THE DIFFERENTIAL DEVELOPMENT
AMONG ANGLOS AND MEXICANS IN THE MORMON COLONIES
OF NORTHWEST MEXICO

A Thesis
Presented in Partial Fulfillment of the Requirements
for the Degree Master of Arts

by
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Approved by

[Signature]
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This study was made for a purpose that was basically selfish. The author wanted to know more about the country where her parents have spent so much of their lives.

For later clarity in reading the study, "Mormon," "Anglo," and "colonist" are used somewhat interchangeably to designate the group of North European stock, and of United States origin. The term Anglo designates both those who are yet American citizens and those of the same origin who have become Mexican citizens. There are Mexican members of the Mormon Church. They will be referred to specifically as Mexican Mormons.

The data relating to the Mexican and Anglo populations in the final chapter was obtained through conducting a census of Colonias Juarez and Dublar. The census would never have been completed without the help of Vilda Juarez, Florencia Soto, and Angie Wilson. To Daniel B. Taylor and Nelle S. Hatch the author wishes to thank for the hours spent with her in discussion of the colonies. Special credit goes to Marion L. Wilson for his untiring leg-work and for his keen insight into the problems of the colonies. To Laurence Neffman, and his skillful red pencil, go best wishes in his present writing endeavor. Through the work of Walter H. Burrus the quality of the illustrations was enhanced. Gratitude extends to all who helped in any way.
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Introduction

The Mormon colonies of northwestern Chihuahua, Mexico, are an excellent example of an enclave. Three-quarters of a century after their settlement they remain a cultural island, a status which has both positive and negative aspects.

In 1883 the United States Congress passed the Edmunds-Tucker Act. In substance the bill provided penalties for polygamists; it disqualified them from jury service, public office, the franchise, plus, with the discretion of the court, imprisonment. The primary targets of the bill were the polygamists among the Mormons (Church of Jesus Christ of Latter-Day Saints). As a direct consequence of the above legislation several areas in northern Chihuahua and Sonora were colonized by the Mormons.

With hard work and thriftiness the colonies grew and prospered until at the time of the Mexican Revolution their fame was more than local. As the majority of the colonists had retained their United States citizenship they fled to the United States upon the advent of the upheaval. Colonias Juarez and Dublin were the only colonies never completely evacuated. As the Revolution slowly came to a close the colonists drifted back to reclaim their lands. Several of the colonies were never resettled which partially explains the fact the Anglo population is the colonies never again reached its pre-Revolution peak. The mountain colonies of Chihuahua—Colonias Garcia, Chuchupa, and Pacheco—although resettled gradually declined in population so that by 1950 Colonias Juarez and Dublin were again the only colonies of the original
settlements with a sizable Anglo population. However, these two colonies have not been without change. The native Mexican population within the colonies has gradually increased to the point where the Anglos are no longer the majority group. Notwithstanding the increase of the native population, the economic reins of the communities have remained in the hands of the Anglos. Because the economic development of the native population has not been commensurate with their increased numbers, there is a marked disparity between the levels of living of the two groups.

The factors which contributed to the disparity have their origin in the nature and history of the two groups. The Anglos upon settling in Mexico had organization, "know how," and a philosophy which helped them make progress during the early years. After the Revolution there was a transition in the type of farmer to be found in the colonies. He gradually acquired land until he was operating a farm of modest size. The population of the colonies was kept constant by the continuing emigration of the young people to the United States for schooling, military service, or employment. Thus, an amalgamation of land holdings plus decreased population pressure contributed to the productivity of later years.

The Mexican coming to the area came because of purely economic reasons whereas the Anglo had come because of religious reasons. For the most part the Mexican coming to the area is penniless, unskilled, has little education, and has few hopes for anything better. His accomplishments might be thought of as a measure of his restricted opportunity and to an undetermined extent attributable to his philosophy of life.
The tension created by the disparity in the levels of living is only increased by the fact that the Anglos are yet very much oriented towards the United States. They have retained English as their mother tongue and intermix very little socially with the Mexican. It is not difficult to understand the basis for the Mexican's resentment of the Anglo.

The Mexican is not without a trump. Under the Agrarian Code of Mexico it is legally possible to expropriate a considerable portion of the lands held by the Mormons, a possibility which has not gone unexplored. In the event the Anglo could no longer make a modest income in Mexico, he would leave, even though he would do it under protest. The individual Mexicans who would then till the lands would undoubtedly be better off than they were previously. On the other hand, the area as a whole would probably decline in economic production. What the outcome of the present situation will be is problematical. It seems that a solution, taking cognizance of the interests of both groups, must involve cooperation of the groups along all possible lines of development plus, a shift in the orientation of the Anglos from the United States to Mexico.

Although the Mormons effectively settled a considerable area in northwestern Chihuahua, the emphasis of the study will be on Colonias Juares and Rublan due to the fact that the Mormon sphere of activity is now concentrated in these two colonies. The study will be considered in three main sections: first, the development of the area to 1910; next, the Revolution - its antecedents and effects; and lastly, a review of the present situation and prospects for the future.
Chapter I
Development to 1910

Despite the rather harsh physical environment, northwest Chihuahua has been the home for successive groups of people. The earliest known group were those delimited by Brand as the "Chihuahuan" culture. Sometime after their demise came the Spanish miners, soldiers, and priests which were supplanted by the Mexicans when Mexico gained her sovereignty. The last group to leave their imprint on the area were the Mormons. Let us first consider the one element that these groups had in common, namely, the physical environment. This will be followed in turn by a discussion of each of the groups mentioned above.

The Physical Environment

The physical environment of northwestern Chihuahua limits man through both climate and surface configuration. In the Basin and Range Province the percentage of relatively level land is greater than the percentage of rough, so the aridity of the climate is the chief limiting factor. In the Sierra Madre Occidental surface configuration and climate combine more equally to limit man's activities. True, the mountains do get more precipitation due to the increased elevation. On the other hand, the increased elevation promulgates the late spring and early fall frosts which limit the variety of crops grown in the cultivable basins.

In an overall view it seems to be climate which most affects Colonias Juárez and Dublan. Colonias Juárez is located in a narrow valley on the eastern limit of the Sierra Madre Occidental, and has
adapted well to the scarcity of level land. They could very possibly utilize more slope area were the climate more humid, but more level land could not be utilized without more water. Colonia Dublan is located in the Basin and Range Province where level land is not the major limiting factor, but water for irrigation is scarce.

Since where man is concerned landforms are the base on which climate operates, surfaces configuration will be discussed first followed by climate. As water available for irrigation is of prime importance to the area, and because it is influenced by both climate and geomorphic structure, a discussion of it will follow that on climate. The final subject to be discussed under the general heading of "Physical Environment" will be vegetation.

Surface Configuration

Northern Chihuahua consists of two geomorphic complexes: the Basin and Range landscape, in which a practically continuous flat, gently rolling or sloping plain is broken by short, frequently parallel mountain chains which rise above the basin floors like "islands out of the sea"; and the Sierra Madre Occidental, which is a great plateau of extrusives, having NNW-SSE narrow structural depressions between smooth topped ridges, mesas and minor plateaus, and segmented by the gorges of headward-eroding streams flowing to the Pacific.

The Mexican Basin and Range Province comprises all of eastern Chihuahua (extending across the Rio Grande into Texas and New Mexico), and an indeterminate area in central Chihuahua. The western border for the Mexican Basin and Range probably would be described best by a line
PARTS OF THE STATES OF SONORA AND CHIHUAHUA MEXICO
drawn along the crests west of Cuauhtemoc, Bechiniye, Manequipe, San
Buenaventura, Galeana, and Casas Grandes (see Figure 1).

The Mexican Basin and Range is dominantly a land of mountain
ranges and intermontane plains (see Plate I for general surface config-
uration). The mountain ranges are generally short, parallel and aligned
in a NW–SE direction, the individual ranges seldom exceeding thirty
miles in length and averaging from five to ten miles in width. The
plains or basins between the ranges are practically continuous, normally
merging along scarcely perceptible water divides which separate the
region into a number of boleares (areas of interior drainage). The
area covered by the basin is approximately twice that of the mountain
ranges.

Soils

The soils of the Chihuahua Basin and Range are mainly the chest-
nut brown to light grey soils of low latitude dry climates. Genetically
these soils are of alluvial, colluvial, and eolian origin. The alluvial
soils comprise the fertile silts of river flood plains and lake bottoms,
clays deposited along streams and over playas, and water-moved basin
soils varying in the proportion of silt, clay, sand, and gravel. The
latter merge into the soils of colluvial slopes where gravity and slope-
wash are the chief agencies of formation. These colluvial soils tend
to be gravelly and sandy. The eolian soils are those formed by wind

1. Donald D. Brand, The Natural Landscape of Northwestern
Chihuahua, ("The University of New Mexico; Geological Series,"
Vol. 5, No. 2; Albuquerque, N.M.: University of New Mexico Press,

2. Ibid., p. 24.
movement and deposition, chiefly sands and basin alluviums that have been swept up from dry playas and pediment slopes and redeposited in the basins, against ridges and around vegetation.

Caliche (a calcareous formation deposited by ascending and descending solutions) is found extensively in the basins. The chief drawback of the formation is that it limits root development and plant growth. For illustrations of caliche see Plates II and III.

Of leading importance to the region are the larger areas of silt, clay, and clayloam formed by river deposition over flood plains. The silt basins that have been, or are of significance to the colonies are between La Ascencion and Colonia Diaz, between Colonias Dulcan and Colonias Enriquez, and in the San Diego-Piedras Verdes basin. The areas coincide with regions of extensive archaeological sites and of present intensive agriculture.

Climate

The climate of northwestern Chihuahua must be evaluated chiefly on the evidence of vegetation and soilform, supplemented by the data from a few widely spaced meteorologic stations.

The disposition of the area is somewhat continental as it is shut off from the Gulf of California, two hundred plus miles distant, by the western ranges of the Sierra Madre; and the Gulf of Mexico is over five hundred miles away to the southeast. Due to its low latitude, northern Chihuahua gets only occasional winter cyclonic storms that have wandered south of the normal path across the United States. Nearly three-quarters of the total annual precipitation falls in the months of July, August, and September. These summer rains are normally of convectional origin,
PLATE II. Caliche formation. The ridge appearing formation is caliche gravel which was uncovered to get base material for the highway.

PLATE III. Caliche formation. Here the caliche has washed bare in a small gully. Its thickness varies as does the depth of the soil overlay.
and are accompanied frequently by thunder storms and hail. The tem-
peratures of the colonies are moderated by the altitude, the annual
mean being in the vicinity of 60°F Fahrenheit.

Table 1 includes climatic data for El Paso, Casas Grandes, and
Ciudad Chihuahua. El Paso and Ciudad Chihuahua are located respectively
northeast and southeast of Casas Grandes. Contradictory precipitation
figures to those presented in Table 1 are given in the Statistical
Compendium for Chihuahua State. The temperature data correlated fairly
well, but the mean annual precipitation for Ciudad Chihuahua is given
as 248.2 millimeters (one inch is the equal of 25.4 millimeters).

Table 2

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<tr>
<th>Year</th>
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<tr>
<td>1952</td>
<td>358.6</td>
</tr>
<tr>
<td>1953</td>
<td>277.5</td>
</tr>
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<td>1954</td>
<td>323.0</td>
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<td>1955</td>
<td>361.9</td>
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<td>1956</td>
<td>159.6</td>
</tr>
<tr>
<td>1957</td>
<td>200.0</td>
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Owing to the fact that the latter data are of a more recent date
the probability of its accuracy is possibly increased. A characteristic
of arid climates that is visible from the above data is the great vari-
ability of the rainfall from year to year.

The climatic complex of the area may be summed up in the following
terms: generally low relative humidity (highest in September and least
in May), intense insolation, excessive evaporation, considerable daily
and seasonal temperature ranges, summer convective rainy season, prev-
salence of southwest winds of about 10 m.p.h. average velocity, and a
generally intense light.

3. Leopoldo H. Olín, Compendio meteorológico del Estado de
## TABLE 1

Climatic Data for Selected Stations

### El Paso

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
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<td>10.1</td>
<td>9.1</td>
<td>6.6</td>
<td>6.4</td>
<td>5.9</td>
<td>4.7</td>
<td>4.2</td>
<td>3.2</td>
<td>3.1</td>
<td>3.5</td>
<td>3.5</td>
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</tr>
<tr>
<td>Mean</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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### Casas Grandes

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<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>ANNUAL TOTAL</th>
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<td>9.8</td>
<td>8.4</td>
<td>8.6</td>
<td>13.1</td>
<td>112.8</td>
<td>86.0</td>
<td>38.3</td>
<td>25.3</td>
<td>18.2</td>
<td>16.9</td>
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<td></td>
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<td></td>
<td>17.3</td>
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</table>

### Ciudad Chihuahua

<table>
<thead>
<tr>
<th>Month</th>
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<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>ANNUAL TOTAL</th>
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<td>6.1</td>
<td>5.5</td>
<td>5.9</td>
<td>4.4</td>
<td>7.2</td>
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<td>23.5</td>
<td>12.0</td>
<td>10.2</td>
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<tr>
<td>Mean</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18.2</td>
</tr>
</tbody>
</table>

### Precipitation in mm.

Temperature in Centigrade.

Irrigation Water

As sources of water for irrigation are of prime importance to the area a brief sketch of them seems advisable at this point. The sources of water used for irrigation purposes in the area are both surface and subterranean.

