This study is supported in part by the Land Tenure Center, a cooperative research and training program of the American Nations, the Agency for International Development and the University of Wisconsin.

The author is Assistant Professor of Agricultural Economics in the Land Tenure Center.

November 1965

CHILE'S EXPERIMENTS IN AGRARIAN REFORM

By

William C. Thiesenhusen

All views, interpretations, recommendations and conclusions expressed in this paper are those of the author and not necessarily those of the supporting or cooperating organizations.
PREFACE

This study attempts to analyze several land reform experiments in Chile, a country where the traditional agrarian structure still predominates. It is predicated on the idea that when a more inclusive reform comes, technicians will benefit from having studied how reform works on a small scale.

The Land Tenure Center, University of Wisconsin, and its cooperating institution in Chile, the Instituto de Economía, Universidad de Chile, have allowed me the enviable task of doing this research in a laboratory situation where social and economic change is taking place. To both institutions I owe a debt of gratitude.

To the friendly and hospitable people of Chile, forever patient with another student—gringo, I am deeply indebted; for their courtesy always, for their acceptance, for their kindness.

My purpose in this study is not to be destructively critical. The foreigner observing another culture has little reason to be arrogant. Should any of my statements appear harsh or disparaging, I have not meant them to be so. The reader will, I hope, keep in mind that the current generation of Chileans did no more to create their current social and economic difficulties than we as contemporary citizens of the United States have done to create the most critical problems our society grapples with today. However, to present-day Chileans in their culture as to us in our society, falls the difficult job of evolving institutions
to confront these problems and to accurately reflect the needs of the modern times. For this task there are no simple remedies nor quick solutions.

I must acknowledge the help of many people, although it must not be construed that they have any responsibility for my errors. Professor Peter Dorner, for his encouragement and ever-helpful comment, must be at the top of this list.

I also wish to thank Felipe Paúl, who accompanied me on all interviews and assisted in innumerable ways during the first half of 1964.

Furthermore, my debt of gratitude must be extended to the staff members of the Instituto de Promoción Agraria (INPROA), the Corporación de Reforma Agraria (CORA), and the Compañía Italiana Chilena de Colonización (CITAL), who were always willing to share their information with me. I can only hope that in the presentation of information drawn from these organizations I have been worthy of their confidence.

Especially to be acknowledged in INPROA are Gonzalo Puga and Hugo Jordán who smoothed the way to the rest of the staff and read and frankly commented on some early draft chapters. I also received valuable information from Juan Soto, Fernando Irarrázaval, Carlos Avilés, and Juan Walker of the INPROA team. Those CORA staff members to whom I am indebted, in addition to Eduardo Silva Pizarro, its vice president under the recently concluded term of President Jorge Alessandri Rodríguez, are René Maluenda, Manuel González, Conrado Prorromant, and Fernando Grez. Cristóbal Unterrichter, CORA's past FAO advisor
also gave me valuable information about CORA and commented on a draft of Chapter VI.

I acknowledge the help of others who read drafts of some chapters and offered helpful suggestions: Professor Bryant E. Kearl, Department of Agricultural Journalism and Associate Dean of the Graduate School, University of Wisconsin; Professor Don Kanel, Department of Agricultural Economics and the Land Tenure Center, University of Wisconsin; Father Gonzalo Arroyo, Centro para el Desarrollo Económico y Social de América Latina; Professor Solon Barraclough, Instituto de Capacitación e Investigación en Reforma Agraria (ICIRA); Professor Henry Landsberger, Instituto de Organización y Administración (INSORA), Universidad de Chile; and Fernando Fuenzalida, Economic Commission for Latin America and FAO.

Staff members of the Agency for International Development, Santiago, have also been helpful.

My colleagues at the Land Tenure Center, Chile, Marion Brown, Daniel Stewart, Héctor Morales, Juan Carlos Collarte, Antonio Idiáquez, and César Carmona, have given constructive criticism and assistance in numerous ways.

The help of settlers on the colonization projects whose story forms the basis of this study and who willingly consented—sometimes on two or three occasions—to being interviewed was sincerely appreciated.

I also thank Msgr. Manuel Larraín, Bishop of Talca, for submitting to Felipe Paúl's and my own questioning.

The rationale behind these interviews and these questions, of course, traces largely to the philosophy of Professor Raymond J. Penn, director of the Land Tenure Center during its first three years.
The reader will find the following conversions useful:

1 US$ = E'3.25 (Chilean Escudos--at the time all conversions were made.)

1 Hectare = 2.471 Acres
1 Cuadra = Approximately 4 Acres
1 Cuadra = 1.5625 Hectares

All translations from Spanish to English have been made by the author unless otherwise noted. A Spanish word is underlined only upon its first use in the monograph.
1. Early Landholdings of the Church in Chile
2. The New Attitude
3. The Modern "Conservative" and the "Liberal" Church

II. The Church in Social Action Agencies: Ideological Underpinnings and Current Pressures .......... 60

III. The Instituto de Promoción Agraria (INPROA) ..... 71
1. The INPROA Organization
2. Plan of Action
3. Administration of INPROA
4. Financing INPROA

IV. Alto Melipilla ........................................ 88

CHAPTER III

LOS SILOS DE PIRQUE ..................................... 90-135

I. The Setting .............................................. 92

II. The Cooperative's Organization ...................... 95

III. The Coop in 1962-63 .................................. 99

IV. Current Social-Political Difficulties ............. 100

1. External Dissent and Internal Repercussions
2. The Problem of Leadership
3. Miscellaneous Complaints
4. Pressures Against Reform in a Traditional Society

V. The Economic Organization of Los Silos in 1963-64 114

1. Cropping Pattern
2. Small Allied Enterprises
3. Livestock
4. Labor Use and Management
5. Members' Income Determination
6. INPROA's Role
7. What is the Production Potential on Los Silos?
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>List of Tables</th>
<th>List of Diagrams</th>
<th>Chapter 1: A Brief Introduction to Chilean Agriculture</th>
<th>Chapter 2: The Interest of the Chilean Church in Land Reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x-xi</td>
<td>1-51</td>
<td>52-89</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I. The State of the Agricultural Sector in Chile</td>
<td>I. The Church's Historic Interest in Land</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II. Is Chile Capable of a Dynamic Agriculture?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Chile's Agricultural Geography</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Are There Adequate Natural Resources in Agriculture?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>III. The Structure of Chilean Agriculture</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Concentration of Control over Land</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Historic Development of Chile's Agrarian Structure</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. The Organization of Chilean Agriculture Today</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. Labor and the Landlord</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. The Inquilino</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. The Mediero</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Fundo Organization</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>e. Discrimination Against Rural Labor</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1) Educational System</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2) Labor Organizations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>f. The Resultant Social System</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IV. Change: Analysis, Predictions, and Precursors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>V. Economists' Interest in the Structure of</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chilean Agriculture</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Can New Colonists Meet Their Debt Payment?
9. How Does Present Income of Colonists Differ From That in Their Position Before the Reform?

VI. Future Plans ........................................... 130
VII. Summary: Los Silos ................................. 133

CHAPTER IV

LAS PATAGUAS DE PICHIDEGUA ......................... 136-174

I. Characteristics of O'Higgins Province ............ 138
II. The Technical Committee's Plan for Las Pataguas . 139
III. Choosing the Colonists ............................. 139
IV. The Parcelization: Its Costs ....................... 143
V. The First Year of Reform ............................ 149
VI. Method of Gathering Field Data .................... 151
VII. Can Colonists Pay their Debts? ................. 151

1. A Case
2. Income and Surplus: Las Pataguas Colonists, 1963-64

VIII. Have Colonists' Levels of Living Risen? ....... 159
IX. Possibilities of Raising Net Income ............. 163

1. A Measurement of Production Potential
2. Cutting Expenses
3. Fertilizer: A Necessary Expense

X. Problems and Progress of the Cooperative: 1963-64 169

1. Early Independence of Members
2. Social Division
3. Supervised Credit Plan
4. Organizational Problems
XI. Summary: Las Pataguas

CHAPTER V

ALTO LAS CRUCES AND SAN DIONISIO

I. Colonist Selection

II. Parcelization

1. Irrigation Problems: Alto Las Cruces
2. The Villorrio: Alto Las Cruces
3. Total Infrastructure: Alto Las Cruces
4. Plans for San Dionisio

III. Tenure System: San Dionisio and Alto Las Cruces: 1963-64

IV. San Dionisio: 1963-64

1. Can Colonists Pay Their Debts?
   a. A Case
   b. Income and Surplus: San Dionisio Colonists, 1963-64
   c. How Did Members Spend Their Surplus?
2. Change in Income Under the Reform: A Comparison
3. Change in Production Under Reform and Possibilities of Raising Net Income
   a. Reconstructed Farming Program: 1962-63
   b. Production Potential
   c. Cutting Expenses
4. The San Dionisio Cooperative: 1963-64
   a. Education on San Dionisio
   b. Protest Activity of the Coop
   c. Internal Growth
   d. Political Agitation Countered by the Cooperative
   e. Summary: The Cooperative in 1963-64
5. Tenure Structure on San Dionisio: 1964-65

V. Alto Las Cruces
CHAPTER VI

THE GOVERNMENT COLONIZATION PROJECT: A PERSPECTIVE AND PRESENT PROGRAMS ........................................... 225-270

I. Historical Development of Government Colonization Programs ........................................... 226

II. Accomplishments of the Caja de Colonización Agrícola ........................................... 231

III. Inquilinos-Medieros as Parcel Holders ............... 232

1. Methodology and Sample Choice
2. Classification of Land Tenure Systems on Thirty Selected Parcels
3. Income on Thirty Selected Parcels
4. Principal Problems of Inquilino-Medieros as Parcel Holders
   a. Extensive Land Use
   b. Lack of Use of Conventional Inputs and Working Capital
   c. Lack of Technical Help
   d. Lack of Cooperative Organization

IV. Recent Land Reform Legislation in Chile .......... 255

V. Scope of Recent Government Parcelization .......... 264

CHAPTER VII

In Conclusion ................................................................. 271-291

I. Types of Economic Organization for Reform ........ 271

II. Campesino Organization: An Important Factor in Reform ........................................... 278

III. Economic Components of Reform ...................... 284
IV. The Importance of Developing Entrepreneurship to Reform's Success ....................... 286

V. Large Scale or Across-the Board Reform vs. Isolated Efforts ............................. 287

VI. Private vs. Government Reform ......................................................... 289

VII. Reform: An Integral Part of Development ............................................. 290

BIBLIOGRAPHY ....................................................................................... 292

LIST OF TABLES

CHAPTER IV

I: Point System - Las Pataguas ........................................................... 140
II: Calculation of Net Cash Income .................................................. 153
III: Surplus or Deficit Among a Selected Sample of Las Pataguas Colonists 1963-64 .......... 156
IV: Comparative Income Before and After the Reform: Las Pataguas ......................... 161

CHAPTER V

I: Calculation of Net Income for One Case on San Dionisio 1963-64 ......................... 191-192
II: Surplus or Deficit Among a Selected Sample of San Dionisio Colonists 1963-64 .......... 195
III: Surplus or Deficit Among a Selected Sample of Alto Las Cruces Colonists 1963-64 .......... 216

LIST OF DIAGRAMS

CHAPTER I

I: Relief Map of Chile ................................................................. 7
II: Chile's Climate Types and Agricultural Regions ........................................ 8

CHAPTER II

I: INPROA Fundos Under Reform .................................................. 80
II: Original Organization Plan for INPROA, as of November 26, 1963 ................. 81
III: Current Organization Plan--INPROA, as of November 1, 1964 ......................... 83

CHAPTER III
I: Organization Chart of the Los Silos Campesino Cooperative ............................ 97

CHAPTER V
I: The Parcelization Plan of Alto Las Cruces .... 184
CHAPTER I
A BRIEF INTRODUCTION TO CHILEAN AGRICULTURE

The encomienda and the hacienda built up an aristocracy which, once the government of Spain was overthrown, stepped into the place vacated by the representatives of the crown and set up a new government in harmony with the existing social order. The common people took virtually no part.

-- Benjamín Subercaseaux--Chile: A Geographic Extravaganza (Chile: Una Loca Geografía).

On November 3, 1964, when Eduardo Frei began his term as the thirty-eighth President of Chile, he admitted, "The situation of the country cannot be more dramatic." In addition to noting that there are heavy interest payments on external debts due and a growing rate of inflation, he stated, "The nation ought to be told that there is not a single cent in the national treasury to meet November and December payrolls."

Frei's campaign was predicated on regenerating his country's stagnant economy. It was no accident that his platform gave a central role to a thorough rejuvenation of the agricultural sector.

The State of the Agricultural Sector in Chile

There are indications that the plight of agriculture is becoming worse with each passing year:
1. Agricultural productivity cannot keep up with demand, and the sector is contributing less and less to gross national product even though the number of people engaged in agriculture has remained fairly constant. In 1952, 30.1 percent of the active population was engaged in agriculture. By 1960 this percentage had dropped to 27.5 while, in absolute terms, almost the same number of people were employed as at the beginning of the 50's.\(^1\) In 1952 about 18 percent of the gross national product of the country came from agriculture. But by 1960 the sector's percentage share in the gross national product had fallen to 12 or about six percent under its 1952 level.\(^2\) Although this could indicate an economy in which other sectors are growing rapidly, in Chile this is not the case.

It is extremely difficult to show how much the agricultural sector has lagged, since statistics and measurements of growth vary widely. One of the most reliable sources of information is probably the Inter-American Committee for Agricultural Development which has cited the Ministry of Agriculture and Corporación de Fomento de la Producción as the source for its conclusion.

\(^1\) The percentage of total population classified rural in 1950 was 41.3 while the total population classified rural in 1960 was 34.7. (Source: Johannes L. Sadie, *Población y Mano de Obra en Chile, 1930-75*, CORFO/CELADE, Santiago, 1962, p. 17.) There were 648,000 people engaged in agriculture in 1952 (active population); the same number was engaged in agriculture in 1960. (Source: Ministerio de Agricultura, *La Agricultura Chilena en el Quinquenio 1956-1960*, 1963, Cuadro 4, p. 8.)

"During the 15 years from 1945 to 1959 the cumulative annual rate of growth of the agricultural sector was 1.8 percent while population growth was 2.2 percent."^3/

Assessing the five years from 1955 to 1960 the Ministry of Agriculture states, ". . . while the population of the country grew by 2.7 percent . . . agricultural production grew by 2.29 percent."^4/

During the six year period from 1958 to 1963 gross national product grew by an average of 3.1 percent each year,^5/ indicating that GNP is--just barely--keeping up with population increase. Agricultural production, however, reached a peak of E$510 million in 1960 and, from 1960 to 1963 dropped off at an average of 2.3 percent a year totalling only E$475 million in 1963. All other sectors showed a small average rise during this period.^6/

---

^3/The Inter-American Committee for Agricultural Development, called Comité Interamericano de Desarrollo Agrícola (CIDA) in Spanish, surveyed land tenure forms in selected countries of Latin America in 1962 and 1963. This project, which now is undoubtedly the most complete statement of land tenure forms in Latin America, was jointly sponsored by the Organization of American States, the Inter-American Development Bank, the Economic Commission for Latin America, the Food and Agriculture Organization of the United Nations, and the Inter-American Committee for Agricultural Sciences. The preliminary draft report on Chile, Estudio Sobre la Tenencia de la Tierra en Chile, (mimeographed), Santiago, 1964, 641 pages, will hereinafter be cited in this monograph as "CIDA borrador." CIDA borrador, Chile, p. 45.

^4/Ministerio de Agricultura, op. cit., p. 3.

^5/Corporación de Fomento de la Producción, Dirección de Planificación, op. cit., p. 17. All figures were expressed in 1961 escudos prior to making this calculation. GNP in 1958 was E$4,172 million while in 1963 it had risen to E$5,117 million.

^6/Ibid., p. 17. These figures are also expressed in escudos of 1961.
2. In addition to undoubtedly adding to the country's high rate of inflation,² growth in internal demand working against an inelastic food supply adds to Chile's chronic balance of payments difficulties. Agriculture has not shown a positive export surplus since 1939. From 1935 to 1939 annual net surplus of agricultural products in foreign trade was US$11.8 million. From 1953 to 1957 annual net deficit of agricultural products in foreign trade was US$67.8 million. From 1958 to 1963 annual net deficit has averaged US$82.9 million.

The "drag" agriculture has placed on the economy of Chile has been steadily growing. In 1958, 21.9 percent of all Chile's imports and only ten percent of her exports were attributable to agricultural produce, a deficit of 11.9 percent. This percentage deficit had grown to 19 in 1963 when 25.2 percent of Chile's imports and 6.2 percent of her exports came from agricultural produce.³

These indicators--low and decreasing percent of agriculture's contribution to the gross national product, recent absolute drops in the productivity of the sector, inability of agricultural productivity to keep up with demand, and increasing deficits of agriculture in foreign trade--show that the sector is performing

---


³/ Calculated from Ministerio de Agricultura, Sinopsis de la Agricultura Chilena 1961-1963, (Mimeographed), Santiago, August 1964, Cuadro 10, p. 23.
inadequately, probably helping to prevent both stability and development.

Is Chile Capable of a Dynamic Agriculture?

Perhaps Chile has an inadequate natural resource base and for this reason is unable to produce enough food for her growing population. Although a relatively small part of the country is arable, this does not seem to be the case.

Chile's Agricultural Geography

Chile extends for some 2,630 miles along the southwest coast of Latin America. It averages a width of 110 miles and at no place is its eastern frontier more than 250 miles from its western boundary at the Pacific Ocean.

The geographic framework of the country is composed of three north and south roughly parallel units: the Andes on the east, which gradually decrease in height from north to south; the central plateau of the west; and a central depression running between the two (Diagram I). It is this latter area which, in the middle provinces, is the agricultural heart of the nation—the area of greatest agricultural productivity and highest potential. Santiago, the country's capital, is located here, and middle Chile, between the mountain ranges, is the area of greatest population density. Of this area, Butland states:

"This Mediterranean region, particularly the central valley component of it, is the most typical Chilean region. It was from the earliest days of European settlement the nucleus of the nation-to-be, enclosed in its sixteenth-century formative period by desert, ocean, mountain, and forest, fertile in its lands, and blessed with a climate familiar to its Spanish
colonists, and favourable to human settlement and progress. For over three centuries this earth-region was Chile for all practical purposes, and the ribbon has only grown northward and southward in the last 70 years, until the expansive process has stretched well beyond the tropic end to the last habitable rocks of the continent."\(^2\)

James comments:

"The most distinctive feature of middle Chile is the climate. Between Coquimbo at latitude 30° S. and Concepción south of latitude 36° S. there is a transition between the desert of the north and the continuously rainy lands to the south. This is a climate of mild, wet winters and cool, dry summers, to which the name 'Mediterranean' is commonly applied."\(^10\)

It is its Mediterranean climate—which implies little or no rainfall in the growing season—that makes irrigation an important component of Chile's agriculture (Diagram II). In summer the melting snows in the Andes fill rivers which run to the sea at roughly right angles to the central basin. Water is undoubtedly as valuable as land itself. Without irrigation, most of central Chile would be almost as barren as the northern desert, which is cut only occasionally by a river and contains one of the driest areas of the world.

From one half to one third of middle Chile is not taken up with mountains and plateaus and is usable for agriculture. Between Santiago and Concepción the inter-mountain basin is more or less continuous. Further north the valley of the Aconcagua


RELIEF MAP OF CHILE

LEGEND

OVER 10,000 FEET.
600 TO 10,000 FEET.
UNDER 600 FEET.

SOURCE: CIDA.
Diagram II

CHILE

Climate Types

- Undifferentiated Highlands
- Desert
- Steppe
- Mediterranean

Agricultural Regions

- Mediterranean Agriculture (Horticulture Dominant)
- Crop and Livestock Farming (Commercial Type)
- Livestock Ranching

Source: CIDA.
River is cut off from the valley of the Mapocho, where Santiago is located, by a mountain spur. Other spurs divide off rich areas of middle Chile from the main basin.

In the third of the country south of the Bio Bio River (the usual line of demarcation between middle and southern Chile), an area of crop and livestock farming gives way to hardwood forests, which are most dense at the level of the Island of Chiloé. Further south, the archipelagic zone followed by range land appears. The climate in this area becomes progressively more harsh as one nears the Straits of Magellan. Agriculture in this entire southern area is not nearly as important as it is in middle Chile.

Are There Adequate Natural Resources in Agriculture?

Is the relatively small amount of farm land in Chile, usually estimated at about thirty-eight percent of its total area, enough to support agriculture at higher than its present stagnation levels? Considering only natural resources, would it be possible to convert agriculture into a positive force for Chile's economic development?

Although a precisely quantifiable response is impossible, nearly every commentator on the Chilean scene has felt that both questions should be answered affirmatively:

"The level of agricultural development in Chile is so low that to raise it should not be difficult. Chile has an adequate resource base in agriculture if not compared with the United States. It has an abundance of arable land per inhabitant when compared with other areas of the world including most of the western hemisphere."\(^{11}\)

Bray, likewise, has concluded:

"Moreover, the natural resource endowment of the country seems to be adequate to support a population much larger than the present 7.5 million and at higher levels of living."\(^{12}\)

In a footnote, he continues this argument:

"The United Kingdom, for example, has a comparable area of arable land of probably poorer average quality, a less advantageous climate for agriculture and yet produces about 40 percent of the food requirements of 50 million inhabitants. This would appear to be about 3 times the volume of Chilean output, without specifying the composition of product in value terms."\(^{13}\)

Along the same lines, Kaldor states:

"There can be little doubt that the combination of natural and human resources of the country--its climate and geology, its mineral resources as well as the potential fertility of its soil, the natural vitality and intelligence of its population derived from a combination of strains of European stock which in the similar climatic but different social environment of North America produced spectacular results--are as favorable, if not more favorable, than that of the economically most developed nations of the globe."\(^{14}\)

The Chilean Corporación de Fomento de la Producción (COFRO) has asserted that "between 1945 and 1959 Chile imported farm and livestock products valued at US$1,220,000,000." Of this, it estimated that US$790,000,000 or about 65% could have been produced

---


\(^{13}\) Ibid.

\(^{14}\) Nicholas Kaldor, "Economic Problems of Chile," unpublished paper, Economic Commission for Latin America Library, Santiago, Chile.
domestically. Dorner noted that "at the 1960 level of imports, this rate of import substitution would result in an annual saving of approximately US$75,000,000. This implies an increase in production of from 15-20 percent."

There seems to be little doubt that production rises of 15 to 20 percent are perfectly feasible in the short run. Morales calculates that productivity for an area of O'Higgins Province he studied could be raised 30 to 40 percent. CIDA concluded that in the irrigated area of the country between Santiago and Cautín, 479,536 hectares or 44.1 percent of the total number of irrigated hectares--in one of Chile's richest agricultural areas--was devoted to natural pasture. It concluded that this represented under-utilization of land, "because natural pasture maintains only .5 animals per year while artificial pasture is capable of supporting from 1.5 to two animals." This says nothing about possible uses of this acreage in intensive crops for which most of the land is admirably suited.

---


18/ CIDA borrador, Chile, op. cit., p. 54.
The Structure of Chilean Agriculture

To attempt to determine reasons for agriculture's present stagnation in the face of adequate resources, we must turn to the structure of Chile's agriculture. Who owns or controls the factors of production which must be used if production is to rise? How, generally, is agriculture organized?

Concentration of Control over Land

In Chile a small group controls a large part of the land riches of the country. Sternberg notes:

"The concentration of land ownership in Chile is among the highest in the world. In 1955, 4.4 percent of Chilean landholders owned approximately 80.9 percent of the total farm land, 77.7 percent of the agricultural land, 51.5 percent of the arable land, and 43.8 percent of the irrigated land."19/

Powelson points out that in Chile there are 3,250 farms over 1,000 hectares each, making up 75 percent of the land in the country.20/

Sternberg concludes that Chile appears to have the highest degree of land concentration among countries of the Western Hemisphere.21/

Pointing up the minifundio problem, he continues:

19/Sternberg, op. cit., p. 34.


21/Sternberg, op. cit., p. 34.
"On the other end of the scale, 36.9 percent of the holdings contained roughly 0.3 percent of the total farm land, 0.3 percent of the agricultural land, and 2.3 percent of the irrigated land."²²/

The control over resources and the resultant control over laborers by a relatively small class in Chile is best illustrated by a description of the tenure system implied in the above statistics.

In Chile the traditional system of land tenure is still pretty much intact. The structure consists of a small number of very large farms, a large number of very small ones, and an increasing number of landless workers. Before we detail the organization of Chilean agriculture today, a brief description of the historic development of this system is in order.

Historic Development of Chile's Agrarian Structure

The bulk of the land in Chile with highest productivity and greatest potential is owned as haciendas or fundos. This type of farm is a large estate "...which is both a large property and a large enterprise."²³/

In the New World the latifundia of the twentieth century can be traced to several colonial institutions: encomiendas, grants of Indians on the land they occupied, and mercedes or estancias, direct grants of land. Both were given by the king, usually in

²²/Ibid.

his name by his authorized representatives in the colonies: the governor, the town council, or the conquerors themselves. Since the Spanish colonists had no intention of farming or mining personally, land grants without Indian labor were nearly worthless. For that reason some land grants were given near the encomiendas.24

In other cases, although it was legally prohibited, colonists moved Indians they had been assigned nearer their land grants.

Relationships of the encomendero with Indians in his charge were largely feudal. Indians were to have the right of peaceful occupation of their land. Their obligations or tributes usually consisted of giving up a certain amount of their produce and devoting a certain amount to labor in the mines. Encomenderos, in return, had to pay taxes, maintain bridges and roads in their domain, and be prepared for military service.25

Although encomiendas were not meant as land grants, encomenderos came to think that they owned not only the service of the Indians, but all the land they occupied. Indians, since they were accustomed to community property, did not really understand the meaning of private ownership. All they wanted was the right to work the land and collect the usufruct as before. They felt the technicalities of possession of little importance.


The crown tried to rectify the inherent abuses of this system by sending a surveyor to Chile to review all land titles in 1603. Those representing too much territory would have to return the excesses to the Indians. The crown also attempted to govern the working conditions of the native population which got subsequently worse as demand for labor increased. These efforts from Spain largely failed. Land was not returned to Indians nor were working conditions improved. The authorities in Spain were too far away, and their representatives in Chile who were beneficiaries of the new system were understandably unwilling to stem the tide.

By the time the labor laws were decreed, landless laborers were already very much a part of the system. Indeed, as McBride states:

"The colonists loudly proclaimed that they could not possibly occupy the land and maintain themselves there except by means of the forced labor of Indians. Chileans of the present day, although condemning the severity with which the first Chileans were treated by their conquerors, readily admit that only through some such method could settlements have been established and the country brought under exploitation. It was taken for granted then, and still is, that white men could never have done the work themselves, and could hardly have been expected to do so."26/

In effect, the shadow of the encomienda, "has remained as an implied system of territorial authority until the present day."27/


Even so, the encomienda system did not work as smoothly in Chile as in many other Latin American countries. Although fewer in number, the Araucanian Indians (also called "Mapuche" which is the language they speak), who occupied most of the southern part of central Chile, were much more hostile to Spanish advances than other tribes to the north. For 100 years after Pedro de Valdivia founded Santiago in 1541, the Spanish and the Araucanians were in constant warfare. Violent attacks broke out from time to time after that even though a treaty had been signed recognizing the Bio Bio River, at the southern extreme of middle Chile, as the northern limit of Mapuche territory.

Supplies of natives, who were increasingly needed as labor demands grew, diminished as they fled south to avoid persecution and slavery. Furthermore, most of the tribes of middle Chile, unlike many of the Indians of northern South America, were not accustomed to living in permanent farming villages. They lived in temporary shelters for a time, farmed a piece of land until it was depleted, and then moved on. Problems of extracting tribute from them became increasingly great as colonization proceeded. Thus the belligerence of the Araucanians, the low initial number of Indians in the central zone, and their nomadic existence tended to frustrate the encomienda in Chile.

---

When in 1791 the crown finally succeeded in abolishing the encomienda in Chile, there were few of them left. The hacienda and its subdivision known as the fundo had already evolved from the colonial institutions.

Upon legal abolition of the encomienda, another institution served to maintain large estates: entail (vinculación). The most important legal doctrine in this category was primogeniture (mayorazgo).

In Chile, as in most of Latin America, the revolution against Spain can hardly be considered a social revolution. It merely substituted creole for Spanish rule. Once independent, whether to maintain primogeniture became a major issue. The revolutionary hero Bernardo O'Higgins abolished it in 1818. This and his other attempts at reform which would have reduced the privilege of the aristocracy contributed to his downfall as leader of the new republic. Primogeniture was restored again, not to be finally done away with until laws were passed in 1852 and 1857.

