-operation of nation and state and local unit is being sought in an effort to solve Mexico's age-long problem of the land. It is still too early to say whether the present reform will fully succeed or whether, like the measures undertaken by the Spanish crown at various times and the more comprehensive scheme initiated by Benito Juárez, this new attempt will fail before the opposition of the large landholders, who, as a class, desire no modification of the present system.

CHAPTER VIII

CONCLUSION

The facts considered in the foregoing chapters show that the Mexican land system is in a state of transition, as is, in truth, the entire life of the nation. The growth of population has rendered former methods of using the land inadequate. The construction of railroads, the development of commerce, the influx of foreign men of enterprise, and the extension of education are changing old conditions. Contact with the customs, institutions, and ideas prevailing in the United States and other countries, which has resulted from increased facilities for travel among the educated classes and from the movement of peon labor across the Río Grande, is stimulating the mental life of the people. The ease of communication and transport render it no longer essential that a rural property should be a self-sufficing unit. Improved methods of farming and the introduction of machinery make a more intensive cultivation possible. The higher wages which may be earned in mines, factories, railroads, and shops have brought a new spirit of independence to the peon, multiplying his wants and making him dissatisfied with the system which attempts to hold him as a poorly paid serf, bound to the soil. This condition was accentuated by the rise in the cost of living, unaccompanied by a like advance in the wages paid to rural labor, and by the extensive seizure of pyeblo lands, which deprived many of the rural inhabitants of their independent means of subsistence. These influences taken together may be said to have made the old institutions of rural Mexico appear, even to the Mexicans themselves, entirely unsuited to the new situation in which the nation finds itself as part of the modern world. The country at last is laying aside the outgrown habiliments of colonial times. The agrarian system is changing

in response to this far-reaching metamorphosis that the nation is undergoing, and the former characteristic feature of the land system, the vast estate, now seems doomed to disappear—in fact, is disappearing before the combined attack of the landless mestizo politician, the equally landless soldier, the social reformer, and the agriculturist Indian.

Whether the present revolutionary government continues in power and persists in its program of land reform, or whether new elements (the radical socialists; the reactionary landholders; or the no less reactionary Indian sympathizers, some of whom favor a reversion to primitive conditions) finally obtain control, it seems inevitable that the extremely large holdings will gradually disappear from Mexico. A return to the old system is now impossible.

PROBABLE EFFECT OF THE NEW MEASURES ON THE HACIENDA AND RANCHO SYSTEM

This does not mean that the hacienda will cease to exist, but that it will be greatly reduced in size. It may still, however, be very far from what is considered a small property in most countries. In the drier parts of Mexico holdings will always be large. Many unproductive mountain districts would also have little value if distributed in farms of small size. According to the plans expressed in the various agrarian laws, there is usually no ban on properties containing less than some 200 to 600 hectares of irrigated land, 400 to 1,000 hectares of unirrigated arable land, or 500 to 5,000 hectares of grassland or forest. To those familiar with the small holdings of France or the diminutive farms in irrigated sections of the United States this will seem like scarcely a beginning to reduction in the size of agricultural properties. Many of the farms in Mexico will still be larger than those in most other countries, and far larger than the typical "homestead" of the United States. This relatively high limit to the extent of haciendas set by the various laws or plans for land reform is in part, no doubt, in recognition of the probability that, in spite of any reforms which may be adopted, some of the peons will not

respond to the opportunity of proprietorship but will still remain as laborers upon the estates of others.

The partial or complete abolition of the hacienda system would be a benefit to the nation in every way. Economically, it would be an advantage in that it would bring much of the land now standing idle under cultivation, make many of the rural properties more productive, and reduce the evils of absentee landlordism. Socially, it would be beneficial because it would extend the opportunities and advantages of proprietorship to a very much larger number of persons and make it possible for a great many of those who are now entirely without land to become owners of fair-sized farms and thus improve their living conditions. Politically, the disappearance of the *latifundia* would be an advantage since it would foster democracy, would decrease both the so-called proletariat and the powerful landed aristocracy, and would contribute toward the stability of governmental institutions, thus reducing the probability of the revolutions which have so retarded the development of Mexico and other Latin American countries having a similar inherited system of land tenure.

In addition to the reduced haciendas there will probably be created a very large number of the smaller *ranchos*, carved from the remnants of the great holdings. Thus the number of individual proprietors will be increased, and at the same time the landless class of the Indians and mestizos will be still further diminished. Some of these properties will be too small to make profitable farms and, like the small holdings that resulted from the disentanglement of town lands, will not be able to survive the hardships of an occasional bad year. But, with the menace of the great haciendas removed, the grouping of these smaller farms into workable units should follow a more natural course, responding to the demands of the physical conditions of the respective regions. That such properties can be successfully farmed in Mexico is evident to any one who travels through the country and sees the small and middle-sized holdings actually succeeding where the encroachment of the hacienda has not been too strong,

as in the hill districts of Guanajuato, Michoacán, and Jalisco, in the sierras of Oaxaca, on the slopes of the Veracruz escarpment, or upon the restricted arable spots of the northern plains.

In the fostering of these two forms of property, the small hacienda and the rancho, there is no move toward either socialism or communism. In fact, these forms of individual holdings are encouraged as an antidote to the radical tendencies bred among certain elements of the population by the marked inequality that has existed in the past. It is thought that the best way to prevent the growth of such ideas is by the creation of a large class of rural proprietors, whose interest in law and order will be bound up with their holdings. In this the nation is but doing what many other nations have found it necessary to do and what most nations have long ago done, that is abolishing the feudalistic features of its social institutions which had held over from the distant past, particularly the dual tenure of land, and forming, in its stead, a system of land tenure more in harmony with modern democratic and individualistic notions.