The main source of surface water is the Casas Grandes River system which heads in the San Miguel and Piedras Verdes Rivers. Ordinarily surface flow of water is year-round in both upper branches of the Casas Grandes, which are maintained by mountain springs, and augmented by cyclonic rains and melting snows in early winter and early spring and by convectional showers in the summer rainy season. The maximum flow is usually during August (the latter part) and the early part of September. At this time the river achieves proportions of no mean size, however, during the remainder of the year, especially the spring when water is needed most, the flow may decrease to a trickle. The wide fluctuations in the regime of the river are in part responsible for the fact that there are no impounding dams on the stream. Its force is such that high water that more than derr is necessary to retain the running water.

Near Casas Grandes a diversion dam does conduct water to reservoirs where it is stored. The approximate annual flow of the Casas Grandes just below the juncture of the San Miguel and Piedras Verdes is 91,000,000\(^5\) cubic meters (a cubic meter equals approximately 30 cubic feet). The storage capacity of the reservoirs is 22,000,000 cubic

5. Figures supplied by Fletcher A. Memmott, member of the Irrigation Committee, Colonia Díaz, Chihuahua.
meters. Gravity flow is the method by which river water is put on the farms which limits the areas to be irrigated. Irrigation from surface water is probably just slightly over half the total, wells and springs supplying the remainder.

In the upper Casas Grandes valley wells are more important than springs although east of this point springs increase in importance. The exact structure of the water-bearing strata is unknown. The wells sunk in the lands surrounding Colonia Juarez and in the Timaja Arroyo have been drilled to an average depth of 700 feet before reaching water. Many of the wells are located in dry water courses. The output of the wells varies from 500 to 1500 gallons per minute. In Colonia Dulkan the static water level is about 45 feet, and the pumping level about 100 feet below the surface. An hour of pumping time will irrigate one to two acres. A wheat crop takes two to four waterings to harvest time depending on whether the soil is loamy or sandy. The instigation of the wells is sufficiently recent (1948) that the effects of pumping on the water table are as yet undetermined.

The one spring of the area was the source of water for the former inhabitants of the Casas Grandes Ruins. Over the years its flow has decreased so that at present it is of no major significance to the area.

Vegetation

The vegetation of northwestern Chihuahua correlates with the climates prevailing in the area. The distribution of vegetation may be summarized as occurring in elevation zones. The plays at the basin bottoms are normally unvegetated barrens. Around the plays is the zone
of salt grasses and alkali sacaton (bunch grass), which is succeeded by the lowland mesquite association. The mesquite extends up the washes to break the continuity of the next higher zone, that of the creosote bush (also known to American ranchers as stinkbrush and greasewood). On the hilltops and mountain flanks is the zone of sparse stunted mesquite and creosote, with the heaviest concentration of cactus, ocotillo, agave, bear grass, and yucca. Large grass areas, dotted with various shrubs and invaded by tongues of creosote and mesquite, occupy the bulk of the higher basins. Along the streams appear gallery forests, varying in floristic composition with the permanence of the water. Such is a general vegetational picture of the steppe and desert lands of northeastern Chihuahua, with a gradual transition in flora towards the Sierra Madre Occidental. The vegetation of the Sierra Madre Occidental changes so gradually, with increase in elevation, that delimitation of the floristic borders is difficult. In general, the area can be subdivided into a lower zone with a characteristic juniper-oak-agave association, and an upper zone with a nearly pure stand of pine.

The physical environment of northwestern Chihuahua is of little use to man without the addition of water. Where there is a supply of water agriculture flourishes, where there is not the cactus flourishes. The two exceptions to the above statement are the use of the indigenous grasses of the basins for cattle grazing, and the use of the forests in the mountains for lumber. There is no mineral development in the immediate area.

6. The steppe and desert grasses extend over large areas in the basins. Over the area of gravelly well drained soils the grasses usually grow in scattered tufts of bunches. In the western and southern basins of higher elevation (above 4,000 feet) are the most extensive grass areas.
Pre-Historic Peoples

Northwestern Chihuahua constitutes a cultural unit which is distinct from adjacent areas on the basis of archeological evidence. That section occurring in the Sierra Madre Occidental is designated by Lister as the Mogollon. East of the mountains but nearly adjacent to them is what is generally known as the Casas Grandes culture. It is believed that these two groups have common antecedents. Brand combines the two and designates them as the Chihuahuan culture.

It was formerly thought by Brand and Lister that this area fell into the Pueblo group of the American Southwest. Excavations now underway in the Casas Grandes ruins (see Plates IV and 7) point to a southern origin of the group. The arrival of the group is thought to have been in the latter part of the thirteenth century. It was a sedentary farming culture based on the Middle American maize-bean-squash complex, to which was added cotton and irrigation. The Chihuahuan economy was nearly self-supporting, but had trade connections with cultures to the west, northeast, and east. Unknown causes, probably hostile nomades from the northeast brought about the decay and annihilation of this culture, which has left very little imprint on the modern landscape outside of decaying mounds, crumbling cliff ruins, and occasional stone lines on the sides and tops of mountains. This people contributed little or nothing to the Spaniards.


PLATE IV. Communal Dwellings of Casa Grande Ruins. Some of the dwellings are five and six levels, or thirty feet high.

PLATE V. Water System of Casa Grande Ruins. The narrow troughs carried the culinary water of the dwellings. They were covered with flat stones while in use.
and Mexicans who reoccupied the land, but they have provided for modern science another stone in the edifice of the history of human development, and have indicated the persistent values of certain habitats.

Spanish and Mexican Control

The historical period began in northwestern Chihuahua with the coming of the Spaniards (1660) an unknown number of years after the decay of the Chihuahuan culture. The first Spanish explorers (soldiers, miners, and missionaries) found the area in the possession of several nomadic and semi-nomadic Indian tribes. In 1684-85, these tribes—the Janos, Sumas, Jacones, Conchos, and others—confederated, destroyed their missions and terrorized northern Chihuahua. The Apaches joined the rebellion but refused to capitulate with the other tribes and thenceforth for two hundred years remained a threat to civilized life in Northern Mexico. During this time remnant Indian bands and dissatisfied mission Indians were taken into the Apache nation and absorbed. Despite the Indians, miners were developed, missions founded, and presidios established during an initial period of exploration and conquest by the Spanish which lasted for about 200 years in northwestern Chihuahua, and gradually merged into the century of inaction and decay which marked the close of the Spanish regime. The change to Mexican dominion (1810) brought with it only a greater outburst of Apache terrorism and further decline along all developmental lines. In the 1880's the Apache threat was removed by the employment of the Mexican Army. Colonists from the United States and parts of Mexico entered in numbers and the modern development of the area was begun.
Mormon Colonization

Early expeditions of the Mormons into Mexico pre-dated the pas-
sage of the Edmunds-Tucker Act. The first known to have set foot in
Mexico were members of the Mormon Battalion who volunteered to fight
in the Mexican War (1846). 9

In the fall of 1875 a relatively large group of men were sent to
Mexico as missionaries. This mission was of dual character, their pur-
pose was first, to preach and second, to locate suitable lands for
future colonies. Sonora and Chihuahua were two states considered for
future settlement. Colonization was deferred for a period because of
the frequent raids of Apache Indians in the northern states of Mexico.
Subsequent expeditions bore no concrete results.

Shortly after the initiation of the Edmunds-Tucker Act, location
of lands in Mexico on which to settle became imperative. Following
instructions from the Presidency of the Church, A. F. MacDonald and
Christopher Layton left Arizona, on January 1, 1885, in further quest
of land in Mexico. MacDonald and Layton did considerable scouting in
various parts of the country but principally along the Casas Grandes
River in northern Chihuahua. At Corrillo, three hundred acres of land
were rented which were soon thereafter planted to crops by Mormon col-
onists. The two also explored the Corrales Basin in the Sierra Madre
Occidental where Colonia Pacheco was later colonized. The first col-
onists arrived in early 1885 having come from various parts of Arizona
and Utah. This was the beginning of Mormon colonization in Mexico which

9. For an account of the Mormon Battalion, see Frank A. Golder,
The March of the Mormon Battalion. (New York: The Century Company, 1920),
p. 225.
continued to 1900. Nine colonies were established, of which seven were located in northwestern Chihuahua and two in northern Sonora.

The Chihuahua colonies were located in the vicinity of Casas Grandes. Six of them were situated either in the Casas Grandes River valley or in the valley of its tributary, the Piedras Verdes. The three largest Chihuahua colonies—Colonia Diaz, Colonía Dublan, and Colonía Juárez—were located in the Basin and Range province at an altitude of approximately 5,000 feet above sea level. Soon after settling these colonies, the Mormons constructed dams in the rivers and dug canals by means of which their farm lands could be irrigated. Colonía Juárez was developed into one of the most efficient fruit producing areas in Mexico. Colonías Dublan and Diaz became important centers for the production of small grains, alfalfa, and dairy products. The other four Chihuahua colonies—Cave Valley, Colonía Pecheo, Colonía García, and Colonía Chuichupa—were located in the heart of the Sierra Madre Occidental, southwest of Casas Grandes, at elevations varying from 6,000 to 8,000 feet. These colonies were located in areas where there were virgin pine and oak forests, and lumbering has constituted one of the colonists' principal occupations. Heavy spring and fall frosts in these mountain colonies have restricted the crops to corn, potatoes, oats, and a few others; but the river valleys and slopes have been useful as grazing lands and have facilitated the production of beef cattle as an important agricultural enterprise.

The two colonies in Sonora were named Colonía Oaxaca and Colonía Morelos. They were located on the Bavispe River, an important tributary of the Yaqui River, which flows into the Gulf of California south of the
seaport of Guaymas. These colonies were situated in a narrow river valley about fifty and seventy-five miles south of Douglas, Arizona. Within a few years after its establishment in 1892, Colonia Oaxaca was almost completely destroyed by a flood and was never resettled.

The Mormon lands were acquired by means of outright purchase through a colonization company organized for this purpose. At first the lands were held in common, with the idea that permanent ownership would rest with the company and the lands would be leased to private individuals. Within a few years, however, individual ownership was permitted and soon became the prevailing type of tenure. During the initial phases of colonization the company exercised firm control and permitted only members of the Church "in good standing" to acquire lands in the colonies and even reserved the right to expel persons previously admitted whose conduct proved to be contrary to the rules laid down by the company. Romney describes this procedure as follows:

To obtain the use of any of this property one must furnish a recommendation from the bishop of his ward certifying that he was honest and honorable and in full standing in the Church of Jesus Christ of Latter Day Saints. So long as the holder of the land observed the rules laid down by the company he could remain in possession of it, but should be prove recreant in any respect he was liable to a forfeiture of his stewardship. In case he were dispossessed of his holdings an arbitration committee would place a price upon the improvements he had made and he would receive due compensation for the same. It will thus be seen that the early Mormon Colonists in Mexico held property under the same restrictions as did the early settlers of the Great Basin. In both cases only the devotees of the Mormon Church in full standing were entitled to possession and in both instances possession merely implied a stewardship - the titles being held by the Church while the tiller of the soil held his concession only during good behavior. The purpose of such a policy was to insure against the influx of non-members of the Church and other undesirables into a community whose aim was to

control absolutely its social and religious life, and not for the purpose of materially enhancing the coffers of the Church. Indeed, investments in lands in Mexico by the Church subtracted from rather than added to its revenues. In the course of a few years the economic policy of stewardship was supplanted by individual ownership.

The pattern of settlement in these colonies followed closely that of the Mormons in Utah. The farm village was the characteristic type, while the families clustered in villages and the farm lands were located beyond the clustered settlements. The village was laid out in blocks or rectangles, with each family possessing about one and one-half acres as a home lot. On one side of this lot was constructed the family dwelling, and on another side were built barns, corrals, chicken coops, and other buildings to care for the farm animals. The lot also provided ample space for a family vegetable garden and a few fruit trees. In this type of settlement the farmer travels back and forth to work his main farm lands, which are located adjacent to the village.

The foregoing is a general account of Mormon colonization in Mexico. Colonia Juarez will be used as the example for a more specific account of the early years. Even though there were some variations from colony to colony it is felt that sufficient similarity exists in their developmental patterns to warrant the use of Colonia Juarez to epitomize the group.

Colonia Juarez

When the first groups of Mormons entered Mexico lands had not yet been procured in quantity sufficient for all to settle. The

would-be colonizers of Colonia Juárez were impatiently waiting at Camp Turley (on the outskirts of Casas Grandes) for land negotiations to be completed. The drawbacks which held up the acquisition of lands were either questionable ownership or unsuitable location.  

In April of 1885, when hopeful preparations for the location of favorable lands were at their height, a Casas Grandes official entered camp bearing an order of expulsion according to which the Mormons were to be out of the country within fifteen days. The order was of local origin, and the officials were in ignorance as to the objectives of the Mormons. Emigrants had poured into the country so rapidly as to cause alarm among the residents. The intentions of the Mormons had been declared to the Federal Government, and it was only through their aid that the order was rescinded and the Mormons allowed to remain in Mexico.  

Scouting and negotiations for land upon which to settle continued for the better part of the year. It was not until December 1, 1885, that they abandoned their camp and set out for what was to become their new home. Their destination was the west bank of the Piedras Verdes six miles above the confluence of the Piedras Verdes with the San Miguel. Nelle Hatch refers to their arrival in these terms:  

They climbed from their wagons and looked with mingled emotions at the place that marked the end of their pilgrimage. The low black hills skirting both sides of the river were friendly. The timber covered mountains outlined against the western sky offered strength, and the long level valley, free of mesquite, or sacaton, or boulders, promised productivity if there was sufficient water. For the first time they felt rooted, that they owned the soil on which they stood - that at last they had found "the place." Already in their minds was a picture of

13. Ibid., p. 19.
the homes they would build, and the community they would create. If only a kind Providence would multiply the voters to bless the soil, they would build and build well.