Even the abolition of primogeniture did not bring about any large scale division of land. Indeed in 1880 "...the concentration of land, in one sense, was at maximum, that is, fewer people owned the land of Chile than ever before or since."29/

After 1875 and through about 1936, acreage used for agriculture doubled and irrigated acreage tripled as large estates were divided. Agriculture had been stimulated as population grew and

29/Sternberg, op. cit., p. 25.
demand increased. External demand for Chile's produce also mounted. Nitrate earnings, accruing largely to landholders who were also mine owners, seems to have resulted in some profits finding their way into increased capital in agriculture: machines and irrigation works. More and more land came into production south of the Bio Bio as, after the War of the Pacific (in which Chile earned its nitrate riches), soldiers were sent to finally pacify the Indians in that region in 1883.  

But splitting of large estates proceeded slowly. In 1934 Cox wrote:

"In respect to landholding, Chile is far from making substantial progress. In 1928 some 513 persons, less than one half of one percent of all the landholders, were reported to own 60 percent of the land in private hands; two and a half percent of all landed proprietors possessed 78 percent of the arable land." 

Besides division of haciendas into fundos, fragmentation of holdings took another form--the most important, considering numbers involved. Small pieces of what was usually poorest quality fundo land was parcelled off and sold largely to agricultural workers. Upon sale of these properties, fundo owners assured themselves of a more or less permanent labor supply for which they would have no direct maintenance responsibilities. Largely because of this creation of minifundio, an index relating the percentage of owners

---


21/ Ibid., pp. 401-402.
to the percentage of land by size of holding shows that the concentration of land increased rather than decreased through fragmentation, at least to 1954.\textsuperscript{32}

The Organization of Chilean Agriculture Today

a. Labor and the Landlord

In addition to the minifundistas\textsuperscript{33} who serve large landholders by being a ready source of labor (their own plots are frequently too small to allow them to earn a living, especially since these holdings are often subdivided with each generation), other landless groups make up the agricultural working force in Chile. Perhaps a carry over from the encomienda, from the Spanish system --or even from the Roman Empire--landholders and their families seldom work their farms personally without assistance. Indeed, they could not. Fundos are usually too large and are not "family units" in any sense of the term.

The rural labor and the landholder are divided by great social distance and economic means. The working class in Chilean agriculture makes up about 87 percent of the active agricultural population and receives about 34 percent of the income from

\textsuperscript{32}Gene Ellis Martin, \textit{La División de la Tierra en Chile Central}, Nascimento, Santiago, 1960.

\textsuperscript{33}For a description of a minifundio area see Hernán Burgos Mujica, \textit{Análisis Económico Agrícola para un Plan de Crédito Supervisado, Comuna de Navidad, Año Agrícola 1960-61}, (Investigaciones en Administración Rural No. 19, Ministerio de Agricultura, 1962).
agriculture. This is a lesser percentage than that received by working classes in Chilean cities who receive about 43 percent of the total income generated there. While the bulk of the rural laboring group—especially those with no specialized training or supervisory responsibilities—live in penury and suffer from a lack of education and social services, landlords frequently live well. Many of them apply little of their skill to their property, living most of the year in town, while technical matters are left to a trusted administrator. Land, with some exceptions of course, serves them as a hedge against inflation rather than as a factor of production.

On the demand side of the market, too, the landlord has been criticized for contributing little to Chile's economy considering his means. Aníbal Pinto Santa Cruz, noted Chilean economist, has asserted "...the demand of the landlords, like that of other upper class groups, is geared to luxury imports...The market for consumer's goods is already narrow. This element (demanding luxury goods), together with the quantitative limitation of the agricultural sector (its slowness to grow)...puts a large barrier in the path of the growth of domestic industries."

---


26/ Ibid., p. 88.
Along these lines, it was claimed by Kaldor that if the upper income groups had the same consumption pattern as their counterparts in the more advanced countries, the savings rate could be doubled.\textsuperscript{27/}

Substantiating this assertion, Sternberg, who studied a small group of Chilean landlords, found that:

"The largest landowners in the Central Valley--owning half of the land--save and invest half the percentage of their income than similar groups in the developed nations. The large landholder consumes over 60 percent of his disposable income, 75 percent of which goes for luxury consumption. "Twenty-five percent or more of his consumption expenditures are for imported products."\textsuperscript{38/}

A developing economy can depend no more on those who spend their earnings out of the country and demand domestic items with few internal multiplier effects than on those at subsistence levels. We shall turn, briefly, to the laboring groups in Chilean agriculture:

b. The Inquilino

Fundo labor is composed of efuerinos, laborers who do not live on the fundo; resident farm labor; and medieros, who may or may not live on the fundo.

Resident labor is hierarchically ranged including the inquilinos at the bottom of the scale, followed by those workers

\textsuperscript{27/} Nicholas Kaldor, "Problemos Económicos de Chile," \textit{El Trimestre Económico}, Mexico City, No. 102, April-June 1959, pp. 170-221.

\textsuperscript{38/} Sternberg, \textit{op. cit.}, p. 151.
with varying degrees of specialization or supervisory responsibility called *empleados*, all the way to the highest fundo empleado, the administrator.

The term *inquilino*, while it means "renter" in Spanish, has a very special meaning in Chile. An inquilino is a resident laborer who, in addition to a small cash wage, is given the use of a house and usually a small piece of land for growing crops of his choice. If the plot is watered, the inquilino may grow spring planted row crops such as corn, potatoes, squash, and beans collectively called *charca*. The inquilino is usually also given a small piece of land near his house (usually used for growing vegetables if it is watered) called a *cerco*. He may also receive other perquisites (*regalías*) such as several loaves of bread, a plate of cooked beans at noon, the privilege to pasture a certain number of animals, firewood, etc.

In return, inquilinos usually work all day—six days a week—on the landlord's fundo.\(^{39}\) They often work on their chacras.

\(^{39}\) There has been a tendency lately to understate the time an inquilino is required to work on the hacienda. On the farms on which I have conducted interviews, six days a week was the most common response to questions dealing with the time worked for a landlord. (Of course, this says nothing about underemployment.) United Nations, *Progress in Land Reform* E/4020/Add.2, May 14, 1965, reports on page 3 that inquilinos on Chilean haciendas normally work about 150 days a year for the landlord. Perhaps this error stems from a misinterpretation of an excellent earlier study, Ministerio de Agricultura, *Aspectos Economicos y Sociales del Inquilinaje en San Vicente de Tagua Tagua*, Santiago, 1960, which, on page 5, notes an instance of a 160 day work obligation in colonial times. (Hereinafter referred to as "Tagua Tagua Study.") CIDA uses 270 days a year as the inquilino work requirement (p. 116).
or cercos on Sundays or on some specified holidays. Frequently
grown sons of inquilinos also work, recovering a higher percentage
of their wage in cash. The inquilino himself is usually
called the obligado—the obligated one. He is responsible for
performing his work requirement himself or, in cases where his
patrón (landlord) allows it, sending a substitute.

Total minimum wages for agricultural workers—afuerinos and
resident laborers—are set each year as is the percentage of the
wage that must be paid in cash. There is every indication that,
in real terms, minimum salaries in agriculture are eroding.
Expressed in 1960 escudos, the minimum agricultural wage was
E.99 in 1953–54, while in 1960–61 it was E.62. The gap be-
tween rural and urban workers also seems to be widening. In 1965
urban workers received minimum wage adjustments up to the full
amount of the inflation in 1964—about 38 percent. Rural workers’
minimum wages were adjusted only about half as much.

It has been estimated that even if an inquilino were to spend
between 70 and 80 percent of his cash income on food, he could not
provide the minimum nutritional standards for himself and his
family.41/

Whether inquilinaje (the labor system which uses inquilinos)
is a direct descendent of the encomienda system or not is currently

---

40/Ministerio de Agricultura, La Agricultura Chilena en el
Quinquenio 1956–60, op. cit., p. 177. The part of this which
must be paid in cash is also specified by law.

41/Tagua Tagua Study, op. cit., p. 57.
an open question. Gay, a mid-nineteenth century French scholar and prolific chronicler of Chilean history, traces the inquilino to Indians who, after abolition of the encomienda, did not have the economic power to transform themselves into free agents. Preferring to work for their old masters rather than embark on the unknown, they remained on haciendas, and inquilinaje developed.  

Diego Barros, writing a few years later, agrees that inquilinaje is the last transformation of the encomienda. But he adds the fact that Indians soon became "mestisized" by intermarriage with the whites.

Current evidence seems to be on the side of Góngora, however, who claims former theories which linked inquilinaje to the encomienda were wrong. After an exhaustive study of early Jesuit records and the archives of the Real Audiencia and the Capitanía General, as well as other documents, he traces the modern day inquilino to a group of "poor Spaniards," itinerant Indians from the north (yanaconas), and others who arrived with the conquerors. Up through the conquest, this group had lived

---


44/ Mario Góngora, Origen de los Inquilinos de Chile Central, Editorial Universitaria, Santiago, 1960.
from the fruits of war. But after the conquest of Central Chile, those who wished to continue fighting had only the option of battling the fierce Mapuche Indians in rainy and forested Arauco or Valdivia. Because this alternative was unattractive, and since the demand for soldiers was now more limited than previously, the majority of this group was incorporated into the rural scene in the Central Zone. Some became hired agricultural workers. But the majority settled on "loaned" land on the extremes of large properties. They didn't need to pay a rent since land was nearly a "free good" at the time. As land values rose slightly, this settlement was encouraged since colonists could return the obligation of guarding property boundaries for the privilege of land occupancy. By the time of their establishment on the fringes of large farms, most of these people were already "mestisized." Only a very few were pure Indian. Some Negroes and mulattos were also "loaned" land.

With further settlement, land became more scarce and, hence, more valuable. More work, such as assistance at rodeos was required of renters in addition to the usual chores of vigilance. In the eighteenth century wheat trade with Peru encouraged a more intensive hacienda cropping pattern, and from Aconcagua to Colchagua, land prices jumped in value. Work obligations increased proportionally as more labor internal to the hacienda was needed.

At this time collection of cash rents also became more common. Most rents were valued in pesos, but paid in kind or work. Only on northern dry-land areas where inquilinos were especially far from the center of operations did they maintain a degree of
autonomy. In the Central Zone they became thoroughly dominated by their patróns.

During the conquest all conquerors from servants and simple soldiers, right up through the ranks, were united in military comradery. This group considered itself of much higher status than the Indian to be conquered. But, with rising land values, agrarian aristocracy soon substituted for the camaradería de la conquista. And at the end of the eighteenth century "arrendatario" and "inquilino," used interchangeably before, now had separate meanings. "Arrendatario" became any cash renter on the farm or in the city and implied a social and economic status much higher than any "inquilino."

c. The Mediero

Fundos may also employ medieros. A mediero is a sharecropper working on halves who usually farms a different plot on the fundo each year. In the central zone of Chile, medieros usually contribute all of the labor and half of the seeds, fertilizer and some other operating costs. The patrón, who owns the land, may contribute the tilled soil, the remainder of the inputs, and living expense and operating credit necessary for the mediero until the crop is harvested. Physical product is divided 50-50 so that the mediero can either sell his product elsewhere or keep it for his own use.

Management is the responsibility of the mediero even though the patrón may share in important decisions such as what crops are to be grown and quality and quantity of fertilizer. There
are many variations of this system (as there are of inquilinaje) as one moves from one part of Chile to another and even from fundo to fundo. (In Chapter V we will discuss a specific case.)

The mediero who lives outside the fundo may be migratory, accepting medias on one fundo in one year and on another in the second.

The inquilino-mediero works under this same general system but always lives on the fundo. He usually retains all of the responsibilities of an inquilino and uses mediería to supplement his income and absorb the extra labor of his family. He is often given poorest fundo land for sharecropping—land that the patrón might not ordinarily use. In general, the production of the inquilino-mediero is less oriented to the market than that of the non-resident sharecropper. While the inquilino-mediero enjoys the benefits of the social security system which covers agricultural workers, the non-resident mediero is considered an entrepreneur in his own right and doesn't have these benefits.45/

d. Fundo Organization

The fundo, because of its sheer size and high labor requirement, may be very complex in its organization. Again we admit many possible variations, but, risking some accuracy, will concentrate on describing the general organization on a typical large

---

45/Legal definitions for agricultural workers covered by social security is given in Servicio de Seguro Social, Manual de Instrucciones del SSS, 1961-62, Unidad No. 23393 en el Registro de Propiedad Intelectual de la Biblioteca Nacional, Santiago, p.11.
fundo. While labor may be supplied by afuerinos, resident laborers (who are collectively, with the exception of the obligados, called voluntarios), and outside medieros, supervision and technical help is provided by a staff of empleados. The administrator may have an assistant if the farm is especially large and/or a mayordomo mayor, through whom his orders are transmitted. On a lower level there are usually several mayordomos in charge of crops on various sectors of the fundo. On the same supervisory level as the mayordomo is the capataz, in charge of the livestock, to whom the vaqueros (cowboys) report. Mayordomos and capataces usually supervise workers in their charge from horseback.

Fundo buildings are usually centrally located, and working out of this nucleus in the farm's graneries, machine shops, storehouses, and office, may be mechanics (mecánicos), smithies (herreros), tractor drivers (tractoristas), warehouse or granery tenders (bodegueros), handimen (maestros), a bookkeeper-paymaster (cajero)—even a baker if the farm offers bread as a perquisite. The llevaro, or key-keeper, supervises the distribution of supplies.

The service staff of the patrón also works out of the central nucleus of the fundo. The patrón lives in a centrally located house frequently referred to by fundo workers deferentially in plural—"las casas." It is often at the end of a grove of eucalyptus or poplar trees and surrounded with a garden (called a parque). The patrón may hire a house-keeper, cook, gardener, and chauffer. Of course, a separate
service staff is needed if the patrón maintains another house in town.

All of the fundo empleados, as the inquilinos, are usually paid part of their salaries in kind and part in cash.

The Chilean fundo is a community in itself, perhaps more basic a social, economic, and political unit than the country village. Usually there is a school on the fundo—or on a nearby fundo. The fundo operator may pay for the school construction while the central government pays the teacher. There is often a chapel on the fundo and a priest (usually called the capellán or chaplain), paid by the patrón, may come to say Mass once or twice a month. A few fundo operators even operate their own store for the benefit of "their people" called a pulpería. A doctor and maybe even a dentist may visit the fundo regularly.

One commentator has noted:

"The hacienda is not just an agricultural property owned by an individual. The hacienda is a society, under private auspices. It is an entire system and governs the life of those attached to it from the cradle to the grave. It encompasses economics, politics, education, social activities, and industrial development."[46]

As the "company store" becomes less common on fundos this statement is becoming less true in Chile. The important point is that villages are evolving, but at a slow rate since the subsistence levels at which campesinos live discourage merchant

and professional service investment, and in-kind payments
tie workers to the economy of the fundo. Landlords generally
do not use services of villages but travel to cities instead.

In many cases workers have lived on the fundo all of their
lives. Even so, they lack economic incentives to produce more--
they usually receive the same wage whether they work hard or,
in the words of many we talked to, just "act like they are work-
ing when the mayordomo comes around."

Over the years some safeguards for fundo workers have been
built into the system which probably makes their situation a
little better than their counterparts in many other Latin Ameri-
can countries. For example, a minimum wage has been established
(albeit it is declining in real terms); a provision for paying a
percentage of the inquilino's salary in cash has been instituted
to make the system less "feudal" (paradoxically, however, with
inflation so rampant, some preference has been expressed by
inquilinos for in-kind payment); 47/ and the length of time be-
fore an unsatisfactory inquilino may be discharged has risen from
eight days 48/ to two months.

---

47/Tagua Tagua Study, op. cit., p. 20.

48/Gay, in his description of inquilinaje, notes that an
inquilino may be discharged with eight days' notice. Reported
e. Discrimination Against Rural Labor

Even so, the rural laborer, perhaps more so than his city counterpart, is up against a system that discriminates against him. The educational system is one example.

Educational System

Even though the school system has expanded lately, facilities—both private and public—are nowhere near demand. The result is that access to schooling is granted to the relatively well-off, and education has not increased social mobility nor performed a task of democratic equalization. Out of 100 students who enroll in first grade, only 30 reach secondary levels and no more than nine percent reach the university. One percent finally receive their university degree.\(^{49/}\)

Because public education is free and facilities inadequate, there is a strong pressure to fail students in year-end exams to help relieve congestion. Even when they could continue, families in lower classes are often not able to purchase the uniforms and books plus pay for transportation to the oft-times distant schools. This tendency, of course, is accentuated in rural areas where schools are further from dwellings and incomes are, on the average, lower than in town. This author has visited areas of Chile where families deny themselves breakfast and use resultant savings to pay bus fare to send their children to school.

\(^{49/}\) Osvaldo Sunkel, *Change and Frustration in Chile*, paper presented to Conference on Obstacles to Change in Latin America, Royal Institute of International Affairs, Mimeographed, February 1965, p. 37. Again, statistics vary. Sunkel's nine percent for university entrants seems a little high. Sergio Molina, Minister of Finance, thinks two percent more realistic. *Latin American Times*, October 4, 1965, p. 3.
Furthermore, city private schools--primary and secondary--offer a better education than public institutions, as a general rule. Thus, those who have means (and time to capitalize on "connections" to convince recalcitrant administrators that their children should be enrolled) are more apt to be granted admission.

To receive their high school diploma (bachillerato), and, hence, be granted admission to a university (publicly or Church supported and requiring very low tuition), all students, be they educated in private or public secondary institutions, must pass a state administered, standardized examination. Those who have been educated in private institutions are less apt to fail (or when they do, have more leisure time to make up their failure) and more apt to be able to take advantage of highly subsidized institutions of higher learning.

Those who receive highest scores on their bachillerato exam--again those who undoubtedly have been educated in private institutions--are most likely to be skimmed off by schools such as medicine, law, and engineering, professions long occupied by Chile's elite. Thus the privilege of the already rich is reinforced through the school system.

Less than two percent of university students are of working class origin and these are found in the less traditional careers. The number of working class university students who come from rural areas is miniscule.

50/ Ibid., p. 39.
Labor Organizations

Another example of discrimination is in labor organization. About 15 percent of all laborers in Chile are members of trade unions; the number of Chilean agricultural laborers that is organized is under one percent. One reason for the difference is that the Chilean labor law (Código del Trabajo) makes industrial and professional trade unionization difficult and agricultural labor organization well nigh impossible.

The dual standard finds its historic roots in the election of 1920 which put Arturo Alessandri in the presidency:

"With the election of 1920...political power in the nation as a whole passed from the rural landlords to the city. However, Alessandri was only allowed to come into office as the result of a tacit agreement that the landlords be left untouched. This meant that there would be no attempt at agrarian reform, and that the government would not allow the organization of agricultural workers into unions."51/

After a bitter congressional fight, the social laws forming the basis of the present Código were approved on September 8, 1924. With additions to date the social labor legislation was united in 1931.52/ As it is enacted by Congress and signed into law, labor legislation is amended to the Código.

Some stipulations of the labor law are common to all workers in Chile. But some key sections of the code treat only


52/ For a brief summary tracing the development of labor legislation in Chile, see Moisés Poblete Troncoso, "Cuarenta Años de Legislación Social Chilena," published in El Mercurio, September 7, 1964, p. 5.
agricultural workers. Articles 75-82 deal mainly with agricultural contracts and Articles 418-493 aim to control the organization of agricultural trade unions.\(^53\)

The major legal inhibitions against agricultural trade unions are: \(^54\)

1. Violating the International Labor Organization Convention (which Chile has signed), Article 426 states that agricultural trade unions can be organized only if all members live on the same farm. Article 431 specifically prevents federalizing several sindicatos. These provisions supercede Articles 365-366 which allow workers to unionize depending on their industry or profession. And federation for purposes of education or mutual assistance is permitted for industrial unions (Article 386).

Government and municipal workers may not unionize either/(Article 368, Regulation 1030, Section 58).

\(^{53}\)Juan Díaz Salas, Código del Trabajo, Tomo VII, comprende desde Febrero de 1954 hasta Marzo de 1956, Editorial Nascimiento, Santiago, 1956, pp. 37-40; pp. 167-185. See also Hernán Troncoso, Trade Union Freedom, Dittoed English Translation of a pamphlet originally published by Acción Sindical Chilena (ASICH) prepared for the Congreso Nacional de Abogados de Concepción, 1957, p. 1. In this publication Troncoso presents suggestions for changing the Código del Trabajo. (Hereinafter referred to as Troncoso Paper.); Tagua Tagua Study, op. cit.; United Nations Economic and Social Council, Economic Commission for Latin America, Tenth Session, Mar del Plata, Argentina, May 1963, Social Development of Latin America in the Post War Period, E/CN.12/660, April 15, 1964, p. 35. The study again points out that this double standard is part of a larger phenomenon: the social security program is poorer among rural workers, school facilities are inferior, etc. The study calls this the "marginality of the rural population" (see pp. 30-45).

\(^{54}\)The following four points were condensed by the author from the Troncoso Paper, the Tagua Tagua Study, and the Código del Trabajo, all cited previously, and personal conversation with Hernán Troncoso, Chilean labor lawyer, American Embassy, Santiago.
2. According to Article 418 the part of the statute which protects union officers from being fired without legal cause (Titles I-II-III of Book II) does not apply to agricultural workers. This is again contrary to the ILO Convention.

3. Article 433 states that agricultural trade unions may be organized on properties having more than 20 workers over 18 years of age with more than one year of consecutive service on the same farm and representing at least 40 percent of the workers on the fundo. At least ten workers must know how to read and write.

Twenty-five members are necessary before an industrial union can be organized (Article 384), but the higher number is not as exclusive as for smaller agricultural enterprises which may unionize only within the farm boundaries. In industrial unions 55 percent of the workers in the industry or enterprise must be represented in any union that is constituted (Article 385), but only the five officers need to be able to read and write (Article 376).

Referring to the above restriction to the organization of agricultural trade unions, one study concludes:

"...Two thirds of the campesinos work on fundos where there are less than 20 workers...in order to form a Sindicato de Campesinos these 20 must have more than 1 year of consecutive service on the same fundo. Permanent workers represent only a part of the total personnel on the fundo, so although during certain seasons more than 20 workers are actually working, it still is impossible to establish a sindicato. With this stipulation the workers eligible to belong to a union, which, as we have indicated, may be a third of all workers, is again
diminished. Of the 100,000 workers who might organize themselves into sindicatos, maybe one half or 50,000 are seasonal workers."\(^{55/}\)

Troncoso, a Chilean labor lawyer, noted that because of the 20 member requirement, the legal organization of labor unions is prevented on 96 percent of the fundos in the country. And provision that at least ten of the workers joining an agricultural union must be able to read and write halves the four percent of the farms on which unions can be organized. Even this assumes that all workers on fundos are over 18 years of age, which they undoubtedly are not.\(^{56/}\)

4. Right to strike (established in Book IV, Title II, Article 627) does not apply to agricultural workers (Article 469). One impediment to an agricultural strike is given in Article 470 which states that petitions of complaint can be presented only once a year and not during seeding or harvest season. The "time of seeding or harvest" is determined by zonal inspectors and cannot be less than 60 days for each. Substituting for the strike privilege given to other trade unions, Article 482 states, "If all attempts to conciliate fail a (Special Conciliation and Arbitration) Commission will arbitrate."

Government recognition of unions is dependent on a complicated procedure which probably discourages even some of those which meet all legal requirements. Legal personality is obtained

\(^{55/}\)Ibid., Tagua Tagua Study, p. 9.

\(^{56/}\)Troncoso Paper, op. cit., p. 1.
through registration and the publication of a decree signed by the Minister of Labor. This procedure has been called "one of the longest and most unnecessary procedures now operative in the Chilean Public Administration. It literally takes months to obtain official recognition."\(^{57}\)

The conclusion of both studies referred to is that the law be radically changed.\(^{58}\)

The Christian Democratic government has promised to:

"Repeal or leave without effect, the present agricultural trade union law and establish legislation which promotes free regional and national unions..."\(^{59}\)

\(^{57}\) Ibid., p. 3, Troncoso notes, "The procedure requires the presentation of an application by the union and the checking of the applications, statute and by-laws by the following offices: Regional Labor Inspection Office; the Provincial Labor Inspection Office. (Control Divisions, Provincial Inspector, Division of Social Organizations), Direction-General of Labor (Control Division, Legal Division, Division of Social Organizations, Director-General of Labor), Ministry of Labor (Control Division, Ministerial Decree of Recognition), the Ministry of Justice, (Control Division, Decree granting Legal Personality, Minister of Justice), Signature of the President of Chile, the Comptroller-General of Chile (Review of the legality of the Decrees). The return of the documents to the Unions through the same offices: Comptroller-General, Ministry of Justice, Ministry of Labor, etc. to the Regional Labor Inspection Office. The file is transmitted by regular mail throughout the process (see Regulation 1030, Article 21). What makes this procedure obsolete and superfluous is that application, statutes and by-laws are copied verbatim and sent from one office to the other, it is impossible to explain the need for all this procedural review."

\(^{58}\) Ibid., pp. 4-11; Tagua Tagua Study, \textit{op. cit.}, p. 10.

\(^{59}\) Partido Democrata Cristiano, \textit{El Libro de la Tierra; Movimiento Nacional de Liberación Campesina}, 1964, p. 23.
It is too early to tell whether the Christian Democrats will be able to live up to their promise. But after the Presidential elections the government made it clear that all petitions of complaint on such matters as landlords who were not paying minimum wages would be heard by the local representatives of the Minister of Labor, regardless of the state of the law. Previous functionaries of the Ministry merely turned a deaf ear when they found that complaints were emanating from an illegal but de facto union.

Factors other than the oppressive nature of the law have been responsible for campesino group movements not being effective in Chile while they seem to have been in Mexico, Bolivia, Cuba, and even Venezuela.  

Undoubtedly the heterogeneous nature of agriculture, coupled with the stratified social structure, has been importantly responsible. It should be recognized that differing interests of laborers stem from their varied land tenure status. This fact will always make their agreement on specific agricultural policies difficult.

But if the Código del Trabajo were changed, at least the first step toward correcting the inequities that rural labor currently faces could be taken.

As we have seen, legislation, made or substantially influenced by landlords, is calculated to reduce trade unions to

---

"Isolated bodies which represent neither an occupational force nor a weapon to defend the interests of the rural workers."\(^{61}\) 

f. The Resultant Social System

Even though the patrón delegates responsibilities, it is he who holds the power in the system. This relationship, a landlord with "his people," is the epitomy of paternalism. (On a national level this is manifest as "state paternalism."\(^{62}\)) The patrón protects but also dominates and makes decisions. The labor supply is held to the fundo by lack of alternative opportunities, education, and tradition.

It is this system that has stamped itself indelibly upon the society of Chile, its laws, and its institutions.\(^{63}\) Even the growing middle class in the cities seems firmly committed to this two class society. The middle class—salaried and white

---


collar workers, professionals, government workers, and others—
does not seem to act as if it had a common, identified interest
as a class. The majority in this group seems to aspire to and
identify with the upper class. As such, the middle elements do
not perform the functions a similar class served in nineteenth
century Europe or North America. They have not spearheaded re-
forms which would tend to draw the rural or urban lower class in-
to the greater society. Rather, allied with the upper class,
they have favored the status quo.

Pike carries this point further, asserting:

"Frequently, middle groups have committed themselves
more passionately than the upper to preserving the
gulf between those who guide and benefit from the
course of natural development, and those who are
supposed to accept and suffer from it with resig-
nation." 64/

In an article quoting some Chilean scholars, Pike and Bray
note:

"Jorge Gustavo Silva observes: "...in whatever pro-
fession they enter, middle class elements seek to
obscure their humble origins and to convert themselves,
even at the risk of appearing ridiculous, into aristo-
crats and oligarchs" ("Nuestra Evolución Político-
Social," 1931, p. 100). The reknown Chilean novelist,
Pedro Prado ("Un Juez Rural," "Alsino," etc.) is
noted for his anti-middle class sentiments, arising
from convictions that this class has turned on the
humbler elements of Chilean society. Nearly every
Chilean author, in fact, who has concerned himself
with middle class-upper class relations has detected
the same tendency." 65/

64/ Fredrick B. Pike, op. cit., Introduction, pp. XXII-XXIII.