EFFECT ON THE LANDHOLDING PUEBLOS

The other form of rural property in Mexico which is gaining with the reduction of the haciendas is the landholding pueblo. This collective system of tenure, the aboriginal method under which agriculture was made the basis of society in Aztec and pre-Aztec times and which survived as one of the principal features of the Mexican land system until the middle of the past century, is somewhat at variance with modern conceptions of property. Communal tenure, moreover, is generally considered unsatisfactory from an economic viewpoint. It is, however, the system most easily understood by the agricultural Indians, who constitute a large proportion of the rural population in several of the states of central and southern Mexico. Particularly on the Mesa Central and the Mesa del Sur it seems to be the method best suited at present to the needs of these rural dwellers, who, however unfortunate it may seem, are still in a primi-

tive stage of social advancement and are consequently unable to stand on the same footing as the whites and the more enlightened of the mestizos. In other sections there is little demand for the restoration of the *ejidos*, as tables on preceding pages (165-166) have shown. Those who object to what they term Mexico's reversion to communism fail to appreciate the fact that many of the Indians of Mexico are still in the upper grades of barbarism, in which the conception of individual property in real estate is beyond their grasp, and that to force them too rapidly into the ways of civilized man is but to expose them to the cupidity of more advanced elements of the population and so preclude all possibility of their existence in any condition save that of serfs. Since the actual cultivation of the soil in central Mexico depends almost wholly upon this class, it would seem better to allow them to hold their lands, for the present at least, in the primitive collective manner, until, by education and by actual contact with the more advanced forms of society, they shall be able to receive their lands in severalty. For this purpose no better system could be devised, perhaps, than their ancient one of village holdings in which the title to the lands is safely held inalienable by the town, as a legally recognized corporation, but in which the individuals enjoy a permanent or quasi-permanent tenure of the plots assigned them, with a common use of the pasture and timber lots, much after the manner followed by our own civilized tribes in Indian Territory until the creation of the state of Oklahoma, by many of the towns of New England during colonial days, or by the villages of certain states in Europe at present.

In addition to the restoration of *ejidos* now going on and in order to extend the protection of this pueblo system to peons who have lived upon haciendas, some such provision as the time-honored measure noticed in the colonial laws of Spain might be revived, whereby, under certain conditions, new pueblos might be formed and lands assigned them wherever a specified number of persons are settled, proper recompense, of course, being guaranteed by the state for any lands so taken.

OPPOSITION TO THE PRESENT REFORM MEASURES

While many of the *hacendados* have long been willing to agree to land reform and while many now second the government's efforts to find a solution for the ancient problem of idle land, a landless class, and peon labor, there are a great many who oppose all efforts to reduce the size of their estates. There are several reasons for their opposition. In the first place, they fear that the indemnification in the form of government bonds will be little less than worthless. This must depend upon the good faith of their own government in so far as it concerns Mexicans only, and, as regards foreigners, upon the protection afforded the investments of their citizens by their governments.

Probably a still more serious reason for the objection to any land reform is the rather chaotic state of titles to land holdings in Mexico. Many of the properties are built up around acquisitions made either contrary to the law or in the absence of any laws governing such matters. Thus "squatter sovereignty" would constitute the only claim to ownership. Extensive untitled holdings are said to have been in the hands of some families for a long period and to be well-recognized possessions, except for purposes of transfer. The land legislation of the Díaz administration made provision for the perfecting of titles to such lands, and many proprietors took advantage of the opportunity offered. Numbers of such properties still are thought to exist, however, and their holders naturally fear to have the grounds of their possession investigated.

Three main groups of landholders stand out as opposing the agrarian reform. These are the Mexican *hacendados*; the numerous Spanish owners of big estates; and the Americans who, during the prosperous days of the Díaz administration, acquired extensive holdings for development, for colonization, or for speculation. Both groups of foreigners have depended upon their respective governments to protect their investments, made, usually, in good faith. Beyond a doubt they are entitled to the usual protection accorded in such matters. The Americans have been readier to see the need of a reform, since the old order of

things in Mexico was so utterly foreign to the system of land tenure that exists in the United States, so evidently subversive of all attempts at a democratic organization of society, and, withal, so unsatisfactory from an economic viewpoint. The Spaniard, with his European background, looks upon the hacienda, with its following of peons, as a most natural form of rural property and also considers it less as an enterprise expected to yield financial returns than as a safe means of investing capital in an estate that would bring the pleasures and ease of tropical life to him and his family. Consequently he employs every means at his command to halt the program of land reform, and to protect his hacienda from being reduced by grants to pueblos or by partition among the aspirants for individual holdings. The Mexican *hacendados*, driven from the land by the successive revolutions and the raids of lawless bands, have had no possibility of appeal and have had to content themselves with efforts to stir up trouble for the revolutionists from beyond the border. It would seem the part of wisdom for them to recognize that land reform is inevitable and, by co-operating with the new government, secure the best possible terms for themselves, at the same time contributing to the permanent welfare of the country.

ADAPTABILITY OF THE PROPOSED LAND SYSTEM TO THE GEOGRAPHICAL CONDITIONS

A pertinent question in regard to the several forms of tenure that bid fair to emerge from the present chaotic state of property in Mexico is as to their adaptability to the peculiar physical conditions that exist in the different geographical provinces of which the country is composed.

We have seen that an important problem of the agriculturist in most parts of Mexico is the matter of a water supply sufficient to ensure a crop in the regions where the rainfall is light or uncertain and to take the place of rain in the still more arid sections of the country. Consequently no system can be expected to succeed in Mexico unless it is able to develop irrigation to a considerable extent. It has been pointed out that the Indian

pueblos have practiced irrigation from time immemorial, having originated a system of regulation which became the established code of colonial Mexico and survives in many features of the present legislation regarding water rights. Hence these villages should have little difficulty in carrying on irrigation, provided they are given proper protection against encroachment on the part of adjoining ranchos or haciendas.