The land upon which they settled was purchased from the Gomes del Campo brothers, who in turn had received title for it from Porfirio Diaz (president of Mexico at that time). The brothers had received the land in payment for the surveying of national lands. There was one stipulation attached to the title given to the Gomes del Campo brothers in that they were obligated to colonize the area.\textsuperscript{14} The 50,000 acres was deeded to I. F. MacDonald who in turn deeded it to the Juarez Colonization Company. An indication of the price paid for the lands is given in a circular dated 1888.

\textellipsis\textsuperscript{...} Persons who are limited in means can buy farms and procure the best title at from $5.00 to $30.00 per acre for lands improved as good as Utah's best lands, with canal and water rights secured to the land. \textellipsis\textsuperscript{...} The conditions of pay for lands are: cash, cattle, horses, wagons, and in fact available property of any kind. In buying grazing lands, in large tracts, from the government or from individuals, prices vary from 15¢ to $1.25 per acre.\textsuperscript{15}

As the winter season was well on its way they decided that the most feasible method of gaining shelter for the winter would be to construct dugouts. Soon a row of "gnarulous" holes lined the riverbank. Each family moved into a dugout, built a fire in the foreground, made a bed against the back wall, and was at home.

\textsuperscript{14} Ciudad Juarez, Chihuahua: Distrito Bravo, "Registro de Títulos Transláticos del Dominio de los Inmuebles o de los Derechos Reales," Sección primera del Registro Público, Registrado No. 20, p. 70-74, Agosto 9, 1890.

\textsuperscript{15} A. F. MacDonald and S. D. Johnson, Jr., "The Mormon Colonies," a printed circular Chihuahua, Mexico; Sept. 24, 1888; on file in L. D. S. Church Historical Office, Salt Lake City, Utah.
After the immediate housing needs were met, three committees were formed to complete three separate tasks. Committee number one was to lay out the townsite with drawings to indicate the division of land for the town proper and for the fields adjoining it. Committee number two was to select a site for a meetinghouse and take the initiative in getting it built. It took twenty-three days to set up poles, weave willows between them to be chinked with mud, top it with brush supported sod and harden a dirt floor. This structure served as church, school, social center, and civic meeting place.

Of the three committees appointed, number three was to select a damsite and mark a canal course to carry water to the townsite.

The passage of spring and summer saw the dugouts exchanged for adobe hutts, thriving gardens, and sprouting shade trees. The community had really begun.

But when optimism was at its highest another blow fell. The rumor that they were on San Diego property was confirmed. The shrugged-off warning had proven true. A mistake in the boundary line had been made. Instead of putting down roots on the Del Campo purchase, they had improved a part of the old San Diego Ranch. Worse still their rightful purchase lay two miles to the north and between the narrow hills through which the Pioche Verdes trickled.16

The new town was situated in a narrow valley, averaging three-fourths mile wide, and bordered by bluffs varying in height from one hundred to two hundred feet. The town was surveyed into regular square blocks, the streets crossing each other at right angles, but instead of following the cardinal points of the compass, they run parallel with the valley from northwest to southeast (see figures 2 and 3). Distri-
FIGURE 2. Diagram showing Original Site of Colonia Juarez. The colonists offered the owner of San Diego Ranch double the area in exchange for it. The owner refused the offer, hence, the moving of the townsite two miles up the river.
bution of the town plots was accomplished by drawing lots. Allocation of the farm lands above town was done on a basis of time contributed to the building of the canals. The more time contributed, the larger the water right, and the larger the farm plot.

As usual, water was at a premium, canals were constructed, enlarged and lengthened, to supply the needs of the fields and town. Water was also harnessed to operate a town electric plant. An unforeseen advantage of the colonists move upstream was that they gained priority water rights over the later inhabitants of San Diego Ranch. A physical phenomenon, an earthquake in early 1887, also helped ameliorate the water problem by increasing considerably the flow in the Piedras Verdes.

The event is referred to in Church records as follows:

A terrific earthquake took place in the mountain districts of Chihuahua May 3, 1887; just before that, the Mexicans had decided to come up to tear up the Juarez dam because the water was so low in the river, but this earthquake shook the earth so violently that the water increased in the Rio Piedras Verdes one-third and other smaller streams in proportion. Also new springs burst forth in many places... 17

Contriving ways and means of making a livelihood for the impoverished group in an unpromising area was a major challenge. Orchards were to replace farms and home industries had to furnish commodities. It was comparatively easy to fill the adjoining fields with trees and wait for them to produce but it was another matter to take care of the immediate needs of the group in a spot so barren. Capitalizing on available resources and recognizing individual aptitudes for developing them was the answer. It was not long until the community boasted a sawmill in the

17. Andrew Jensen, compiler, "Jutras Stake Wards," (unpublished manuscript, L. D. S. Church Historical Office, Salt Lake City, Utah), no pagination.
mountains, a grist mill below town, a cattle breeding business (with butcher shop, tannery, shoe and harness shop, and dairy as by-products), a co-op store, a tinsmith (where cans for cannery were made), and a hotel. Originally all the goods were for local markets, excepting cattle which could be driven to a railroad terminal. After the completion of the railway (1898) connecting the colonies with Ciudad Juarez and Mexico City, fruit, leather goods, and dairy products (particularly cheese), were shipped in increasing quantities. Industrialization on a small scale had gradually changed the aspect of the little town to that of a thriving community. And thus a colony was begun.

Juarez Stake Summary

The remaining colonies were also prospering. In 1910, the Stake boasted a population of nearly 4,000, with Colonias Hias, Dubler, and Juarez in the lead. The mountain colonies of Chihuahua showed the least increase in population. An estimated 285 non-members of the Church resided within the colonies. Some of the first Mexicans to enter the colonies had previously worked at San Diego Ranch. Early settlers paid the Mexicans' bill at the tienda de raya (hacienda or ranch controlled store) so that they would be permitted to leave. 18

The activities of the Stake were many and varied. At this time there were 1197 students attending Church schools; the one secondary school in northwestern Chihuahua being located in Colonia Juarez. Some of the other activities that occupied the time of the colonists were a shoe factory, a furniture shop, fruit packers, cheese factories, floor

mills, tanneries (see Plate VI], blacksmith and carpenter shops, sawmills, shingle mills, and a brick factory as well as the numerous farming en-
devors. The larger the community the more varied were the activities. The colonists boasted that there were neither rich nor poor among them. The Mormons had succeeded in developing the area, an area which had been left essentially untouched until their arrival.

What are the keys to this initial success? Mormons would reply "Mormonism." Granting that it is by its fruits that the roots of a culture are eventually known, still only a partial answer rests in the identification of the two poles of the situation. One is to also lay stress on the pre-ideational as well as the ideational factor in culture, that is to say, on the specific pre-conceptions or attitudes of life which underlie the different conceptions or ideals of life embodied in the cul-
ture. The next objective is to interrelate historically the pre-ideational and the ideational factors within the culture, thereby showing how its basic conceptions of life arises as a general response on the part of the people of that culture, to the particular environment both physical and spiritual.

To arrive at a people's philosophy it is necessary to determine their dominant preconception or peculiar sense of life. In other words to interpret a people's character is to reveal what makes them "tick." To find out what makes people "tick" is to uncover the mainspring of their history.

Mormon history developed along parallel lines, secular and reli-
gious. The secular history extends over a much longer period than does the religious. It is in this secular development that the Mormon identi-
ries himself with Anglo-American tradition. The little disputed frontier American ideal is made in the image of Daniel Boone. The foregoing considerations can now be brought into focus: the dominant preconception on which Anglo-American culture rests is the epic sense of life.

The theme common to the epic form of literature is a dramatic situation involving the inevitability of moral conflict arising out of the pursuit of some goal by a personality or a group. Briefly stated the epic soul struggles endlessly to conquer obstacles external to himself. The epic hero looks upon the obstacles he encounters in his ventures as evil to be overcome. What is, historically, the relation between the epic sense of life and the apparent success of the Mormon ventures?

Early Mormon history is typified by triumph over several succeeding crises: crises which united the "Saints" and without which it is doubtful that Mormonism would have survived. The first crisis was the intense antagonism directed at the Mormons by well-intentioned people. An antagonism precipitated not because of misconduct either legally or morally, but because their religious tenets (the idealistic factor expressed), their habits and customs were different from the other inhabitants. Human society is so constituted that unless individuals of different groups can find something in common they will not associate. The Mormons refused to have anything in common with their Gentile neighbors and consequently the only method that would insure peace was isolation.

The second crisis was the battle with the physical elements: the major problem was finding a method by which they could make the epic
Great Basin produce. The last major crisis encountered by the Mormons was the fight with the federal authorities over the legality of polygamy.

Each of the crises was precipitated either directly or indirectly by the ideational factor. The response to the crisis developed from the pre-ideational factor—"right shall prevail."

It was Mormonism that brought its members together, and the series of crises that united them. As a result of this sequel of crises organization was developed, every man became adept at several skills, group consciousness was constantly being stimulated, and it became the firm conviction of every member that he would and could succeed.

Organization, "know how," thriftiness, hardwork, and the Mormon's philosophy of living all contributed to the initial success of the colonies. A success that was soon to be interrupted by another crisis in the form of the Mexican Revolution of 1910 through 1920. The Revolution was to usher in a new phase in the development of the colonies. The bearing of this Revolution on the colonies will be considered in the following chapter.
Chapter II
The Revolution

The Revolution which began in 1910 is designated by Mexicans as the "Revolution" to distinguish it from all minor rebellions and coup d'etats which have occurred at various times and places throughout Mexico's history. In actuality it was the culmination of the revolution begun a century before, which seemingly ended after the attainment of independence from the Spanish crown. The Revolution is yet underway, although its methods have changed from the military to the judicial.

Many of the developments in the Mormon colonies from 1910 forward can be attributed either directly or indirectly to the Revolution. Possibly the most far-reaching achievement of the Revolution in effecting or directing the development of both the colonies and the country as a whole was the creation of the Agrarian Code.

The social and economic transformation being effected through the agrarian code that is now taking place in Mexico grows out of the previously existing land tenure patterns, and to be understood it must be related to what existed before. Therefore, the first consideration of the present chapter will be the agrarian antecedents to the Revolution, followed secondly by an analysis of the Revolution as it related to the Mormon colonies, and lastly a consideration of the characteristics of the Mexicans, a people who were now to become an important element in the population of the colonies. The new laws arising out of the Revolution will be discussed with reference to the present situation in the concluding chapter.
Agrarian Antecedents to the Revolution

The turbulent four hundred years of Mexican history since the Spanish Conquest of 1519 may, for the purpose of a summary view be divided into five periods: (1) the conquests; (2) the three hundred years of colonial administration; (3) the struggle for independence, beginning in 1810, and the internal strife that succeeded it, including the war with the United States, the conflict with the church, the constitution of 1824, and the Maximilian adventure; (4) the consolidation under Diaz from 1870 to 1910; and finally (5) the agrarian revolution from 1910 to the present. Closely intertwined with the developments of these five periods has been a succession of basic changes in land distribution and land tenure.

There was, first, the expropriation of the natives resulting from the sudden and violent intrusion of the Spaniards, followed by the slow process of stratification during the long colonial period. The early nineteenth century witnessed the disentailment of the large estates arising from the changes that followed the War of Independence and the subsequent confiscation of the church lands. With the coming of the Diaz regime there ensued a rapid alienation of the national lands and a destruction of village communal ownership. The last phase of the agrarian revolution is still being wrought out under the influences of the Revolution which began in 1910.

Mexican agrarian history is more typical of the Central Mesa than of the periphery areas of the Republic, particularly the northern states. Nevertheless, it was from the experience of the people of the
Central Mesa that the laws were formed which now affect all parts of the Republic. In this way, the history of the more populous areas became the vicarious history of the more remote areas. Thus, even though Chihahua did not share all the experiences of the core area, the experiences of the core area do now actively affect the state. Therefore, the agrarian history of Mexico as a whole will be discussed.

Pre-Conquest Systems of Land Tenure

The Spaniards found the Mexican Indians living under a well-defined system of land tenure. The conquest took place in a deeply rooted and organized community and not within a social structure where the population was foot-loose and wandering. The natives had a stable land system with rights, privileges, and obligations that were well defined and well enforced.

This indigenous land system was closely interrelated with the social organization of the Indians. They were found organized as tribes and divided into kinship groups known as calpulli. Several of these groups united to form villages. Within the lands surrounding the village, each calpulli administered its own section. In each kinship group plots were held by the heads of families with permanent tenure and inheritance. These plots were inalienable and transferred only for non-tillage or in the case of the disappearance of the family. In addition to the parcels held by the family, there were lands specifically set aside for other purposes: for the maintenance of local officials, the payment of tribute to the Aztec overlords, for religious purposes, and for the prosecution of wars. These were tilled
in common by the people of the villages. Besides this widely spread system of ownership and tenure, there was an incipient feudalism with bound serfs and fairly large estates belonging to the nobility. Both of these pre-colonial land systems have made their contributions to the character of contemporary landholding in Mexico - the hacienda and the village. In spite of the fact that numerous villages were absorbed into the large estates which the Spaniards carved out for themselves, many communities retained their essential structure as well as some of their lands till well towards the end of the nineteenth century, when their position became increasingly difficult because of the land policy of the Diaz government. Both the present-day village and the hacienda may be said to be more or less perpetuated types of land tenure that existed before the conquest. What is clear is that the area embraced in the haciendas, as well as the number of people subjected to their control, was greatly increased by the conquest.