65/ Fredrick B. Pike and Donald W. Bray, "A Vista of
Catastrophe: The Future of United States-Chilean Relations,"
Change: Analysis, Predictions, and Precursors

That the structure we have briefly described must and will change has been postulated again and again. In a letter to Francisco Bilbao, Santiago Arocs said, as early as 1852:

"In order to make our country prosperous, it is necessary to first improve the situation of the people by giving human status to those who now work as if they were farm tools for the powerful landlords."66/

McBride, writing about three decades ago, saw reform as imminent:

"No superficial reforms can long retard the movement. Only a fundamental modification of the hacienda-inquilino system seems capable of saving the country ... change is inevitable."67/

In 1945 Ellsworth added:

"The chief obstacle (to agricultural development) appears to be the influence of the easy-going tradition of the hacienda, which continues to dominate farming in the most productive area of the country. This obstacle is gradually being worn down... Progress, however, is very slow and it is doubtful if it can become sufficiently rapid without great changes in Chile's landholding system."68/

Still, however, there was no basic change, and more recently Pike has noted:


"Why has the situation in Chile become so critical? Basically, I think that the reason is that Chile has clung to a set of values associated with a rapidly disappearing way of life. The cardinal feature of this way of life is a socio-political structure based on paternalism and on the perpetual existence of a participating, privileged minority that is served by a non-participating, non-privileged majority."69/

Contemporary Chilean intellectuals are not without participation in the discussion which, as Keller realizes, has political implications:

"Until 1958 the fundo and hacienda workers had always voted for the candidates which their patrons had chosen for them and these workers were always considered part of the inventory of the latifundia that would assume the politics of the landowner. In 1958, however, there was a rebellion of campesinos who voted against the candidate of the patrons for the candidate of the extreme left. Because of this, the latifundia in Chile has been transformed into a political problem."70/

In the 1964 presidential elections an even higher percentage of the voters than in 1958 opted for the extreme left. By this time, however, as we shall see in the next chapter, the entire political spectrum seems to have moved leftward. This seems to indicate that although the staying power of the privileged class in Chile has been consistently underestimated, its power may be eroding. That many have enunciated the necessity of change that has not come about, seems to indicate again that reform of traditional institutions is not initially a social or economic question, but one of power. Structure will change only

69/ Pike, op. cit., Introduction, p. xx1.

when the equilibrium alters sufficiently to allow it: when the force of those demanding change over-rides the pressure of those holding to the status quo. As Warriner has said, reform is, in its initial stages, a political matter and not a question for experts who would "advise it into existence." 71/

In Chile pressures for reform continue to mount as egalitarian ideas, demands for new merchandise, and drives for social and economic development, that take many forms, penetrate to the lower class. This class in Chile is growing numerically and, despite impediments, is becoming more organized in the process. Of course, the privileged class, too, is articulating its plans for reform. But its programs, deliberately designed to move slowly, are becoming more and more unacceptable to the "non-participating, non-privileged majority." In the face of these pressures and from what we know about what happens in social revolution, one is forced to conclude that, "either the system will be altered by 'relatively' orderly means (which will necessarily involve compulsion, some loss of property, and quite possibly some violence), or the system will be changed by mass violence and complete disruption of order...." 72/

The purpose of this paper, however, is not to document political forces which mold reform, but to discover some of


72/ Dorner and Thiesenhusen, op. cit., p. 1098.
reform's economic components. For while political power is important initially, at the moment of reform, the issue is transformed into a primarily economic and social matter.

Economists' Interest in the Structure of Chilean Agriculture

The general discussion on land reform, a subject long relegated to other social scientists, picked up more economist advocates in the decade of the 50's.\(^{23/}\) This discussion gathered steam after the Charter of Punta del Este in 1961 which made Alliance for Progress aid to Latin America dependent on the country in question effecting an agrarian reform program.

In Chile a substantial number of economists became interested in land reform by way of a phenomenon that has plagued Chile since approximately the mid-nineteenth century—inflation. Although inflation there has long been chronic, its rises and swells have become legend. In discussing the Chilean case, Hirschman has likened inflation to a drought: when it reaches a certain degree of intensity, "a strong compulsion to do something is felt and results in a spate of decision making."\(^{24/}\) To cope with these periods of special intensity a long series of foreign advisors have been called in beginning with Courcelle-Seneuil, the French economist, who advised the Chilean


\(^{24/}\) Hirschman, op. cit., p. 161. See his chapter "Inflation in Chile," pp. 159-223.
minister of finance from 1855 to 1863. Other US and UN counsel was requested in subsequent years, and when it appeared that inflation had "run away" in 1954 and 1955 (it reached 71 and 84 percent respectively), the American Klein-Saks mission was summoned. All policies recommended by these foreign counselors tended to utilize the same monetary "tools"—fiscal, credit, foreign exchange, wage-price, and social security measures. The entry upon the scene of the Klein-Saks group broke a deadlock between President Ibañez and the Congress, and the legislature accepted its recommendations: a 1956 wage and salary adjustment to only 50 percent of the amount of the inflation in 1955 (rather than the customary 100 percent), tighter credit restrictions (on which inflation control policy has long rested in Chile), and a revision of the foreign exchange system.

These measures had already been recommended by Chileans, however, and the Klein-Saks group merely served as a device permitting the contending groups who were requesting wage and salary adjustments "to evade once again (as they had many times in the past) their responsibility to hammer out a workable compromise" among themselves to solve inflation. The mission's recommendations did help curb runaway inflation as 1956-1957 cost of living increases were only 38 and 17 percent respectively. But inflation was arrested only by paying a high price—the economy stagnated and per capita income declined. As a result, the Klein-Saks mission was widely written off as a failure, and some

25/Ibid., p. 209.
economists began to give more currency to other explanations for the economic malaise of the country that had found expression—but not much support—as early as the 1940's. The resultant method of analysis, widely known as the "structuralist" school (counterposed for argumentative purposes against the "monetarist" school), placed the blame for inflation not on impotent monetary procedures, but on the land tenure system and other monopolistic economic institutions. Furthermore, it placed economic development and not the curbing of inflation as the higher desideratum. Monetary measures had their place in structuralist reasoning—but would be effective only after certain monopolistic bottlenecks were broken.

Thus land reform comes into structuralist reasoning through the "back door," not through its proven strengths, but through the already cited defects of the present agricultural system which does not supply the growing economy with enough food and brakes economic development.

Reasoning of the "structuralists" proceeds from the supply rather than the demand side of the market, giving them kinship with economists who prefer "cost-push" to "demand-pull" explanations for inflation in developed countries. Because of the inelasticity of supply of agricultural products, there is a perpetual upward pressure on import and food prices. These, respectively, raise domestic costs and set off wage demands. Oligopoly pricing facilitates the upward movement of prices, and a general rise of the cost-price level results. Felix and
Grunwald\textsuperscript{26} have shown this process in more detail and both agree that although structuralist policy recommendations are not altogether clear, monetary solutions are not sufficient. At the very least, some method must be found to revitalize the agricultural sector.

That this cannot be done without incurring costs is obvious—there is presently no public land in Chile that can cheaply be brought into production. The solution seems to lie in bringing under-utilized land into greater production by releasing it from the grips of the hacienda system. At the same time that supply problems are being rectified, demand for internal products will theoretically be increased and demands for foreign luxury goods will be reduced. Monetary policies applied before institutions are altered may tend to reinforce the traditional structure by adding to the incomes of the already rich. A succinct summary of the position of the structuralists is presented by Hirschman:

\textit{a.} The low productivity of agriculture and its lack of response to economic incentives (are) due to the latifundio pattern of ownership; as a result, industrialization and urbanization lead to rising food prices.

\textit{b.} The tendency to a deterioration in the terms of trade, which derives from the fact that the demand for imports (of equipment, semi-manufactures and

food) increases faster in a country like Chile as development proceeds than does foreign demand for its exports; this results in a tendency for the price of imported goods to rise, usually as a result of devaluation.

"c. Sometimes, the uneven distribution of income is designated as a further structural factor. It is argued that, instead of leading to higher labor savings and investment, this distribution leads to continuous pressures against two critical shortage areas: food consumption on the part of the bulk of the population and foreign exchange demands on the part of Latin America's rich with their weak stay-or-reinvest-at-home propensities."

We have shown the economic difficulties of agriculture in Chile which seem to jibe with the ills of the economy the structuralists describe. In addition to low productivity, we have described monopoly or "uneven distribution of income elements" which characterize Chilean agriculture. As we have seen, in Chile this concentration manifests itself in ownership over property and control of the workers that supply labor for agriculture.

Though some see this situation being solved without a basic alteration in institutions by relying on price incentives and other policies applicable when wealth is more evenly divided, wealth is not evenly divided in Chile. The agricultural means of production are owned by a few who even

---
monopolize the labor supply. The society this relationship has established seems to have stamped the remainder of Chile with the same mold. This leads us not only to the position that pressures for agrarian or land reform\(^{78}\) are becoming stronger, but that a reform, meaning the redistribution of economic and political power through a reordering of the rights to the use of resources, may be necessary if Chile is to develop.

Plan of Study

This paper is designed to show what happens when reform occurs, understanding that the probability of occurrence on a wide scale is constantly becoming greater.

While the traditional society in Chile remains little changed, there are some isolated but interesting experiments in land reform taking place. In this monograph we will analyze some of them to determine what problems confront the reform institutions and new colonists who have been given land. This approach assumes that the political decision to reform has been taken—which, indeed, it has on the experiments we will describe.

Even though reform is not a matter for technicians to propose and declare, technicians will have to cope with reform once it arrives. And it will fall to them to recommend and make

---

\(^{78}\) Sometimes "agrarian reform" and "land reform" are given different connotations. Agrarian reform becomes, then, the more "integral" concept including credit, extension, etc. as well as a change in property rights. See Philip M. Raup, "The Role of Research in Agrarian Reform," Agrarian Reform and Economic Growth in Developing Countries, USDA, Economic Research Service, Washington, March 1962, p. 52. In this monograph the terms will be used interchangeably as they are in Spanish where "reforma agraria" covers both concepts.
plans. The political power capable of reform in no wise guarantees its success. At the moment of reform all the problems of creating viable new institutions to take the place of the old ones remain.

Even though we will be describing land reform experiments in a traditional society, we are not arguing that all the problems encountered and to be described might come to pass if reform should occur across the board. But neither will they all be irrelevant. And the Alliance for Progress and all land reform programs in yet traditional societies in Latin America argue that reform across the board—as in the Mexican, Bolivian, and Cuban cases—is not the only way reform can happen.

While planned colonization on purchased fundos as a means to redistribute land has a long history as a policy of the government of Chile, dating from the creation of the Caja de Colonización Agrícola in 1928, relatively little land was given out. What land has been distributed went largely to people who could not have been classified landless laborers by any stretch of the imagination.

Lately, however, with the reorganization of the Caja into the Corporación de Reforma Agraria (CORA) in 1962 and the subsequent victories of the Christian Democrats, more landless laborers are coming into possession of their own land.

Also established in the early sixties was the program of redistribution of some Church owned fundos in Chile. The agency carrying out this reform has come to be known as the Instituto de Promoción Agraria (INPROA).
This paper will study four cases of reformed fundos under the Instituto de Promoción Agraria and, later, to attempt to gain perspective, will focus on the present living conditions of selected cases of former landless laborers who received land 12 or more years ago under the program of the Caja de Colonización Agrícola.
CHAPTER II

THE INTEREST OF THE CHILEAN CHURCH IN LAND REFORM

It is not enough to assert the natural character of the right of private property, but the effective distribution among all social classes is to be insisted upon.

--Pope John XXIII
*Mater et Magistra*
(Official English Translation)

Our program operates on a small scale, but we believe it has already proven of great value. Through it, other private property owners have been encouraged to carry out similar programs...our program is assimilating training and experience that will benefit the national government--and other nations--in their plans of land use.

--Cardinal Raúl Silva Henríquez,
Archbishop of Santiago.

There was little doubt that in the establishment of land reform projects on three Church-owned fundos the liberals within Chilean Catholicism were having their say. The land reform project began when the Bishop of Talca, Manuel Larraín, turned Los Silos (Chapter III) over to a campesinos' cooperative on June 26, 1962, after having appointed a committee to handle all technical

matters of the transfer. The Archbishop of Santiago, Cardinal Raúl Silva Henríquez, soon followed suit announcing a reform project on two farms his diocese owned, Las Pataguas (Chapter IV) and Alto Melipilla. He also named a Technical Committee to ready the farms for reform. On June 5, 1963, the Technical Committees appointed by the prelates merged and the Instituto de Promoción Agraria (INPROA) was born.

The Church's Historic Interest in Land

Those familiar with the history of Latin America will find the Church's current interest in land reform a turn-about in official attitude. The Church, with a long history as a landowner itself and with the most influential of its faithful being landed aristocrats, was, for a matter of centuries, one of the most conservative forces in Latin America.

One researcher, speaking of the Church's interest in land in Latin America, summarized the situation:

"The clergy was an economically privileged class from the beginning. The members of it received large grants of land from the crown. Many monasteries, cathedrals and individual prelates were given encomiendas which had more or less the same history as those conferred upon laymen.

"For the erection of churches, monasteries and residences, the royal treasury furnished half the money, the encomenderos or the Spanish population in general furnished the other half, and the Indians did the work without remuneration. Ecclesiastical capital was free from taxation—legally in early days, virtually always ...From the outset (the Church) had an economic advantage over even the richest of the encomenderos, who had to build their own houses and provide their own working capital, and had not the resources of income that the clergy had. So with the immense prestige of
the Church behind them, it is not surprising that the clergy dominated the colonial era economically and politically.2/

One of the admitted objectives of the conquerors was to christianize the natives they found upon coming to the New World. This, at the time, was one of the justifications for the encomienda. Later, after the evolution of the hacienda, the Church prospered best when allied with the owners of huge landed estates instead of the new capitalist classes in cities.3/

Early Landholdings of the Church in Chile

The Jesuits, the group which dominated agriculture in colonial times, arrived in Chile in 1593. From this date they began to gather land riches about them. In colonial times the Jesuits were without a doubt the largest landholders. They became owners "...of all the land irrigated by the Mapocho," "of all the land through which the Santiago-Valparaíso railway passes," and "of all (or almost all) the province of Valparaíso."4/

Besides Jesuits, the Augustinian order had a great deal of property in the province of Talca, and Dominicans (as well as Jesuits) owned a great deal of the province of Santiago. But


the holdings of the Jesuits during colonial times were at least twice that of all other orders together.\textsuperscript{5/}

Not only were the Jesuit lands extensive, they were also rich, encompassing some of Chile's best farm land. All indications are that the Jesuits farmed well. They had sufficient tools and controlled, at the peak of their power, large numbers of Indians. Jesuits engaged in selling livestock from some of their farms and also produced wine, wheat, aguardiente, and dried fruits. They hedged against middlemen by building their own warehouses at ports and by hiring their own dispatchers in Peru. Their activities broke the monopoly of agricultural merchants in Lima, even though later in the eighteenth century, the viceroy of Peru prohibited these dealings.\textsuperscript{6/}

"In Chile...the Jesuits monopolized the meat industry, operating slaughter houses and retail stores. They even built small vessels, engaged in the manufacture of lime, pottery, and other articles, and trafficked in drugs and medicine. They possessed similar economic interests in other parts of the Americas, and their wealth increased steadily as devout followers lavished benefits upon them."\textsuperscript{7/}

\textsuperscript{5/}Files of GIDA.

\textsuperscript{6/}Juan Carlos Collarte, G.A. Palacios, P.P. Pinto, "Desarrollo Histórico de la Agricultura Chilena-Período Prehispánico-1830," Seminario en Economía Agraria, Facultad de Agronomía, Universidad de Chile, unpublished, 1961. See also Diego Barros Arana, Riquezas de los Antiguos Jesuitas de Chile, Ed. Ercilla, Santiago, 1932; Carlos Silva Cotapos, Historia Eclesiástica de Chile, Imprenta San José, Santiago, 1925; P. Francisco Enrich, Historia de la Compañía de Jesús en Chile, Barcelona, 1891. These last three references are not very specific on landholdings of the Jesuits, however.

Such favorable worldly status aroused jealousies and antagonisms not only with laymen, but among less favorably situated orders.

At the same time the Jesuits were enjoying such extreme privilege and their riches were being eyed enviously by others in the colony, a wave of anti-clerical liberalism was sweeping Europe.

Caught up in the spirit of reform, largely inspired by French liberal thought at the time, Charles III decreed the expulsion of the Jesuits from all Spanish colonies in 1767. There are no available records of Jesuit land holdings at that time in Chile, but just one of their 47 properties included 126,000 hectares.\(^8\)

While expulsion broke Jesuit monopoly powers since much of their land went up for sale, thereafter this land was not as rationally farmed. Indeed, "In Chile, their departure was attended by an almost complete revolution in the commercial life of the colony."\(^2\)

The Church never recovered its lost land wealth in Chile. After independence more land was confiscated from the Church during the government of Freire in 1824. Although some restitution was made in later more conservative governments, this was made usually in specie and not in land.\(^10\)

\(^8\) CIDA borrador, Chile, op. cit., p. 74.

\(^2\) Worchester and Schaeffer, op. cit., p. 350.

\(^10\) Files of CIDA.
Even through these setbacks, the Church remained a large
landowner with all the power and privilege over the affairs of
state which that implies. In describing the "República Liberal"
from 1861 to 1891 McBride states:

"...with the spirit of tolerance and the practical com-
mon sense characteristic of many leaders of the upper-
class Chileans, the dominant group itself introduced
more liberal features into their government. There was
always, it was true, an obstinate inner circle, jealous
of their 'privilegios de la cuna' (privileges of the
well-born) which opposed every measure tending toward
a lessening of their grip on the affairs of state. Side
by side with such ultraconservatives always stood the
hierarchy of the Church. Clerical bodies were themselves
great landlords. Some of the richest of Chilean
haciendas belonged to these organizations, and the
Church held mortgages on many other great properties.
These two groups constituted the most solidly united
single interest in the country."\[11\]

While anti-clericalism in Chile never went as far in Chile
as in Mexico and Guatemala, where the Church may own no property
except for that strictly needed for religious services, Church
power was held in check in Chile by rather strong anti-Church
groups which gained strength during the last of the nineteenth
and the first quarter of the twentieth centuries.

The New Attitude

After a long period of political controversy, a law of
Church-state separation was passed in 1925 with the approval of
the Chilean hierarchy. In this separation the Church retained
its properties and full control over its schools.

"It became an independent entity within the state,
which abandoned the important prerogative of

\[11\] George McCutcheon McBride, Chile: Land and Society,
American Geographic Society, 1936, pp. 202-203.
New York,
patronage, with its implied right to interfere in the internal administration of the Church."\textsuperscript{12/}

Soon after its position in state affairs was weakened, attitudes internal to the Church began to change in Chile. This "liberalization" was a trend all over Latin America at the time:

"The opening of Catholic universities... has been indicative of a renewed interest in intellectual affairs on the part of the Church in Latin America. Likewise, it has helped to provide a new Catholic intelligentsia, which is beginning to make its weight felt... Many of these Catholic intellectuals are followers of such progressive Catholic thinkers as Henri Bergson, Francois Mauriac, and Jacques Maritain... the Church has tended to shift its emphasis from defense of the economic, social, and political status quo and of its own privileges, toward a more critical attitude toward Latin American society to which it is ministering."\textsuperscript{13/}

What has caused this change in Chile? What prompted, for example, the Church's interest in land reform and the organization of the Instituto de Promoción Agraria? It is to a brief review of these matters to which we now turn keeping in mind that INPROA is one of a whole series of small social action agencies now operating in the Chilean countryside.\textsuperscript{14/}


\footnote{\textsuperscript{13/} Alexander, \textit{op. cit.}, pp. 225-26.}

\footnote{\textsuperscript{14/} These organizations, with direct or indirect Church support, fall into educational institutions and labor movements. Those classified as educational organizations are the Instituto de Educación Rural, Acción Católica Rural, Fundaciones de Vida Rural. Labor movements include Unión de Campesinos Cristianos de Chile, Movimiento Independiente Campesino, Movimiento Nacional de Liberación Campesina, Asociación Nacional de Organizaciones Campesinas, Instituto de Capacitación Sindical y Social. These organizations are described in William C. Thiesenhusen, \textit{Experimental Programs of Land Reform in Chile}, unpublished Ph.D. thesis, University of Wisconsin, 1965. Of course, there are also a parallel group of social action agencies which operate in cities.}
The Modern "Conservative" and the "Liberal" Church

Quite basic to an understanding of social action agencies of the modern Church is the realization that the Church in Chile, as elsewhere, is not monolithic. Some churchmen would oppose—most of them tacitly—any social action program under clerical aegis; others would argue that the church has obligations to society but would not undermine the traditional position of the elite, their favor would probably encompass social action but certainly not social reform. Yet another group, most notably represented by some of the Christian Democrats in Chile, recommends, in its public pronouncements, "rejecting the old norms of social relations, as withered leaves upon dying trees" and peacefully evolving a new society which includes the masses.15/ This latter group—indeed, the latter two groups—represent new thinking since old liberal-conservative arguments within the Church were usually focused on issues like charity and not on social action and reform as such. As Pike has noted:

"In the mid-twentieth century, then, the Church has had to concern itself with the masses. More and more its prelates have begun to speak out in favor of social justice. However, as has been so true in the past, the Church is divided. Social justice has divergent meanings to different Churchmen. To one group it means preserving the stratified, closed society... On the other hand, numerous Catholics contend that the old social structure is doomed and that paternalism and charity will never suffice to keep the masses in line. They envision the emergence of genuine social pluralism in which all classes and functional interest groups will have the power to protect their essential rights and to compete on a basis of relative equality of opportunity for the advantages the nation has to offer."16/

16/Pike, Ibid., p. 22.
The Church in Social Action Agencies: Ideological Underpinnings and Current Pressures

The ideological underpinnings of social action and reform agencies supported by the Church can be traced to the end of the nineteenth century and the encyclical of Pope Leo XIII, Rerum Novarum (On the Condition of Workers), in 1891 recalled by Pope John XXIII in his own Mater et Magistra. Pope John XXIII also lauded another of his predecessors, Pope Pius XI who wrote Quadragesimo Anno (On Reconstruction of the Social Order), another liberal encyclical, in 1931.\(^{17/}\)

The work of Pope Pius XI and that of Pope Leo XIII strengthened the position of a group of Chilean Catholic liberal activists in the early 1900's. The result was the organization of numerous groups protesting against the Conservative Party (the sectarian Catholic party made up largely of landlords), like the Partido Social Sindicalista in 1932. Furthermore it caused the splintering off of the Youth of the Conservative Party (Juventud del Partido Conservador) in 1935. The roots of the Christian Democratic Party of today can be traced to this period and to

\(^{17/}\)"...To carry on its affairs community life requires varied aptitudes and diverse services, and to perform these services men are impelled most by differences in individual property holdings." (Rerum Novarum.) See Two Basic Social Encyclicals: Condition of Workers, Leo XIII, and Forty Years After, On Reconstructing Social Order, Pius XI, New York, 1943; quoted in Great Political Thinkers, Plato to the Present by William Ebenstein, Rinehart and Company, Inc., 1951, pp. 838-9.
this group of liberal Catholics. 18/

In Mater et Magistra, Pope John said in 1961:

"It is not enough to assert the natural character of the right of private property, but the effective distribution among all social classes is to be insisted upon. Rural workers should feel a sense of solidarity with one another, and should unite to form cooperatives, ... if they are to defend their products... The rural workers engaged in improving the conditions of the whole agricultural world can legitimately demand that their efforts be seconded and complemented by the public authorities." 19/

The Chilean bishops had quickly followed Mater et Magistra with a pastoral letter of their own the Sunday after Easter, 1962, in which they announced their plans on agrarian as well as other reforms:

"Conscious as we are of the situation of the campesino and desirous of collaborating not only with the fundamental doctrine, but also with an example of a concrete program, we have agreed in plenary session to recommend the study of an eventual colonization of the agricultural properties that are the property and in the use of the hierarchy to a commission that would prepare legal,

---

18/ One must be careful of mistaking the evolution of ideas such as these for liberal pragmatism. Fredrick Pike, Chile and the United States, 1880-1962, University of Notre Dame Press, Notre Dame, Indiana, 1963, traces the interest in labor groups by the Church to early ideas expressed by Padre Alberto Hurtado, known as the "labor priest," and some of his classmates in the early 30's. He notes "...like today's Christian Democrats in Chile, Hurtado felt that social justice based on merely pragmatic considerations and lacking in theological roots was found to be inadequate. Their suspicions of the United States social system would be occasioned by their spiritually motivated distrust of pragmatism. Chilean intellectuals in general demand an overall, total philosophical position as the foundation for their attitudes toward life. United States lack of concern with broad, philosophical speculation and its dedication to pragmatism stand as imposing obstacles in the way of any attempt to justify its position among a people demanding philosophical-theological ultimates." p. 421. Pike lists sources for this conclusion also in Note 23, pp. 420-21.

19/ Pope John XXIII, Mater et Magistra, English translation, Mother and Teacher, in Social Action Digest, Volume 4, pp. 8-9.
economic, and technical antecedents to facilitate access of the campesinos to the land.20/

On Independence Day (September 18) of the same year the bishops added the pastoral El Deber Social y Político which mentioned not only agrarian structure but singled out other problems: poor housing, unemployment, low wages, illiteracy, bad diet, and government inefficiency. The bishops noted that a true Christian cannot stand in the way of change.21/ Needless to say, many Catholics on the Chilean right were rankled by these statements.

On this letter the New York Times commented:

"No sector of the Chilean community was spared from criticism as the pastoral letter ranged over a wide range of problems and attitudes...

"The letter noted that in the Chilean countryside a minority of proprietors had the greatest part of the best lands and that the majority lived in poverty...

"Despite some gains, there is general agreement here that there are gross social inequalities. But the meat of the latest message from the Church is that reforms are going entirely too slowly and that too many so-called faithful Christians in Chile are showing cold indifference to the problems of the masses that have now reached the emergency stage...

"The pastoral letter criticized those wealthy Chileans who deposited their money abroad or who spend 'enormous sums on totally useless things or amusements here' while millions were in misery."22/

20/Quoted from Vea, 5-VII-1962, p. 4.


The pastoral also hinted that this attitude was not completely inspired by the evolutionary development of the social doctrine of the Church even though this dogma did play a large part. 23/

Surely a part of the raison d'être for what eventually became INPROA, for example, was to answer far-left charges that the Church was not encouraging land reform and that a Communist-Socialist government would be more conscious of the social function of land if it gained power.

On this matter, the Times continues:

"While attacking the abuses of the liberal capitalist system, the pastoral letter also declared that it was simply impossible to cooperate with the Communist movement here. The Communists are working with various democratic parties only with the idea of using them as a stepping stone to totalitarian power, the letter said." 24/

Father Albert J. Nevins has called the Communist movement in Chile "a threat to the Church's life." 25/

During the Vatican conclave meeting in 1963 Cardinal Silva Henríquez gave an interview to L'Osservatore della Domenica saying, in part:


24/ Burks, op. cit.

"The Church in Latin America must decide and choose among the people who push for grand reforms or the people who want to conserve the current situation."

He also declared that all of Latin America "can fall under Communism by the end of this century if political and social conditions are not transformed."26/

The Church can well afford to be alarmed; the anti-Church far-left in Chile has shown accelerated growth lately.27/ The Popular Action Front (FRAF), in which the Communist Party plays a major role, polled 350,000 votes in the presidential election.


27/ In the following analysis the reader may want to keep in mind the following information: In a general right to left arrangement, the current array of the major Chilean political parties becomes: Conservative, Liberal, Radical, Christian Democrat, Socialist, and Communist. Socialists and Communists are currently allied in FRAF, the Frente de Acción Popular (Popular Action Front). Early in the Presidential campaign of 1964 the Conservatives, Liberals, and Radicals made up the Frente Democrático--The Democratic Front--but Julio Durán, their candidate, a Radical, resigned and the Conservatives and Liberals somewhat reluctantly switched their official support to Eduardo Frei, the Christian Democrat. When Durán re-entered the race, only the most loyal of Radicals continued to support him. The majority seem to have thought their vote for Durán, whose support outside the Radical Party was now nearly nil, would merely redound to the benefit of Salvador Allende, the FRAF candidate. To complicate matters, the traditional anti-clericalism of the party switched a number of other Radical votes to Allende, since they were loathe to see a Christian Democrat in power. These within-party splits make the Radical Party difficult to place on a spectrum such as the one above. Another problem with the above scheme is the location of center. Some say that the Christian Democrats, previously regarded as left-of-center, are now right-of-center since they accepted the support of the Conservatives and the Liberals during the presidential race. This question remains to be answered by an _ex post facto_ examination of policies now being enacted by the Frei government.
of 1958, losing the presidency by only 35,000 votes. In the 1961 congressional elections FRAP pushed its total to over 400,000 votes, more than enough to have given it victory two years previous and registering "a greater increase in voting strength than any other political organization." The Communists within FRAP seem to be becoming more ascendant. Pike notes:

"...in the December 1959 election for the executive committee of the Single Center of Chilean Workers (Central Unica de Trabajadores de Chile), the principal labor confederation, Socialists lost several seats, leaving the Communists in clear control of the organization that had traditionally been led by non-communist Marxists. Even more significant, in the March 1961 national congressional elections, the communist slate was supported by 154,130 voters, while the Socialist Party gained a disappointing 147,883 ballots."