Many of the individual properties, even though the haciendas should be greatly reduced in size, would still be large enough to construct irrigation works. An *hacendado* with from 500 to 1,500 acres of irrigable soil should easily command the capital required for the building of such reservoirs as are needed. In fact the area under cultivation now on many of the haciendas where irrigation is practiced is less than this amount. As we have seen, even small ranchos of only a few acres often have their individual *presas*, and are partially or wholly independent of the season's rainfall. Thus the reduction of the haciendas, the creation of more ranchos, and the revival of landholding pueblos would not seem to diminish the possibility of irrigation. In fact, the more intensive farming made possible by smaller holdings would probably increase the amount of land artificially watered. The construction of extensive irrigation works by the government, a part of the agrarian program, would still further render great holdings unnecessary.

As to other geographical factors an elastic scale for determining the maximum size of large properties, such as that embodied in several of the state laws noticed and suggested in the national measure under discussion, would seem to be necessary in order that allowance might be made for the varying physical conditions of temperature, rainfall, character of the soil, and the nature of the product. With such a provision for better adjustment in the size of farms to geographical conditions than now exists should result.

ADAPTABILITY OF THE SYSTEM TO THE RACIAL FACTOR

One other important factor remains to be considered: viz. the racial elements composing the population. Will the Indians,

who compose a large proportion of the rural inhabitants, be able to carry on agriculture without the hacienda system and without the compulsion of peonage? Will Mexico starve when the white master's tutelage is no longer imposed upon the Indian and mestizo laborers? In answering these questions it should be remembered that the Indians inhabiting most of the uplands of Mexico, the peninsula of Yucatán, and many of the valleys that descend from the plateau, unlike the aborigines of most other parts of America, had long been agriculturists and that a large population was maintained by the products of their fields before the advent of white men. The Spaniards in their advance into central Mexico were surprised to see the extent to which the natives cultivated the soil, Cortés himself writing to the king that in parts of the country through which he passed not a palm of land was left uncultivated. Judging from the quite complete utilization of the land in the pueblos and ranchos that exist in Mexico today, it seems reasonable to expect that, while the country will probably suffer in some minor respects with the disappearance of the great hacienda in general the Mexican Indians, with their traditional inclination to agriculture, will make a more complete use of the land than do the *hacendados* of the present time, and that agricultural production will increase with the liberation of the rural laborers from peonage and with the greater incentives offered them by an effective if restricted proprietorship.

SUMMARY

From the historical facts presented, it is apparent that the system of *latifundia* with peons attached has long outlived the situation for which it was introduced as part of a conquest régime. Geographical considerations indicate that, while the size of properties must vary in response to the diverse physical character of the several natural regions, such extensive holdings as now exist are not essential in any part of the country; that, in most districts, they cannot be regarded as the logical product of the environment; and that, in many regions, small properties

CONCLUSION

181

are a far more natural response to the conditions of climate, soil, and relief. The ethnic composition of the population, while making the system possible in the past, does not demand or warrant its continuance, but rather appeals for its abolition. Considerations of the economic, social, and political welfare of the country argue for a reduction in the size of the haciendas, for a great increase in the number of ranchos, and for the protection of the pueblo collective holdings until such a time as the Indians shall be able to assume full individual proprietorship.

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LAND TENURE IN MEXICO

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INDEX

- Abad y Queipo, 65
 Acapulco, 64
Acazules, 137, 144
 Acosta, José de Salamán, 182
Agave americana, 22. *See also* Maguey
 Agrarian commissions, 161
 Agrarian corporations in 1854, 132
 Agrarian reform, 156
 Agrarian revolution, 157; distribution of land under present measures, 160; leaders, 159; opposition to present measures, 177; proposed national law, 170; recent laws bearing on reform, 167
 Agricultura y Fomento, Secretaría de, 170
 Agricultural land, 21; extent (table), 22
 Agricultural villages, 160
 Agriculturista, genuine, 84, 88
 Aguascalientes (state), 21, 22; rural holdings in 1910, 142
 Aguilera, J. G., 5
 Alamán, Lucas, 66
Alcaldía, 48
 Alcobiz, Andrés de, 116
 Allodial holdings, 93, 94
 Alluvium, 22; large estates on, near Lake Pátzcuaro (ill.), opp. 140
Atlapalatlí, 114, 124
 Alvarado, Pedro de, 48
 Alvarado, Salvador, 169
 Alvarado Tezósómoc, Fernando de, 182
 American Geographical Society, ix, x, xi, xii
 American opposition to land reform, 177
 Amunátegui y Solar, Domingo, 44, 60
 Antonelli, Antonio de, 187
 Apam, Llanos de, 36
Apercaría, 117
 Arable land. *See* Agricultural land
 Atenquique, opp. 16 (ill.), 18
 Atl. Dr., 191
 Atlitico, Valley of, 35, 46, 57; scene (ill.), opp. 36
 Atoyac, Río, 10
 Atasco, Duke of, 48
 Aztec empire, 44
 Aztec land system, 111, 117
 Baerlein, Henry, 191
 Baja California, 150; large land grants (map), 152; rural holdings in 1910, 151
 Bajío of Guanajuato, 10, 35, 39, 49, 55
 Balareso, Manuel, 191
Baldíos, 57, 72, 108; Law of Colonization and, 74
 Balsas, Río de las, 10, 15, 18
 Bancroft, Hubert Howe, 186, 188, 191
 Bandelier, Adolph Francis Alphonse, 112-119, 186
Barrancas, 18; on western escarpment of plateau (ill.), opp. 16
 Barrett, John, 191
Barrios, 113, 125, 135
 Beans, 83
 Beleña, Eusebio Bentura, 187
 Bibliography, 182; colonial period, 187; Government department publications, 195; laws, 194; national period, 190; pre-Conquest period, 182
 Blackmar, Frank Wilson, 189
Bolsones, 10, 21, 37, 44, 112
 Bolton, Herbert Eugene, 110, 189
 Boturini Benaduci, Lorenzo, 182
 Boundaries, 56, 115
 Bourne, Edward Gaylord, 189
 Bowman, Isaiah, xii
 Brasseur de Bourbourg, Charles Étienne, 186
Brass, 116
 Brinsmade, Robert Bruce, 191
 Brocklehurst, Thomas Unett, 191
 Buenavista (hacienda), 27
 Bulnes, Francisco, 143, 191
 Busto, Emiliano, 191
 Butterfield, Carlos, 190