Colonial Dominion

The three hundred years of Spanish dominion were characterized by a persistent trend in the direction of land concentration. Against the background of land ownership as it existed before the conquest must now be set the results of the reduction of the Indians to the political and economic dominion of their European masters. The Spanish conquest was carried out by a very small number of soldiers, adventurers,

2. Ibid., pp. 111-116.
missionaries, and gold seekers who took possession of the country in the name of the King and in return were compensated by him for their labor and sacrifice. The compensation took the form of distributing the lands of the conquered Indians, and subjecting the native population to the personal service of the conquerors. That is, the Spaniards had allotted to them the Indian villages and the lands that these Indian villages possessed. The tribute to the chieftains that characterized the pre-colonial system of land tenure was merely transferred to the conquerors. These allotments were known as encomiendas.

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. 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 evil effects of the early allotments of Indians to the Spaniards led to repeated attempts by the Crown to protect the natives by curbing the prerogatives of the colonists. Generally speaking, the power of the local colony was so great that most of these attempts bore little fruit. The encomiendas which were originally meant to last only for one generation, were gradually extended from one generation to another, and were not finally abolished until the eighteenth century.
These encomiendas were of great size, covering in some instances as many as 25,000 square miles, and 115,000 people. So numerous and extensive did these large estates become that there was little good land left, either for the Crown or for the agricultural towns. In order to check usurpation 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. These measures were initiated in 1571, and extended to 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 an almost impossible task.

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 other localities arranged that a composición should be accorded to their holdings collectively upon payment to the Crown of a nominal sum.

3. This is the estimated size of the encomienda allotted to Cortes.
The transformation of the Indians from that of free communal landholders to that of serfs bound more or less strictly to the hacienda upon which they lived was completed and legalized by the composición, under which legal title definitely passed from the hands of the aboriginal community.

During the colonial period, when once a large estate had been formed, it ordinarily remained unbroken. This stability was due to two facts: first, an encomienda could not be divided, and second, the general practice was the creation of mayorazgos (entailed estates). No sooner would a colonist acquire a fortune, whether from trade, mining, the tribute of Indian villages, or the produce of his farms, than he would seek a title of nobility, and with his title would go the title to 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. It was these customs which prevailed until the era of independence, that was largely responsible for the preservation of large estates in Mexico.

Moreover, the church from the conquest to the end of the colonial regime, gradually acquired very large holdings. The amount of land held by the church is not known. Estimates have gone as high as "from one-half to three-fourths of the total area of the republic." In all probability they were somewhat less than half. The colonial period was therefore essentially a period of land concentration. Every force seemed to be working in the direction of increasing the area held by a few individuals and decreasing the number of actual owners.

Early Nineteenth Century

The end of the eighteenth century and the beginning of the nine-teeenth saw the first break in the tendency of land concentration in Mexico. The first step in the process came with the confiscation of the lands of the Jesuits in 1767. After that date a variety of forces contributed to the attempt to break the hold of the Mexican hacienda upon the rural community. The influence of the American and French Revolutions, especially the Napoleonic influences in Spain, the Spanish liberal constitution of 1812, the confiscation of the lands of the Inquisition in that country, all combined to stir an internal movement in Mexico that was both agrarian and national.

The War for Independence was largely motivated at least in its early stages by agrarian ambitions on the part of the Indians. It is true that the ultimate achievement of independence in 1821 was under conservative auspices and that one of the premises of a successful revolution was the maintenance of the status quo in land. The struggle for independence did, however, lay the foundation for three policies that contributed to the attempted breakup of the large estates. It led to the abolition of the legal inferiority of the Indian, a gesture it is true, but yet a change in the relative position of the races in the direction of greater social, and ultimately, of political and economic equality. It led also to an abolition of entailment of large holdings which, in spite of little immediate effect, must be considered as a contribution towards destroying land feudalism in Mexico. Finally, the internal conflicts to which independence gave rise led to the ultimate confiscation of church lands.

41
The first attack against the lands of the church took place, as noted above, in 1767, while Mexico was still a colony of Spain. Soon after independence, other attempts to curtail the lands of the church developed. These varied efforts took effective shape in the "Ley Lerdo" of June 25, 1856, which ordered the transfer of the church lands to the renters then occupying them at a capitalization which at six per cent would yield the church the actual rental then being paid. The lands held by the church but not rented were to be sold at public auction.

The law aimed to break up the latifundios and out of them to create many small proprietors. It prohibited civil as well as ecclesiastical corporations from owning real estate, the former category including the communal village. The purpose was to convey to each villager his portion of the ejido. By substituting personal for communal ownership it was hoped to stimulate the submerged Indian to individual initiative and open the way for economic emancipation. The measure aimed, in other words, to create both from above and below, a hitherto non-existent rural middle class.

An agrarian reform this well intentioned effort proved a failure. To cross off with the stroke of the pen the encrusted feudalism of three centuries was well nigh impossible. The resistance of the church to the point of civil war - in which it did lose much of its wealth - and the consequent imperialist intervention with its chaos, went far to nullify the program. In the confusion and stress of civil conflict the records were lost, titles to the properties were obscured, land ownership was made more confused than ever, and what is still more significant the transfer of church lands did not change the fundamental character of
the land system. The lands of the church seem to have gone either to enlarge existing estates or more generally to create new haciendas of a type already dominant in the country.

However, the greatest disaster was the attack upon the communal village land, that protected by the Spanish crown had persisted throughout the colonial period. The framers of the constitution did not foresee the results that these measures would bring to the villages. In the north and northwest, where the mestizo element was dominant and where the villagers were well acquainted with the institution of private property, the measure seemed to produce the desired effect, and villagers used it as a means of confirming possessions which they had long regarded as their own. In the Central Mesa and in the south, however, where the Indian element was dominant and where collective property was the only kind understood or appreciated, the measure proved to have the opposite effect. In these areas the Indians opposed and evaded the law. If they were forced to comply, some of them accepted title and then immediately transferred this to some trusted elder of the community. Many others became the prey of unscrupulous speculators and lost their lands almost as soon as deeds had been issued. Frequently the titles to the land never reached the Indian at all but were held by dishonest government officials or fell into the hands of large landowners, who kept them for awhile and claimed ownership of the property. When the disastrous effects of these laws on the landed villages became apparent to Benito Juarez, he abandoned all attempts to make individual proprietors out of the villagers and refused to administer the law as

applied to village lands in spite of the constitution of 1857. This legal prohibition against communal ownership was later put into effect under the Diaz administration with resulting consequences which are still being felt in contemporary Mexico.

The Diaz Regime

The attempts to destroy the feudal character of the Mexican land system were defeated by the Diaz regime. This influence lasted till 1910, or some 35 years. It was during this period that Mexico developed its greatest stride as a unified nation. The Diaz policy seemed to center about the rapid commercialization of the country. The development of railroads, mining and public utilities was pressed with great speed and with these changes came an increasing flow of foreign investments into Mexico. The results taken together in so far as they influenced the agrarian problem of the country led to a rapid rise in land values and to speculation in land. Under this stimulus and under the assumption that Mexico would be best served by the rapid investment of foreign capital and colonization the Mexican government developed a land policy that proved to be against the best interests of the country.

This attitude of Diaz is one of the reasons the Mormons were allowed to colonize in Mexico, polygamy notwithstanding. It is also probably the basis for part of the antagonism expressed by local officials against the Mormons in the beginning stages of colonization.

The whole policy of the Diaz government must be viewed in the light of Mexican agrarian history. The very nature of colonial land

distribution made land titles imperfect, led to abuse on the part of landowners and made it difficult to develop any system of colonization because the government never knew which land belonged to it or to private owners. This lack of definite boundaries is given as one of the causes for the persistent failure of all attempts at colonization in Mexico. In part the land policy of Diaz must be looked upon as an attempt to straighten out the tangle of land titles.

Under the law of 1883 contracts were given to private companies to survey lands in specified regions embracing areas greater than some of the states. These surveys were for the purpose of discovering terrenos baldios (vacant lands), that is lands belonging to the nation. The companies were allowed to retain one-third of all the lands they surveyed. Later, in 1894 a colonization law further extended the range of surveys. It abolished the previously required settling of lands, and the previously forbidden alienation of plots larger than 2,500 hectares, and retroactively annulled whatever penalties might have been incurred for violating the provisions.

Terrenos baldios were defined by the law as lands which had never been lawfully alienated by the nation or legally destined to public uses. The law provided that any inhabitant of the Republic might denounce and file claim on baldios. By definition, the baldios could be interpreted to include most of the village lands, since the Indians were ignorant of the laws and since Diaz himself had ruled that it was definitely illegal for villages to hold land of any kind. As might be expected, the legislation was followed by widespread denunciation and incorporation of village lands into large estates. An example of the
effect of this legislation upon the villagers in Yucatan is related
in an editorial published in the Catholic daily, "El Pais," on May 3,
1909, and quoted by Greening:

Our readers have already read of the unspeakable perform-
ance by the Secretary of Agriculture which consists in the
adjudication to Senor Don Olegario Molina of 279 hectares of
territory, adjoining his country estates in Yucatan....

The business may be summarized as follows: The Secretary
of Agriculture Don Olegario Molina conceded to the Haciendo
Don Olegario Molina the adjudication of these thousands of
hectares as vacant (haldio) and the real governor of Yucatan,
Don Olegario Molina, ordered possession given to the aforesaid
haciendo, the denounced having been made before Tomas Avila
Lopez, agent of the Secretaria of Agriculture, at the head of
which is Don Olegario Molina.

...In the land grab...were included pueblos of unfortunate
Mayas, whom the jefes politicos had hastened to throw out of
their poor earthy homes, casting them out not even as a criminal,
a pernicious individual or a traitor of the country is, with
passage furnished to a given destination, but as one kicks out
a street cur, without caring what becomes of him, or whether he
will die of hunger or thirst....

This appropriation, this expulsion, has been an outrage
whether these pueblos did or did not hold viceregal titles,
because a right which the laws of the entire civilized world rec-
ognize and guarantee has been violated....

Every time that a pueblo is despoiled of its lands, defects—
for the most part imaginary—in its titles are alleged, or the
lack of titles. Thus the wiping out from our jurisprudence of
great unquestionable rights which immemorial possession gives
has been erected into a system.

And note that in the pueblos which have just been adjudicated
to Senor Molina the despoilment includes not only their ejidos
but their very town site (fundo), the very ground on which they
have erected their houses, and that which serves as public highway....

But is it true that these pueblos lack titles and that their
possession is not in good faith?

It is absolutely false, because they have a supreme title,
created and established by the public law in Yucatan. The con-
stitution of that state includes those pueblos in its geography,
thus recognizing their legal existence and declaring them subject
to its jurisdiction.

46
So that the taking of these fundos and the dissolution of these pueblos has been not only an assault on property but against the sovereignty of the State of Yucatan.  

The peon's penury was often intensified by the tienda de raya or company store. It existed before Diaz, but under his regime came into more widespread and efficient use to assure each hacienda its labor. The tienda de raya was the chain that bound the peon to the hacienda. He seldom received currency for his toil, but credits against the commodities he was obliged to purchase. Even under an honest administrator the debt could never be paid, and at death it passed to the peon's children.

The tienda de raya was a characteristic of the larger ranches in Chihuahua. Land accumulation on a large scale by private individuals had its origin shortly after Mexico became a republic. At this time the Apache outbreaks in Chihuahua sent the sparse population fleeing to centers of greater population, leaving the abandoned farms to enterprising politicians. One of whom was Don Luis Terrazas, who accumulated over 1,000,000 acres in northwestern Chihuahua. During the Diaz regime the foreign influence was prominent in Chihuahua. In 1923 nearly one-half of all rural holdings in Chihuahua were in the hands of foreigners.

Data which would indicate clearly the net result of these measures is lacking. Luis Cabrera (cited in Whetten) estimated that, by

1910, ninety per cent of the villages in the Central Mesa had no land whatever, save that on which their rude huts were standing; McSride presents data indicating that more than ninety-five per cent of the heads of rural families in all but five states had no rural property of their own; 10 and Parkes is of the opinion that nearly half of the rural population was bound to debt slavery. 11

The movement to destroy land feudalism had failed. In part this was due to the fact that the racial composition in Mexico lent itself to a type of political and social policy that would have been more difficult to carry through if the population had been homogeneous. The Díaz regime was consistent with a general attitude of contempt towards the Indians and their institutions and with a belief that the only hope of Mexico was in a destruction of the Indian communal organization, a reduction of the Indian population, and a replacement by foreign immigration. This perhaps explains the racial nationalism which accompanied the Revolution that ended the Díaz regime.

The concentration of the land in fewer and fewer hands had been the central factor in the history of Mexico. The conquistadores divided the country among themselves with a system of encomiendas; the War of Independence succeeded only in changing the nationality of the exploiters; the Reform movement was able to change solely the names of the owners and to break down the communal holdings; finally, during the Díaz regime the process of concentration was accentuated and by both legal and foul means


the rape of the communal villages continued until by the end of the dic-
tatorship, 2 per cent of the population owned 70 per cent of the land,
and in some states as much as 98 per cent of the rural heads of families
were landless.  

The Revolution and the Mormons

The Revolution initiated by Francisco I. Madero against the Díaz
regime was the signal for uprisings, and in the course of a few months
"bands of rebels were terrorizing the inhabitants and ravaging the coun-
try far and near."

The Revolution initiated in 1910 was not a complete surprise to
the prospering Mormons of Chihuahua. Hatch summarizes their position
as follows:

The colonists were grateful for privilege sic ex-
tended to them, for colonization privileges granted them
in the beginning, and maintained a general feeling that
Porfirio Díaz was a friend in need, yet they were not
blinded to the plight of the poor peon, or unaware that
sooner or later some overt act would precipitate a crisis.
Not many but could predict that a leader to bellwether a
movement toward restoration of expropriated rights would
at once claim the support of the downtrodden masses.  