The growth of the Communist Party is astounding by all measures. Indeed in 1948 it was declared illegal as President Gabriel González Videla turned against the Communists, the party which was instrumental in electing him, by enacting the "Law for Permanent Defense of Democracy" with congressional approval. The party was not legalized again until the closing days of Carlos Ibáñez's second term in 1958. González Videla and Ibáñez'

29/Nevins, op. cit.
31/Ibid., p. 263.
32/Ibid., p. 264.
controls on the Communist Party were complete enough to lead K.H. Silvert, one of the most knowledgeable commentators on the Chilean scene, to observe in 1957 (the year before the party was re-legalized):

"The tendencies can perhaps best be exemplified by the dwindling importance of the Communist Party and the growing influence of the Christian Socialist Falange. The former, who reached their heights of power in 1946 and 1947 with cabinet posts and important appointments in administrative agencies, are now an outlawed party every day falling further and further into desuetude as their ideology becomes less applicable, their primitiveness and inflexibility more obvious. As they cling ever harder to dreams of a class revolution in the United States, the 'inevitability' of the self-destruction of the 'capital forces' by international war, the necessity for a dictatorship of the proletariat in their own Chile, the realities of international politics and of the internal dynamics of Chile draw ever further from their unadjusted preconceptions. Concomitantly, their power of ideological persuasion, hitherto their most potent weapon, has become weak and comparatively ineffectual. At the same time, the Falange has moved in to conquer some of the more important persons in the universities, the trade union movement, and in many of the new and often directly or indirectly publicly sponsored industries, such as steel. This party, with its democratic political ideals, its roots in a traditional religion consistent with today's mode, and its neosocialistic economic doctrines has not grown in direct proportion as the Communists have declined, but it has demonstrated ability to fill the political needs of important policy groups and has enough popular support--even among some anti-clericals--to allow it to dream of the presidency with some justification."32/

While being quite wrong on his forecast of the growth of the Communist Party--he did not seem to foresee its re-legalization nor sense its extra-legal growth under the guise of other parties--

32/K.H. Silvert, A Political Sketch of Chilean History From 1879, American Universities Field Staff letter, West Coast South America Series, Vol. IV, No. 1, January 27, 1957, p. 4.
Silvert was correct in his assessment of the parallel growth of the National Falange, founded in 1937 by splintering off from the Conservative Party. (In 1957 the Falange changed its name to the Partido Demócrata Cristiano, the Christian Democratic Party.)

Although Eduardo Frei Montalva, the Christian Democratic candidate, came in third in the 1958 presidential elections, he did get about one third of the total votes cast. In the March 1961 congressional elections the Christian Democrat Party won some 212,000 votes. This marked the first time it surpassed the Conservative Party which obtained about 197,000 votes. As might be expected, however, the conservative wing of the Church has rebelled against the Christian Democrats and, as Pike has noted, engaged the Christian Democrats "in one of the bitterest pamphlet wars in modern Chilean history." 

The 1964 presidential election saw the Conservatives supporting the Christian Democrats after a 27 year estrangement.

---

24/ On the Christian Democratic Party, which has certainly also been aided by the growth of the European Social Christian Parties and the dropping out of rival Christian Parties within Chile see such sources as Luis Vitale, Esencia y Apariencia de la Democracia Cristiana, Arancibia Hnos., Santiago, Chile, 1964; Ricardo Boizard B., La Democracia Cristiana en Chile, Editorial Orbe, Santiago, Chile, 1963; Congresos Internacionales Demócrata-Cristianos, Editorial del Pacífico, Santiago, Chile, 1958; Jaime Castillo V., Las Fuentes de la Democracia Cristiana, Editorial del Pacífico, Santiago, Chile, 1963.


26/ Ibid., Pike, p. 260. See especially note 19, p. 422 for a listing of some of these publications.
Time will tell what effect these unlikely bedfellows will have on the Christian Democratic government of Eduardo Frei.

By 1964 the number of voters had doubled, due to new enfranchisement, population growth, and voting procedures which made it more necessary for eligible voters to register. Predicated on a strong campaign of anti-Communism, but left of center reforms, the number of votes for Frei approximately tripled in 1964. However, a comparison is more fairly made in relative terms. The number of votes for Jorge Alessandri (who won) and Frei in the 1958 elections included about 52 percent of the total vote. In 1964 the vote for Frei totalled about 55.6 percent. The March 1965 congressional elections gave Frei the mandate he requested: an absolute majority in the lower house, eight seats above the outright majority in a total of 147 Chamber seats. Furthermore, all 12 CD Senate candidates were elected. This vote seemed to undermine those who thought Frei had won the presidency only with the aid of rightist votes. The CD's captured between 40 to 45 percent of the popular vote.

The Communist Party within FRAP did not lose ground, however. The percentage of the vote it captured grew from 11 in 1961 to 11.8 percent in the 1965 congressional election. In presidential elections FRAP grew from about 350,000 votes in 1958 to about 975,500 votes in 1964, more than keeping up with the doubled vote. Relatively, FRAP's share of total votes in
1958 was about 25 percent of all votes cast; in 1964 its share had grown to 38.5 percent.\textsuperscript{37}

Although this is not the place for a detailed analysis of the Church's changes to meet these new challenges, a few generalizations are in order:

1. The application of the social doctrine of the Church in Chile probably dates from the end of the last century. This doctrine began to be translated into concrete action programs in the countryside in the 1950's, although city Catholic action agencies had an earlier beginning. Late impetus has been provided by Pope John XXIII and, internal to Chile, by liberal Catholic clergy, foremost among them the Archbishop of Santiago, Cardinal Raúl Silva Henríquez; Bishop of Talca, Manuel Larraín; and prominent Jesuits. Other clergy, those who are non-Jesuit and/or possibly non-Christian Democrat, also have fostered some social action programs. They often find themselves at odds with the aforementioned group. These programs, although stemming from Catholicism, are not monolithic, and intense rivalries between them are common.

2. The recent growth of social action/programs in the countryside is probably not due only to the current popularity of the social dogma of the Church, although this body of thought is important. Other factors which have played a part,

\textsuperscript{37}The right saw their Chamber position weakened in 1965. The Liberals and Conservatives held 45 seats in the last house, but only 21 in the new. Radicals dropped also, from 38 seats in the previous Chamber to 20 in the new.
all underlaid by demands for economic progress emanating from heretofore disadvantaged classes, are:

(a) The desire for Church groups to return "to the fold" Catholics who have fallen into non-attendance at Mass and hence, non-support of the Church by offering them more earthly rewards for their faith.

(b) The void of enough effective social action public support/institutions operating in the countryside in Chile. The Church's parish-diocese arrangement may be a more effective administrative unit for basing community action than the provincial government itself which has been traditionally weak, power being strongly centralized in Santiago. At any rate, the Church has felt it necessary to play a role not usually expected of it in developed countries with a federal government. The high percentage of Catholics in Chile makes the Church a logical organization to perform functions which might otherwise be undertaken in the public sector. Its mere size makes its aloofness from politics impossible and also means it may become the object of attacks by politicians.

(c) Closely related to the former point, the Church has found it necessary to respond to the growth of far leftist political groups in Chile which promise sweeping

---

38/ This argument is weakened because there are many Latin parishes without priests. See Francois Houtart and Emile Pin, The Church and the Latin American Revolution (Translated from French by Gilbert Barth) Sheed and Ward, New York, 1965.
reforms which the Church historically opposed. The Church must adapt to its changed and ever-changing environment if it is to remain institutionally strong.

The Instituto de Promoción Agraria (INPROA)

INPROA—whose staff and supporters are largely Christian Democrats—has become a laboratory in which ideas on reform can be experimented with and the agrarian platform of FRAP countered, as well as being an illustration of the Church's interest in land reform. As the Christian Democrats assumed power, a number of INPROA's best technical people were hired away by the government land reform agency. It seems likely that via its trained personnel, rather than in any official way, INPROA will play a part in the reform program of the new government.

Press Misunderstandings Regarding Land Reform on Church Land

INPROA's own words set forth its fundamental goal:

"It is INPROA's fundamental purpose, to elaborate and develop an operative model of agrarian reform whose results serve to demonstrate its necessity and its urgency, and thus counter many of the prejudices against agrarian reform.

"Later, if INPROA receives necessary financing, it will use it to give access to the land to 1500 families."

---


40/ INPROA, Informe de INPROA, (mimeographed), 1963, p. 31.
In the face of these admittedly limited and realistic objectives, reports on the Church land redistribution program began to appear in the popular press in the United States and Latin America. In general, they indicated little knowledge of the Church’s stated mission and tended to over-statement and, more serious, na"ive:

1. "...In the face of Latin poverty (the Church has) felt justified in taking drastic steps...It has put together stopgap relief measures, broad-scale educational projects, political innovations, social reforms...

"You can see the progress of this movement best in Chile. The Church has scored tremendous gains there in the past two years.

"The Church’s real master strokes came last fall. First, the Church gave, absolutely without strings, all its existing lands to those working them.\footnote{Ed Heister, "The New Revolution in Latin America, a Re-armed Church Battles the Reds," \textit{Parade}, July 7, 1963. Underline in this and the next quotations are the author's and are made to point up inaccuracies which will be discussed later.}

"...The Church program is radical; it has purely and simply handed over all its lands to the people working on them.\footnote{The Atlantic Monthly, "Chile," October, 1962, p. 23.}

2. "The Archdiocese of Santiago...has a yearly income of $165,000. Three fourths of that amount comes from donations. The other quarter comes from property rentals—but nearly half will be lost to the Church, which, under its own agrarian reform program is liquidating the farms from which rental comes.\footnote{Leonard Gross, (Senior Editor), "The Catholic Church in Latin America," \textit{Look}, October 9, 1962, p. 28.}

3. "Practicing what Silva Henríquez preached about agrarian reform, the Roman Catholic Church in Chile undertook its own land distribution program, parcelling out 13,200 of its own acres in the Andean foothills...\footnote{Time, August 23, 1963, p. 16.}
4. "Two large estates totalling over 3,000 acres belonging to the Santiago Archdiocese were then divided. The average distribution was a section of about 23 acres, although some exceptionally capable farmers received up to 75 acres. Since then land transfers have gone on steadily."44/

5. "There are already signs of success: "...farm families take to cooperative techniques quickly."45/

6. "...The episcopate considered it fundamental to undertake an agrarian reform. They preached about it, without any ideological hesitation, with a social criterion pervading the concept of property reaffirmed by Christian thought."46/

Clearing up statements like these and offering a detailed description of the Church reform is one purpose of this monograph. Briefly treating each inaccuracy cited above:

1. The Church did not give all of its land to those working it. The amount of land given out is 7,371 acres of irrigated land and 6,120 acres of dry land. Of the dry land, much is unusable. All told, this means that a total of 13,491 acres on five properties are in various stages of being turned over to colonists. The census of 1955 and the Bureau of Internal Revenue (Dirección de Impuestos Internos) shows that Church land in Chile includes about 2,065 properties--many of them


46/Otto Morales Benítez, from a manuscript prepared for publication in El Tiempo, Bogotá, received by the International Development Foundation, Inc., October 8, 1963.
merely lots—encompassing about 123,550 acres (50,000 hectares). At the time the census was taken it was estimated that half of the land was rented; half was worked directly. The majority of this land is owned by Orders; a smaller part by diocese. About 11 percent of Church land, then, is included in the INPROA program.

Furthermore, the Church did not give the land "absolutely without strings." The general case is that land is sold to colonists over a 20 year period with five percent interest.

2. The INPROA program is not set up to lose money for the Church. A duty of the Church is to maintain the integrity of possessions which are willed to it for social action and the INPROA program is designed accordingly.

3. All the land in the program has not been parcelled out. In the case of Los Silos, INPROA has experimented with a system of cooperative farming. We shall see a different system in the case of the fundos of San Dionisio and Alto Las Cruces, designed shortly before INPROA's birth and administered by INPROA. These colonies will be described in Chapter V. Here mediería and a rental period are gradually preparing colonists for land ownership. On the other hand, two fundos, Las Pataguas and Alto Melipilla, were parcelled out. And parcelization is the stated eventual goal of INPROA's present reform program.

4. Land transfers have been made, contingent on payment, only on the two subdivided fundos: Las Pataguas and Alto

---

Melipilla. Land is legally owned by the cooperative on Los Silos and a deed is in the hands of INPROA in the case of San Dionisio and Alto Las Cruces. The land transfer program is frozen at its present level for the time being. No new fundos were added to the program during the 1963-64 crop year.

5. Farm families do not take to cooperative techniques easily. Cooperatives everywhere in the world have their peculiar difficulties and our case studies of Los Silos, Las Pataguas, San Dionisio, and Alto Las Cruces will attempt to detail the particular problems of these cases. Cooperatives are not impossible, but their difficulties must be taken into account in any land reform program to which they are central.

6. Any statement which reveals the Church as becoming completely liberal is certain to be inaccurate. The author of this statement forgets about the right wing of the Chilean Church that even branded Bishop Manuel Larraín as a "red-bishop" for his part in Los Silos (see Chapter III). He further forgets the years of Church conservatism the present liberals of Catholicism in Chile must counter.

The INPROA Organization

The program executed by the Technical Committee appointed by the Bishop of Talca espoused a cooperative farming plan with built-in incentives. Aside from cooperatively worked land, each colonist would be given a small plot to farm. Cooperative members might or might not elect to eventually opt for private property. The cooperative would be made up of as many of the old fundo
inquilinos as would accept cooperative principles. If replacements had to be made, the cooperative itself would decide on new colonists. Much of the intellectual guidance for this committee had come from the Jesuit-oriented Instituto de Desarrollo and its Latin American counterpart. Agricultural technicians of the Food and Agricultural Organization (UN-FAO) cooperated closely with this committee.

The Technical Committee of the Archbishop of Santiago, on the other hand, espoused a plan similar to that used by the government land reform agency, Corporación de la Reforma Agraria (CORA). Under this system land would go directly into the hands of campesinos selected on the basis of a point system. A coop would be organized later. The Technical Committee of the Archbishop relied a great deal on the Instituto de Educación Rural (IER) and several fundo owners and agricultural businessmen, generally more conservative elements within the Church framework.

At INPROA's organization, after the Technical Committees had operated one crop year (1962-63), the Archbishop's Committee requested that INPROA confine its activities to economics and leave the social aspects to the IER. The Bishop's Committee, on the other hand, wanted INPROA to be a land reform agency dealing with all aspects--social and economic--of the reform.

In the end the ideas of the Bishop's Committee seemed to take ascendancy, but this does not mean that an interesting meld of ideas from the two Committees was not developed.

From the first year of experience with Los Silos and Las Pataguas, INPROA concluded:
"In almost all cases a certain amount of time is necessary to prepare land for subdivision and rational exploitation. The condition of natural resources available indicates a direct access to property by new owners is necessary. But it is also necessary to allow for a transitional period during which the campesino can adjust to his new farm. During this time, the campesino must be converted into a responsible person who can occupy a definite and responsible position in the community. There seems to be a certain conflict between access to property and the necessity that land fulfill a social function, that is, to be maximally productive. This situation isn't permanent; it is a transitory condition and only lasts while the campesino is developing into a responsible business person." 48

Plan of Action

According to initial plans this transitional process would take the following general form:

1. INPROA would receive the land from the Church with the understanding that it has irrevocable right to:
   (a) Sell, to alienate, to rent, in usufruct, etc.; to collect and set the prices or rents.
   (b) Directly affect the farming program on the piece of land; to contract all classes of services, technicians, assistants, and professionals.
   (c) Contract loans and credits with institutions concerned with banking or development.
   (d) Encumber the piece of land in whatever form necessary.
   (e) Effectuate necessary investment on the land.
   (f) Perform studies on the property.

2. Colonists must pay for land in a maximum of twenty years according to its commercial value; this value will correspond to productivity.

3. During the first year of occupancy the colonist or his cooperative needs only to pay interest. Entering the third year, amortization payments begin.

4. The colonist must pay INPROA a ten percent downpayment on the value of his land upon parcelization.

5. The sum INPROA spends on the property for investments will be paid back in the first amortization quotas.

6. In the first year of operation the land is administered by INPROA and a campesino cooperative is organized. Production will be the basis for parcelization. During this time the number of families the farm can support will be decided upon.

7. After the first year, if the coop chooses, the colonist-community begins renting its land from INPROA. Except for unforeseen difficulties, those who enter this stage are given an option to buy.

8. Selection of final colonist families is made by the cooperative itself.

9. In a third step parcels will be sold to the campesinos.

These were the guide lines INPROA set down as the result of the Technical Committee's experiences on Los Silos, Alto Melipilla, and Las Pataguas to be applied to San Dionisio and Alto Las Cruces and other fundos which might come into its program.

---

49/ These points condensed from Ibid., pp. 16-19.
Administration of INPROA

The geographic dispersion of INPROA's current land reform program is shown on the map in Diagram I.

The first INPROA organization plan is shown in Diagram II. Four departments were involved in the administration of the program: Promotion, Technical, Accounting, and Marketing-credit.

The purposes of the Promotion Department were to aid in establishing cooperatives and educate the colonists on the merits and techniques of cooperation.²⁵⁰/

The Technical Department was designed as INPROA's extension division. It was responsible for advising the remainder of the INPROA organization on technical matters of reform on the fundos in the program including such matters as irrigation, planning for crop rotation, division of lands, construction, etc. This department was designed to be directly responsible for the administration of the fundos prior to their parcelization. After parcelization, its purpose would be to advise the cooperative officials on matters of technical agriculture who would, in turn, pass the information along to coop members. In preparation for parcelization it was expected that this department would do all necessary land division studies and advise the remainder of the INPROA organization as to the number and kind of technicians necessary on each individual fundo. The Technical

²⁵⁰/Note that the use of "promotion" here is different from our usual English usage of the word to mean to further, urge forward, push on, raise, or elevate an already existing organization in the sense of advertising it or propagandizing for it. Here the concept includes the organization of the coop and the basic education in cooperative techniques which must accompany such organization.
DIAGRAM II

ORIGINAL ORGANIZATION PLAN—INSTITUTO DE PROMOCION AGRARIA (INPROA)

as of November 26, 1963

Mandate
The Archbishop of Santiago
(Cardinal Raúl Silva Henríquez)
The Bishop of Talca
(Manuel Larraín E.)

Administrative Council
Representative and Alternate (unpaid) from:
Diego Portales Foundation, Cardenal Caro Foundation, León XIII Foundation, Bishop of Talca,
Christian Entrepreneurs Union, Development Institute, and Institute of Rural Education (IER)

Executive Secretary
Legal
1 Lawyer half-time

Supervisory Committee
Chairmen of each Department

Secretarial Staff
1 Secretary
1 Courier
1 Janitor

Departments

Promotion (4)
Technical (2)
Marketing and Credit (2)
Accounting (2)
Department would be expected to map out parcelization schemes and detail necessary infrastructure with its proper cost.

The Accounting Department was assigned the duties of keeping an account of all the expenditures of INPROA and advising the fundos in the INPROA program on bookkeeping. All tax functions also fell to this department to administer.

The Credit and Marketing Department was responsible for purchasing all inputs and consumption goods necessary for the cooperatives. It also was to sell the production of the colonists, collect the marketing fee, and obtain credit for colonists.

During its first year the INPROA organization grew substantially. Diagram II shows that INPROA employed 14 full time and one half time person as of November 26, 1963. By November 1, 1964, as shown in Diagram III, this number had grown to 31 full time people and one half time person. The more than doubled staff called for the new operational structure put into effect in June 1964.

The Office of Executive Secretary disappeared in this new plan. To make administration of the larger staff more flexible, INPROA was divided into two sections: operations and finance.

A staff member of the Development Institute, who had served as its representative on the INPROA board of directors, was brought in to serve as executive director of INPROA. The four departments became six as the promoters and the Department of Education and Cooperative Organization were created from the original Promotion and Technical Departments. While the Technical Department kept its planning functions, it gave extension
CURRENT ORGANIZATION PLAN--INSTITUTO DE PROMOCION AGRARIA (INPROA)
as of November 1, 1964

Mandate
The Archbishop of Santiago
(Cardinal Raúl Silva Henríquez)
The Bishop of Talca
(Manuel Larraín E.)

Administrative Council
Representative and Alternate (unpaid) from:
Diego Portales Foundation, Cardenal Caro Foundation, León XIII Foundation, Bishop of Talca,
Christian Entrepreneurs Union, Development Institute, and Institute of Rural Education (IER)

Legal
1 Lawyer
(half-time)

Executive Director

Operations Section
Departments
Community Education
(3)
Technical
(7)
Promoters
(3)

Finance Section
Departments
Administration and Control
(8)
Marketing
(2)
Finances
(Staff not chosen)

Secretaries (2)
Couriers (2)
Janitor (1)

Santiago Office: 1070 Eleodoro Yañez
duties to this new organism. The promoters are those staff members who live on the fundos and help the coop members with day to day problems of their organization. Each is responsible for a different fundo. The Department of Education and Cooperative Organization is set up to teach colonists cooperative techniques, civic organization, doctrinal-social orientation, technical agriculture, farm bookkeeping, diet and sanitation, reading, writing, and basic mathematics.

With the reorganization, the credit division was also separated from the former marketing and credit department and combined with other duties relative to INPROA's new sources of outside financing (to be covered in the following section). Seven of the present staff are Ingenieros Agrónomos (roughly equivalent to the holder of a Bachelor of Science degree in Agriculture—the highest agriculture degree granted by a Chilean university).

INPROA operating expenses during the first seven months of its existence (June-December 1963) averaged about $8,500 a month. This includes all staff salaries and expenses of the Santiago office but no short or long term credit or infrastructural investments at the fundo level. This figure averaged $12,500 a month in January and February and by August was averaging $16,500. The total amount spent for these purposes for the first year of INPROA's existence (June 1 - May 30) was $156,000 averaging $13,000 a month.

Financing INPROA

Prior to the time amortization payments begin, the Church collects five percent of the commercial value of the land under reform each year from INPROA as its rental. Original capital for
INPROA, E$100,000, was put up by two prelates. The statutes specify that the Archbishop of Santiago was to donate E$66,667 and the Bishop of Talca E$33,333 at the time INPROA received official legal status. This status was received November 12, 1963 and was approved by government Supreme Decree No. 3,272 on November 27, 1963. An organization of German Bishops, MISORER, donated the first funds--$110,000\textsuperscript{51/}--to be used for office expenses (and specified that this grant not be used for loan purposes). In 1964 they donated another $100,000 for the same purpose through government channels (Zentral Stelle) and have promised another $100,000 in 1965. A request by INPROA for a $700,000 revolving fund was made to Zentral Stelle but was not granted. A religious group in France, TAIZE, has donated $35,000 and the Inter-American Development Bank, late in 1963, granted $40,000.

Of this latter sum, given expressly so that INPROA could do parcelization studies, $11,300 came from Social Progress Trust Fund sources which the bank administers as part of the Alliance for Progress.\textsuperscript{52/}

During 1963-64 short term credits of about E$600,000 were obtained from various Chilean banking sources. INPROA re-loaned these funds to its colonists.

\textsuperscript{51/}From henceforth "$" in this study signifies US$.

\textsuperscript{52/}Press Release "BID otorga asistencia técnica para facilitar la parcelización de tierras de la Iglesia Católica en Chile," Banco Interamericano de Desarrollo, 20 de Febrero de 1964, CP-14-64. See also Inter-American Development Bank (IDB), Social Progress Trust Fund: Third Annual Report, Washington, D.C., 1963, p. 56.
INPROA also applied for a $1.5 million loan from the Inter-
American Development Bank (carrying about ten percent interest
repayable in dollars) expressly for land reform—building infra-
structure and giving short, medium, and long term credit. As
the September 1964 elections approached, the loan had been ap-
 proved by the bank, but blocked by the office of the President
of the Republic. Had INPROA received this loan, it probably
would have proceeded directly to enlarge its land reform efforts
to other fundos. Aside from the five fundos already mentioned,
INPROA had planned to expand its program to four more
properties, thus giving it a total of 5,200 hectares of irrigated
land. According to an early estimate INPROA felt that an expendi-
ture of $2,000,000 would be necessary for infrastructure and
operating expenditures on all of the nine fundos in question.
This included houses, all installations, agricultural machinery,
draft animals, etc. This expenditure would be made in 1964-65.
The infrastructure would be recoupable at the end of ten years
and the operating expenses at the end of each crop year.53/ The
election now past, INPROA hopes to receive this funding soon.
Other funding possibilities largely closed to it,
INPROA requested and received a grant of $325,000 from
AID-Chile on June 30, 1964.

53/ Alfonso Rochac and Casto Ferragut, Informe Preliminar
Sobre Reforma Agraria de la Iglesia Católica en Chile, (mime-
The $325,000 grant, signed June 30, 1964, from USAID will run until June 30, 1967.54/

The grant provides for capital equipment and construction for land projects totalling $115,395.55/ Besides, it sets up a revolving fund aiding the fundos under reform (their cooperatives) to purchase inputs such as seed, fertilizer, weed killer, disinfectants, insecticides, sacks, gasoline, oil, and grease. It also will permit a small number of non-land reform campesino cooperatives (also part of the INPROA program but beyond the scope of this monograph) made up of groups of small property holders to purchase the same inputs. The revolving fund totals about $159,500 56/ and includes an amount of technical help direct to the cooperatives "necessary to obtain success of the enterprise."57/

Yearly, the loans will be paid back to the revolving fund by each cooperator with 12 percent interest. INPROA will collect an additional one percent for its lending service. (INPROA had to charge 15.6 percent for funds it lent to coops in 1963-64.)

54/ USAID, Project Number 513-13-140-159, Agreement Number INP-I-64, Rural Cooperative Development Institute, INPROA, (dittoed), Pro -Ag June 30, 1964.

55/ Gonzalo Fuga and Hugo Jordán, INPROA, Plan de Trabajo e Inversiones, transmitted to Mr. John Robinson, AID Director, July 13, 1964, pp. 2-6 and p. 9. There will be some minor changes in the figures noted above as negotiations on specifics of the projects continue.

56/ Ibid., p. 11-13.

When cooperatives repay the $115,395 for construction and equipment it, too, will be put into the revolving fund. The first and second year no payment will be required of the coops for the machinery. Between the third and sixth year 40 percent will be recouped at ten percent each year and between the seventh and tenth year the remaining 60 percent will be recouped at 15 percent each year.

A planning technician budgeted at $25,000 is also called for under this loan. He will assist in planning programs, cooperatives, and the business aspects of the operation. After he is hired, INPROA will be able to hire other technical assistance totalling $25,000.

As part of its responsibility INPROA must contribute $300,000 to the program in cash or in kind "from its own resources and/or from donations received from Chilean or other non-US government sources."58/ In addition INPROA must develop a project to be presented to AID for PL 480, Title II goods.59/

Alto Melipilla

Alto Melipilla (164.47 irrigated hectares) will not be covered in this analysis except for this passing reference since many of the 26 parcels went to people more able to pay—and not to the landless poor who must form the basis of a true agrarian reform.

58/AID, op. cit., Section D, 6.
59/Ibid., Section D, 8.
A required 30 percent downpayment was the discriminating factor making it difficult for inquilinos, medieros, or even lower level fundo employees to purchase parcels. Consequently this colony is mainly made up of former higher salaried fundo employees—and only several inquilinos.

Furthermore, the parcels in Alto Melipilla are small—they average around five hectares. Some of the parcel holders already have their own inquilinos, thus indicating that the project has hardly served to break the traditional social system in the area. Furthermore, the cooperative is especially weak here, most colonists apparently feeling too independent and too different in background to make it work effectively. Few of INPROA's resources are channelled into this project. After the land division was made, it was INPROA's decision to spend more time and money on other more needy projects.
"You are the patrones of Los Silos. You have the responsibility for the fundo. It is a great satisfaction for me to bring it to you. But very sincerely, I have also brought you increased responsibility."


"Bishop Manuel Larraín 'gave' us the land, but only in words... This 'Agrarian Reform'...has cut off our water supply and our fences, and is pressuring us to leave."


Such has been the character of the discussion over Los Silos since the Church-owned farm was turned over to a campesino cooperative in July 1962. Its curious organization today --not really private property, not a collective, not even a cooperative in the conventional sense of the word--and its accessibility--about 30 kilometers southeast of Santiago near Puente Alto--have made it the object of debate among those concerned with alternative land tenure structures in Chile. Why
should this property be of such interest to students of agrarian reform? Why should it be the object of our analysis?

The issues involved in land reform are often framed in terms of the political and economic power of landlords who refuse to permit a major change in the fabric of an anachronistic society, faced by pressures from the left demanding all or most of that power. If this is all that reform involves—change of power—there is little place for economic analysis.

However, economists have approached land reform but often ignored power and the social questions it involves. Their studies and resultant policy proposals may center about the use of tax policy to achieve reform. Or perhaps they deal with expropriation of land, a politically charged issue, by being specific only on such matters as means, amount and type of payment, and inflationary adjustments. Some analyses center about justifications for different types of organization—family farms, cooperatives, collectives—but with a great deal of the data drawn from countries which have already gone through agrarian reform.