Caballerías, 50, 108
 Cabanas, Lamberto, 192
 Cabrera, Luis, 159
Cacicazgos, 52
Cacicques, 1, 41, 44, 103, 113, 128, 138
 Caja de Préstamos, 160
 California, pueblos, 108
Calpixquis, 128
Calpulli, 112, 127, 135; lands, 114; picture map, Indian, showing holdings (ill.), opp. 116; public lands, 116

- Cárdenas y Espejo, Francisco de, 45
 Carranza, Venustiano, 159
 Carreño, Alberto María, 192
Casa de hacienda, 29, 33
 Casas, Bartolomé de las, 43, 50, 182
 Castilian towns, 106; as models, 107
 Castillo, José R. del, 192
 Cattle, 37; districts, 55; scene on an hacienda (ill.), opp. 29
 Cattle farms, 80; in 1810, 62, 63, 64
 Census of 1910, 139, 153
 Chachapalcingo, 68
 Chalco, 57
 Chapala, Lake, 141
 Chavero, Alfredo, 186
 Chiapas, 8; highlands, character, 16
 Chichimecas, 49
 Chiefs, Mexican, lands, 116, 120
 Chietla (ill.), opp. 21
 Chili, 83
 Chimalpopoca, A. A., 192
 Church, George Earl, 190
 Church holdings, 59. *See also* Ecclesiastical estates
 Cities, largest, location, 23
 Clans, 112, 129. *See also* *Calpulli*
 Clavigero, Francesco Saverio, 117, 182
 Climate, 5; list of works on, 10
 Coahuila, pueblos, 109
 Coffee, 37, 80
 Cofre de Perote, 17
 Colby, C. C., 8
 Colima, 26; hacienda, plan of a typical (map), 26; rural holdings in 1910, 144
 Collective holdings, 103; abolition by the Reforma, 129; effect of land reform on, 175; typical country of (ill.), opp. 117; variations in early times, 117
 Colonial period, method of Spanish settlement, 108, 109
 Colonization, 75; attempts at, in outlying regions, 90
 Colonization, Law of, 74, 96
 Comisión Nacional Agraria, 161
 Common pasturage, 106
 Communal houses, 113
 Communal lands, 77; denouncement, 77; transformation to holdial, 92. *See also* Collective holdings
 Communism, 175, 176
 Comonfort, Ignacio, 69
Composiciones, 56, 61
Condueñazgos, 103
Congregaciones, 119, 125; distribution and number in 1854, 132
 Congress, 170
 Conquest, Spanish, 42; aim, 42
 Conquistador anónimo, El, 183
Conquistadores, 28; large land grants to, 48
 Constitution of 1857, consequences, 133
 Corn. *See* Maize
 Correa, V. M., 192
 Cortés, Hernando, 45, 183; land grants to (maps), 46, 47; mining properties, 48; on houses and villages, 113; on large holdings, 120; on tenants, 118; possessions, 48; religious endowments, 59, 60
 Cortés, Martín, 119, 128, 183
 Cossío, J. L., 73
 Cotton, 35; regions of production, 37
 Covarrubias, José, 10
 Crops, hacienda, 34; share as rent, 117
 Cuernavaca, outskirts (ill.), opp. 141
 Cuernavaca, Valley of, 46, 56
 Cultivation, wasteful, 39
 Dabney, Charles William, 192
 Debt, 169
 Deeds, 56
Dehesas, 106, 108, 110 (map), 111
Demasías, 74
 Democracy, 61, 133, 138, 174
Desamortización, 69, 130
 Díaz del Castillo, Bernal, 183
 Díaz régime, 72, 75, 81; conditions at end of, 139, 157, 158
 Díez de la Calle, Juan, 188
 Dirección General de Temporalidades, 62
 Domestic animals, introduction, 54
 Domínguez, Leferino, 158, 192
 Doporto y Uncilla, Severiano, 186
 Dry farming, 149
 Dual tenure, 170, 175
 Durán, Diego, 184
 Dwellings, small, 113
 Ecclesiastical estates, 59; confiscation of Jesuit estates, 61; distribution in the early republic, 67; nationalization, 70
 Echeverría y Veytia, Mariano Fernández de, 184
Eje volcánico, 18
Ejidó, 69, 92, 108, 110 (map), 111, 130, 136; assignment from hacienda (plan), 162; character, 106; division of an *ejido* into individual portions (plan), 163; extent, 124; land given to a pueblo as *ejido* (map), 164; number of towns receiving, under reform