When such an event did occur, Chihuahua, with Casas Grandes in
the lead, was the first state to revolt. Pascual Orozco, Abraham
Gonzalez, and Francisco Villa took the initiative and declared alle-
giance to Madero. By May 9, 1911, the revolutionists had recruited
an army of insurgents strong enough to storm and take Ciudad Juárez,

    and Social Progress of Mexico, (Mexico City: no publisher cited, 1933),
    p. 22.

the port of entry on the north. Prestige, recruits and money gained there made possible the concerted move toward the national capital for an attack on the political stronghold of Porfirio Diaz.

There is space here only for a glimpse at the Revolution in order to show that the Mormon colonies were suddenly faced with a changed life induced by disrupted political conditions. There was restlessness among the natives which found vent in disrespect for law. With the abdication of local Diaz officers and no Maderistas installed in their places, civil control became disorganised, thievery, robbery, and burglary were rampant.

14. For the benefit of those interested in the political and military aspects, the following chronological sequence of events is given. This is taken from Tyler M. Simpson, The Kildon: Mexico's Way Out, (Chapel Hill: The University of North Carolina Press, 1937) pp. 47-48.

"Oct. 4, 1910. The Chamber of Deputies declares Porfirio Diaz elected President for the seventh consecutive time.


May 30, 1911. President Porfirio Diaz and Vice-president Ramon Corral resign in accordance with the Pact of Juarez signed on May 21, 1911, by representatives of Diaz and Madero.

May 25, 1911. Francisco Leon de la Barra becomes Provisional President.

Nov. 6, 1911. Madero assumes the Presidency following general elections held in October 1911.

Nov. 1911. Emiliano Zapata starts a revolt in Morelos.

Feb. 19, 1913. Madero resigns following his arrest by General Victoriano Huerta; Pedro Lascuerain, Secretary of Foreign Relations, acts as Provisional President from 7:00 P.M. to 7:16 P.M.; he resigns in favor of Huerta.
Concern for the colonies under the unsettled conditions was expressed by the Mormon church leaders in Salt Lake City. Their admonition to the colonists was to "Remain perfectly neutral, take no part with either side. Solicit judiciously the protection of whatever faction is in power. Explain carefully your position, and strive always to be at peace with them. Accede to their demands in reason, and give or deny with all the wisdom in your possession." In whatever manner the colonists interpreted neutrality it did not exclude requesting the intervention of the United States government on their behalf.

14 Con't.


July 15, 1914. Huerta resigns and is succeeded by Francisco S. Carbajal as Provisional President.

Aug. 12, 1914. Carbejal resigns and leaves Mexico City the following day. After this, as one general after another gains the upper hand, Saulillo Gutierrez, Roque Gonzalez Garza and Francisco Lagos Chasco serve as "President" for varying periods of time.


May 1, 1917. Carranza becomes Constitutional President following general elections held during April 1917.

April 1920. The so-called "reindicating revolution" under the leadership of Alvaro Obregon, Plutarco Elias Calles and Adolfo de la Huerta overthrows the government of Carranza and Carranza is assassinated, May 21, 1920.

May 25, 1920. De la Huerta appointed Provisional President by Congress and assumes office on June 1. Elections are held with the result that:


As noted previously a characteristic of the Revolution was expressed enmity to foreigners arising partially from Diaz patronization of such groups. Although the Mormons were in sympathy with the masses they were considered as enemies by the rebels for the following reasons: (1) they were foreigners, (2) Diaz had befriended them so they were assumed federalists, (3) as Americans they were blamed for the embargo put on all arms crossing the border, arms that the rebels needed to continue the fight, and (4) because of the requested intervention of the United States to protect their rights.

The charges of the Mormons against the rebels were possibly more concrete, but they did not erase the very realness of the Mexicans’ attitudes towards the Mormons as a group. The charges of the Mormons against the rebels were primarily concerned with (1) the lawlessness prevalent resulting in widespread thievery and burglary, and (2) the increasing demands of the rebels for provisions, firearms, and other effects by which they could continue to wage their battle. There were a number of shootings on either side that kept tempers on edge constantly. Both Hatch and Romney give the Mormons position in these killings; however, an account of the position of the Mexicans is lacking.

On the 24th of July, 1912, Salazar rebel general of the area at the time sent word to Henry E. Bowman that all former promises of protection to foreigners in Mexico were withdrawn. The revolutionists need the six guns, the ammunition, and war supplies the Mormons had, and he proposed to get them at whatever cost.

Up to this time the Mormons had clung to their firearms, without which they felt they would be at the mercy of the rebels. Ecclesiastical

16. Ibid., p. 181.
authorities, as a result of the above ultimatum, arranged for a central place for all firearms to be deposited; and concurrently made arrange- ments for the women and children to be transported to El Paso by train. All but approximately twenty men followed a few weeks later upon coming to a joint decision that there was little they could do in the colonies to protect their property or further the interests of their families.

The colonies were vacated by the Mormons in the mid-summer of 1912. Soon thereafter, brief visits were made to them by a number of the leaders to ascertain the extent of the damage done and to weigh the possibilities of an early return. The next step in the process of re-occupation was the return of men singly and then finally a filtering in of the wives and children. The year following evacuation of the col- onies, three or four hundred had returned to repossess their homes.

In the early part of 1914, Joseph C. Bentley reports the condi- tions as follows:17

In Colonía Chuichupa the homes and property of the colonists were not seriously molested until some time after the people had left, when finally Mexican people began coming in and occupying the vacant houses and farms and many household effects were carried away and other property stolen. There are no colonists living in the colony at present.

In Colonía Dias .... in February, 1913, a band of Red Flaggers Salazar's men came into the colony and burned about 40 of the principal homes, mainly along Main Street, including the meeting house.

Thus went the reports. At this time there were about sixty col- onists in Colonía Dublan with the remainder of the three or four hundred in Colonía Juarez. Gradually the colonists drifted back.

...Interims of peace gradually lengthened with the passage of time, plantings and reapplications took place, school and ward activities functioned normally, and gaieties and merriments increased...15

In 1921 when the military portion of the Revolution was essentially ended five of the Chihuahua colonies had been resettled - Colonias Chuchupa, Garcia, Pacheco, Juares, and Dublan. The population of the colonies was less than one-fifth that of 1910. There are a number of reasons which might help explain this fact. When the Mormons were forced out of Mexico persecution of polygamy had abated in the United States, because church policy regarding polygamy had been altered to comply with "the laws of the land." With the removal of this pressure the colonists could once again live undisturbed in the United States. During the interim of the Revolution while it was still felt that the colonies were unsafe for settlement many started their lives anew elsewhere. Factors which might have kept them from returning at the close of hostilities were the isolation of the colonies and the limited economic opportunities available in the colonies, particularly in the mountain colonies.

During the absence of the colonists a number of Mexicans moved into the colonies. Some had been hired to care for the farms during the absence of the Mormons. Others moved in to take advantage of the unoccupied homes and lands. Thus, at the close of the Revolution there was a decided change in the aspect of the colonies. The colonists who were there were no longer refugees from the United States, but there by choice. And, the population of the colonies contained a new element,

the native Mexican, an element that was to become more important as
time progressed. Let us now consider this additional element to the
colonies.

The Mexican People

The Mexican people during the early years of the Mormons settle-
ment in Mexico had little direct influence upon the colonies. The first
manifestation of the Mexican people that was to affect the Mormons was
the Revolution, the force that precipitated the general exodus of the
Mormons. Other factors combined in keeping to a minority the number who
returned. The Revolution not only precipitated the exodus of the Mormons,
but was also a permissive factor in so far as the intermingling of
Mexicans within the Mormon communities was concerned. This component
of the population which essentially had its origin during the initial
years of the Revolution was soon to become the dominant element of the popula-
tion in terms of numbers.

What attributes did this new element bring to the colonies that
would foretell their contributions to the colonies? It will be remem-
bered that the characteristics of the Mormons which led to the early
development of the colonies were organization, "know-how," and an attitude
towards life whose embodiment could be said to be preparation for the
future. The characteristics of the Mexicans were very nearly the direct
antithesis of the above.

Psychologically the Mexican milieu is underlain with an ingrained
morality that derives from the traumatic character of Mexican exper-
ience. All of life, personal, social, political, and even cultural, is
burdened by the expectancy of sudden injury, violence, and death. It
is not that the society is violent, brutal, and ungracious. Quite the opposite. The society is quiet, generous, friendly, and overflowing with vitality, but it is lived in the very day, at the very moment, because no one can tell what will happen tomorrow. Life really has no sense of permanence. All existence is on the verge of disaster. This peculiar fatalism results in irresponsibility, in a sense of futility, in a feeling that tomorrow, "mañana," will be time enough, if there is a tomorrow. It tempers every act, every belief, every arrangement, every promise.

To some extent this is a psychology of battle. Survival is a matter of luck and miracle, a product of accident or hidden charm. It is due to the protective influence of the favorite saint. He who survives is lucky, brave, or specially favored.

Mexican history has been peculiarly tragic, violent, and remorseless. At various times the Mexican people have seen the sudden onslaught of an enigmatic evil that destroyed whatever made life worth living. The Conquest killed the Indian leaders, destroyed their temples, burned their records, and almost destroyed the identity of the people with their own past. It would almost seem as if the attempt was to strip the Mexicans of their psychological continuity as a people. The Spaniard denied the Indians their gods, their art, their writing, their temples, their law, their morality, and their ethics.

The Indians never recovered from this blow, and the tragedy was as much in its seeming purposelessness as in its destructive character. The "why" had no answer. Very much the same can be said of the other
violent experiences of the Mexican people. The long and destructive wars of Independence, with their avowed purposes of freedom and justice, provided a cover not merely for terror and bloodshed, but for the denial of the essential human values inculcated during hundreds of years of colonial teaching. The fifty years of continuing strife that followed the wars of Independence merely confirmed the Mexican people in their feeling that life was a temporary survival on the brink of death.

In the struggle with the Church the thing in evidence was the years of cruel and rapacious civil war. In the part of the leaders the battle might be for high ideals, for the mass of the people it was like the hurricane, purposeless, directionless, impersonal, and utterly destructive. The Diaz regime rested upon orderly and systematic terror, if such a phrase makes sense. Life was lived upon suffering. The Revolution of 1910 merely re-created the older form of violence.

This "tragic" attitude towards life created through centuries had not been erased in the decades subsequent to the Revolution. Perhaps time and economic advance will heal the wound of history but it will never erase the scar.

The very nature of Mexican history left its citizens with a sense of futility, and with little interest in the future as that future could only bring sadness. These combined to give the Mexican a general purposelessness of existence. As life becomes more stable, it becomes more meaningful, and interest in the future develops. Nevertheless, it might be said that the major difference between the Mexicans and the Mormons who settled in the colonies was that the former had no concrete
goals or objectives, whereas the latter did. This in part helps to explain the differential development of the two groups.

In a review of the Revolution it can be seen that it was not only a pivot point in Mexican history, but also in the history of the development of the Mormon colonies. The chief accomplishments of the Revolution, as it affected the colonies were one, to noticeably contribute to a changed composition in the population, and two, the creation of a new political climate. Both substantially affected the development of the present situation and will be further considered in the following chapter.
Chapter III

The Present Status of Mormon Colonies

The Revolution was a turning point in the development of the colonies. Anglo population steadily decreased, Mexican population increased. Mormon lands were amalgamated under those colonists who remained. Generally speaking, the Mexicans acquired few lands. Agriculture received increased emphasis among the Mormons. Only a small percentage are unconnected with agriculture. The Mexicans have taken over the processing industries such as flour milling and leather working. Also the semi-skilled labor force is composed primarily of Mexicans. Nevertheless, a large percentage of them are still unskilled day laborers working for a pittance. The differences between the two groups are again noticeable in the average number of years of education an adult has completed, the Anglo has completed high school and the Mexican has completed less than five years.

The seeming prosperity of the Mormons is constantly under the shadow of the current interpretation of the Agrarian Code of Mexico. Forty per cent of the Anglo population of Douglas could be materially affected were the Agrarian Commission to change its policies. The residents of Juarez have less at stake because their land holdings are considerably smaller.

What exists then is an undercurrent of antagonism between the two groups. The Mexicans are envious of the Anglos' prosperity and at the same time resent his presence, because for all practical purposes
the Anglo is yet a foreigner. The Anglo is afraid of the potential expropriation of his lands, his primary method of making a living.

The economic and social development of these two colonies is stilted owing to the barriers between the groups. Before the present situation can alter to any degree in favor of both groups, they must unite in purpose, an objective that may never be accomplished. Provided they unite in purpose there are a number of developments, both economic and social, that can be undertaken to help erase the great differential in the levels of living.

For expediency in understanding the present situation this chapter will be discussed under the following headings: (1) shift in population composition, (2) differential in levels of living, (3) the Agrarian laws, (4) present economic endeavors, and (5) the future.

I. Shift in Population Composition

In comparing the population of the colonies for 1912 and 1959, there are two changes that meet the eye immediately: (1) the decrease of the Anglo population, and (2) the increase of the Mexican population. Let us first consider the former.

Decrease of Anglo Population

Just prior to the Revolution, Anglo Mormon population in the colonies reached its peak. As mentioned previously, many factors combined in keeping to a minimum the number of Anglos who returned to the colonies after hostilities ceased. Among these were, the isolation of the colonies from friends and families in the United States, limited
economic opportunities for those without accessible capital, and
failure to return because of new homes begun elsewhere. Even after
the Revolution ended the numbers of those who returned continued to
decrease. Table 3 illustrates the continued decrease of the Anglo
Population.