A central theme of this monograph is that these studies are often useful, but most helpful are studies of actual reform efforts in the very country where reform is to take place. The ancient land tenure structure in Chile is largely intact. However, on a few private properties, like fundos to be analyzed in this study and on some properties purchased by the state, the "political decision" to implement reform has been made. But at the moment of reform all of the basic problems centering around
creating new, economically and socially viable institutions which are subject, especially in their youth, to a wide variety of internal and external pressures, remain to be coped with.

The Setting

That there are pressures and difficulties—and also successes—after reform comes can be illustrated in the case of Los Silos, a former Church property located in the commune of Pirque. Pirque, encompassing 460 square kilometers, is composed mainly of latifundia—six proprietors hold 90 percent of the land in the commune.1

Msgr. Manuel Larraín, Bishop of Talca, bought Los Silos, a 182 hectare fundo (all of which was irrigable), in 1952 to help support the Seminario Conciliar of San Pelayo which depends on his diocese for its funds.2 When the Bishop acquired the property, he immediately leased it. In the late 1950's the original renter left and the Bishop let out his fundo again.

Since the last renter spent very little time at the fundo, he left management to his son who lived there and served as administrator. In addition, he employed 18 resident workers, about equally divided between inquilinos and empleados.

---

1/ The commune (comuna) is the smallest political subdivision within provinces in Chile.

2/ Two descriptions of the fundo previous to its transfer to the Bishop have been written. Both describe the farming programs of the fundo during one crop year. Jacques Chonchol, Informe Pericial, Tasación y Cálculo de Rentabilidad del Fundo "Los Silos," unpublished, Facultad de Agronomía, Universidad de Chile, Santiago, 1948 and Helmut Seeger Stein, Informe Pericial, Tasación y Cálculo de Rentabilidad del Fundo "Los Silos de Pirque," unpublished, Facultad de Agronomía, Universidad de Chile, Santiago, 1952.
In mid-1961 the renter's inquilinos were paid less than $ .10 a day in cash. Additionally they were given perquisites of a little over one irrigated hectare to be farmed individually, were permitted to graze two animals, and were given some bread each day. In mid-1961, to protest their low income (which was well below the legal minimum for agricultural workers that year), one of the Socialist aldermen in nearby Puente Alto organized a strike among seven of the 18 fundo workers in his capacity as an officer of the Federación Campesina.

On November 12, 1961, a formal protest was made to the local work inspector. An agreement was signed a week later providing workers with a 16 percent salary increase and a few more perquisites. When the renter did not fulfill the agreement, seven of the fundo's employees remained on strike, losing the harvest on their individual plots and their grazing rights.

When the inquilinos notified the provincial governor of the situation through the Federación Campesina, he recommended that they leave the fundo quietly and he would get jobs for them. Meanwhile, hoping to solve the problem, the work inspector called the Bishop's renter to his office several times, apparently to pressure him to comply with the agreement. But the renter neither went nor paid the fine levied on him. The renter later contacted the work inspector, but only to threaten to have him transferred because of his attitude in favor of the "insurrectionists." 2/

2/Última Hora, December 18, 1961.
It was at this time of unrest--after seven months of workers' strikes--that the Bishop decided to put a reform experiment into effect. Up for renewal on May 1, 1962, the rental contract was cancelled. Plans for the fundo's operation under reform had already been drawn up, and a group of Chilean land reform technicians had tried previously to get the Bishop's cooperation in the effort.

The Bishop, belonging to the most liberal wing of the Church and already widely known for his pointed sermons on social issues, had begun to get some support for his positions from Rome. But when he turned Los Silos over to the campesino cooperative on June 26, 1962, he was called "a demagogue and a fool"--even by some active Catholics. Besides, he risked an assured rental check each six months for less certain amortization payments. Larraín is, it should be noted, one of the poorest Bishops in Chile. The income for his diocese is about $13,750 a year and its expenses, which must be made up in donations, are twice that. His own salary is $40 a month.

More importantly, his Church office makes him responsible for the financial integrity of the possessions of his diocese.

Since he felt a staff of clergymen unprepared to handle

---

5/ See Chapter II.
6/ Personal conversation with the author, February 14, 1964.
the details of a reform, the Bishop appointed a committee to handle technical matters of the land transfer. A short time later, also in time for the 1962-63 planting season, the Archbishop of Santiago proceeded with the subdivision of Las Pataguas (see following chapter) and Alto Melipilla.

The first crop year, the Bishop's Technical Committee put a former fundo administrator in charge of the Los Silos' day-to-day operation. Save for a small piece of land each colonist would farm individually and some animals each would own, land would be farmed by the cooperative. The coop would eventually hold title to all the real estate, and all credit and technical aid from INPROA would be channelled through it. Each operator was expected to work to his capacity on cooperative as well as on individually managed land.

The Cooperative's Organization

All previous workers on Los Silos had the opportunity to join the cooperative and become land holders. Unlike the Chilean government land reform program, there is no "point system" by which parcel holders are chosen. "Whether or not they were good workers as inquilinos is not of much help in deciding whether they'll be able to make decisions about their own piece of land," stated the Technical Committee.8/

But agreement with the principles of the cooperative is absolutely necessary and non-acceptance reason enough for

---

8/From the files of CIDA.
exclusion. The colonists in general session will decide whether the cooperative system of farming will continue and, if not, the cooperative's role should last be parcelled out.

The direction of the cooperative is in the hands of the campesinos who make it up. It is governed by an administrative council (Consejo de Administración). Chilean law requires that there be at least 20 members to organize a coop. Since there weren't enough colonists and sons over 18 to meet the requirement when the coop was founded, some wives had to join. There were 26 members in 1963-64. The council is elected by the colonists in general session. These councilmen are also chairmen of the coop committees (see Diagram I for official organization chart).

1. The Savings Committee is in charge of managing and distributing funds of the cooperative, repairing installations, etc.

2. The Consumption Committee sells consumption items to cooperative members. (This committee is not currently functioning).

3. The Agricultural Committee plans work, attends to current agricultural problems and gives technical assistance.

4. The Associated Enterprise Committee decides upon possible methods of intensifying the coop's pattern of enterprises. There is currently a small enterprise for making and selling bricks; some wood grown on the fundo is also sold.
**Diagram 1.**

Organization Chart of the Los Silos Campesino Cooperative.

- **Administrative Council:**
  - **Savings Committee:** Establishes credit and savings policy. Arranges loans to members.
  - **Consumption Committee:** Sells consumption items to members.
  - **Agricultural Committee:** Supervises work of members in chagra, wheat, dairy, hay. Plans sale of this produce and cropping pattern.
  - **Associated Enterprise Committee:** Supervises work of members in brick and wood enterprises; plans sale of these products and new enterprises.
  - **Social Welfare Committee:** Sees that sick are taken to doctor; assists housewives with various problems.
  - **Education Committee:** Teaches cooperative technique, plans for educational facilities on the fundo.

- **Manager (Gerente):**
  - Social and Economic Operations.

- **Administration:**
  - Bookkeeping.
5. The Social Welfare Committee sees that the sick are taken to a doctor. Medical attention is at the cooperative's expense. According to INPROA, this committee is rather ineffective at present.

6. The Educational Committee plans to contract a teacher for Los Silos. Now most children on Los Silos attend school on a neighboring fundo which the owner himself admits isn't very adequate. Few who go there have ever passed the necessary exams to get into secondary school.

The strong point of this organization is that it helps to develop leadership in a group in which individuals are just learning to make their own decisions. However, INPROA technicians are concentrating on raising production on the fundo in 1964-65 and do not have enough time to devote to leadership in all committees. Those committees not directly related with production are developing slowest. The Consumption and Social Welfare Committees are at a near standstill as this is written.

A problem with this organizational plan is that council members simply do not have time to do a good job as committee chairmen and do necessary work too. There is discussion about changing this aspect of the organization. Yet changing it implies that even more leadership ability must be developed and close coordination between the council and the committees might be lost.
The Coop in 1962-63

The cooperative evolved gradually from the time of the Bishop's turn-over of the land. At one of their first meetings the new colonists fixed a daily advance for each member with land rights and a slightly higher rate for each 18 year old son who wanted to work. The first year the coop decided that perquisites similar to those of inquilinos would be available to cooperators with land rights. Extra profits at the end of the year would be divided or used to pay off outstanding debts for the cooperative's operating capital.

At a public sale, the coop purchased some of the former renter's equipment and animals. Credit was obtained from a private lending institution and the Bishop signed the necessary loans.

As INPRCA took over the general administration of Los Silos, land price was set at E$78,000 and buildings at E$72,000 to be paid in 20 years with five percent interest each year. Originally the principal was to be paid off in equal installments adjusted for inflation by the percentage increase in the price of wheat during the year. The original amount, about E$1,200 a hectare, was publicized by INPRCA as being "65 percent of the commercial value."\(^2\) The Church did not regard this reduction as a gift, but a just evaluation to compensate cooperators for

\(^2\) CIDA, op. cit., p. 474. One rate of exchange will be used throughout this monograph: US$1=E$3.25.
the low salaries they received as workers on the fundo.

It is difficult to determine commercial value: tracts of land this size in the area seldom come onto the market. Tax value often runs a fourth or less of what properties sell for. But a group of small plots and another fundo in the area sold with a smaller amount of infrastructure brought about £2,000 a hectare recently. There is little reason to doubt that the selling price of Los Silos was substantially below commercial value.

The adjustment for inflation will be less severe beginning in 1964-65 being based on whichever standard is more favorable to the colonist: the wheat index (wheat price is fixed by the government each year) or the index of a list of selected wholesale product prices (not fixed by the government). Two and one half percent interest a year will be paid on the adjusted debt and two and one half percent on the non-adjusted debt.

Current Social-Political Difficulties

What follows is an account detailing a few social-political difficulties which have developed on Los Silos in its first years under reform. The purpose of analyzing this situation is not to be unfairly critical of the parties involved nor to discourage reformers, but to serve as an example of the kinds of disputes reform may bring. A festering social problem would detract from the most economically successful reform.

This section attempts to show how complicated reform may become and the skill necessary to administer such an experiment
--however small--in a traditional society. There is no assurance either that these problems are limited to traditional societies, but it is dangerous to extrapolate too widely from this one experience. One generalization is immediately obvious however: whether it takes place in a traditional or in a rapidly changing society, reform is a complex issue bringing with it unique problems which its participants have little or no experience in solving.

External Dissent and Internal Repercussions

Technicians decided the capacity of Los Silos would be 16 families. Two of the 18 original resident workers of the fundo left soon before and two left soon after the Bishop's turn-over of land—all four of their own volition. Two more were later expelled by the coop's vote. Replacements were brought in for four of these.

Four additional families, still under the influence of the Socialist alderman who had helped them during the strike, interpreted the Bishop's words the day he turned over Los Silos to the cooperative, "You are the patrones of Los Silos," as meaning each would get his own piece of land. They claim, even now, that they do not understand the coop and its organization. Nor did they ever accept outsiders who were taken as replacements for those who left and who came to be cooperators with land rights. They claim the Bishop explicitly turned the fundo over to former residents of the fundo.
The Bishop's idea, although he seems not to have communicated it clearly enough, was that these organizational details would be left to the Technical Committee. And he allowed the committee to function more or less autonomously.

The Technical Committee felt that much more study would have to go into the fundo if it was to be divided into small farms. There was a great deal of overhead capital represented in the barns and the silos and moreover some expense (for which no funds were immediately available) would need to be incurred to change the irrigation system from one that served the fundo's large fields to one that watered parcels. Further, the committee was anxious to experiment with cooperative farming. Los Silos would be one of the only cooperatively farmed fundos in Chile's history.

Since it simply was not possible to continue a coop organization giving four families the land they wanted while they remained outside, and the dissenting families refused to join, the coop voted to expel them. Subsequently, the coop voted four new families in to take their place. But the four old families insisted upon remaining in homes they felt rightfully theirs.

Since there were no houses in which the four replacement families could live, two remained in their family homes in nearby Puente Alto, one lived in a room in the old patrón's house, and the fourth took up residence in the fundo's school. They waited especially anxiously for the old families to move so they could have their houses. And the coop continued
sending its children to school on the neighboring farm.

At first old residents of the fundo who elected to participate in the reform were divided in their loyalties between the four dissident families, with whom they had worked for years, and their new, struggling coop. Largely they swung to the side of the coop, however, and a feeling against the four families became a rallying point which seems to have drawn the entire coop closer together during its first year.

But the problem also absorbed a great deal of the energy of the young coop which certainly might have been better used to strengthen its institutional framework in other ways.

Detailing the complicated efforts to expel the dissidents makes this clearer.

On March 1, 1963, the four families were given formal notice and asked to leave in two months (the traditional procedure in Chile—a patrón gives the same sort of notice to inquilinos he fires, as we have noted earlier). The four families were offered E$495 apiece to leave and buy land elsewhere, and the agreement was signed by the work inspector of Puente Alto. Until May 1, 1963, their light and water would be paid by the cooperative. By May they had not moved. Since the title of the land had not formally passed to the coop, the Bishop refused to give the cooperative support on its move to expel the four. In April 1963 some of the dissenters began to keep their lights burning all night and left water running. The cooperative cut their electricity in October and later denied
them use of the coop's running water. The four families still refused to leave.

The situation moved from bad to worse and late in 1963 there was a strong move by the coop to take matters into its own hands, expelling the families by force.

This move, however, has been quieted by legal proceedings in process since March 1964, which would force the families to leave. Aside from being firm in their decision to remain (they had no place to move to), the families now argue that the severance pay originally offered them is too small since inflation has severely devalued it.

The cooperative, until title to the property moved definitely into its hands, had no right to remove the four families. As soon as it received clear title in early 1964, the lawyer it engaged had a Comodato Precario issued on the families. This legal action indicates that the cooperative had given the four families right to use the land for a time, but now needed it. This was a less complicated legal method of expelling the families than proving they had no title, since even members of the coop had not been issued individual titles. The local judge in Puente Alto requested titles or other information proving ownership and later set a date for appearance of witnesses for both the coop and the dissenting families. Proceedings were delayed by the presidential elections in Chile but by late September 1964, the coop had presented its title and two days were set aside by the local judge to hear
witnesses' testimony. No one appeared for the four families. Five witnesses testified for the cooperative. By not sending representatives to the hearing on the days set aside for this purpose, the four families have lost the right to appear.

At this writing, in mid-1965, the local judge has not made a decision. When a ruling is handed down, the case may be appealed to the court in Santiago. If this is done, the case may not be finally decided for months more. If the four families lose and still refuse to move the judge may request the governor of the Department of Puente Alto (or the intendente of Santiago if the case is appealed) to order the local police to expel the families.10/

The Problem of Leadership

As institutions are being built and taking root, internal representative leadership must be developed to carry the organizations forward and to draw all members into participation. Los Silos' Technical Committee was quick to recognize that this meant putting campesinos themselves--many of whom never had decision-making experience previously--into positions of responsibility in the coop. Unfortunately, during the time of the workers' strike, the renter lost his most capable inquilinos

---

10/ This explains the delay because of the Chilean Presidential election. The governors and intendentes are direct representatives of the president in departments and provinces respectively and are appointed by him. Should they have been forced to take action before the elections, the situation might easily have been used in political propaganda.
to neighboring farms which treated resident workers better, and Los Silos became a harbor for some of the poorest laborers in the zone.

To help fill this leadership void, the hired administrator brought Luis Pérez, \textsuperscript{11} an employee of a fundo some 50 kilometers distant, to Los Silos. Pérez began his career in farming as a reemplazante, a substitute for an inquilino, one of the lowest positions in Chilean agriculture. Gradually, he had risen to inquilino status and by the time he came to Los Silos he had attended several short leadership courses and was employed as one of the caretakers of his former patrón's dairy herd. Still, he was very much a campesino and remained ever-concerned with the campesinos' lot and enthusiastically anxious to help better it.

Los Silos was a natural outlet for his talent and he was voted some leadership responsibilities soon after his arrival at planting time in 1962.

Meanwhile the Technical Committee's appointed administrator had the responsibility of guiding the cooperative through its first year. It was the committee's original idea that the administrator would live in the old patrón's house and become a coop member and landholder himself. The administrator proved efficient. The coop showed a healthy profit as the first year under reform closed. But one of his problems was that he became very active in the local Christian Democratic Party during his tenure. At a pre-election time when the technical

\textsuperscript{11}/This name is fictitious.
committee—and later INPROA—was anxious to show its political and religious impartiality, this proved a tactical error. More serious, however, the social distance between him and the campesino coop members widened as he assumed more and more a paternal role. His past duties as an administrator of a large, traditional fundo had taught him all too well the relationship that exists between administrator and laborers in Chile. Members generally liked and respected him, but tended to turn to him not as a fellow coop worker whose technical abilities were known, but to seek explicit direction on "what to do next."

Anxious to build more self determination into the coop, INPROA returned the administrator to its Santiago office as the 1963-64 crop year began.

At this time, Pérez was elected coop president and named chairman of the Agricultural Committee. As such, he made many of the day-to-day management decisions of the cooperative during 1963-64, a fact important to our later economic analysis.

Pérez impresses any visitor with his personal grasp of the meaning of Los Silos and his missionary-like zeal in its behalf.

His message to many visitors is a chalk-talk, which he begins by drawing two large circles on the blackboard one above the other with a series of parallel lines in each. "This represents the way things are in Chile," he explains. "There are two classes with a wall between them." Referring to the lower circle, he continues, "...before our cooperative, we
could rise in this circle if we worked hard, but we could never break through the wall and become land owners. Under this new system if we work hard the land can be ours and the wall can crumble."

The fact that two of the new colonists were Pérez' brothers-in-law has been a source of no small concern to the original residents of the fundo and to the four dissenting families. Some seem convinced that Pérez is trying to take over the fundo for the personal profit of his family. Further, some colonists believe that Pérez himself is getting rich at the expense of the other cooperators. In the face of evidence, both of these charges seem groundless.

Nonetheless, they underline the difficulty of finding adequate leadership for a reform effort. A leader must have not only natural abilities to direct his fellows, but also be worthy of their trust. Yet he must know their lot and perform his functions without developing into a demagogue himself. One only need remember the high rate of illiteracy, the miserable poverty, and the centuries of paternalism in Chile to recognize the mere difficulty of locating a campesino leader who asks no special favors in return for his position.

Feeling against Pérez grew during 1963-64, even internal to the coop. He did almost no physical work himself, devoting himself mainly to supervision. As we shall show later, the coop slipped economically. He was not re-elected president or named to the Agricultural Committee at the regular election in November 1964, although he was returned to a position on the council.
Miscellaneous Complaints

Some dissenters and a few coop members feel the Bishop should also have let the coop buy the small sand pit on one extreme of the farm. After not being successfully exploited for some time, under the management of the Technical Committee's administrator in 1962-63, this enterprise became quite profitable and net income from it helped pay some of the Bishop's expenses which were formerly paid by the fundo rent. The Technical Committee felt Los Silos should be used only for agricultural purposes, for only in that way could the feasibility of reform on a broader scale be proven. They felt that profits from selling sand would only underwrite any losses the farm as an agricultural unit might show and colonists would come to rely on it to bail them out of agricultural difficulties.

A television set is another sore point. The first year the cooperative operated, it decided to buy a receiver on which cooperators and their inquilino neighbors from other fondos could watch soccer. Since it was the year of the world championship in which Chile was a participant, any means of seeing the game could be expected to draw a large crowd; at any accompanying social gathering, neighboring campesinos might be convinced of the feasibility of a plan like Los Silos, reasoned some members. So the coop in general session was asked to approve the TV purchase. A new large-screen model which the coop still uses was ultimately selected. "We never approved of buying that television set," one cooperator told us "what do we want with television when we're hungry?"
Complaints like these cannot help but sound petty. Yet to a struggling new institution they take on more importance than when an organization has reached a certain maturity. One problem, what to do with the sand pit, was a decision made by the reform agency which had to be communicated carefully to participants in the reform. The other, the purchase of the TV on which the coop voted, was simply not accepted by some members in the losing minority.

Part of the success of reform, it would seem, rests on the campesino's conception of the organizations serving him and those of which he is a part. The two institutions are quite different in character and function. In one, the coop members have a direct voice through their vote and their ability to sway members to their point of view. But the vote of the majority is to be accepted.

The other, now INRCA, has certain policies also influenced by cooperative vote. But INRCA can use its veto power over the coop's action in other matters. Issues concerning technical agriculture, we will argue later, probably should fit into this category more than they did in 1963-64. Policy matters, such as the sand pit decision, belong in this category too.

Communicating an understanding of the power structure of the organisms which have a part in reform is part of what reform is about. And as this understanding is made clearer one of the frictions to structural change is removed. Even acceptance of the majority opinion is a new experience for some coop members.
In view of this, the well-functioning of a multi-purpose cooperative like that of Los Silos is an immense task. And the time necessarily spent in only organization—even leaving aside all the technical matters which involve production—should not be underestimated or short-changed.

Pressures Against Reform in a Traditional Society

Reform in a traditional society seems to present certain problems not relevant if reforms were to take place across-the-board. But reform across-the-board may not be the only way reform can happen. The Alliance for Progress, for example, argues that reform can take place in piecemeal fashion as do all land reform agencies in traditional societies.

If this is so, we should understand some pressures countering even small experiments like Los Silos. For example, Los Silos is opposed—sometimes only tacitly—by those who stand to lose from it if it succeeds. We have pointed out that Pirque is a commune in which the dominant tenure pattern is the latifundia. The neighboring fundo operator, an extremely good farm manager, is aware of changes on Los Silos. About the same time Los Silos was founded, he initiated a "profit sharing" scheme on his fundo.

As soon as their water source and electricity were cut and advanced salaries cancelled, the four dissenting families were forced into a closer association with him. Although this fundo owner is extremely paternalistic, his inquilinos are treated well—among the best in the zone. Worker houses neighboring those of the four dissident families are well kept up, neat,
have running water nearby and electricity. Since the Los Silos coop was founded, they have been painted. The neighboring patrón now provides work for some of the rebel families and gives them drinking water. He senses Los Silos' current problems and gladly told us of its difficulties as he saw them. But in a more reflective moment he said, "You know, we have to do better than they." This spirit of competition is, to a degree, advantageous to both parties.

Perhaps more dangerous to the coop's future is the contact the four dissenting families have retained with the leader of the former workers' strike. Since the strike, the neighboring alderman had come to rely on Los Silos for some publicity. Even though, short of expulsion, the Bishop could do nothing about his renter, the fact that unsatisfactory working conditions existed on property the Church owned could easily be connected in the public mind with the Christian Democratic Party, the Socialist official's political archenemy. Since the cooperative farming plan was initiated on the fundo and a Communist intellectual had attempted to help the Technical Committee solve its problems with the four families, the Socialist saw Los Silos as a local Communist-Christian Democrat Alliance. 12/

Paradoxically for those accustomed automatically to attributing collectivistic ideas to Socialists, he said:

"Our campesinos have a mentality shaped by the landholders. They are excessively individualistic. It

12/ Personal interview, October 20, 1964.
is hard for them to understand cooperative and collective systems when they concern farming."

As the year wore on, he aided the dissenting families from time to time in their struggle against the coop. It also became more and more obvious that he was acting alone—to maintain his own political position—and not within the rubric of any political party or organization.

Many of these events seem to represent a lack of understanding of one new institution by another. Others may mean a simple misuse of power vis-a-vis a youthful organization which has not yet equipped itself with all necessary institutional defenses. The two are probably inter-related at some levels.

From this experience, we can draw the following generalizations:

1. In a reform effort which relies on a similar organizational structure to the one adopted by Los Silos, leadership which truly breaks the master-serf relationship existing in the remainder of Chilean agriculture is a crucial but difficult to cope with factor.

2. In the multi-purpose organization for reform which Los Silos has adopted, much effort must be placed on institution building—and on teaching campesinos to understand the organizational structure through which they must learn to vocalize their complaints and through which services to them will be channelled.

\[13\]Ibid.
The "rules of the game" for both the coop and the reform agency must be known by all.

3. Difficulties the agencies in question have had with communication (i.e. the four families, the administrator, sandpit decision) may be a reflection of two agencies which do not fully understand each other. Great effort must be expended in maximizing "feedback" between the coop and INPROA. It may be that a superior-inferior relationship inherited from the paternal structure of Chilean agriculture tends to block communications and is not completely dead insofar as INPROA's dealings with the coop—or even within the coop itself (i.e. Pérez and his problems)—are concerned. Are the coop's desires similar to INPROA's wishes for it? Much inter-communication is necessary to find out and INPROA must constantly continue to re-adjust its policies according to the coop's wishes. Likewise, the coop must learn to recognize that INPROA's veto power over some matters is useful and necessary.

The Economic Organization of Los Silos in 1963-64

In total, as the 1963-64 year began, eight families were brought in from the outside; eight who were former residents remained, one of them preferring to serve as an inquilino to the cooperative.

The economic analysis in this section will focus on the following questions:

1. Can the 15 colonists meet their debt payments on land and capital?
2. How does present income of colonists differ from that in their position before the reform?

3. What is the production potential on Los Silos?

What follows is an evaluation of one year's experience and we cannot generalize on the basis of such a short period of time. However, aside from heavy rainfall in 1963-64, there were no unusual weather or marketing circumstances which could influence the economic performance detailed below. The analysis attempts to indicate what colonists must do if they are to meet their future debt payments. Although Los Silos is a mixture of individual and cooperative enterprises, the analysis in this section will treat the cooperative as the basic business and accounting unit.

**Cropping Pattern**

It will be convenient to describe the tenure system on Los Silos in terms of the three major crops grown in 1963-64.

Wheat makes up about 32 percent of the farm's acreage and alfalfa accounts for another 35 percent. They are both grown on the common land, and income is designated for overhead expenses: water, electricity, machinery costs, land and interest payments. In addition, fertilizer, seed, and other direct expenses incurred by growing wheat and alfalfa are paid from this income.

Individual chacras (corn, potatoes, and beans) were planted on another 19 percent of the land. Members drew lots for the plots averaging about two hectares. These are individual
enterprises in that members have the major responsibility for planting, tending, and harvesting their respective chacras. Income above direct expenses (for fertilizer, seed, etc.) accrues to the individual provided that income from the common land is sufficient to cover all other expenses and principal payments. If income from the common land enterprises is not sufficient, this individual income can be diverted to cover any outstanding coop expense.

Small Allied Enterprises

A small building brick enterprise and the harvest of wood for sale are also operated communitarily. This income is, likewise, available for meeting overhead expenses.

Livestock

Los Silos had about 50 head of dairy cattle in 1963-64 with an average of 16 in milk. Although most members own only two or three dairy animals, they could, in 1963-64, pasture up to six full-grown animals free of charge on the coop's common land alfalfa pasture. (Animals under one year of age are not counted.) A small rental fee was to be charged for the seventh through tenth animal and no member could pasture more than ten.

Labor Use and Management

In 1963-64 the coop manager (Pérez) assigned and supervised labor on the common land and brick and wood enterprises. In addition, if a member were occupied on one of the common projects, the manager would send another cooperator or hired
laborer to work on the chacra of the member so employed. The tractor drivers, mechanics, and other members with specialized functions relied heavily on other members or hired labor to irrigate and weed their plots.

All members are obligated to work on the common land and carry out other tasks for the coop. However, there is no clear-cut economic incentive for members to work to capacity on coop enterprises. Aside from coop censure and personal prodding by the manager, a member's major motivation is his knowledge that income from his individual enterprises will be used to meet overhead expenses if the common enterprises do not yield enough income to meet these obligations.

On the surface, this would appear to be a strong enough incentive. Yet an individual can always rationalize that the common enterprises will be well operated even if he, one individual in a group, shirks his duty at times.

Member's Income Determination

Since coop members needed a flow of income to provide for their families while awaiting the harvest, the coop made a living expense advance of E$1.1 a day. This income was to be repaid from the individual's sales of produce, all of which was to be marketed through the coop. The coop was responsible for repaying INPROA, the original lender.

Heads of families in 1963-64 were paid this advance each day they worked as well as on days when they were ill. Illustrating the problem of incentives, as harvest approached, the
cooperative reported cases of malingering. Withholding advances in cases of imagined or feigned illness might create some incentives if the family is completely dependent on advances. However, in the absence of medical evaluation, state of health is difficult to determine.

Sons of cooperators who are older than 18 can become **socios**, that is, members without land rights. In 1963-64 there were four socios working for the cooperative with advances of $1.1 a day. They are also entitled to some share in the profits as determined by a year-end accounting.\(^{14}\) Two sons of cooperators under 18 also worked for the cooperative in 1963-64, receiving $1.1 a day without any additional claims to profits.