- Ejid* (continued)
 measures, 165, 166; restoration, recent, 161; transformation, 124
- El Oro, 86, 87
- Emigration, 32
- Empresario*, 107
- Encomiendas*, 43; abolition, 60; distribution in 1572, 53; duration, 49; entailed estates, 58; evolution, 45; geographical factor in the distribution, 54
- Enganchados*, 34
- Enock, C. Reginald, 192
- Entailed estates, 58; abolition, 67
- Erosion, 15; eastern escarpment, 17
- Escarpments, 16; eastern, 17; southern, 17; western, 18
- Escobar, Romulo, 192
- Escobar, Sebastián, 190
- Escudero, José Agustín de, 134
- Estancias*, 27
- Estancias de ganado*, 62, 63
- Estates, 58, 67. *See also* Haciendas
- European plants, 55
- Excedencias*, 74
- Falces, Marqués de, 123
- Fancourt, Charles Saint John, 186
- Fanegas de labor*, 51, 82
- Farms. *See* Rural holdings
- Farrand, Livingston, 186
- Fathom, 116
- Fernández del Castillo, Francisco, 189
- Feudal tenure, 120, 171, 175
- Fiefs, 120
- Fiske, John, 113, 122
- Fonseca, Fabián de, 57, 62, 188
- Foreign capitalists, 42, 72
- Foreigners, opposition to reform, 177
- Foreword, ix
- Foster, Alice, 6
- Fraccionamiento*, 168
- Freedom of *rancheros*, 101
- Frosts, 11, 85
- Fundo legal*, 124, 135
- Gage, Thomas, 184
- Galván Rivera, Mariano, 51, 190
- Gálvez, José de, 188
- Gamio, Manuel, xii; Foreword, ix, 195
- García Cubas, Antonio, 92, 192
- García Granados, Alberto, 192
- García Granados, Ricardo, 190
- García Icazbalceta, Joaquín, 11, 52, 113, 116, 183, 184, 185, 186
- Gayol, Roberto, 192
- Geography, land systems as related to, 178
- Gil, Hilarión Romero, 186, 187
- Gomara, Francisco López de, 184
- González Roa, Fernando, 42, 65, 75, 125, 192
- Government department publications, 195
- Gran Registro de la Propiedad, 77
- Grazing, 38
- Guadalajara, Valley of, 21, 22
- Guadalupe (ill.), opp. 10
- Guanajuato, 21, 22; Bajío of, 10, 35, 39, 49, 55; large land grant, 49
- Gulf Coast, 19
- Gutiérrez de Lara, Lázaro, 192
- Guzmán, José, 10
- Hacendados*, 25; groups opposed to reform, 177; labor recruiting, 137; manner of life, 29, 40
- Haciendas, 25; *caballerías*, 50; cattle, bringing in (ill.), opp. 29; detachment of portions under recent reforms, for *ejidos* (map), 162; distribution in 1810, 63; economic value, 38; *encomiendas*, 43; extent, 25; *hacendados*, 28; history, 42; Indian pueblos versus, 126; lands, 25; national place, 40; number and distribution by states, in 1910, 77; origin and history, 42; owner's house and garden (ill.), opp. 28; *peonías*, 50; peon's hut (ill.), opp. 28; peons, 30; peons cultivating a field (ill.), opp. 29; people, 27; plan of a typical hacienda in Colima (map), 26; products, 34; reform measures, probable effect of, 173; *repartimientos*, 43; social value, 40; system at present, 81; various origins, 52. *See also* Large estates
- Hann, Julius, 10
- Hanna, Paul, 193
- Helps, Sir Arthur, 189
- Henderson, G. F., 92
- Henequén*, 35, 36
- Heredades*, 114
- Hidalgo, 9, 22
- Hidalgo y Costilla, Miguel, 66
- Highlands, 6
- Homesteads, 74, 84, 93
- Hospital de Jesús Nazareno, 59-60
- Household manufactures, 115
- Houses, small, 113
- Huaracha (hacienda), 27
- Huebra*, 51
- Huejotzingo, 35, 57

- Huejutla, 57
 Huerta, Adolfo de la, 159, 165
 Humboldt, Alexander von, 11, 31, 32, 39, 65, 68, 188
 Huntington, Ellsworth, 10
- Ibáñez, Blasco, 40
 Icazbalceta. *See* García Icazbalceta
 Iguala, Plan de, 66
 Inda, Manuel, 193
 Independence. *See* War for Independence
 Indian picture map (ill.), opp. 116
 Indian pueblos, 98, 111; blending with Spanish villages, 127; haciendas versus, 126; loss of communal lands, 134; neglect to confirm lands, 125; Reforma and, 134; reorganized on Spanish basis, 123. *See also* Pueblos
 Indians, 43; agricultural settlement (ill.), opp. 113; communal lands, 58; freedom, 61; inclination to agriculture, 180; large holdings in early times, 118; legal equality, 67; methods of land tenure, 110; misunderstanding of land legislation, 135; neglect to record lands, 77; property ideas, 58, 97, 134, 175; *rancheros* and, 83; settlement showing small holdings (ill.), opp. 112; small holdings, 115; spoliation, 66; subordinate tenure, 158
 Individual holdings, 136, 153; irrigation and, 178, 179; Reforma legislation, 129, 133
 Inequality, 65
 Introduction, 1
 Irrigation, 11, 42, 75, 80, 99, 114, 147, 148; individual holdings and, 178
 Iturbide, Agustín de, new land régime, 66
 Ixtaccihuatl, 18
 Ixtlilxochitl, Fernando de Alva, 120, 184
- Jal.*
 Jalisco, 7, 10, 22, 55
 Jaramillo, Juan, 48, 49
 Jenkins, W. O., 52
 Jesuits, 60; confiscation of estates of, 61
 Joerg, W. L. G., xii
 Joint ownership, 103. *See also* *Condueñasgos*
 Joyce, Thomas Athol, 187
 Juárez, Benito Pablo, 41, 70, 74, 90, 133, 171; agrarian reforms, 92, 94; allotment in severalty, 130
 Kancab, 164
 Kings, lands cultivated for, 116
 Kingsborough, Lord, 182, 184
 Kinship groups, 112, 127, 129
- La Puerta de Medina (*ranchería*), 86
 Labástida, Luis G., 68, 69, 70, 71, 135, 190
 Labor, 30; conditions, 30, 34; emigration, 32; migration into the United States, 85; on ranchos, 84; pueblos and, 137. *See also* Peons
 Laguna district, 80
 Land, ix, 2, 25; encroachments, 126; monopoly under Díaz, 72; problem, regions affected, 24; problem, relation to national life, 172; productivity, 39; registry, 77; speculation in, 72, 73, 80; struggle for, 24; tenure, Indian methods, 111; titles, 56; titles to ranchos, 85; unequal distribution, 153. *See also* Haciendas; Rural holdings
 Land grants, 43, 48, 50; standards, 51. *See also* *Encomiendas*
 Land system, 1; antiquity, 2; geographical and historical study, 2; proposed system as related to geographical conditions, 178
 Landholders, 28; communal, 137; general estimate of number of, 153. *See also* *Hacendados*
 Landholding towns, 104
 Landholdings, general statistics, 154
 Landless class, 153, 155, 158
 Landmarks, 115
 Landowners, 28; domination, 41; typical, 29, 40. *See also* *Hacendados*
 Lane, Franklin Knight, 193
 Large estates, 25, 59; distribution in 1810, 62, 63; Michoacán, law to break up, 167; near Lake Pátzcuaro (ill.), opp. 140; number in certain states in 1910, 79; renewed monopoly under Díaz, 72. *See also* *Encomiendas*;
 Haciendas
Lati fundia, 42, 155, 169, 174, 180
 Laurel (ill.), opp. 117
 Lava flows, 22
 Law of colonization, 74, 96
 Laws, collections of, 194
 League, Spanish, 124
 Lehmann, Walter, 187
 León Pinelo, Antonio, 43, 49, 52, 188
 Lerma River, 9, 86
 Libro Rojo, 57
 Literature, 182