<table>
<thead>
<tr>
<th>Name of Colony</th>
<th>1912</th>
<th>1922</th>
<th>1926</th>
<th>1930</th>
<th>1935</th>
</tr>
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<tr>
<td>Chihuapa</td>
<td>300</td>
<td>218</td>
<td>202</td>
<td>106</td>
<td>16</td>
</tr>
<tr>
<td>Garcia</td>
<td>250</td>
<td>161</td>
<td>157</td>
<td>64</td>
<td>---</td>
</tr>
<tr>
<td>Pacheco</td>
<td>300</td>
<td>78</td>
<td>99</td>
<td>72</td>
<td>40</td>
</tr>
<tr>
<td>Juarez</td>
<td>600</td>
<td>310</td>
<td>377</td>
<td>234</td>
<td>339</td>
</tr>
<tr>
<td>Deblan</td>
<td>1,200</td>
<td>264</td>
<td>341</td>
<td>377</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>2,650</td>
<td>1,131</td>
<td>1,760</td>
<td>753</td>
<td>579</td>
</tr>
</tbody>
</table>

The population of the colonies remained fairly constant from 1922
to 1930. Between 1920 and 1940, the Anglo population once again took a
nose-dive. The two main factors involved were the depression and the
Agrarian policies of the Mexican government. Many of the conditions
present in the United States during the depression were also characteristic
of the colonies. The market value of crops was down. The United States
market for cattle was closed. The abundance of the labor supply made

1. Jensen, op. cit., "Juares State wards," and research done in
   the field, January through March, 1958. Elsewhere in the chapter where
   no reference is cited for data presented it will be from the field
   research.
labor cheap, an uninviting alternative to the Anglos. The labor problem was enhanced by the emigration of many Mexican citizens from the United States at this time. The current wage was 52¢ per day United States currency.7

The rate of expropriation of lands for the formation of ejidos in Mexico has fluctuated with the seal of the man who holds the office of president. During the Cardenas regime (1935-40) more land was distributed than in all previous administrations put together. In no single year of the six year term did the area distributed fall below 1,700,000 hectares, while in 1937 it reached a total of over 5,000,000 hectares.7

The rapid distribution under Cardenas was felt by the Mormons. Following are excerpts from the Juarez Stake reports. The colony referred to is Colonia Pacheco.4

1935. Because of the spirit of unrest which seems to be quite general in the colonias, the Karu population has dropped down to about what it was eight or ten years ago with a possibility of further decrease.

Also "we have learned to our native neighbors, under the Agrarian law, are applying for more of our colony lands, with a possible chance of our losing them: this is also very discouraging to the people."

1936. The white population of the colony is still moving out largely to the United States, and the natives are gradually moving in to take their places. It has been quite a struggle this winter and spring again to keep the natives from Colonia Hernandez, to the east of Pacoco Ward, from taking over all of the unoccupied colony land.

1937. Squatter troubles of late have quieted down somewhat in our own colony, while still aggravating in Colonia Garcia, but the government attitude towards these has apparently moderated.

2. Jensen, op. cit., "Juarez Stake."


4. Jensen, op. cit., "Juarez Stake Wards."
At the outbreak of World War II, the majority of the Anglos were still American citizens, and those of draft age were inducted into the armed services. About sixty-five boys from the colonies served with the armed forces of the United States during World War II. Families emigrated to take advantage of the war-time jobs available. Also, since there was no secondary school in the mountain colonies, many families moved either to Colonia Juarez or to the United States. This accounted for the increase in population for Colonia Juarez 1945-50.

From 1950 to the present (1959), the forces that are operating to decrease the Anglo population are those that have been in operation since the Revolution. Boys still enter the United States military service. Other young people leave the colonies to attend colleges and universities. During a ten year period (1938-1948) approximately seventy left the colonies for that purpose. Often the young people who leave never return. The Anglo parents now living in the colonies have a combined total of 166 children living outside Mexico. The Anglo population of the colonies would be increased considerably if these children and their families resided there. In Colonia Juarez 54 per cent of the heads of families were born in the colonies and 28 per cent were born in the United States. Of the adults in Colonia Juarez, 67 per cent are United States citizens and 26 per cent are Mexican citizens with the remainder not designated.

Among the Anglos in Colonia Dublan 57 per cent of the heads of families were born in the colonies, 21 per cent in the United States, and 15 per cent in other parts of Mexico.

5. Whetten, op. cit., p. 159.
The percentage of Mexican citizens among the Anglos in Dublin is directly opposite to that of Colonia Juárez — 65% of the adults are Mexican citizens. Quite often the husband will be a Mexican citizen for purposes of land ownership, and the wife will be an American citizen, either because she may have come to the colonies since marriage or so the children may claim United States citizenship.

**Mexican Population Increases**

At the time of the Revolution an estimated three hundred Mexicans were interspersed among the colonists. During the Revolution their numbers increased and have continued increasing to the present.

**TABLE 4**

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<tr>
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<th>1940 Total of Mexican Colony</th>
<th>1950 Total of Mexican Colony</th>
<th>1959 Total of Mexican Colony</th>
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<tr>
<td>Juárez</td>
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<td>690</td>
<td>460</td>
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From Table 4 it can be seen that during the past thirty years the Mexican population of Colonia Juárez has remained nearly constant, and that of Colonia Dublin has more than doubled. The differential can be explained by the fact that there is no further room for expansion in Colonia Juárez. Also, some of those settling in Colonia Dublin work in nearby Casa Grandes. For views of these towns see Plates VII, VIII, and IX.
PLATE VIII. Colonias Juarez. Note how the town is surrounded by bluffs.
PLATE VIII. Colonie Dublan. In the left center is the Mormon School and Gymnasium. In the foreground are fields leveled for irrigation. These are the fields that were originally 14 rods wide.
PLATE IX. Nuevo Casas Grandes. This town, with a population of roughly 10,000, is the wholesale distribution point for northwestern Chihuahua. It is also the marketing center for both Colonias Juárez and Rubízar.
Table 5 shows that in both Colonia Dublan and Colonia Juarez the percentage of Mexicans born in the Colonies is roughly equal; in the former 21 per cent and in the latter 23 per cent. Over 50 per cent in both cases were born in other parts of Chihuahua. During the last 10 years 48 per cent of the heads of families have moved into Colonia Dublan, and 47 per cent into Colonia Juarez. The major difference between the two colonies is that a comparable number of Mexicans must have left Colonia Juarez to keep the population as stationary as it has been. More than three-quarters of the heads of families moving into Colonia Juarez had their origin in the state of Chihuahua. In Colonia Dublan 39 per cent were from out of state, with roughly two-thirds of those from out of state coming from Agua Caliente.

Figure 4 shows the present building types in Colonia Dublan. Originally all the brick houses belonged to the Mormons. The Mormons are still concentrated on the three westernmost streets of Dublan. The overlay illustrates the distribution of construction since 1952. As can be seen most of it occurs along the eastern and southern edges of Dublan, the primary building type being adobe. The newcomers to Colonia Dublan reside in the newly constructed southern and eastern periphery.

In Colonia Juarez the Mexicans are interspersed fairly evenly throughout the town. However, here too, there is concentration around the periphery.

II. Differential in Levels of Living

The term "standard of living" has been the object of debate as to its exact meaning. Generally speaking, a definition includes levels
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*Refers to other parts of Chihuahua.*
aspired to. For this reason the author has chosen to use the term levels of living which, interpolated, means the facts as they are, disregarding aspirations. The criteria used to determine the level of living or to illustrate the differential in the levels of living of the two groups are: property, including landholdings, and type of abode used for residence, occupation including income of same; and education. The above will be discussed in that order.

**Property**

In an agricultural community the solvency of an individual can often be determined by examining the amount and type of landholdings he owns. When the individual does not use agriculture for his livelihood or does not own any land, another visible means of judging his income is by the type of abode he uses for a residence. Both criteria work remarkably well in both Colonias Juarez and Poblan.

In 1910, the Mormons boasted that there were neither rich nor poor among them. Irrigated landholdings were small and fairly evenly distributed. Hatch lists 24 owners of the "little fields" above Colonia Juarez which were divided into 96 plots. In 1947, the number of plots had been reduced to 54, and the number of owners to 26. In the first list no Mexicans were named as owners and in the second list only one Mexican was designated as an owner. See Figures 5 and 6 which illustrate the amalgamation of land in Colonia Juarez holdings. Table 6 correlates with Figure 6 to illustrate the size of holding and the class of land.


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These numbers correlate with the Plot Numbers on Figure 6.
There is not comparable data for pre-revolution Colonia Dufian. However, Figure 7 shows the irrigated colony lands as they were in 1947. The strips on the east side of the river were all originally fourteen rods wide and varied in area as the river curved. The amalgamation on the west side of the river can be seen through the irregular shapes of the holdings. Table 7 correlates with Figure 7 to show size of plots. These maps show only a portion of the grazing lands held by the colonists.

It is literally impossible to determine the average size holding for an individual for two reasons. One, if a person is not a citizen of Mexico, he often has his title registered in a friend's name. And two, those whose holdings exceed the limits set by the Agrarian Code, and who do not have ineffectualities on their holdings, often transfer the excessive amount to another individual.

When the Mormons first settled in Mexico those that did not have sufficient cash to purchase landholdings were sponsored by the Church, and then paid for their holdings as they reaped their crops. The colonist had previously learned farming techniques through earlier experience as an agriculturist.

Possibly the most concentrated land amalgamation among the Anglos took place in the 1920's, when those who did not return sold their lands for a fraction of what they had once been worth. The people to buy them were in most cases the colonists who had remained or returned. They were given preference both because they were friends of the former owners and because they were the ones with capital. As
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<td>56</td>
<td>25-59-01</td>
</tr>
<tr>
<td>24</td>
<td>9-01-47</td>
<td>57</td>
<td>Included in #39</td>
</tr>
<tr>
<td>25</td>
<td>10-83-71</td>
<td>58</td>
<td>4-80-19</td>
</tr>
<tr>
<td>26</td>
<td>5-13-63</td>
<td>59</td>
<td>73-66-90</td>
</tr>
<tr>
<td>27</td>
<td>4-38-65</td>
<td>60</td>
<td>21-45-69</td>
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<td>62</td>
<td>29-58-44</td>
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<td>18-24-84</td>
<td>63</td>
<td>40-06-26</td>
</tr>
<tr>
<td>31</td>
<td>2-87-81</td>
<td>64</td>
<td>45-11-88</td>
</tr>
<tr>
<td>32</td>
<td>3-48-56</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>20-56-21</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>12-11-06</td>
<td>67</td>
<td></td>
</tr>
</tbody>
</table>

Plot numbers correlate to those on Figure Number 7.
time passed, the more efficient managers acquired additional lands, while those who could not "make a go of it" often left the colonies.

To assume that none of the Mexicans acquired lands is false. However, those who have sizeable landholdings are in the minority.

In Colonia Juarez 10 per cent of the Anglo heads of families claim no land except for the lots their homes are built upon. In Colonia Dublan this figure rises to 24 per cent. This might be explained by the fact that some of the old-timers have given their land to their children, and because some rent the lands they work.

Among the Mexican heads of families 70 per cent do not even claim the lots upon which their homes are built. This figure may be slightly exaggerated because of the manner in which the question was worded in the census. 7 Fourteen per cent of the natives claim the land upon which their homes are built, and the remaining 16 per cent have landholdings ranging from small farms to ranches. Even a higher portion of the natives in Colonia Juarez claim no land, 83 per cent.

This wide discrepancy in land distribution is also noticeable in the other feature of property which is physically visible, e.g., the homes of the people. The home of the Anglo, generally speaking, is well constructed and is equipped with the more fundamental of modern conveniences -- plumbing, electricity, and oil and gas heating units.

The Mexican home, with exceptions of course, is a small adobe structure, often consisting of one or two rooms. In the instance of a two room house, one room is furnished with a small wood stove, a

7. "Terrenos" ("lands") The reply given was recorded.
table, bench, and possibly a chair or two. There is a wash-stand with a pail and dipper next to it. Kerosene lamps are used for light in the evenings. In the other room of the dwelling the entire family sleeps. Such a dwelling oftentimes will house eight or ten people. Plates X and XI show the "typical" of each group.

Let us now turn to a less visible criteria in determining levels of living, that of occupation.

Comparative Occupation and Incomes

A man's occupation is an element which may raise his status in the eyes of his fellow men. Generally speaking, one who is essentially his own boss rates a "higher" distinction than do those who take orders from other men. Closely related to occupation is income, an item which is not quite so tenous in marking differences between groups. Let us first consider occupations followed by the correlating incomes.

Among the Anglos of Colonia Dublen only 10 heads of families have no connection at all with farming. The 10 include 2 merchants, 3 teachers, 2 housewives (widows), 1 building contractor, 1 retired, and 1 mining engineer. In Colonia Juarez the heads of families who are not engaged in some phase of farming included 4 teachers, 4 widows, 2 carpenters, 1 speech therapist, 1 trucker, and 1 medical doctor.

Of the four groups being analyzed, Juarez-Anglos and Mexicans; Dublan-Anglos and Mexicans, the group that shows the most diversity in occupations are the Dublan Mexicans. This is indicative of the fact that Dublan is a town and Juarez is but a village. Because Dublan is primarily Mexican in composition, it would be expected that the Mexican

81
PLATE I. Residence of Mexican Day Laborer. "They are a
great people to at least try to have a small plot of flowers
if given half a chance." - Maxim J. Wilson.

PLATE II. Typical Mormon Residence. This home was built
prior to the Revolution. It resembles many of the homes
built in Utah during that period.
section of the population would exhibit a greater variety in occupations. Some of the less common of the occupations represented are an engineer, a journalist, an aviator, a medical doctor, shoemakers, and masons. These are the exception rather than the rule. Fifty-eight per cent are either obreros or agricultores, the former meaning day laborer, and the latter meaning farm worker. The latter term contains an element of ambiguity in that it also designates those who work on their own farms as well as those who work on the farms of others. If the number of those who own lands is subtracted from the total of agricultores a closer approximation of the total picture may be had. The revised figure is 40 per cent. Now we must be aware of the fact that even though the man may have a small property of his own it does not exclude him from hiring out.