All members with dependents received a governmental family allowance (under the Chilean Social Security laws called **asignación familiar**), while some members with special skills received a cash bonus in addition to some extra grazing rights. In 1963-64, then, members’ cash income was expected to accrue from four sources: (1) the family allowance from the government; (2) payments from the cooperative in reward for work requiring special skills; (3) individual income above direct costs as determined by separate accounting on members’ enterprises, after payment of all operating expenses, land and capital amortization, short term production credit, income advances, and

\(^{14}\)Since, as we demonstrate later, there were no profits to divide in 1963-64, the nature of this sharing has not been clarified. The advances for socios in 1963-64 really became “wages” in the absence of profit.
marketing charges to INPROA; if all expenses and obligations could be met from the common enterprises without drawing on "income above direct costs" from individual enterprises, and if the coop still showed a profit, profits would be divided among members at the end of the year according to days worked.

INPROA's Role

INPROA provided technical assistance, accounting services, short term production credit, and income advances. In return for its services, it charged a two percent marketing fee plus interest of 1.3 percent per month on its loans.

Can New Colonists Meet Their Debt Payment?

In analyzing the cooperative as the basic business unit to arrive at debt paying capacity, we must assume that all income from produce sold, whether it accrues to individual members ultimately or whether it goes directly to the cooperative account, forms part of the gross income of the cooperative. Individual sales not channeled through the cooperative are also included in this gross income. Thus data on sales from the common enterprises were obtained from the cooperative records, whereas individual sales were obtained through the questionnaires.

\[15\] We are, of course, omitting income in kind in the form of produce consumed, house rental value, etc. These will be included in later comparisons. We are also excluding the concept of equity which could accrue to individuals from two sources: (a) from an increase in their individual livestock inventories, and (b) from an increase in inventories held by the coop and from the land and capital amortization payments made by the coop. As we shall see in the analysis that follows, (a) is relatively unimportant and (b) is irrelevant given the nature of the outcome in 1963-64.
administered to members. This procedure was necessary since the coop did not have records of the individual sales made through channels other than the coop.

The analysis is one of cash transactions during the agricultural year 1963-64. This is justified because most of the crops and livestock products produced during the year were sold within the year. There was no accrual of inputs such as fuel, fertilizer, etc. We assume that cash sales of livestock plus depreciation of the milking cows about offsets the increased value of growing animals. No major purchases of animals were made during the year. The hay stored for the following year is about equivalent to that stored and held over from the year before.

We have included the government family allowances (asignación familiar) as an income item of the coop. This is justified because individual members are responsible for debts incurred by their cooperative. Under extreme circumstances, families might have to draw on them to meet coop commitments. Furthermore, one of the expense items of the coop is paying into the government program so that members become eligible for this family allowance. Since the expense is an unavoidable one for the coop, we include the income from this source in coop accounts.

Including all income from individual enterprises, common land, the cooperatively operated brick and wood enterprises, and the government family allowances gave the coop a gross cash
income in 1963-64 of E$63,405.80.\textsuperscript{16/}

Operating expenses of the cooperative, considered as a
unit, totalled E$47,640.44.

The picture that emerges for the year is:

| Gross Income | E$63,405.80 |
| Operating Expenses | 47,640.44 |
| Net Cash Income | E$15,765.36 |

But this still makes no provision for cash income to families or
for amortization payments due on capital and land.

To complete the picture, we must turn to an analysis of
individual accounts. What was the magnitude of cash income
actually retained by members?

Aside from the short term credit, charged as an operating
expense, INPROA had loaned the cooperative E$7,628.50 for family
expenses (E$1.1 a day—referred to earlier).

According to information supplied by the cooperative and
confirmed by INPROA, the coop was not able to collect the family
living advances. This means that the 15 members plus the four
socios retained this cash. Also, the asignación familiar went
directly to members, a total of E$3,602. Total income from indi-
vidual enterprises amounted to E$20,733, but the coop did withhold
about 50 percent of the chacra harvest to cover expenses, a total
of E$5,765, leaving net cash to members from their individual
enterprises of E$14,968 (E$20,733 minus E$5,765). Thus

\textsuperscript{16/} Since these data are excerpted from the author's thesis,
no effort will be made to round off figures. Tabular support
may be found in William C. Thiesenhusen, Experimental Programs
of Land Reform, unpublished Ph.D. thesis, University of Wis-
cconsin, 1965.
the total cash income accruing to members was £26,198.50 (the sum of £7,628.50 plus £3,602 plus £14,968).

Returning now to an earlier calculation, we noted that the coop had a net cash income of £15,765.36. But analyzing the individual accounts, we see that members retained £26,198.50 in cash. Adding this figure of £26,198.50 to the amortization payments due in that year, £18,200 (£10,500 for land and £7,700 for machinery) yields a total of £44,398.50. Setting net cash income of the coop against this we have:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash income retained by individual members</td>
<td>£26,198.50</td>
</tr>
<tr>
<td>plus amortization payments due in 1963-64</td>
<td></td>
</tr>
<tr>
<td>Net cash income available to the coop to</td>
<td></td>
</tr>
<tr>
<td>meet these payments</td>
<td>£15,765.36</td>
</tr>
<tr>
<td>Coop deficit for the year</td>
<td>£28,633.14</td>
</tr>
</tbody>
</table>

One interesting question that remains is the extent to which the members used their cash income for consumption as against saving and investment. The members with land rights were asked to estimate their living expenses according to the following categories: "What are your cash food expenses for a week?" "What are your cash expenses for clothing for a month?" "What other consumption expenditures do you have?"

An itemization of these self estimates totals £21,080. Since family living advances and the asignación familiar totaled only £17,230.50 for the 15 members, it seemed from these

---

12/ Whether Los Silos should have contracted such a large debt for labor saving machinery when labor is such an abundant factor of production is surely doubtful.
estimates that their consumption was not restricted to this amount. That it was not was verified later.

This points up a general condition to be taken into account in a reform program. The pressures for increased consumption on the part of those who have long lived in dire poverty are strong. In addition to lacking technical and managerial skill on the production side, the coop lacked power and perhaps the will to restrict consumption for cash to levels which would still be somewhat higher than that of most agricultural workers. This weakness of the coop is seen in its inability to prevent some of the produce from being marketed outside the coop channels. In the case of milk, the coop paid members monthly without deducting expenses due the coop.

Cash income available to the 15 members (E26,198.50) compared to self estimates on cash consumption expenditures (E21,080), would indicate a net savings of E5,118.50. Our data do not permit us to estimate whether this was actually invested in production goods or whether the self estimates of consumption were low.

In answer to the first major question posed, whether or not new new colonists can meet their debt payments on land and capital, the conclusion is negative for 1963-64. Judgment regarding a generalization on this point must be withheld until the other questions are analyzed.
How Does Present Income of Colonists Differ From That in Their Position Before the Reform?

The year before the cooperative was founded, the average income (cash plus evaluated perquisites) of all of the 15 cooperative members was E$1,156.51.18/

Cash income may be a better measure of participation in the market economy. The year before the coop was founded the average cash income of all 15 cooperators was E$749.

Under the conditions existing on Los Silos in 1963-64, cash income of the 15 averaged E$1,640, an increase of E$891 over the former situation. Total income, including home consumption and perquisites averaged E$2,158 or E$1,002 more under the reform.

The legal minimum wage for inquilinos in Santiago Province for 1963-64 was E$1.354 daily (cash plus perquisites), or about E$494 annually. Asignación familiar for a husband with four dependents would total about E$236, bringing the legal minimum to about E$730. The average for colonists on Los Silos was about three times this amount.

On a well-operated neighboring fundo, a profit sharing plan has been put into effect. While it does not break with the traditional system as the Los Silos plan does, it gives the best workers an opportunity to earn more than the poorer ones.

These are among the best paid inquilinos in the zone.

18/All figures are expressed in 1964 Escudos.
Yet, the colonists on Los Silos had 1963-64 incomes that averaged E$563 more than the best paid of inquilinos.

This again raises the question whether or not income accruing to coop members might be too high. There is no question that workers as poorly paid as those on Los Silos before the reform must experience some direct and substantial participation in the reform effort as expressed in higher incomes and improved living conditions. Even eliminating all cash incomes received by individuals would not have solved the financial problem of 1963-64. But this is not to say that incomes of individual members could not have been reduced and still leave the colonists much better off than before the reform. Once the debt burden is reduced and interest payments decline, further increases in individual incomes will be possible.

What is the Production Potential on Los Silos?

Our previous analysis has shown that Los Silos showed a deficit of about E$28,633 in 1963-64. Could Los Silos have increased its gross income by this amount? This would imply a gross of E$92,039 (E$63,406 plus E$28,633). In other words, does potential exist to maintain individual income at the 1963-64 levels and also meet repayment commitments? Let us assume for the moment an increase in gross to cover this deficit of E$28,633 without raising cash expenses. Later, we will show how present expenses might be reallocated to make this possible.

Data from a study describing Los Silos in 1947-48 supplies physical yields of wheat, corn, potatoes, hay, and eggs.

---

12/ Chonchol, op. cit.
The physical data when multiplied by current prices shows that comparable gross income in 1947-48 was probably very close to the equivalent of $90,000.

Comparable gross income the first year under reform (1962-63—when the Technical Committee's technician was in charge of management in Los Silos) was about $83,000, not counting that produce sold outside the coop marketing channels.  

A third measure of potential is available by comparing Los Silos to the well-managed neighboring fundo referred to previously. According to maps of the Photogrammetric Project in Chile, soils on this neighboring farm are very similar to those on Los Silos. Water for irrigation is plentiful, in both cases coming from the nearby Maipú River.

There are some difficulties in this comparison since the cropping pattern is different. The neighboring farm does have a peach orchard and a small vineyard to which it devotes five percent of its acreage. The latter is not open to everyone who wants to produce grapes, but is dependent on a hard-to-get license issued by the central government if grapes are to be grown for wine.

Gross income per hectare on the neighboring farm was $549 as compared to $327 on Los Silos (excluding now, the asignación

---

20/ Los Silos, Memoria Anual, 1962-63.

21/ This mapping project, completed in 1964, details land use capacity, ownership, and irrigation sources. It covers most of Chile and its immediate use will be for tax purposes. In this case map 3330-7030C was used.
familiar formerly included in gross income). This a difference of E$222 per hectare or slightly over 40 percent. A 40 percent increase in Los Silos in 1963-64 would have brought gross income near E$89,000.

Data from these three comparisons seem to indicate a production potential of gross income of somewhat more than E$87,000. This is less by about E$5,000 of that needed to meet 1963-64 obligations. In other words, potential seems to come fairly close to the requirements we have set up.

Earlier in this section we mentioned the possibility of increasing gross income without raising expenses—that is, by a re-allocation of present inputs. For example, one major means of yield increases in crop production is to increase the application of commercial fertilizer. The neighboring farm uses about 30 percent more fertilizer per hectare than Los Silos.

What are the prospects of cutting some expenses to permit this increased expenditure on fertilizer? Our analysis shows that Los Silos in 1963-64 spent E$5,196 on wages for hired labor. All indications are that this figure could be reduced.

For example, the neighboring farm uses 30.6 man-days per hectare while Los Silos uses 59.6.\textsuperscript{22} Although it is difficult

\textsuperscript{22}/This assumes they all work the same number of hours a day. This is slightly incorrect as workers on the neighboring farm work about ten hours while on Los Silos they work eight. But most Los Silos workers said they work harder now than before the reform. Another factor may be more important: according to INFROA, neighboring farm workers are very highly selected from the best in the zone. It has already been noted that Los Silos before the reform was a haven for poor workers. But in this comparison we are assuming that the eight colonists who came to Los Silos from outside the fundo up-graded the average so this comparison is more or less valid.
to make a meaningful comparison with respect to labor-substituting capital on these two farms, it must be emphasized that the cropping pattern on the neighboring farm is more labor intensive.

A recent university-government study based on 2,766 interviews established the average number of man-days per hectare of various crops for each province of Chile under different conditions of farm size and mechanization. 23/

Although this study does not provide estimates for livestock enterprises, according to the coefficients given, it indicates that Los Silos should have required about 4,000 man-days for its crop production (using the coefficients most nearly fitting the case of Los Silos). Since 6,600 man-days of labor are available within the cooperative (including members and their six sons working in 1964-64), it seems likely that sufficient labor is available to also handle the dairy operations. Actually 10,120 man-days were used on Los Silos in 1963-64. The difference between labor available and used represents labor hired. Although these comparative measures are crude and do not take into account peak labor loads when additional help may need to be hired even though the permanent work force is unemployed during other seasons, it does seem clear that some expenses could be shifted—from present labor costs to other productive inputs.

A serious objection could be raised to this point, however. While it is true that Los Silos could benefit from reducing its hired labor costs and investing in other inputs (thus implying that present members would have to work more), this is not a solution when the agrarian problem is considered nation-wide. Employing labor from outside Los Silos was, in fact, spreading the effects of reform to a larger number of people than its own colonists.

Looked at in another way, we need not necessarily conceive of fertilizer and labor costs as being directly competitive. Given the productivity potential that appears to exist (in comparison to yields and returns on a neighboring farm with similar soil type and irrigation possibilities) more fertilizer certainly appears profitable. The problem, then, is not so much one of direct competition between labor hired and fertilizer purchased. It is a matter of credit availability and a knowledge of input-output relations in production that will provide the incentive to use it.

Over several years, given sufficient time for establishment of higher yield levels and more livestock, it may indeed be possible to achieve the higher income levels claimed by colonists in addition to utilizing additional labor from outside, thus spreading the benefits of reform to a wider group of workers.
Future Plans

It is important to point out that in view of the difficulties of any reform of this kind and the importance of the experiments, this analysis is not intended as criticism of INPROA. INPROA and the cooperative leadership on Los Silos recognize the weaknesses of the 1963-64 operation.

Some of the changes already introduced in the 1964-65 year are that no labor from outside was hired during the planting season, and a two percent marketing charge for all milk sold through the coop is being collected monthly by INPROA. Funds from sale of milk are not being returned to members (as they were in 1963-64) until final accounting time. Rental fees for each animal grazed on the common pasture are being charged to redress some of the inequalities of the previous arrangement and to capture more of the costs incurred by INPROA. Each cooperator knows his total debt since it was pro-rated among all members early in the 1964-65 crop year.

However all these are minor in comparison to the requirements of success at Los Silos. The assignment of debt to individuals may merely result in frustration unless plans for increasing production are effected. But plans have been made, and in some cases are well advanced, for making Los Silos a going concern.

In October 1964, Los Silos received a £55,000 loan from the Chilean development agency (Corporación de Fomento de la Producción), to purchase 100 good quality cows. These will be sold to members and the loan is to be repaid in five years with interest at 18 percent. Some poorer animals in the present
herd will be used to partially pay off the principal. The new stock will allow all members to own at least six good quality dairy animals. The farm has sufficient stable space and pasture producing capacity to support this herd.

As this enterprise is expanded, another of the coop's plans may become feasible. With more sons of members reaching adulthood and joining the potential labor force, additional employment will be required. The dairy cattle operation in itself will require more labor. Also, the hope of establishing some dairy processing functions (butter and cheese making) may become feasible. And a proposed feeder pig project may one day be realized.

The feasibility and success of all these plans will depend on the capacity of management and the ability to train and establish discipline among coop members. In addition to management problems in 1963-64, accounts were not well kept, and it was not until the agricultural year was well along that the cooperative and INPROA realized their financial difficulties.

This again points to a broader generalization. Since reform implies liberation from domination by the patrón, the technicians should not make all the decisions that need to be made. Members must participate. The administrator during the first year (1962-63) left Los Silos partly because he was being turned to as a patrón, even though he made Los Silos an economically successful concern.

Technical help in a reform effort must combine a high degree of agricultural and management skill with a knowledge of
how to teach cooperative members to make their own decisions. This also implies careful vigilance over the farm accounts and attention to institution building. If Los Silos is to be parcelled into individually owned small farms, which is also part of the future plans, sixteen entrepreneurs (the inquilino became a member in 1964-65) must be prepared to make management decisions. For the intermediate period between inquilinaje and individual proprietorship, all evidence seems to indicate that technical help must be coercive enough so that high production, very necessary for a successful reform, is maintained. This makes it doubtful whether the cooperative leader and the technician can be the same person—at least initially—as they were in 1963-64 on Los Silos. A good manager must be hired for Los Silos—one who will preferably live on the fundo and who will assist cooperators in decision making.

Further neglect of the entrepreneurial function will continue to result in costly losses for Los Silos. And "allowing cooperators to make their own mistakes" will not hasten the day when cooperators become rational decision makers in their own right. To expect a person untrained in farm management who is suddenly given access to the land to become an entrepreneur overnight—simply because the traditional system has been broken—is folly.

It is planned that the new manager will not work with individuals, but through the cooperative. A farming program will be drawn up with his help, and credit will be given in conformity with how closely the cooperative complies with plans. Credit,
in other words, will be strictly supervised, and if members elect
to diverge from plans INPROA funds will be withdrawn.
This system will be continued even if Los Silos is sub-divided
into smaller farms.

Summary: Los Silos

1. Illustrated by Los Silos, a reform effort which truly breaks
the master-serf relationship is a complicated process. Problems
which arise center about hard-to-solve social and political—in
addition to economic—problems with which few of the participants
in the reform have had experience:
   a. Replacing the patrón with leadership by participants in
      the reform effort means that effective campesino leader-
      ship must be developed.
   b. A great effort must be placed on institution building
      within the campesino organization and within the reform
      agency. Communications internal to both (i.e. leader-
      member) and one with the other must involve a maximum
      of "feedback" for optimal performance. Functions of
      each institution must be clearly understood by all
      parties to the reform.

2. The experiment releases the colonists from the traditional
system and gives them the opportunity to be landowners if they
are able to pay. It also creates a cooperative institution
through which they are able to make their needs known and through
which help can be given.

3. Although the first year under reform was quite successful,
allowing the coop to meet some of its debts, in 1963-64 production was not sufficient to allow its colonists to pay off their land and machinery debts and finance their increased income.

4. Average income for colonists on Los Silos in 1963-64 was about three times the zonal minimum for inquilinos and also above the income for best inquilinos on the neighboring well-managed farm which has established a profit-sharing scheme for its inquilinos.

5. A study written in 1948 detailing Los Silos' farming program at that time, production on Los Silos the first year after reform, and income per hectare on the well-managed neighboring farm all seem to indicate Los Silos has potential to produce more than in 1963-64 and could produce nearly enough gross income to meet its current obligations assuming these obligations remain about as they were in 1963-64.

6. Income accruing to individual colonists might be lowered slightly during years of heavy debt repayment and still leave them with much more income than before the reform and better off than workers on the neighboring fundo. This, coupled with increased productivity and more or less constant expenses would leave little doubt that the reform would be economically successful.

7. Operating expenses on Los Silos could probably be re-allocated so that less is spent on labor and more on yield increasing capital costs still remaining about constant.

8. Los Silos is taking steps to intensify its operation in 1964-65. Other steps are being taken to strengthen the
cooperative institution.

9. Technical managerial help seems vital to an experiment of this nature. Whatever system is used, it must help teach members to make their own rational decisions on their cropping pattern and use of inputs besides helping the coop keep accurate accounting records. The cooperative leader and the technician probably cannot be the same person—at least initially.

10. It seems very likely that the cooperative farming phases of this experiment will end in several more years and each colonist will receive his own plot of land, thus underlining the necessity of developing individual entrepreneurs.
CHAPTER IV
LAS PATAGUAS DE PICHIDEAGUA

We liked our patrón very much. He was a good worker. Now we work more, we have more worries, the system involves more sacrifices, and we need to take better care of things. We wouldn't move now, however. We're settled here.

The former system was "prettier." There was lots of machinery then. Now there's almost none. But I don't think anybody really wants to go back to the old system.

The old patrón was good. When I needed something, I got it. But it was the system that was bad.

Now I'm more interested in my work. Before I just put in hours.

--Las Pataguas Colonists.

Colonists on the Las Pataguas land reform experiment exhibit varying degrees of enthusiasm in the success of its first two years, but nobody we interviewed would be willing to turn back to the days of inquilinaje.

Unlike Los Silos, each of the 76 colonists on Las Pataguas, a 1,485.5 hectare (1,162 irrigated hectares) property, has his own piece of land. The majority, those who have made a downpayment on their land (or a good percentage of one), were given a provisional title at the beginning of the 1963-64 crop year.
Colonists manage their land individually, thus giving the cooperative more limited functions than on Los Silos. On Las Pataguas there is no cooperatively farmed land. Colonists belong to the coop which acts as an intermediary for distribution of seeds, fertilizer, and other credit coming from INPROA, supplies bookkeeping and other services, acts as caretaker for the fundo's overhead investments, and markets colonists' harvest. Colonists also operate a consumers' cooperative at which members can purchase some standard food items--flour, sugar, tea, etc.--cheaper than in the neighboring villages, Pataguas Cerro and Pataguas Orilla. The coop "committee" structure, however, is similar to that on Los Silos (Diagram I, Chapter III).

Since the fundo is about 40 miles from the Pan American highway (in O'Higgins Province) and reachable only by unpaved roads, marketing farm products and buying consumption goods in the area have always been a problem. Being far from the main stream of population, numerous middle-men, involved both on the selling and buying side of the market, rake off considerable profit for menial intermediary functions and for trucking merchandise in and out. Shops in the area, therefore, charge relatively high prices for merchandise. The numerous stores themselves, serving a relatively sparse population, are forced to contribute to this high price tendency. What they lose in low-volume sales they try to recoup on mark-up.

When buying from farmers, middle-men may set an inordinately low price for farm goods and, since there are few competitive
buyers, the farmer is at their mercy. Thus an effective marketing and consumers' cooperative in this relatively isolated area seems even more important than at Los Silos which has ready access by good roads to the more organized markets of Santiago.

We shall refer to the coop's accomplishments and problems since its founding later in this chapter.

**Characteristics of O'Higgins Province**

The latifundia is the predominate system of land tenure in O'Higgins Province. At the same time, there are a great number of minifundistas or landless workers living in or near the small towns who make the bulk of their living working on fundos.

Although farms over 500 hectares in size comprise but 1.9 percent of the total number of holdings, they make up 82.9 percent of the entire area of the province, 73.9 percent of the total agricultural area, and 48.2 percent of the total irrigated area. Farms in O'Higgins of less than one hectare—minifundios—represent 55.8 percent of the holdings, but only .2 percent of the total agricultural area and .8 percent of the irrigated land.¹

---

The Technical Committee's Plan for Los Pataguas

Las Pataguas was willed to the diocese of Santiago in July 1941. From then until May 1, 1962, the Archbishop of Santiago leased it on three different occasions, the last time for 18 years.

In September 1961, Cardinal Raúl Silva Henríquez designated a Technical Committee to plan for the reform experiment on Las Pataguas. At planting time in 1962 the renter had left and the Committee's scheme was ready to be effected.

The plan provided for the division of all the land into small farms save for the small amount needed for maintaining the overhead investments: central buildings to be held by the coop, roads, and irrigation canals. Much of the 266 hectares of dry land was also parceled out since it could be used for pasturing sheep, although 142 hectares were reserved for coop purposes. The Technical Committee decided to also save 122.6 hectares including a 42.30 hectare flood-plain which was rented out in 1962-63 and again in 1963-64.

Choosing the Colonists

Three different size-categories of plots were distributed: huertos (1 irrigated hectare); parcels (averaging about 16.7 irrigated hectares); and hijuelas (35-86 irrigated hectares).

Again unlike Los Silos, which accepted all former residents of the fundo who agreed to the coop's principles, each person to be awarded land on Las Pataguas had to meet the following conditions:
1. Have worked in agriculture for at least five years.
2. Belong to a well established home.
3. Promise to farm the property personally.
4. Not own another agricultural property which is bigger or like one for which he is applying.

After meeting these criteria, a point system (Table I) was the basis of the selection. After the points were added up and it was decided who would receive a huerto, parcel, or hijuela, accumulated points determined the order within each classification in which the applicant could choose his piece of land.

**TABLE I**
Point System - Las Pataguas

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. For each dependent</td>
<td>4</td>
</tr>
<tr>
<td>2. For being specialized in intensive cultivation of crops or for successful fulfillment of a position of responsibility, or for being renter or sharecropper for more than three years, up to</td>
<td>10</td>
</tr>
<tr>
<td>3. For each five years of work on the fundo</td>
<td>3</td>
</tr>
<tr>
<td>4. For being active in the Instituto de Educación Rural or a similar organization for more than a year</td>
<td>5</td>
</tr>
<tr>
<td>5. For maintaining a savings or checking account in the State Bank or for each three years of active membership in a cooperative</td>
<td>2</td>
</tr>
<tr>
<td>6. For each ten percent of the downpayment (in addition to the downpayment) possessed, up to</td>
<td>2</td>
</tr>
</tbody>
</table>
Of the 60 former fundo workers, eight chose to leave; three were expelled by the Technical Committee. Upon leaving, these three were given a severance pay for each year of service on the fundo. This means that 49 colonists out of 76 or about 64 percent of the present number of settlers lived on Las Pataguas prior to the colonization. The capacity of the fundo was increased by 16 families (about 21 percent) by the reform. Fifty-three or 69.8 percent of the 76 Las Pataguas colonists were either voluntarios, medieros, or inquilinos previous to the reform.

Four former Las Pataguas workers who had specific crafts—a bread baker, two mechanics, and a smithie—were located on huertos so that they could be called in from time to time to work on the larger properties of the remainder.

Aside from those with trades, huertos were given to eight applicants with poorest work records on the fundo—those who, in the judgment of the Committee, would probably not be successful working larger plots. According to INPROA, size of the huertos was determined arbitrarily at one hectare, so that they would be large enough to permit "the cultivation of fruit trees, vegetables, chicken production, etc. for the consumption of the family."²

Thirty-one former fundo inquilinos or medieros and four fundo employees who had some supervisory responsibilities previously, remained to get a parcel. Twenty-four neighboring minifundio operators or workers on other fundos who applied were also

selected to get parcels. The dimensions of the parcels were determined "based on special studies of income and family capacity to work."³

Five others (two of them former Las Pataguas empleados) were awarded larger plots or hijuelas. One of these was sold to an Ingeniero Agrónomo who, according to the plan of the Archbishop's Committee, would serve as a technician for the project. Hijuelas were awarded to "those who (were) more able technically and economically."⁴

All told, 12 huertos, 59 parcels, and five hijuelas were distributed.

Awarding differing size-categories of plots defined a social class structure in the Las Pataguas community. Although one purpose of the reform is to break the rigid social system, reformers in this case recreated a miniature replica of the archaic master semi-serf class structure existing in Chilean agriculture.

Since the five hijuela owners were dominating the coop, they are now being encouraged by INPROA to withdraw their membership. This is not being made without complaint and disension.

The Ingeniero Agrónomo who owned an hijuela soon had a falling out with the Technical Committee and later with INPROA. He tried to assume a paternal role on Las Pataguas. His technical

³Ibid., p. 20.
⁴La Voz, August 5, 1962, Number 261.
experience was, in any formal sense, lost to other coop members and he concentrated on making a living on his hijuela which he sold in 1964.

On the other end of the spectrum, huerto operators live almost as poorly as they did formerly. Among their problems are that now they work for parcel and hijuela operators, who often lack ready escudos, sometimes at a lower daily wage and often more irregularly than was the case under the patronal system. Furthermore, parcel holders are more reluctant than fundo operators to make necessary payments to the Social Security Service and huerto operators seem to worry more now than before about having its benefits lapse.

INPROA's plan is to divide up much of the coop reserve-- along with the hijuela the Ingeniero Agrónomo is disposing of-- selling it to whichever huerto operators want to enlarge their holdings. This should even out the economic base of the coop in coming years giving it a more homogeneous membership.

The Parcelization: Its Costs

The few fundo buildings--transferred to the cooperative at the time of the reform--have been left pretty much intact. A wing of the former patrón's house is now used for the community teacher and his family, a boarding house (pensión) for visitors, and as a dwelling for a parcel holder whose family runs the pensión. There is also one large multi-purpose building of which various rooms are used as a granery, cooperative meeting place, office, and cooperative store. The coop also owns a workshop
and a three-classroom school.

The value of the portion of the fundo planned for division—
including the former inquilinos' houses and land (on which the
price was fixed after an extensive soil typing study)—is
E'885,356. 5/ The real estate to be permanently reserved for the
cooperative totals E'33,332 setting the total value of the fundo
before costs of parcelization at E'918,688.

Costs for improvements and other infrastructure—irrigation
adjustment, houses, roads, etc.—were added later.

While Los Silos used overhead capital already available on
the fundo, including the inquilinos' houses, and planned to rely
on the farm's profit to make improvements, the committee planning
Las Pataguas made an effort to give out a complete parcel with
overhead capital already intact. Part of this was a matter of
necessity: some of the 47 adobe brick inquilino houses were in
decidedly poorer shape than dwellings on Los Silos. Settlers
built a dozen pre-fabricated two-room houses to serve while a
coop committee 6/ approved plans for more permanent ones and pre-
pared to accept the corresponding financial obligation. The
pre-fabs accommodated people moving in from outside the fundo.