- Littoral, western, 20
 Live stock, 38
 Llanos de Apam, 36
 Local government, 137-138
 López Bancalari, Ignacio, 193
 López de Cogolludo, Diego, 184
 López de Velasco, Juan, 48, 53, 55, 113, 188
 Lower California. *See* Baja California
 Lubin, David, 193
 Lucas, F. W., 50, 189
 Lyon, G. F., 64
- Maceguales*, 115, 118, 119, 128
 MacHugh, Robert Joseph, 193
 Madero, Francisco, 157, 159
 Magdalena, Hacienda de la (map), 26
 Maguey, 22, 36; fields near Mexico City (ill.), opp. 37
 Maize, 23, 35, 145
 Malaria, 19
 Malintzin, 18
 Maltrata, 17
 Maltrata, Valley of, Indian settlement (ill.), opp. 112
 Man on horseback, 40
 Manero, Antonio, 193
 Manero, Vicente E., 193
 Maniau Torquemada, Joaquín, 57, 60, 188
 Maqueo Castellanos, Esteban, 193
 Mason, Alfred Bishop, 193
 Maximilian, Emperor, 41, 71
 Mayas, 112
Moyeques, 52, 118, 120, 121, 122
 Mayer, Brantz, 190
Mayordomos, 48, 59, 65; abolition, 67
Mayordomos, 27, 28, 29, 155
 Maza, Francisco F. de la, 73, 94, 113, 124, 190
 Measure, Indian land, 116
 Melchor de Jovelhanos, Gaspar, 60
 Melgarejo, Antonio D., 193
 Mendoza, Antonio de, 123
Merced, 51
 Mesa Central, 6; Atlixco Valley and wheat fields (ill.), opp. 36; climate, 10; communal system in, 167; land struggle, extent, 24; maguey fields (ill.), opp. 37; physical geography, 9; representative states: their rural lands in 1910, 139; settlement, 23; Spaniards in, 44
 Mesa del Norte, 8, 14
 Mesa del Sur, 8, 15; large estates (ill.), opp. 140
Mesta, 37
 Mestizos, 30, 71, 89, 129, 133, 134; position, 153; as *vaqueros*, 83
 Mexican Congress, 170
 Mexican pueblos, 129
 Mexicans, 66; backwardness of rural life, 1; typical rural, 83, 84
 México (state), 21, 22; land grants to Cortés (map), 46; rural holdings in 1910, 139
 Mexico, Valley of, 7; from Guadalupe (ill.), opp. 10; northern portion (ill.), opp. 11
 Mexico City, 11
 Michoacán, 9, 21, 22, 55; law of March 5, 1920, 167; rural holdings in 1910, 140
 Middle class, 101, 102, 133
 Middleton, Philip Harvey, 193
 Migrations, 128
 Mill, Nicholas, 66
Múpa, 32
 Mineral deposits, 54
 Mines, 55
 Mining towns, 105
 Missions, 108
 Molina Enríquez, Andrés, 28, 39, 40, 42, 104, 125, 156, 193
 Monasteries, 59
Monjes, 107
 Montezuma, Emperor, 60, 120, 123
 Montufar, Alonzo de, 185
 Morelia, Valley of, 21, 22
 Morelos (state), 22; land grants to Cortés (map), 46; rural holdings in 1910, 142
 Morelos, Valley of, scene (ill.), opp. 141
 Morgan, Lewis Henry, 113, 122, 187
 Mortgages, 68
 Moses, Bernard, 72, 189, 190
 Motolinía, Toribio de Benavente, 185
 Mountain pasture in central Mexico (ill.), opp. 16
 Murga, Gonzalo de, 193
- Nacionales*, 74
 Nahuas, 112
 National agrarian law, 170
 Nationalization of church property, 70
 Natural regions, 5; map of natural regions, 8
 Natural resources, 42
 Navarro y Noriega, Fernando, 48, 62, 80, 130, 188
 Naxas River, 37
 New Laws of the Indies, 50
 New Mexico, pueblos, 109
 Nordhoff, Charles, 151