In Colonia Juarez the variety of occupations among the natives is much less varied than in Colonia Dublan. Whereas in Colonia Dublan there were 29 different occupations listed, in Colonia Juarez there were only 12. Here again the percentage of obreros and agricultores is high, being 69 per cent. Even after the correction made above it is 50 per cent. In Colonia Juarez, 12 per cent of the heads of families do housework for a living. This is the largest secondary maximum for either Colonia Dublan or Colonia Juarez.

The gross incomes of the Anglos vary from less than $1,000 per year to a maximum of $80,000 (U. S. currency) a year, the "average" being somewhere in the nature of $4,000 to $6,000 per annum. On both the question of income and landholdings the Anglos were much more
reticent than were the Mexicans in giving answers. However, a sufficient number co-operated that the above is held to be fairly valid.

The income of the Mexican is not generally regarded on an annual basis. He lives from day to day, and his income is usually a daily or weekly rate. The obreros and agricultores average $60 to $100 pesos per week. In United States currency that would be somewhere in the vicinity of $5 to $8 per week (the exchange rate is $12 pesos to 1 U. S. dollar). Oftimes several from the same household will work to meet the needs of the family. Girls start working in homes about the age of thirteen or fourteen. Boys at the same age start doing farm labor. The white collar workers and the semiskilled average from 125 pesos to 400 pesos a week, depending on their proficiency. Even a wage of 400 pesos a week is only 24 dollars. The merchants, the landowners, and the professional people live on the same scale as do the Anglos, and in some cases better.

The economic domination of the Anglo is emphasized in discerning who are the employers in the colonies, and who are the employees. The Anglos of the two colonies combined hire four hundred people throughout the year and an additional four hundred seasonally. Among the Mexicans of the combined colonies fifty-three employers employ approximately two hundred people. Two employers account for twenty-five per cent of those employed.

Education

Here again, as would be expected from the above, there is a wide gap in the education and in the educational opportunities of the two
groups. The average Anglo adult (over 20) has completed 12.6 years of schooling. The average Mexican adult has completed 4.2 years of schooling. For the Anglo youth the number of years schooling generally correlates with the number of years it has been since he reached school age. This is not the case among the Mexicans. Table 8 illustrates the point very well.

**TABLE 8**

<table>
<thead>
<tr>
<th>Age</th>
<th>No. of Yrs. School</th>
<th>Age</th>
<th>No. of Yrs. School</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>.2</td>
<td>13</td>
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<td>9</td>
<td>2.0</td>
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</tr>
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<td>10</td>
<td>2.5</td>
<td>17</td>
<td>4.4</td>
</tr>
<tr>
<td>11</td>
<td>3.1</td>
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<tr>
<td>12</td>
<td>3.5</td>
<td>19</td>
<td>4.5</td>
</tr>
</tbody>
</table>

The number of native young people in Dublan with ages 7 through 20 is 710, or 40 per cent of the Mexican population. The number between 7 and 20 who have never enrolled in school is 50.

In the Mexican elementary school of Dublan there are 320 students enrolled. The curriculum includes geography, history, civics, national language, arithmetic, geometry, natural science, physical education, drawing, singing, handicrafts, and domestic science. The school employs eight teachers, whose prerequisites for teaching are six years of schooling. Their salary is 720 pesos per month. This school is federally supported.
In Colonia Juárez, according to the census figures, there are 203 native young people between the ages of 7 and 20, or 45 per cent of the Mexican population. The school gives its enrollment as 183 students. It appears that there is some discrepancy as the school only offers the six grades. To the author it appears as though the enrollment is either much too high or the census is considerably off. The curriculum is much the same as it is in publan. Seven teachers are employed. The prerequisites are the same, but in view of the grave problem (i.e., lack of school teachers) they are allowed to teach with less schooling if they study while they are teaching. The Colonia Juárez school is state supported.

Let us now turn to a consideration of the church operated school system. Total elementary enrollment for the year 1956-59 was 258 students. Total enrollment at the academy was 216 students. The ratio of Anglos to Mexicans in the three schools (two grade, one high school) is one of the former to two of the latter. The Mexican students come from the Colonies, Casas Grandes, and other parts of Mexico. The Academy employs 14 teachers; Juárez grade school, 4; and the Publan grade school, 5. The training of the teachers includes 3 Master's degrees, 7 Bachelor's degrees, and 13 other post-high school preparation. The curriculum follows the standard grade and high school curriculum of the United States, with a greater emphasis on Spanish. The Juárez Stake Academy has the distinction of being the only secondary school in northwestern Chihuahua. The Mexican students who graduate from the academy invariably are those who take the lead in their communities after graduation.

The average education of the Mexicans in the colonies is possibly higher than that for the Republic, particularly that for rural areas. Nevertheless, the colonies are in dire need of increased educational facilities.

Perspective

There is no room for doubt that there exists a disparity in the levels of living of the two groups. How the Mexican feels about this disparity is difficult to discern, particularly for the author who is of Anglo rather than Mexican origin. Therefore, it is felt that a Mexican should express the attitude of the Mexican towards the Mormon. In an article by Noisés T. de la Péně, appearing in the periodical, Problemas Agrícolas e Industriales de México, he both praised and severely criticized the Mormons. The characteristics for which he praised the Mormons were for their agricultural industriousness, and for their intellectual activity. However, his criticism more than compensated for the praise. To see how a Mexican feels towards the Mormons selected excerpts from his article will follow:

...There are now 5 colonies with a total population of 765 which alternate with a large number of Mexicans. But the latter are always salaried servants to the rich Mormons, the owners of numerous orchards, many cattle, magnificent homes, richly furnished and each one with a pantry admirably supplied with cold meats, milk products, fruits preserved in syrups, flour and everything that production can offer to those who know how and are able to live well.

...The young folks still emigrate and this accentuates the decrease of the group since high economic and cultural level has reduced the birth rate considerably. Due to their small number and their economic position, the ex-colonists stand out like any other rich foreigner who lives among Mexicans, working his properties with Mexican labor and spending his time at purely administrative activities.

The uniqueness of the Mormons, due to his sectarianism more than for any other reason, is still just as radical as it probably was the day he arrived at his colonies; he speaks Spanish perfectly, he considers himself a Mexican and clinically his conduct is almost without reproach; but he continues to be a Mormon foreigner 100 per cent. Although his religion allows him to marry people of other races if they are Mormons, the truth is that we learned of not one single case in which a man or woman had married a Mexican. These people do not have a racial problem for they are of all races, although all of them are Noricins and all of them have English as their official language. In their family and religious relationships Spanish has no place at all, and in everything they maintain a separate world from the Mexicans, even from those who have embraced the Mormon religion.

This is a profoundly sectarian matter but their high economic and cultural position has no small influence in keeping these colonists within an unbreakable barrier which in the end is racial and Noricin.

They are a demographic cyst, as disdain the society in which they live, that is, the Mexicans as a group. This undeniable truth makes them undesirable people... They take all the good we can offer and then locate themselves in a social and civic position which is negative, because of which, no matter what their economic virtues may have been, which in the case of the Mormons are certainly high, these virtues are cancelled out by the fact that they oblige us to tolerate them as a social cyst.

It is necessary that we oblige the Mormons to fulfill completely our laws regarding education, regarding military service and not accept one more immigrant of this sect. Happily those who remain are losing importance and everything seems to indicate that in the near future they will have no social significance at all.

It is not the objective here to argue points made by Moises T. de la Pena, but to analyze them. There are three conclusions that
can be derived from the above quotation. They are, one, the Mexican is resentful of the Anglo's economic and cultural status. Two, the Mexican yet holds antipathy towards anything foreign. And, three, the same exclusiveness exhibited by the early converts to the Mormon Church in New England, which aroused the antagonism of the local populace, is also a characteristic of the Anglo Mormon in the Colonies.

The economic barriers between the two groups can be removed. The Anglo might possibly become thoroughly Mexicanized. However, the pattern of Mormon history tends to negate the probability of the latter, at least in the foreseeable future. Perhaps when the economic status of the two groups is more nearly equal, the Anglos will be more open to social interchange.

Of the methods that can be employed to break down the economic barrier, one is negative and one is positive, in so far as the Anglos are concerned. The former would decrease the economic investments of the Mormons, or in other words, bring the Mormon down to the level of the Mexican. This course of action would employ the use of the agrarian code. The latter course of action would involve the Anglo taking the initiative in so far as the economic development of the area is concerned. Or, stated differently, helping the Mexican to raise his status to a more equal level with the Anglo. The "negative" avenue of action will be considered first.

III. Mexican Agrarian Reform

In the reiteration of the Mexican agrarian revolution the account was dropped at the outbreak of the Revolution in 1910. From
that point forward, nothing was accomplished in the realm of agrarian
reform until the decree of 1915. This was later substantially incor-
porated into Article 27 of the Constitution of 1917 and, together with
that article became a Magna Carta for the whole agrarian movement.

The decree of 1915 contained the following provisions: (1) all
alienation of village lands which had taken place through misappli-
cation of the law of 1856, through illegal acts of surveying companies,
or through other illegal means should be declared null and void, and
(2) villages (of specified types) needing lands, but lacking proof
of former ownership have the right to receive sufficient lands for
their needs, such lands to be expropriated from adjacent properties.

Article 27 contains the formula for solving the agrarian
problems: (1) the restoration of lands to villages; (2) the out-
right grant of lands to villages in cases where they are needed,
even though prior ownership cannot be proved; (3) the recovery of
national lands and estates that were alienated in opposition to the
public welfare during the Diaz regime; (4) the destruction of
latifundia by limiting legally the size of private landholdings.

The legal machinery for the carrying out of these objectives
was not put into efficient operation until the enactment of the
Agrarian Code in 1934. Under this code three types of land grants
are made to peasants. They are restitution, "dotation" or outright
grant, and "amplification."

Restitution, as the term implies, involves a restoration of
lands that had been taken away from the villagers illegally. The
method of donation removed from the villages the necessity of proving previous possession. The majority of land settlements made have been through this method of outright grant. Amplification is a grant designed to enlarge the holdings of a village when it can be shown that their present lands are inadequate for their needs.

The lands for redistribution to any given village are to be taken from public or private holdings located within a 7-kilometer radius of the center of the petitioning village. Any private holding within this radius is subject to seizure except for certain specified exemptions. Those which apply to the Mormons are as follows: 10

1. An area not exceeding 100 hectares of irrigated or humid land, or 200 hectares of seasonal land, or the equivalent in other types of land. For exemption purposes each hectare of irrigated land is equivalent to 2 hectares of seasonal, 4 hectares of good pasture land, or 8 hectares of woodland or pasture land located in barren country.

2. Up to 300 hectares for fruit trees.

3. Under certain specified conditions, lands may be granted an exemption concession for a period of twenty-five years. Each concession must be the subject of a presidential decree and shall never exceed 300 hectares of the most fertile or 50,000 hectares of the most barren lands.

To be expropriated the lands must be petitioned for by a group of qualified villagers. In some cases Mormon lands have not been

petitioned for. In other instances the lands have been petitioned for and awarded. This is true of the colonies that were not resettled following the Revolution. Also, an undetermined portion of the mountain colonies has been awarded to the agrarians, because they were judged unoccupied. And finally, for those on their toes, inaffectabilities have been procured for their specific properties. These inaffectabilities are of a temporary nature. However, it is believed that they are subject to renewal.

It is estimated that roughly half of the lands held by the colonists in 1910 are now held by agrarians. The mountain colonies are still losing their lands. In Colonia Juárez if all the lands were petitioned for that exceeded the maximum small holding set by the Agrarian Code, over one-third of the Anglo families of the town would be affected. At the present, the immediate probability of such an occurrence seems unlikely. On the other hand, the newly instated President of Mexico has declared it his policy to review all inaffectabilities. There is not a great deal the Mormons can do to stem the tide of agrarians. In 1947, a law was passed which would allow the land owner to start injunction proceedings, when his land was petitioned for by agrarians. Prior to this date he had no recourse except that of picking up the worthless notes the government gave him for his property. It cannot be determined here whether or not the Anglos will be permitted to retain their lands.

No where in the study, as yet, have the present economic endeavors of the colonies been discussed. Let us now turn to that subject.
IV. Economic Endeavors of the Colonies

Earlier in the chapter, mention was made of the fact that nearly all Anglo heads of families were engaged in some form of agriculture. This is reflected in the primary production of the area, which is shown in Table 9. Plates XIII through XX illustrate some of the more salient features of production. All of the present farming activities, with the exception of cotton growing and the poultry industry, were important in the pre-revolution period.

Wheat is the single most important crop of the area. Colonia Dublan is the center of production. The wheat is both milled and marketed locally. Beef cattle follow wheat in importance. These are generally grazed outside the Colony boundaries (shown on Table 9).

The market for beef is in the United States. Periodically the Mexican Government closes the line to shipment across the border to force some meat on the Mexican market. This is indicative of the fact that market prices in the United States are higher than those in Mexico.

Ciudad Juarez is the market for alfalfa, cotton, milk, and other produce of Colonia Dublan. Of the crops just mentioned, alfalfa also has a considerable local market. Cotton production is a relatively new venture in the colonies. The growing season is short enough that cotton is a marginal crop. The dairy industry has decreased in importance since the Revolution, particularly cheese making.