5/ We will continue to use 1963-64 escudos. Further elabora-
tion and breakdown of statistical materials given in this chapter
may be found in William C. Thiesenhusen, Experimental Programs of
Land Reform in Chile, unpublished Ph.D. thesis, University of
Wisconsin, 1965.

6/ The coop was founded after colonists were settled on their
parcels. Gradually, the Technical Committee and INPROA, when it
took over, called upon more settlers—through their coop—to
help them in decision making.
All but five of the original houses are located in a villorrio or large hamlet\(^2\) along the two public roads which lead to the property. In some cases this location places houses on the land; in most, dwellings are quite far from farms, necessitating daily travel to and from the property.

Through villorrio settlement, the Technical Committee hopes to:

1. Use social overhead capital in buildings optimally.
2. Provide for services such as drinking water and sewage system.
3. Develop a sense of community among the future land owners.
4. Offer services to parcel holders of mechanics, blacksmiths, carpenter, etc. who will be given lots in the villorrio.
5. Give children of parcel holders the opportunity to attend school a short distance from their home.\(^3\)

\(^2\) UN, CEPAL, (Economic Commission for Latin America), Rural Settlement Patterns and Social Change in Latin America: Notes for a Strategy of Rural Development, Social Affairs Division, (dittoed) April, 1964, Santiago, "The villorrio is usually smaller than the aldea, but the important distinction is not so much in the size as in the relative importance of specialized administrative and economic functions and the more rudimentary class stratification. The population of the typical villorrio consists almost entirely of small cultivators and agricultural wage workers...it is a sprawling agglomeration of houses without a center--for more specialized services the villorrio must depend on a nearby pueblo," pp. 6-7.

\(^3\) INPROA, Proyecto Específico "Las Pataguas," (Request to Inter-American Development Bank--mimeographed), Santiago, April 27, 1964, p. 27. Hereinafter cited as INPROA, 1964.
Although the former location of most of the inquilino homes makes a villorrio a very feasible arrangement, one colonist showed such a preference for living on his land that he has built a grass and reed "ranchito" and refuses to move from it unless the cooperative forces him. He maintains that although it is farther from services and from installations of electricity and water and is decidedly poorer in quality, he prefers to live on his land—he says he's afraid of having his harvest robbed if there is no one to maintain vigilance.

This apparently isn't as isolated an occurrence as it seems at first glance and represents one bottleneck to planning for colonization programs. An Economic Commission for Latin America publication asserts, "Instances have been reported in which beneficiaries of agrarian reform have refused to occupy houses built for them or inherited from a previous hacienda nucleus, preferring to build huts on their own land."\(^2\) Domínguez also warns against a settlement which separates the peasant from his land.\(^10\) The Las Pataguas coop has now voted to construct as many new houses as possible on parcels.

All infrastructure has not been installed on Las Pataguas although the majority of it is complete. Parcelization involves

\(^2\)UN, op. cit., p. 50.

\(^10\) Oscar Domínguez, El Condicionamiento de la Reforma Agraria: Estudio de los Factores Económicos, Demográficos y Sociales que Determinan la Promoción del Campesino Chileno, Université Catholique de Louvain, Collection de l'Ecole des Sciences Politiques et Sociales No. 173, 1963, p. 182. quoted in UN publication cited above.
building 25 new houses and repairing 15 old ones in the villorrio. The remainder of the houses are usable as they are. Fences and gates and an installation of a more adequate electrical system and drinking water were also added. Furthermore, an 8,800 meter long access road has been built to a rather remote section of the fundo.

Adjusting the irrigation system to the new parcels involved quite a different arrangement than the maze of ditches which carried water to the farm's previous 38 fields. The irrigation system installed on Las Pataguas is based on a system of measured water gates (marcos partidores) which allows a precise amount of water into canals serving each parcel. A colonist can use all the water in his canal any time he chooses. This differs from a cheaper and more common system of "shifts" or "turns" (turnos) in which a colonist uses all water in the canal during a pre-defined time period. This is a greater amount at any one time than in the marcos partidores system.

Cost of parcelization, including all necessary studies that needed to be made prior to division, totalled:

Miscellaneous infrastructure: (new houses, repairing houses, fences, gates, electricity, drinking water) $139,305.00
Building access road $30,258.10
Irrigation adjustments $62,402.39
Total infrastructure necessary: $231,965.49
In summary, cost of the fundo, with all infrastructural additions, totals:

- Value of fundo real estate: E$ 918,688.00
- Costs of parcelization: 231,965.00
  E$1,150,653.00

In total, infrastructure represents about 20 percent of the cost of the reform. Average cost of parcelization per settler was E$3,052; average per settler cost for a complete property was E$15,140.

Infrastructural costs for each farm were added to the land bill of each colonist. The colonist was given 20 years to pay at a six percent interest. The interest was reduced to five percent in 1964-65 with conditions of repayment and adjustment for inflation the same for those described for Los Silos.

One problem of this pre-billing system is that actual infrastructural costs are running higher than estimated costs. Since the colonists were given their bills before all improvements were made, INPROA found it impossible to revalue their debt based on the real costs without losing the confidence of the settlers. This means that INPROA will not be able to recoup its total investment.

A comment is in order about the magnitude of expenditures for infrastructure. Only the irrigation expenses, temporary housing facilities, and installation of drinking water represented expenditures absolutely essential during the first several years of reform. These made, each parcel holder could have
lived on and farmed his own land satisfactorily. Probably building of the access road, and certainly permanent housing, fences, and even electricity might have waited until later. It is also doubtful that all adjustments on the irrigation system had to be completed immediately although admittedly they probably avoided certain in-fighting that might have developed had the water been too badly distributed. A cheaper type of irrigation system based on "turns" rather than marcos partidores could have been established, however. Immediate costs of infrastructure could have been reduced at least 50 percent, it seems, the lacking infrastructure being provided with the initiative of each colonist working through the cooperative. This would have saved INPROA the immediate expense, lowered the total debt to each proprietor, and given each land holder a sense of participation in the development and improvement of his own farm.

The First Year of Reform

The first year of the reform experiment on Las Pataguas, 1962-63, the Archbishop's Committee gave each colonist "contracts of rent and sharecropping." To build more incentives into the usual system of mederia (see Chapter I), however, the Church program allowed the usual 50-50 income split if production of wheat was only 40 quintals per cuadra (a cuadra is four acres or 1.56 hectares), but if production was from between 40-50 quintals the mediero received 60 percent of the income and if production was over 50 quintals the mediero received 70 percent. On other
crops the division was 50-50. Operating expenses were split in the traditional manner in all cases. Wheat in 1962-63 averaged 65 quintals a cuadra giving a 70-30 income split in favor of the medieros.

Assessing the early accomplishments on Las Pataguas, a spokesman for the Technical Committee said:

"...Although the process is not complete yet...the 60 stable workers that the fundo had has risen to 97.11 Of 65 seasonal campesinos that worked 80 days a year, today they work 120 days. This represents more work and indicates that the land can receive more people (after reform). This increased intensification in agriculture can circumvent campesino movement to the cities."12

All evidence indicates total production has risen on Las Pataguas over production on the same fundo under the rental system in 1961-62, but it is impossible to determine by how much. The renters used an extensive farming program. They had other agricultural investments and included them all in the same accounting. Even though we cannot make confident statements about production now as compared with the fundo's production under the traditional system, we will attempt to answer the questions: What is the colonist's ability to pay his new debts? Have the parcel holders' levels of living risen? Then, by comparing production in 1963-64 with production on a similar acreage on a well-managed fundo with similar irrigation problems and soil type

11/ Surely a mis-statement. He probably meant 79. The correct figure is 76.

12/ Msgr. Rafael Larraín, director of the Instituto de Educación Rural, in La Voz, op. cit.
we will attempt, as we did in the case of Los Silos, to determine whether there is a margin of unexploited productivity and whether some expenses could be reallocated thus lowering operating costs.

Method of Gathering Field Data

Unlike Los Silos, where the cooperative was the basic accounting unit, we have seen that on Las Pataguas the cooperative does not play as central a role. Economic decisions were largely made by the individual farmers. Therefore to measure the economic success of the Las Pataguas project we must turn to colonists' accounts.

We drew a random sample, stratified according to type of holding: parcel, hijuela, huerto. We decided upon a 25 percent random sample of parcel holders: 15 cases out of 59. After drawing 15 cases, we plotted them on a map of the fundo to assure ourselves of geographic dispersion. We also drew two cases each from the hijueleros and huerteros. Since hijueleros were being removed from the coop and most huerteros' plots will be increased next year, our analysis concentrates on parcel holders.

Can Colonists Pay Their Debts?

A Case

Most income for parcel holders accrued through the marketing of crops. Cash income earned through the sale of animals or animal products was very minor. Contrary to Los Silos, since the parcel holders are considered self-employed, they get no part of their incomes from asignación familiar. Other possibilities
of income during the year might have occurred through increase in the colonists' own inventories or from increase in the coop's inventory, since parcel holders are coop members and must pay toward machinery it purchases for common use. Given the income situation of each cooperator, the former possibility is minor and the latter payments were not collected until the end of the year. Colonists received their income with the harvest and during the year their living expenses came mainly from several lump-sum advances from INPROA through the cooperative, from savings they may have had last year, and from sales of produce sold outside coop channels as they needed cash during the year.

A case is presented in Table II. This colonist was selected because his cropping pattern and yields are fairly typical of colonists on Las Pataguas.

He kept out all of his potatoes and corn and part of his wheat and beans for home-consumption purposes. As in the case of Los Silos we will not count his home consumption of crop and animal products in our estimate of gross cash income. Subtracting home consumption ($E^21,142$) from total produce ($E^24,487$), his gross cash income becomes $E^23,345$. The bulk of his cash income came from the sale of wheat.

This colonist's largest operating expense this year was land interest at $E^2948,84$ (six percent of his remaining adjusted land debt of $E^215,814$).

Labor expenses during wheat and chacra harvest, together with that of outside labor utilized during the time of chacra
TABLE II
CALCULATION OF NET CASH INCOME
Former Inquilino-Tractor Driver on Las Pataguas;
Present Owner of Parcel 22 (9 Hectares)

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Wheat</td>
<td>160 qntls</td>
<td>£0 17.5</td>
<td>£0 2,800</td>
</tr>
<tr>
<td>B-Beans (Variety: Tórtola)</td>
<td>17.6 &quot;</td>
<td>31</td>
<td>545</td>
</tr>
<tr>
<td>C-Beans (Variety: Tórtola)</td>
<td>4.8 &quot;</td>
<td>31</td>
<td>149</td>
</tr>
<tr>
<td>D-Corn (C)</td>
<td>24 &quot;</td>
<td>19</td>
<td>456</td>
</tr>
<tr>
<td>E-Potatoes (C)</td>
<td>25 sacks</td>
<td>10</td>
<td>250</td>
</tr>
<tr>
<td>F-Wheat (C)</td>
<td>2.4 quintals</td>
<td>17.5</td>
<td>42</td>
</tr>
<tr>
<td>G-Animal Income (C)</td>
<td></td>
<td></td>
<td>245</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>£0 4,487</td>
</tr>
<tr>
<td>Total crop consumed (C) (Minus)</td>
<td></td>
<td></td>
<td>1,142</td>
</tr>
<tr>
<td>Gross cash income</td>
<td></td>
<td></td>
<td>£0 3,345</td>
</tr>
</tbody>
</table>

Operating Expenses 1963-64

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Interest on land debt (set at 6% of total remaining debt of £0 15,814)</td>
<td>£0 948.84</td>
</tr>
<tr>
<td>B-Outside labor hired;</td>
<td></td>
</tr>
<tr>
<td>Harvest of wheat</td>
<td>35</td>
</tr>
<tr>
<td>Weeding of chacra</td>
<td>70</td>
</tr>
<tr>
<td>Harvest of chacra</td>
<td>100</td>
</tr>
<tr>
<td>Meals for outside laborers</td>
<td>15.07</td>
</tr>
<tr>
<td>C-Interest on £0 565 in advances</td>
<td>67.87</td>
</tr>
<tr>
<td>D-2% of crops marketed (paid to INPROA) (2% of £0 3,345)</td>
<td>66.90</td>
</tr>
<tr>
<td>E-Pro-rated share of total land tax</td>
<td>60.90</td>
</tr>
<tr>
<td>F-Share of weed killer (applied with airplane)</td>
<td>34.71</td>
</tr>
<tr>
<td>G-Combining of wheat (paid 12 quintals of wheat plus gasoline for tractor)</td>
<td>221.70</td>
</tr>
<tr>
<td>H-Tilling land</td>
<td>52.40</td>
</tr>
<tr>
<td>I-Seeds: wheat, corn, potatoes, beans</td>
<td>187.98</td>
</tr>
<tr>
<td>J-Fertilizer:</td>
<td></td>
</tr>
<tr>
<td>12 sacks of salitrea (£0 8/sack)</td>
<td>96</td>
</tr>
<tr>
<td>2 sacks of superphosphate (£0 15.84/sack)</td>
<td>31.68</td>
</tr>
<tr>
<td>K-Horse shoeing</td>
<td>78</td>
</tr>
<tr>
<td>L-Animal feed purchased</td>
<td>100</td>
</tr>
<tr>
<td>M-Share of administrative expenses of cooperative</td>
<td>107.14</td>
</tr>
<tr>
<td>Total expenses</td>
<td>£0 2,274.19</td>
</tr>
</tbody>
</table>

Gross cash income £0 3,345.00
Operating expenses £0 2,274.00
Net cash income £0 1,071.00
weeding, plus meals which the laborers ate totaled E$220.07.

INPROA collected about E$67.87 on the advances of E$565 loaned to him on several occasions during the year. Although INPROA charged a higher rate (1.3 percent a month for the number of months of the loan) we have applied a standard 12 percent, which seems to be a reasonable average. A two percent marketing fee was also paid to INPROA on the E$3,345 gross cash income marketed through its channels.

Land tax on the fundo was pro-rated to members depending on their acreage. The amount corresponding to this case was E$60.90. Weed killer was applied by airplane to the wheat and his pro-rated share for this service was E$34.71.

Rental of the combine is usually set at a certain number of quintals of wheat plus gasoline for a hectare or cuadra. Expressed in escudos, he paid E$221.70 for this expense and, at the time of seeding, he rented a tractor to disc three cuadras at a charge of E$52.40. Seed expenses ran E$187.98 and fertilizer E$127.68.

Shoeing this colonist's team cost him E$78 and feed he purchased for his animals was valued at about E$100.

Each coop member had to pay for administrative costs of the coop on a pro-rated basis. Paying for the manager's salary, office supplies, irrigation rights, etc., these averaged about E$107.14, making total operating expenses E$2,274.19.

Net cash income was E$1,071.00 (E$3,345 minus E$2,274).

Since each case has been calculated in precisely the same manner we will not repeat more cases.
Income and Surplus: Las Pataguas Colonists, 1963-64

In this section we will determine consumption and, subtracting it from net income, arrive at debt repayment capacity. Subtracting capital payments due, we will determine surplus or deficit for our sample of colonists. Table III shows these calculations. The case we described in the former section appears at A-10.

After calculating net income (column 1) we asked each colonist to estimate his cash living expenses on the basis of the following categories: "What are your food expenses for the week?" "What are your clothing expenses for the month?" "What are your other expenses?" Results are displayed in column 2.

A figure for calculated cash consumption based on number of dependents and minimum standards set up by the National Health Service is found in column 3.

Regardless of individual variations, the grand totals of Columns 2 and 3 are quite close: E'37,410 for "estimated consumption" and E'42,522 for "calculated consumption." We take this to mean that on the average colonists are probably able to give a fairly accurate estimate of their consumption expense needs. Subtracting self-estimated family cash consumption from net cash income (Col. 1 minus Col. 2), we arrive at debt repayment capacity in Col. 4. In nine cases this number is negative.

The Las Pataguas cooperative has a total machinery inventory of E'10,000 on which it paid E'4,000 in 1962-63. Since it has two more years to pay off the remaining E'6,000, the 1963-64 portion of the machinery debt for each colonist is approximately E'43.
<table>
<thead>
<tr>
<th>Case</th>
<th>Net cash income</th>
<th>Self estimated family cash consumption</th>
<th>Calculated family cash consumption (Col. 1 - Col. 2)</th>
<th>Debt repayment capacity (Col. 1 - Col. 2)</th>
<th>Capital payments due in 1963-64 (Col. 4 - Col. 5)</th>
<th>Deficit or surplus for 1963-64 (Col. 6 - Col. 7)</th>
<th>Amount to be paid in 1964-65 for land (Col. 8 - Col. 9)</th>
<th>Surplus or deficit assuming a land payment (Col. 10 - Col. 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 1</td>
<td>8,651</td>
<td>2,465</td>
<td>2,668</td>
<td>6,186</td>
<td>293</td>
<td>5,893</td>
<td>752</td>
<td>5,141</td>
</tr>
<tr>
<td>A 2</td>
<td>3,428</td>
<td>2,546</td>
<td>1,940</td>
<td>882</td>
<td>43</td>
<td>839</td>
<td>890</td>
<td>- 51</td>
</tr>
<tr>
<td>A 3</td>
<td>1,777</td>
<td>1,966</td>
<td>2,182</td>
<td>- 189</td>
<td>43</td>
<td>- 232</td>
<td>710</td>
<td>- 942</td>
</tr>
<tr>
<td>A 4</td>
<td>3,663</td>
<td>1,242</td>
<td>1,697</td>
<td>2,421</td>
<td>43</td>
<td>2,378</td>
<td>801</td>
<td>1,577</td>
</tr>
<tr>
<td>A 5</td>
<td>3,734</td>
<td>2,686</td>
<td>3,048</td>
<td>- 189</td>
<td>43</td>
<td>2,005</td>
<td>750</td>
<td>255</td>
</tr>
<tr>
<td>A 6</td>
<td>1,303</td>
<td>1,188</td>
<td>1,940</td>
<td>115</td>
<td>571</td>
<td>- 456</td>
<td>713</td>
<td>- 1,169</td>
</tr>
<tr>
<td>A 7</td>
<td>2,023</td>
<td>1,197</td>
<td>2,668</td>
<td>826</td>
<td>43</td>
<td>783</td>
<td>760</td>
<td>23</td>
</tr>
<tr>
<td>A 8</td>
<td>756</td>
<td>1,825</td>
<td>2,425</td>
<td>- 1,069</td>
<td>1,303</td>
<td>- 2,372</td>
<td>840</td>
<td>- 3,212</td>
</tr>
<tr>
<td>A 9</td>
<td>1,837</td>
<td>4,936</td>
<td>3,868</td>
<td>- 3,099</td>
<td>43</td>
<td>- 3,142</td>
<td>750</td>
<td>- 3,892</td>
</tr>
<tr>
<td>A 10</td>
<td>1,071</td>
<td>2,245</td>
<td>1,697</td>
<td>- 1,174</td>
<td>743</td>
<td>- 1,917</td>
<td>837</td>
<td>- 2,754</td>
</tr>
<tr>
<td>A 11</td>
<td>864</td>
<td>1,474</td>
<td>2,425</td>
<td>- 610</td>
<td>43</td>
<td>- 653</td>
<td>718</td>
<td>- 1,371</td>
</tr>
<tr>
<td>A 12</td>
<td>760</td>
<td>1,174</td>
<td>2,182</td>
<td>- 414</td>
<td>43</td>
<td>- 457</td>
<td>818</td>
<td>- 1,275</td>
</tr>
<tr>
<td>A 13</td>
<td>1,487</td>
<td>1,527</td>
<td>1,697</td>
<td>40</td>
<td>43</td>
<td>- 83</td>
<td>833</td>
<td>916</td>
</tr>
<tr>
<td>A 14</td>
<td>1,052</td>
<td>884</td>
<td>372</td>
<td>168</td>
<td>43</td>
<td>125</td>
<td>784</td>
<td>659</td>
</tr>
<tr>
<td>A 15</td>
<td>4,448</td>
<td>1,938</td>
<td>4,586</td>
<td>2,510</td>
<td>43</td>
<td>2,467</td>
<td>812</td>
<td>1,655</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>39,554</td>
<td>29,293</td>
<td>35,975</td>
<td>7,361</td>
<td>3,383</td>
<td>4,178</td>
<td>11,768</td>
<td>- 7,590</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>2,457</td>
<td>1,953</td>
<td>2,388</td>
<td>504</td>
<td>225</td>
<td>279</td>
<td>785</td>
<td>506</td>
</tr>
<tr>
<td>A 16</td>
<td>17,574</td>
<td>4,566</td>
<td>2,425</td>
<td>13,008</td>
<td>4,457**</td>
<td>8,551</td>
<td>-</td>
<td>8,551</td>
</tr>
<tr>
<td>A 17</td>
<td>9,110</td>
<td>2,000</td>
<td>1,697</td>
<td>7,110</td>
<td>7,000**</td>
<td>110</td>
<td>-</td>
<td>110</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26,684</td>
<td>6,566</td>
<td>4,122</td>
<td>20,118</td>
<td>11,457</td>
<td>8,661</td>
<td>-</td>
<td>8,661</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>13,342</td>
<td>3,283</td>
<td>2,061</td>
<td>10,059</td>
<td>5,728</td>
<td>4,331</td>
<td>-</td>
<td>4,331</td>
</tr>
<tr>
<td>A 18</td>
<td>443</td>
<td>556</td>
<td>728</td>
<td>- 113</td>
<td>30</td>
<td>- 143</td>
<td>115</td>
<td>258</td>
</tr>
<tr>
<td>A 19</td>
<td>406</td>
<td>995</td>
<td>1,697</td>
<td>- 589</td>
<td>43</td>
<td>- 632</td>
<td>169</td>
<td>801</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>849</td>
<td>1,551</td>
<td>2,425</td>
<td>- 702</td>
<td>73</td>
<td>- 775</td>
<td>284</td>
<td>- 1,059</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>424</td>
<td>776</td>
<td>1,213</td>
<td>- 352</td>
<td>36</td>
<td>- 388</td>
<td>142</td>
<td>530</td>
</tr>
</tbody>
</table>

* Calculated on the basis of number of persons in the family from the study by H. Burgos Mujica, Análisis Económico Agrícola para un Plan de Crédito Supervisado: Comuna de Navidad, Año Agrícola 1960-61, Mtn. de Agricultura, Depto. de Economía Agraria, Sección de Admin. Rural, No. 19, p. 23. Based on theses by Elvira Matte de Cruchaga (1938) and Violeta Silvori A. (1950), Escuela de Servicio Social, Universidad Católica de Chile and norms established by the Servicio Nacional de Salud.

** Hijueleros were required to make a land payment in 1963-64.
Land interest payments (at six percent—included in operating expenses) will be required of each cooperator this year, but amortization payments are not due until 1964-65 except in the case of the hijuela operators who must make land plus interest payments this year. Some cooperators have other outstanding debts they must pay back this year (since A-18, a huertero, is not yet a member of the cooperative, he need not pay a portion of the machinery debt). We have called all of these debts—machinery, land amortization (for hijueleros), and miscellaneous loans due —"capital payments," and displayed them in column 5.

Surplus or deficit for the year is reported in column 6. Eight parcel holders and the two huerteros in our sample show deficits for 1963-64.

Assuming, for the moment, that a land amortization payment was necessary this year, how many could pay it?

Before calculating, a word of explanation is necessary. An adjustment for inflation and various improvements were added to the value of each parcel. Then each calculation was expressed in quintals of wheat and the amount was written into each cooperator's provisional title. For example, A-1 paid an E750

---

13/ On first glance one would imagine that advances should be accounted for here. Actually, they are included in the consumption which has already been subtracted to arrive at debt repayment capacity.

14/ This calculation may be a bit unfair: land payments were delayed so colonists could have several years to get established, organize a coop, etc. The calculation is not made to be prematurely critical but to point out how many colonists will have to raise their incomes over 1963-64 to meet their increasing obligations.
downpayment last year when the farm was under a sharecropping system. Early this year he received his provisional title which notes that he has 776.4 quintals yet to pay. This will be paid in 18 years beginning in 1964-65. It represents an amortization payment of about 43 quintals a year or E$752 due next year expressed in 1964 escudos (that is, 43 times the 1964 price of wheat which was E$17.50 a quintal).15/

Making a similar calculation for each of the parcel holders we interviewed results in column 7. Subtracting land payment to make next year from deficit or surplus (column 6) and displaying the difference in column 8 results in an enumeration of the parcel holders who could pay their land debt this year.

Under this assumption, two more parcel holders as well as the two huerteros would show deficits.

The average parcel holder on Las Pataguas made a net cash income of E$2,457 in 1963-64. He spent E$1,953 for family consumption and E$225 for debt payments and had a surplus of E$279. If a land payment had been required in 1963-64, he would not have been able to pay it entirely since upon subtracting the E$785 land amortization payment from the surplus of E$279

15/As this is written, the readjustment system is being changed by INPROA to include also an index constructed from a list of selected wholesale products. Then the debt adjustment may be made either on the wheat index or on the wholesale price index, whichever is more favorable to the colonist. It is impossible to tell how much this will benefit colonists a priori. But the fact that interest rate will be five percent instead of six percent and only two and one half percent will be applied to the re-adjusted principal should lessen deficits that show up for some colonists later in this chapter, but not enough to change the conclusions reached.
a E$\textsuperscript{506} deficit appears.\textsuperscript{16/}

Hijueleros will probably have no trouble meeting their consumption, capital payments, and land amortization. The two we interviewed averaged a surplus of E$\textsuperscript{4,331} after they had met all these payments.

Huerteros, it would seem, will have difficulty even with the relatively low payments required of them in 1963-64. The two showed an average net income of only E$\textsuperscript{424}. With consumption average and capital payments of E$\textsuperscript{812}, this left them with an/ E$\textsuperscript{388} deficit.

All colonists who showed deficits were presented with statements of their debt at the end of the crop year. It is mandatory that they make them up. Although no definite time limit has been set since each crop year presents different weather problems, settlers understand their debts must be paid as soon as possible if they are to remain as colonists.

Another measure of success of the reform experiment is found in a comparison of income before the reform and income in 1963-64. It is to that situation that we will turn next.

Have Colonists' Levels of Living Risen?

Before the colony was founded, the colonists who were interviewed had incomes (cash plus perquisites) averaging E$\textsuperscript{1,032}.\textsuperscript{17/}

\textsuperscript{16/}Again we remind the reader that this assumes all factors equal to 1963-64 in 1964-65 when the first land payment is due. Modifications in the inflationary readjustment system made in 1964-65 by INPROA and detailed earlier will undoubtedly lessen the average deficit but it will not disappear entirely.

\textsuperscript{17/}The comparisons in this section carry the same assumptions and restrictions as in the comparable section of the Los Silos analysis (Chapter III).
Average total income the last year before reform for all colonists who are now parcel holders was E\$1,162, while their average cash income was E\$705.

To arrive at a comparison with income available to the colonists now with income available before the reform we must add the net cash farm income arrived at in Table III to the amount of consumption in kind and "perquisites"\(^{18}\) from the parcel (Table IV). To calculate in-kind consumption, we added a value for the harvest the colonist stored for family use or consumed during the growing season, and the value of animal products, \(^{19}\) house rental, electricity, and garden production.

Table IV indicates that income increased for 14 of the 15 parcel holders after the reform. On the average, their income was E\$3,821—an increase of E\$2,659 (about 300 percent) over their pre-reform situation. Average cash income for parcel holders was E\$2,457, E\$1,752 above that in their pre-reform situation, an increase of about three and one half times.

There are three possible dispositions of the total income of E\$3,821 accruing to the average parcelero:

---

\(^{18}\) Of course, no perquisites are given to individual colonists in the sense they are given to inquilinos. But some of the same benefits (i.e. house, grazing privileges, etc.) valued in our discussion of the situation before the reform are still available after. This means that if we are to compare incomes, we must include them again.