- Nuevo León, 31, 95
- Oaxaca, 16, 46
- Oaxaca (state), 15, 56; agricultural district (ill.), opp. 146; land grants to Cortés (map), 47; rural holdings in 1970, 145; small farm in the hills (ill.), opp. 147
- Ober, Frederick Albion, 193
- Obregón, Alvaro, 159, 165
- Ogilvie, A. G., xii
- O'Higgins, Ambrosio, 60
- Oil, 19, 146
- Oil lands, ownership question, 146
- Ordóñez, Ezequiel, 6
- Orizaba, 17; view (ill.), opp. 20
- Orozco, Wistano Luis, 190
- Orozco y Berra, Manuel, 189
- Otero, Mariano, 190
- Overlordship, 45, 118; Texcoco, 120
- Oviedo y Valdés, Gonzalo Fernández de, 185
- Oxen, 85
- Ozumba, 55
- Pánuco, 57
- Papaloapam, Río, 15, 18
- Parra, Porfirio, 191
- Pastoral colonies, 109
- Pastos comunes*, 106
- Pasturage, 38; common, 106
- Patrón*, 1
- Pátzcuaro, Lake, 35, 56, 141; large estates near (ill.), opp. 140
- Payno, Manuel, 191
- Peasants, bound to the soil, 118
- Peón*, 1
- Peonías*, 50, 88, 108
- Peons, 30, 58, 180; economic bondage, 30; holding for debt, 169; homes, 33; prerequisites, 32; position, 30; relation to patrons, 118, 119, 121; wages, 31
- Perfect number, 116
- Personal service, 170, 171
- Petroleum. *See* Oil
- Peust, Otto, 193
- Pimentel, Francisco, 127, 191
- Pinchon, Edgumb, 192
- Place units, 113, 127
- Plan de Iguala, 66
- Plateau, 8
- Plows, 54, 85
- Poinsett, Joel Roberts, 31, 32, 191
- Political system, 3
- Pomar, Juan Bautista, 185
- Popocatepetl, 18
- Population, distribution (map), 12
- Ports, 105
- Precipitation. *See* Rainfall
- Preface, xi
- Presas*, 14, 179
- Prescott, William Hickling, 189
- Presidios*, 108
- Productivity of land, 39
- Products, large-farm, 35
- Property, assessed value of rural (map), 13
- Property owners, 102
- Propios*, 106, 108, 110 (map)
- Public lands, 73; classes, in 1894, 74; creation of ranchos from, 94; disposition in 1866-83, 95; distribution, by states, in 1912, 76; monopoly, 73; reclamation of those illegally disposed of, 160
- Puebla, Valley of, 9, 22, 56
- Pueblo Indians, 113
- Pueblos, 98; Castilian, 107; distribution and number in 1810, 131; in 1854, 132; earlier and later Spanish, 108; in the northwest, 108; in prairie regions, 109; labor source, 137; land-holding pueblos and reform measures, 175; local government, 138; place in national life, 136; term, 130. *See also* Indian pueblos
- Puga, G. B., 10
- Pulque*, 22, 35; production, 36
- Pura sierra*, 15
- Purchas, Samuel, 184, 185
- Pyramid of the Sun (ill.), opp. 11
- Querétaro (state), 10, 21, 22
- Quevedo, Miguel Angel de, 193
- Quijada, Enrique, 187
- Racial factor in land reform, 179
- Radin, Paul, 122, 187
- Railway development, 72
- Rainfall, 178; average annual (map), 9; eastern escarpment, 17; Mesa Central, 11; Mesa del Norte, 14; Mesa del Sur, 15
- Ramírez de Fuenleal, Sebastián, 120, 185
- Rancherías*, 82, 104, 125; La Puerta de Medina, 86
- Rancheros*, 83
- Rancho de Dolores, 109
- Ranchos, 82; creation from public lands, 94; cultivation methods, 85; distribution and number in 1810, 89; in 1910, 97, 98; growth in size, 97; history, 88; importance, 90; labor,

- Ranchos, (*continued*)
 84; land titles, 85; origin and history, 88; place in national life, 100; *rancheros* and, 83; reform measures, probable effect of, 173; scene in valleys leading into the Valley of Mexico (ill.), opp. 100; term, 82; typical, 86
- Real Hacienda, 62
- Realengos, 72, 109
- References, 182
- Reform, 156; opposition to, 177
- Reforma, 42, 69, 70, 90, 92; allotment in severalty, 130; consequences of legislation against communal holdings, 133
- Religious institutions, 59. *See also* Ecclesiastical estates
- Renters, 171
- Repartimientos, 43, 113
- Requena, Pedro, 193
- Revilla Gigedo, Juan Vicente, 60, 125, 188
- Revolution. *See* Agrarian revolution
- Reynolds, Matthew Givens, 51, 190
- Rice, 35, 37, 55
- Río Grande, settlements, 109
- Río Grande de Santiago, 10, 19. *See also* Santiago-Lerma River
- Riquelme, Félix, 194
- Riva Palacio, Vicente, 47, 62, 186, 189, 191
- Rolland, Modesto C., 191, 194
- Román y Zamora, Jerónimo, 116, 185
- Romero, Matías, 31, 32, 194
- Rosa, Luis de la, 191
- Roscher, Wilhelm, 189
- Rouaix, Pastor, 33, 159
- Rural holdings, assessed value (map), 13; distribution, 139
- Saachila, 16
- Saenz, Moisés, x
- Sahagún, Bernardino de, 185
- Sala, Antenor, 194
- San Andrés, 127
- San Lorenzo (hacienda), 68
- San Luis Potosí, 55
- San Rafael del Alamito (hacienda), 149
- Sanders, E. M., 6
- Santa Anna, Antonio López, 68, 69
- Santa Anna Atoyascalco (hacienda), 52, 116, 127
- Santiago-Lerma River, 7, 86
- Sapper, Carlos, 6
- Saville, M. H., 122
- Sedano, Francisco, 188
- Seler, Eduard, 117, 120, 187
- Señoríos, 120
- Serfs, 52, 118
- Settlement of public lands, 94, 96
- Settlements, Spanish, 105. *See also* Spanish settlements
- Sierra, Justo, 133, 189
- Sierra de las Cruces (ill.), opp. 117.
- Sierra Madre del Sur, 15
- Siete Partidas, law of, 106
- Sinaloa (state), rural holdings in 1910, 147
- Sisal, 20
- Slopes, 16. *See also* Escarpments
- Small estates, 61; allotments in 1877-93, 93; creation from church property, 71
- Small proprietors, 159, 167
- Social conditions and landowners, 41
- Social system, 2
- Socialism, 175
- Soil exhaustion, 39
- Solares, 51, 107
- Solórzano Pereira, Juan de, 185
- Sonora, 147; pueblos, 108; rural holdings in 1910, 148
- Sonora, Marqués de, 188
- Southworth, John R., 25, 78, 139, 145, 149, 151, 194
- Spaniards, 23; aim in conquest of New World, 42; early holdings, distribution, 53; extensive grants made to, 48; founding of new towns, 105; *hacendados*, 28; monopoly of property, 65; real farmers among, 88
- Spanish Inquisition, 68
- Spanish settlements, 105; blending with Indian pueblos, 127; regulations for laying out, 107; type of town holdings (plan), 110
- Speculation in land, 72, 73, 80
- Spence, Lewis, 187
- Spinden, Herbert Joseph, 122, 187
- State agrarian legislation, recent, 167
- Stevens, Henry, 50, 189
- Stock raising, 37
- Succession, Law of, in 1536, 49
- Suertes, 107, 108, 109
- Sugar cane, 35, 55, 80, 144; production, 36
- Surveys, 56, 57
- Tabasco, 19, 55
- Tamaulipas, 19
- Taviche (ill.), opp. 146
- Tecpan, 116
- Tecpanitaca, 116
- Tecpanitalli, 116