Colonias Juarez is still the center of fruit production, although a few orchards have been recently planted in the Dublan area. Double red delicious apples are the product that are most marketable. A combination
<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity</th>
<th>Value in Pesos</th>
<th>Market Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle - beef calves</td>
<td>3,000 head</td>
<td>3,600,000</td>
<td>U. S. and Ciudad Juarez</td>
</tr>
<tr>
<td></td>
<td>300 head</td>
<td>366,000</td>
<td>Ciudad Juarez or Chih. City</td>
</tr>
<tr>
<td>Wheat</td>
<td>5,000 long tons</td>
<td>4,565,000</td>
<td>Within radius of 200 miles</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>7,000 long tons</td>
<td>2,275,000</td>
<td>Local and Ciudad Juarez</td>
</tr>
<tr>
<td>Cotton</td>
<td>1,000 bags</td>
<td>1,700,000</td>
<td>Ciudad Juarez</td>
</tr>
<tr>
<td>Fruit - Apples</td>
<td>60,000 bu.</td>
<td>3,000,000</td>
<td>Mexico City</td>
</tr>
<tr>
<td>Peers</td>
<td>6,000 bu.</td>
<td>300,000</td>
<td>Guatemala City</td>
</tr>
<tr>
<td>Peaches</td>
<td>4,000 bu.</td>
<td>200,000</td>
<td>Chihuahua City</td>
</tr>
<tr>
<td>Eggs</td>
<td>18,000 cases per case</td>
<td>3,000,000</td>
<td>Mexico City</td>
</tr>
<tr>
<td>Market Milk</td>
<td>1,000,000 liters</td>
<td>1,000,000</td>
<td>Ciudad Juarez</td>
</tr>
<tr>
<td>Beans, Milo Maize,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potatoes and Corn</td>
<td></td>
<td>1,500,000</td>
<td>Local</td>
</tr>
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</table>

Gross Value: $21,500,000 Pesos or roughly $1,800,000 U. S.

Data on fruit supplied by E. Deville Hatch, Hatch Bros. Fruit Growers Assoc., Colonias Juarez.
Egg Data supplied by Claudius Bowman, Jr., Secretary, Avicola Colonial, Colonias Juarez.
Hay, Cotton, and Wheat data supplied by Fletcher Memott, Fomentadora Agricola, Colonias Dublan.
Milk, beans, potatoes, and milo maize data supplied by Marion L. Wilson, Colonias Juarez.
PLATE VIII. Wheat in March. This will be harvested the latter part of June before the rains begin. Wheat is the primary irrigated crop of Colonia Díazlan.

PLATE IX. Flour Mill. This mill was formerly Mormon, recently sold to larger milling interests. There is also another mill in Colonia Díazlan which was owned by Mormons.
PLATE XV. Holstein Dairy Cows. Excluding the local market, essentially all fresh milk products are shipped to Ciudad Juarez.

PLATE XVI. Alfalfa. This crop yields more income per acre than does wheat. However, local farmers prefer to raise wheat. Markets are local and Ciudad Juarez.
PLATE XVIII. Fruit Packer. This is one of several new ones in the area. Here, fruit is graded and packed for shipment.

PLATE XVIII. Nursery. The horticulture needs of the colonies are sufficient that Ashton Longhurst does a thriving business in young fruit trees.
of slope, good drainage, and the use of smudging generally assures a
good crop annually. The Mexico City area is the largest market, with
a secondary market in Ciudad Chilpanzin.

The second most important product of Colonia Juarez is eggs,
literally millions of them. After a failure in the Thirties, the poul-
try industry was reintroduced in the late Forties to provide a method
by which colonists moving down from the mountain colonies could make a
living. The eggs are marketed through a cooperative, the primary
market being again the Mexico City area.

Other products are beans, mio maize, potatoes and corn, all of
which are marketed locally.

To be a profitable producer in any of the above mentioned areas
of activity requires varying amounts of capital, in all but one, land-
holdings, and a rather specialized knowledge of farming. These the
Mormons have developed over the years, and are noticeably lacking
among the majority of the Mexicans.

Before considering possible future development let us first
delineate the economic and social problems of the area.

The most significant physical factor limiting the development
of the area is climate.

The most significant non-economic factor limiting the develop-
ment of the area is the lack of rapport between Anglo and Mexican.

As far as the Mexican alone is concerned, the problems that are
most in evidence are under-employment, low salary, and the lack of
training. These problems can never be completely resolved. However,
PLATE XIX. Cement Block Chicken Coop. Bricks are no longer being kilned in the colonies. The use of cement block as a building material is increasing.

PLATE XVI. Adobe Chicken Coop. This is the more traditional building material. Adobes are quite substantial if covered by a good roof.
steps can be taken in the direction of their solution. For a dis-

ussion of these, the future development of the area will be considered.

V. Future Development

In the discussion of the future development of the area those
measures which would benefit both Mexican and Anglo will be considered
first, followed by those measures which are aimed primarily at re-

lieving the problems of the Mexicans, and finally, by a discussion of
the possibility of bettering relations between Anglo and Mexican.

General Area Development

As was stated previously the biggest single physical factor
limiting the development of the area is the lack of sufficient water
supply for irrigation needs. There are no impounding dams on the
Casa Grandes River. Surface flow is extremely seasonal, and the
storage reservoirs only partially meet the needs of the area. Surface
flow is supplemented by the use of wells. However for most of the
Mexicans this secondary source of irrigation water is as yet unavail-
able, primarily because of the cost in initiating and maintaining
wells. A secondary limitation in the use of wells is that in the
spring when water for irrigation is most needed the available supply
of tractoline with which to run the pumps is often inadequate. This
could be alleviated by the construction of more gas and oil storage
tanks.

There are several projects now being considered which would
substantially increase the supply of surface water for irrigation.
The largest project being considered is that of the Boquilla Dam.
PLATE XXI. Oil and Gas Storage Tanks. The oil needs of irrigation pumping and fruit smudging in the spring are often not adequately supplied because of the lack of sufficient storage tanks.

PLATE XXII. Pump Irrigation. This method of irrigation is considerably more expensive than gravity flow due both to initial investment and operating costs.
The proposed dam would be located just below the junction of the Peñas Verdes and the San Miguel (see Plate XXII and Figure 8). It would be constructed with a cement core and base, with an earth fill. The dam would double the present storage capacity of the area which is now 22,000,000 cubic meters. A site benefit would be the production of hydro-electricity. The present power rates in the area are comparatively high. Colonia Juarez pays 8¢ per kilowatt hour of electricity and Colonia Dublin 4¢ (United States currency). The estimated cost of the dam is $100,000,000 pesos. One of the costs to be considered is the moving of the railroad which is now situated in the canyon where the dam would be built.

At the present time construction of it is a remote possibility. The Mexican Government just does not have sufficient funds to finance the many such projects that are on the planning board.

The second project entails increasing the storage capacity of the present reservoirs. One accomplishment along this line was recently completed — the diversion canal leading to the reservoirs was enlarged with the help of the government (see Plate XIV). Along this general line, the gates that divert the water into the canals need to be reconstructed so as to allow more water into the canal (see Plates XV and XVI). The main component of this project, however, is to increase the height and width of the boarders surrounding the reservoirs to increase the storage capacity. The present storage capacity of the larger

11. Data supplied by Fletcher Meemott, member of Irrigation Committee, Colonia Dublin.
PLATE XXIII. Biquilla Dam Site: Down River Side. Photo also shows some of the fields needing more water to produce efficiently.

PLATE XXIV. Diverslon Canal. The government recently helped clean this to increase capacity.
PLATE XIV. Diverison Dam on Casas Grandes River. Large gates let the water down river, small gates divert water into the canal leading to the reservoir.

PLATE XXVI. Diverison Dam - Small Gates. These gates are easily plugged with trash in flood season. Note the accumulation of silt in front of the gates - another problem.
reservoir, "Round Lake," is 13,000,000 cubic meters. This capacity could be increased to 32,000,000. The storage capacity of the smaller reservoir is now 9,000,000 cubic meters and could be enlarged to 24,000,000 cubic meters. The combined capacity of the two reservoirs would then be 56,000,000 cubic meters. The cost for more than doubling the capacity of two reservoirs is estimated at only 10 per cent that of the Boquilla Dam project. The dam could irrigate some lands above the reservoirs that the reservoirs cannot. In either case the majority of the water would go to farms that now receive only a fraction of the water needed to produce efficiently.

It's mainly due to politics that the project is not now underway. To elaborate, both reservoirs were originally developed by the colonists. As a friendly gesture they donated one reservoir to the ejidos north of Dublan, hoping thereby to get more general cooperation in the diversion of flood waters to fill the reservoirs. "This, sorry to say, has been taken by the agrarians as a sign of weakness, that the colonists were not too sure of their claim."12 "The colonists are ready to go ahead on the lakes if the rest of the area would enter in proportion to the water they would like out of them. Largely because of Agrarian methods the colonists are afraid that if they foot the bill for the project, it may turn out to be so much lost effort as far as they are concerned."13 Here, the factor of social origin may turn out to be more important than the factor of physical origin in limiting the further development of the area.

13. Ibid., May 9, 1959.
Upon the enactment of one of these projects the agricultural production of the area should rise considerably. The dairy and poultry industries are two areas of production that could be increased without worrying about whether or not the product could be marketed. The poultry industry doesn't require water directly, but the grain that feeds the chickens does require water.

Development Related to the Mexicans

The problems of the Mexicans are related to the cheap labor supply, under-employment, and lack of training. The wages of the Mexican in the area will probably be relatively low for some time to come because the local wage rate is related to the national labor supply. However, semi-skilled and skilled laborers receive considerably higher wages than does the unskilled laborer. The objective then is to change the status of the laborer.

There are two projects now planned that will help in this transformation. One is being sponsored by the government and the general citizenry of the area. The other is to be sponsored by the Mormon Church. In the former a secondary school is to be established in Nuevo Casas Grandes. The school will include a much needed industrial arts training program.

Under the church welfare program each regional division of the church operates in a group owned farm. The labor is donated and the proceeds go to the needy of the church. The Mexican membership of the Church in the colonies exceeds the Anglo membership. However, a large portion of these are unable to adequately support their families. The
church plans to employ the most destitute of these on the farm but, instead of being remunerated in cash, they will be remunerated with goods. The objective of the program is to teach these Mexicans how to farm, so that they can operate a farm on their own.

The other primary problem confronting the Mexicans is that of under-employment. This is especially true of the agricultural workers. In the pre-exodus days the colonists operated small local consumer industries. There is no evident reason why something of a comparable nature could not again be accomplished.

One suggestion along this line is the construction of a small furniture factory. The primary objective would be to market low cost, attractive furniture. Production would be aimed at the peon market, a market which cannot afford to purchase imported furniture and hence, for the most part, does without. Chairs, tables, beds, etc., could be made. The design would not have to be ornate, and still the furniture could be attractive. Raw materials for the factory could be furnished by the local lumber mills.

In Nuevo Casas Grandes exists a meat packing house that has not been in operation for several years. It was constructed during the period when Mexico was beset by the hoof and mouth disease, for which reason no beef on hoof crossed the border. This packing house could still be utilized. The source of meat would be female cattle or old fat cows. The reason for this being that in Mexico there is a law which prohibits shipment of female cattle across the line. If the plant were put back into operation cattle from other parts of Chihuahua could also be packed here.
The alternatives suggested are only a few examples of the policies which could be carried out. No single plan is going to alleviate the peasants' plight by itself. Only time, patience, and concentrated effort in that direction will accomplish the task.

**Lack of Rapport Between Anglo and Mexican**

The lack of rapport between Anglo and Mexican is decidedly retarding the economic development of the area. The Mormon because of his background is in a position to lead in furthering the economic development of the area. However, such a thing is not occurring. This is partially the fault of the Mexican and partially the fault of the Mormon. The Mexican is skeptical of the foreigner, and the Mormons' exclusiveness and retention of United States citizenship confirms his skepticism. If the Mexicans and the Mormons could be induced to cooperate as a unit, not as separate groups, on the above measures, this could be a starting point from which better relations and increased economic production could result. However, such a prospect seems unlikely at the present. Isolated cases of improved relations may occur, but in general it is believed that the present conditions will continue to prevail. Continued emigration and the continued enforcement of the Agran'An code will probably result in a continued and gradual decline of the colonies, an event which would be a loss to both the area and the colonists.
Conclusion

The Mormons came to Mexico as refugees and left again as refugees in 1912. It might well be that if they are forced to leave again there may be a touch of the refugees associated with their leaving.

Early Mormon colonization in Mexico prospered. The attributes which led to this prosperity were organization, varied skills, and a philosophy of life which epitomized is "I am the captain of my ship; I am the master of my soul." The early colonies were fairly homogeneous in composition with few Mexicans interspersed among them.

The peace and prosperity were cut short by the Revolution of 1910, a revolution precipitated by the landless masses revolting against the entrenched property holders. During the course of the Revolution most of the colonists were forced to leave.

The Revolution marked a turning point in the development of the colonies. The most noticeable changes were the influx of the Mexicans and the decrease of the Anglo population. The attributes of the Mexican coming to the area included little education, economic penury, and a fatalistic attitude towards life.

The Mexican population continued to increase and the Anglo to decrease. The Mormons continued to prosper, the Mexican remained a peon. The differential in levels of living that resulted from this led to a resentment of the Mormon by the Mexican, resentment which was increased by the Mormons remaining American citizens and being socially exclusive. The Mormons became wary of the Mexican during the Revolution.
when they lost considerable property at the hands of the Mexican. This enmity was increased as Mormon lands were expropriated for the agerians. The present economic development of the area is being retarded by the fact that the two groups are constantly at odds.

What is the prospect for the Anglo in the colonies? Probably the influence of the Anglo in the colonies will decrease with decreased numbers brought about by continued emigration of the youth, and continued expropriation of colony lands.


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"Juarez State Wards." Unpublished manuscript, L. D. S. Church Historical Office, Salt Lake City, Utah.