- Teggart, F. J., xii
 Tehuantepec (isthmus), 19; land distribution, 90; large estates, 80, 81
 Tekax, 164
 Temperature, 10
 Tenants, in the time of Cortés, 118
 Teosinte, 23
 Teotihuacán (ill.), opp. 11
 Tepeaca, 55
 Ternaux-Compans, Henri, 120, 121, 183, 184, 185, 186
 Texas, 91; pueblos, 109
 Texcoco, overlordships, 120
 Texcoco, Lake, looking toward (ill.), opp. 10
 Tezontepc (pueblo), 163
 Thayer, W. N., 5
 Thompson, Wallace, 32, 39, 194
 Three Years War, 70
Tierra caliente, 5, 37, 72, 146; description, 19; labor conditions, 34; large holdings, 80; scene in (ill.), opp. 21
Tierra fría, 5
Tierra negra, 17
Tierra templada, 5, 143
Tierras y vasallos patrimoniales, 119
 Timber, 80
 Titles, 56; chaotic state, 177; Indian pueblos, 125; ranchos, 85
 Tlahuillipa (hacienda) (plan), 162
Tlalmates, 118
Tlalmatecas, 118
Tlalmilli, 114, 115
Tlatocatlalli, 116
 Tlaxcala (state), 22; creation of typical farm, 52; titles, 57
 Tobacco, 37, 80
 Toluca, Valley of, 21, 55; Indian agricultural settlement (ill.), opp. 113
 Topography, 5; list of works on, 5, 8
 Torquemada, Juan de, 185
 Torre, León Alejo, 191
 Towns, landholding, 104
 Tribes, 112
 Tribute, 44, 115, 116, 118, 122, 146, 148
 Tropical products, 80
 Trowbridge, Edward Dwight, 194
 Trueba y Cosío, Joaquín Telésforo, 189
 Tula, 48
 Turner, John Kenneth, 34, 194
 Twitchell, Ralph Emerson, 189
 Two lives, 49
 Unearned increment, 39
 Urrutia, Carlos de, 57, 62, 188
 Valderrama, Licenciado, 119
 Valdés, Luis B., 187
 Valleys, 10
Vecindarios rurales, 125
Vecinos, 128, 155
 Velasco, Alfonso Luis, 5, 194
 Veracruz (state), 19, 22; land grants to Cortés (map), 47; large estates, 80, 81; rural holdings in 1910, 146
 Vetancurt, Agustín de, 185
 Vigil, José María, 191
 Villa de Laredo, 109
 Villages, 104; formation of free, 126; Indian, landholding, 111
 Villamar, Aniceto, 51, 190
Villas, 130; distribution and number in 1810, 131; in 1854, 132
 Villaseñor y Cervantes, Juan de, 48
 Volcanic ash deposits, 22
 Volcanoes, 10
 Wages of peons, 31, 32
 War for Independence (1810-1821), 28, 41; agrarian aspect, 65; results on the land situation, 66
 Waste lands, 74
 Water rights, 114
 Waterman, Thomas Talbot, 112, 113, 121, 187
 Wells, David Ames, 194
 Western littoral, 20
 Wheat, 35, 55; fields in Atlixco Valley (ill.), opp. 36
 Wilfley, Lebbeus R., 194
 Wilson, H. M., 5
 Winton, George Beverly, 194
 Wittich, Ernesto, 6
 Woodlands, 107
 Xilotepeque, 48
 Xochimilco, 48, 128
 Xochiquentzin, Prince, 120
 Yale University, xii
 Yaquis, 34, 81
 Yucatán, 19, 55; agrarian legislation, 169; description, 20; *henequén* production, 36
Yugada, 51
 Zacatecas (state), agrarian law of 1917, 168
 Zayas Enríquez, Rafael de, 194
 Zorita, Alonso de, 52, 113, 118, 119, 128, 186

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1800-04