\(^{19}\) This figure is calculated from the schedule of the Ministry of Labor (referred to earlier) which values "grazing privileges" as a perquisite. This undoubtedly undervalues actual animal income. But this under-valuation is probably slight since a much higher percentage of these animals are horses than on Los Silos.
### TABLE IV

**COMPARATIVE INCOME BEFORE AND AFTER THE REFORM: LAS PATAGUAS**

<table>
<thead>
<tr>
<th>Case</th>
<th>Income: last year of work before becoming a Las Pataguas colonist**(1)**</th>
<th>Under the Reform 1963-1964</th>
<th>Rise in income after reform (Col. 4 minus Col. 1)<strong>(5)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>E0</strong></td>
<td><strong>E0</strong></td>
<td><strong>E0</strong></td>
</tr>
<tr>
<td>B 1</td>
<td>1,216</td>
<td>8,651</td>
<td>1,183</td>
</tr>
<tr>
<td>B 2</td>
<td>1,604</td>
<td>3,428</td>
<td>1,765</td>
</tr>
<tr>
<td>B 3</td>
<td>570</td>
<td>1,777</td>
<td>1,537</td>
</tr>
<tr>
<td>B 4</td>
<td>623</td>
<td>3,663</td>
<td>1,454</td>
</tr>
<tr>
<td>B 5</td>
<td>913</td>
<td>3,734</td>
<td>1,885</td>
</tr>
<tr>
<td>B 6</td>
<td>980</td>
<td>1,303</td>
<td>249</td>
</tr>
<tr>
<td>B 7</td>
<td>807</td>
<td>2,023</td>
<td>1,498</td>
</tr>
<tr>
<td>B 8</td>
<td>1,000</td>
<td>756</td>
<td>869</td>
</tr>
<tr>
<td>B 9</td>
<td>1,176</td>
<td>1,837</td>
<td>1,624</td>
</tr>
<tr>
<td>B 10</td>
<td>1,437</td>
<td>1,071</td>
<td>1,251</td>
</tr>
<tr>
<td>B 11</td>
<td>1,149</td>
<td>864</td>
<td>1,486</td>
</tr>
<tr>
<td>B 12</td>
<td>926</td>
<td>760</td>
<td>962</td>
</tr>
<tr>
<td>B 13</td>
<td>3,146</td>
<td>1,487</td>
<td>1,068</td>
</tr>
<tr>
<td>B 14</td>
<td>616</td>
<td>1,052</td>
<td>1,674</td>
</tr>
<tr>
<td>B 15</td>
<td>1,265</td>
<td>4,448</td>
<td>1,956</td>
</tr>
<tr>
<td>Total</td>
<td>17,428</td>
<td>36,854</td>
<td>20,461</td>
</tr>
<tr>
<td>Average</td>
<td>1,162</td>
<td>2,457</td>
<td>1,364</td>
</tr>
</tbody>
</table>

| B 16 | - 2,000*** | 17,574 | 1,484 | 19,058 | 21,058 |
| B 17 | 2,561      | 9,110  | 2,432 | 11,542 | 8,981  |
| Total| 561        | 26,684 | 3,916 | 30,600 | 30,039 |
| Average| 281      | 13,342 | 1,958 | 15,300 | 15,019 |

| B 18 | 647        | 443    | 595   | 1,038 | 391    |
| B 19 | 953        | 406    | 562   | 968   | 15     |
| Total| 1,600      | 849    | 1,157 | 2,006 | 406    |
| Average| 800      | 424    | 579   | 1,003 | 203    |

---

* Using net income presented in Table III.
** Perquisites are valued by a schedule issued by the Dirección General del Trabajo (Ministerio del Trabajo) in 1963-64 prices. Wages are expressed in 1963-64 Escudos.
*** He was a renter previously.
1. Family Consumption

Table III indicates that a cash average of E$1,953 was probably spent for each family's consumption expenses in 1963-64. In addition, products and perquisites valued at E$1,364 were used for home consumption purposes. This means that an average of E$3,317 in cash, product, and perquisites was used by parcel holders for family consumption (E$1,953 plus E$1,364).

2. Cooperative and Individual Investment

Table III indicates that on the average, E$225 per colonist was spent on coop and individual investments.

3. Savings

About E$279 surplus or saving is available at the end of the year for the average colonist to use for other investments or for consumption.

Table III indicates that had a land payment been required in 1963-64, colonists would have shown an average deficit of E$506. Yet family consumption of the average parcel holding colonist has risen from E$1,162 to E$3,317—just under three times. Interviews on a neighboring fundo show that an inquilino family of nine (average family size is nine among parcel holders on Las Pataguas) was about E$1,300. As on Los Silos, we must conclude that consumption of colonists could be reduced, still leaving them better off than other zonal inquilinos and their situation formerly, so that they could meet their land payments.

As a less painful possible alternative to cutting consumption, it may be possible to raise production, or at least, lower expenses.
Possibilities of Raising Net Income

A Measurement of Production Potential

Again using the Photogrammetric Project (as we did in Chapter III), we selected a neighboring well-managed fundo which has a similar water supply and soil type for comparison with Las Pataguas.\footnote{Map 3410-7100A.}

On Las Pataguas, of the 284.7 hectares corresponding to the 19 colonists in our sample, 225 hectares or 79 percent of the total area is devoted to annual crops: rice, potatoes, beans, sunflowers, corn, and wheat. On the neighboring fundo of 630 hectares, 403 hectares or 63 percent of the farm is devoted to annual crops: corn, potatoes, and wheat. The other 227 hectares is pasture for fattening feeder cattle.

Wheat production on the neighboring farm was 33 percent higher than wheat production on our sample at Las Pataguas. Corn production on the neighbor's farm was 87 percent over corn production on our sample on Las Pataguas, while potato production was 155 percent higher.

This evidence seems to indicate that given the proper combination of inputs, production on Las Pataguas could be raised in the short run. Commercial fertilizer per fertilized hectare on the neighboring farm was well over two times greater when compared to our sample on Las Pataguas despite the fact that the
neighbor's fundo was able to take advantage of well manured pasture land which is constantly being brought into the rotation. This seems to indicate that if Las Pataguas colonists hope to increase their production, at the very least they will have to raise fertilizer inputs.

Cutting Expenses

In our description of Los Silos we hypothesized that labor inputs could be cut so that this saving might be allocated to yield increasing inputs. We qualified our analysis in a number of ways and will not repeat our qualifications here.

On the 284.7 hectares of our Las Pataguas sample, 20,170 man-days or about 71 man-days per hectare were used. Of this, about 8,809 man-days of hired labor were used at a total cost to the colonists in our sample of about £15,922. Thus about 44 percent of the labor used on our sample of Las Pataguas in 1963-64 was hired.

Three pieces of evidence lead us to the conclusion that this amount of labor is excessive and could be pared back.

(a) Calculations from data given us by the neighboring fundo operator, whose production we referred to above, reveals that the number of man-days of work on his fundo each year is about 27,000 or 43 man-days per hectare.

One may well argue that the neighboring fundo operator uses more labor-saving capital and so does not need as much labor as Las Pataguas. The next two pieces of evidence will attempt to show that this is not necessarily an important objection.
(b) Our information on the crops grown on Las Pataguas and the neighboring fundo was held up against the labor coefficients for the same combination of crops arrived at in the Ministry of Agriculture study referred to in Chapter III, this time for O'Higgins Province, to indicate whether labor use on Las Pataguas is really extravagant.

Calculated man-day requirements on our sample of Las Pataguas equals 10,780 or approximately 38 man-days per hectare. This figure is about half of the figure actually used—20,170 (approximately 71 man-days per hectare). On the other hand, the calculation on the neighboring fundo equals 20,808 while, as we have shown, it actually uses 27,000 man-days of labor. Considering that this fundo supports a herd of feeder cattle for which labor coefficients are not available, this seems to indicate that the amount of labor used is a realistic amount—an average for the zone considering the pattern of cultivation.

The calculated figure for Las Pataguas undoubtedly understates the necessity. The Ministry study sample is weighted more toward large farms. Some animals are raised on Las Pataguas. And small parcels need a certain labor flexibility during rush seasons which probably shows up as redundant labor in a gross calculation such as the one above. Also the input study sample undoubtedly includes farms which have more labor saving machinery.

---

to substitute for hand labor. Yet using nearly double the average amount of labor for the zone seems to indicate that the labor force could be reduced.

(c) Morales' data\(^{22}\) again supports the conclusion that labor use could be cut back. He uses a stratified sample of 96 selected farms in O'Higgins Province. Average labor use in the first strata studied (11 farms of from 10 to 19.9 irrigated hectares) was 45 man-days per hectare. In his second strata (31 farms of from 20 to 49.9 irrigated hectares), labor use was 37 man-days of work per hectare. Most of Las Pataguas' farms fall into the smaller of these two size categories.

The three indicators we have used show that from 38 to 45 man-days per hectare is probably average for the cropping pattern on Las Pataguas.

Perhaps by cutting back labor, however, we also are recommending that the fundo does not have the capacity to support colonist families already living there. This is not true.

Potential available labor on Las Pataguas, considering each male colonist-family resident over 16 years living on the fundo, is 172 man-years.

Boys under 16 should probably also be figured as part of the work force, but we will assume that there is a counter over-calculation of those too old to work.

Considering a man year as 300 days, the above calculation indicates a labor force of 51,600 days (300 days x 172) on Las Pataguas' 1,162 irrigated hectares—44 man-days per irrigated hectare.

The 44 man-days of labor per irrigated hectare already available on Las Pataguas falls within the 38 to 45 man-day range set up by the evidence we have presented and seems to indicate that employing 71 man-days of labor per hectare represents an unnecessarily lavish expenditure and means underemployment of some labor resources.

Considering that our sample represents about one fourth of the acreage of the fundo and the colonists we studied spent E$15,922 on hired labor, all settlers on the fundo probably spent four times that amount or over E$60,000 in 1963-64 contracting labor.

If all the approximately E$60,000 from hired outside labor cannot be saved (which, of course it cannot), certainly a major part might be reallocated—perhaps to yield-increasing capital. Or these savings might simply push down expenses thus yielding a greater net income.

Fertilizer: A Necessary Expense

Perhaps even more fertilizer may be necessary on Las Pataguas than the amount per hectare used on the neighboring farm (E$54 per fertilized hectare). At any rate, we can say that the approximately E$20 spent on fertilizer per hectare on Las Pataguas is too low. With a larger percentage of his farm in legumes than
Las Pataguas and much of the farm used for pasture, the neighbor's rotation is long. His soil is constantly being renewed from manure and the pasture itself. Therefore, it is entirely possible that while an expenditure of $54 an irrigated hectare may be nearly an optimal amount on the farm next door, colonists must expect to use even more fertilizer per hectare for comparable yields. A longer rotation for soil renewal practical on the neighboring farm is impractical on smaller plots like those on Las Pataguas.

We conclude our economic analysis of Las Pataguas by noting that the deficits recorded by average colonists if they had to make a land payment this year could have been made up by some combination of the following:

(a) Keeping consumption a little lower (still keeping colonists' income above their former situation and that of zonal inquilinos).

(b) Realizing the production potential that exists on the fundo. By using better management and applying more yield-increasing inputs, production can be increased. This involves the job of teaching colonists that yield increasing inputs pay.

(c) Reallocating expenses so that fewer are devoted to hiring labor.

Certainly the success of individual members will depend to a great extent on the success of their cooperative. We turn now to some of its problems and progress during 1963-64.
Problems and Progress of the Cooperative: 1963-64

Early Independence of Members

Cooperative organization has proven difficult on Las Pataguas. Land holders moved from the patronal system directly to nearly independent land holders. As these settlers received land they felt less need for a cooperative organization than did colonists on Los Silos for whom the cooperative was involved in every facet of their lives—even to working the land. Ironically, some of the colonists who did best economically this year were those who sold some of their produce outside coop channels, thus reinforcing their independence. There must be clear incentives for selling through the coop if it is to be developed into an effective marketing agency.

Social Division

The problem of an early spirit of independence was compounded by difficulties in incorporating the three definable social strata on Las Pataguas into the coop. The hijueleros were in a class by themselves, having little contact with parcel holders and huerteros. Their relationship to the rest of the coop tended to be similar to that between a patrón and "his people." Other colonists resented hijuelero domination of the cooperative in its early days. Hijueleros are vastly better off economically, had some farm management experience prior to their establishment, and seem, considering their background and interests, to have very little in common with their less favored neighbors.
Probably the only solution to the problem is the one chosen—to remove them from the cooperative. Proportioning the huerteros more land should, in years to come, give the coop an important base it seems to need to be effective: a more or less homogeneous membership.

A campesino leader of the Asociación Nacional de Organizaciones Campesinas, a Church supported labor organization, lives on Las Pataguas and began, at the colonists' request in early 1964, to devote himself part time to cooperative organization on Las Pataguas. Of course, if colonists do not see some material advantage to belonging to the coop, it is unlikely that this kind of encouragement will be very helpful.

Supervised Credit Plan

INPROA's general policy of working only with the coop and having its officers and committees, in turn, work with members may strengthen the cooperative. Indeed unless the coop members follow the farm plan drawn up for each colonist for 1964-65, credit assistance in kind and cash will be denied. This will behoove colonists to rely more on their coop organization.

Still, it is not clear whether the technical information can be entirely channeled through the coop without direct technician-colonist contact, considering the immense job of training in such matters as labor use, fertilizer use, etc. that remains.

Channeling inputs in kind through the coop means making a certain amount of fertilizer and seed, for example, available to each member, depending on the plan for his parcel. Then the
member in question plants the seed and applies the fertilizer. This involves a great deal of rote and care must be taken so that colonists know why certain inputs are being used.

Without much doubt, the farming plan in use in 1964-65 was needed. But considering the magnitude of the education job and the imperfections that creep into any farm management plan upon execution, a resident technical agricultural person must be made available full time to assist Las Pataguas with day-to-day management problems, at least in its first years. The case of the Ingeniero Agrónomo who was awarded a hijuela, but left Las Pataguas in 1964, illustrates again that a technician who assumes a paternal role simply cannot make a reform effort succeed, however. In addition to being highly trained himself, a technical person hired to assist in reform must be able to teach colonists gradually to make many of their own rational decisions.

Merely following a plan in order to receive credit has shortcomings too. If not carefully--and pragmatically--administered, a farming plan may develop into a rigidly dogmatic substitute for a patrón which demands unquestioning obedience and fosters little or no comprehension.

Organizational Problems

Las Pataguas' coop has had three managers (gerentes) in its past two years as a colony, the last of whom was relieved of his duties by cooperative vote at the end of the 1963-64 crop year. The gerente until this date had gotten into the fields very little. In fact, the one just removed was not trained in
agriculture and admitted he knew little about farming. Numerous parcel holders informally attested to his lack of knowledge in these matters. Consequently, he did little else than keep the books for the cooperative.

Unfortunately this shifting of gerentes also meant that even the accounts were not kept well.

There was a rather long delay at the end of the harvest while the accounts of coop members were figured. Most colonists had little idea of how they were doing until they finally received the tardy year-end statement and were surprised and disillusioned to find expenses higher than they imagined possible. It will be necessary in coming years for the cooperative to adopt a better bookkeeping system so land holders will be able to see their standing as the year progresses. Some colonists, not used to making management decisions, hired labor to the extent of their resources and didn't take into account that the fertilizer and seeds received in kind as well as the cash advances carried interest charges. Few knew the extent of interest charges when we interviewed them. To be confronted with debt rather than a profit the first year of proprietorship came as a blow and embittered some colonists and again illustrates the necessity for clearer communications between INPROA and the cooperative.

It is still too early to tell whether presentation of a bill showing deficits will encourage colonists to produce more next year or merely foster a defeatist attitude.
Summary: Las Pataguas

1. About 64 percent of the colonists making up the Las Pataguas experiment lived on the fundo at some time prior to the reform. Reform increased the resident capacity of the fundo by 16 families or 21 percent.

2. The reform defined three social classes depending on the size of the plot received. The cooperative is in the process of reversing itself and is encouraging hijueleros to leave the cooperative and will make it possible for huerteros to purchase additional land.

3. A point system determined who would get land on Las Pataguas.

4. Infrastructural costs added 20 percent to the cost of reform on Las Pataguas. It would seem that this figure could have been reduced considerably if more thought had been given to investment priorities. Then the parcel holders could have added less-necessary infrastructure at a later date utilizing profits from their own farm. This would have also given colonists more of a sense of participation in the reform.

5. About half of our sample will probably default on some payments this year although the average parcel holder will show a slight surplus. If a land payment had been required, the number of colonists defaulting from our sample would probably rise to a little more than half and the average parcel holder would show a deficit.

6. Income for each parcel holder has been raised considerably
by the reform—probably at least three times. Some of this increased income has gone into paying/land interest and other coop or individually owned capital. But consumption of families has at least doubled under the reform. If consumption could be held down slightly (admittedly a painful alternative), colonists would probably still be better off than they were before the reform (and better off than average inquilinos in the zone) and would be able to meet more of their debts. This will be especially important when a land amortization payment is required.

7. A neighboring farm under good management and with similar soil type and irrigation possibilities registered yields that are higher than on Las Pataguas. This seems to indicate that Las Pataguas has an unexploited margin of productivity.

8. Three standards used for comparison seem to indicate that too much labor was hired on Las Pataguas in 1963-64. Operating expenses could be lowered if family members would work more efficiently and hire less labor.

9. Fertilizer expenditures will undoubtedly have to be raised on Las Pataguas in order to raise production.

10. Although a supervised credit program is being used on Las Pataguas, and a planned farming program has been initiated in 1964-65, a resident technician is also necessary due to the mammoth teaching job which remains.
CHAPTER V
ALTO LAS CRUSES AND SAN DIONISIO

What we have learned from Los Silos and Las Pataguas we will apply to Alto Las Cruces and San Dionisio. We won't make the same mistakes again.

--A member of the INPROA staff.

Both Alto Las Cruces\(^1\) and San Dionisio\(^2\) were rented out for many years by the fundos' owner, the Archbishop of Santiago. When these properties came into the hands of INPROA at its founding, the Archbishop's Technical Committee had already begun the reform program: some colonists had been selected and a rudimentary cooperative, made up of all settlers, founded.

Both fundos were farmed under a combination sharecropping and rental system in 1963-64. At the close of the crop year, San Dionisio's colonists voted to continue this system another year. The Alto Las Cruces cooperative, on the other hand, opted for across-the-board rental in 1964-65. Parcelization will follow these intermediate steps, probably in 1966-67.

---

\(^1\)342.7 hectares including a marshy area that may be reclaimed one day.

\(^2\)1,127 irrigated and 257 irrigable but now dry hectares. This does not include 1900 hectares of mountain land largely unfit for farming.
INPROA officials felt that the Las Pataguas system of establishing colonists immediately on parcels weakened its young cooperative by giving too much independence too quickly to farmers yet unprepared for rational decision making. They decided that putting several steps between settlement of a fundo and private farms might foster cooperative ideas during the intermediate period helping to make the coop into a bargaining organization. Besides, in the centrally managed system arrived at, INPROA would have controls over management during these intermediate steps, thus strengthening the colony economically.

INPROA officials recognized their dilemma: they had to tread a thin line between helping colonists, inexperienced in agricultural decision making skills, to succeed economically while giving them a sense of participation in their colony.

As we shall see later, in the centrally managed share-cropping pattern adopted for the major part of both farms, original fundo fields are worked without physical division meaning that many colonists had their wheat, for example, in one large field and had to cooperate in irrigating and harvesting it.

INPROA staff members were firm in their belief that only by becoming institutionally strong could the campesino organization become a self-perpetuating agency truly breaking with the master-semi-serf structure of Chilean agriculture and capable of acting one day without surveillance.

Working through committees, the coop began, upon its formation, to make decisions on such non-technical issues as choosing
fellow colonists and employees (like a bookkeeper), electing
officials, punishing members who refused to do their share of
the work, etc. And its meetings came to constitute a forum which
helped crystallize colonists' desires for presentation to the
INPROA staff.

For practical reasons, too, INPROA would have
to economize on its actions as a service agency by dealing through
a strong cooperative made up of all participants in the reform
project and not with settlers individually. As it evolved, the
cooperative would be the vehicle through which members would have
to make decisions affecting their own destinies.

Some problems, however, could not be immediately resolved by
a majority vote of coop members: amount of fertilizer to use,
when to apply insecticides, whether or not to use seed disin-
fectants, etc. These techniques would have to be presented
with the voice of authority at first--through the central manage-
ment and also by way of supervised credit which could be with-
drawn if advice were not followed. At the end of the 1963-64
crop year, on-the-farm courses in cooperatives, agricultural
techniques, money management, etc. were added to the program to
build up individual skills. Further, although in 1963-64 an
INPROA technician largely divided his time between the two fundos,
a separate resident technician was hired for both Alto Las
Cruces and San Dionisio for 1964-65. This system was designed
to teach colonists that new practices pay—in time, effort, and
product. Adoption, reasoned INPROA officials, would follow.
We shall return to more details on the cooperative's accomplishments in 1963-64 and to a more thorough description of the land tenure pattern on the two fundos later in this chapter.

**Colonist Selection**

Unlike Las Pataguas, a point system was not used in the selection of original San Dionisio and Alto Las Cruces colonists. A subjective interview of former fundo occupants was administered by the Archbishop's Technical Committee in 1963. Replacements and new colonists selected from Instituto de Educación Rural sources were brought in. Early settlers were largely chosen without much community involvement; after INPROA began functioning, however, its officials insisted on coop participation in picking colonists. INPROA maintained a list of campesinos applying for a parcel. Therefore, some elimination of prospective colonists could be accomplished at the central office. (For example, campesinos from an entirely different area were removed from coop consideration.) Then candidates' names were submitted which summoned interested campesinos to appear personally before a selection meeting.

There were 52 original fundo residents on San Dionisio. Fourteen left before the reform got underway. Eight of these chose not to participate. Of the remainder, the following reasons figured in their dismissal: he drinks too much, he is too old to accept the responsibilities of a parcel, he doesn't want to work his land directly, he has already spread counter-propaganda
against the reform. 2/ Those who were expelled were given severance pay. By the beginning of the 1963-64 crop year, 17 new colonists were brought in so that the fundo supported three more families than the year before, in addition to a number of sharecroppers who lived outside the fundo and farmed several hectare plots of sunflowers, corn, and beans. By the beginning of the 1964-65 crop year, 11 more permanent colonists had been selected by INPROA and four more original colonists were found other jobs on a nearby fundo, paid an indemnization, and dismissed. 4/ The number of outside sharecroppers was correspondingly reduced in 1964-65. Final plans call for the farm's division into 73 parcels with a possibility of two more which, for the time being, would be held in reserve by the cooperative. When 73 colonists are settled, the fundo will be supporting nearly 29 percent more resident families than before the reform.

Alto Las Cruces formerly supported ten families. In 1963-64 12 colonists were settled there, half of them from the old fundo. Unfortunate accidents resulted in the death of two of these colonists during the crop year. Another colonist was expelled by the cooperative at harvest time in 1964. Five more settlers were selected at the beginning of the crop year 1964-65 and two more will be selected shortly to bring the farm up to its 17 family capacity. This will mean that the fundo after reform will support 41 percent more families than before.

2/ Files of San Dionisio.

4/ Two of these were dismissed because they were bachelors; the coop and INPROA insists on married couples and gives some preference to large families.
Parcelization

The Archbishop of Santiago still owns both Alto Las Cruces and San Dionisio. Through a deed in May 1963, however, he conferred all rights to administer the fundo on INPROA.

Plans for the parcelization of Alto Las Cruces were completed in September 1964, and INPROA applied to the Inter-American Development Bank asking it for a loan for infrastructure.

Irrigation Problems: Alto Las Cruces

Infrastructure additions on Alto Las Cruces are complicated because the farm is divided into two distinct halves by a stream--itself not usable for irrigation purposes--and its accompanying marshy area. Thus divided into a north and south sector, the two parts of the farm receive irrigation water from two different canals of the Maule River.

In the north half, all water comes from the Sandoval Canal, which forks west and north from the Maule and, as it nears the northern boundary of the fundo, is almost parallel to it. The original amount of legally owned water was insufficient to adequately water all of the area, since the old fundo held claim to only 14 regadores, in this case equalling an average of 131 liters per second. But since the Sandoval Canal does not have a legally constituted water association, nearby fundos (like Alto Las Cruces) have, until now, merely taken all the water they needed.

Another related problem is lack of fertility, especially in the northern half of the farm. Taking advantage of the free
water supply, the last renter had depleted the soil by raising rice without an adequate rotation or applying much fertilizer.

To insure that the north sector will have a permanent supply of water if a water association is organized and farms are no longer able to use whatever amount they need, the Archbishop is in the process of buying 150 shares of a canal near Talca to barter for an equal water flow in the Sandoval Canal.\(^5\) Alto Las Cruces continues to use all the water it needs meanwhile, but when legal purchase is complete these additional shares will total 220 additional liters per second.

Because the farm held fewer water shares in its south sector, a reservoir there evened out the water supply. Under the former rental system it fell into disrepair. This sector is watered by the smaller San Miguel Canal which makes a more acute angle with the Maule than the Sandoval and runs parallel to the fundo's southern boundary. The fundo holds five percent of the rights of the San Miguel Canal Association which, in turn, owns half of the shares of the San Miguel Canal. These rights total about 74 liters per second.\(^6\) Lately the Archbishop has entered into

---

\(^5\) The likelihood of an association being formed is great since Alto Las Cruces is in the area of the "Maule Norte," a regional development project of the Chilean government now in its planning stages.

\(^6\) The reader will note that in describing water rights in the Sandoval Canal we referred to "regadores" of water and in San Miguel to "shares" of water. Regadores is an old measure and the quantity of water a regador represents usually varies from canal to canal and in one canal according to the time of year. (But if regador is not qualified by an explanation it refers to 18 liters per second of the Maipo River.) A share is a percentage of all the water in one canal which also varies according to seasons. In old land titles, water rights are usually expressed in regadores while in new titles when water associations are organized, water rights are expressed in shares. To complicate matters, sometimes shares are sold for a certain number of regadores.
negotiations with the Irrigation Department of the Ministry of Public Works (Dirección de Riego del Ministerio de Obras Públicas), which owns a great part of the water rights in Sandoval Canal, to buy more regadores totalling 56 liters per second, but negotiations have not been completed. This additional water will probably be available when the canal to connect the Sandoval and San Miguel at their nearest point off the southeast corner of the fundo is completed by the Ministry of Public Works. Work on this connecting canal is in process.

The overflow rights (derrames) Alto Las Cruces owns from neighboring fundos probably total 15 liters per second. Because of the low total amount of water, the reservoir must be repaired to make the best use of the water that is available. It will have the capacity to store a flow of 145 liters per second during 44 hours. The most expensive single item of the irrigation plan is fixing the reservoir which is expected to cost about 36 percent of the entire amount spent for rearrangement of the farm's irrigation system to fit the parcels. But disrepair of the reservoir, coupled with a low initial water supply, was but one reason for the water scarcity in this sector. Minifundio operators off the eastern boundary of the fundo were pilfering water which belonged to Alto Las Cruces. INPROA has now obtained measured water dividers (marcados partidores) for

2/Even assuming the fundo is able to obtain the new rights, this half of the farm will have claim to only 145 liters per second in comparison with 351 liters per second for the north part.
them, thus giving the group of minifundistas a fixed amount and eliminating most possibilities of stealing an unlimited supply of water from that destined for Alto Las Cruces.

While repair of the reservoir raised the costs of irrigation on Alto Las Cruces substantially, the largest single item on the Las Pataguas water project was the marcos partidores. On Alto Las Cruces (and also San Dionisio), it was decided that a cheaper system of water "turns" or "shifts" (turnos) would be more practical (See Chapter IV).

The Villorrio: Alto Las Cruces

Since the south sector of the fundo has been poorly watered, it was little used by the former renter. The bad state of repair of the houses here meant that all but one had to be demolished after INPROA took over. Eight more dwellings must be built to accommodate the nine planned parcels in the area.

INPROA was convinced by the Las Pataguas experience that a villorrio is an unworkable settlement scheme. Furthermore, Alto Las Cruces colonists voted to live on their land. Yet the INPROA planners realized that the stream might divide the community in two parts since it makes communications between the distinct halves of the fundo difficult. This would be especially true with respect to parcels 11 and 8 (Diagram I). Although they are quite near the planned cooperative buildings, the marshy area makes passage difficult, and colonists would have to use the eastern road to go to meetings or to have any contact with the
DIAGRAM I.

<table>
<thead>
<tr>
<th>NO.</th>
<th>PARCELS</th>
<th>AREA (HAS.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13.87</td>
<td>1.0</td>
</tr>
<tr>
<td>2</td>
<td>14.25</td>
<td>1.0</td>
</tr>
<tr>
<td>3</td>
<td>14.90</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>14.60</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>14.60</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>13.95</td>
<td>1.0</td>
</tr>
<tr>
<td>7</td>
<td>14.40</td>
<td>1.0</td>
</tr>
<tr>
<td>8</td>
<td>15.15</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>14.80</td>
<td>1.2</td>
</tr>
<tr>
<td>10</td>
<td>15.27</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>14.10</td>
<td>0.85</td>
</tr>
<tr>
<td>12</td>
<td>21.95</td>
<td>0.10</td>
</tr>
<tr>
<td>13</td>
<td>15.55</td>
<td>0.25</td>
</tr>
<tr>
<td>14</td>
<td>20.12</td>
<td>1.95</td>
</tr>
<tr>
<td>15</td>
<td>12.90</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>13.85</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>15.00</td>
<td>-</td>
</tr>
<tr>
<td>SUB-TOTAL</td>
<td>330.33</td>
<td>8.95</td>
</tr>
</tbody>
</table>

The Parcelization Plan of Alto Las Cruces.
remainder of the fundo. Furthermore, supplying electricity and drinking water to houses on dispersed parcels would be difficult and expensive. A modified villorrio plan was finally decided upon. This group houses in the center-eastern boundary of the fundo near the road crossing the stream to the north sector while giving as many as possible access to their land and puts the majority of the houses on the least fertile land in the south sector.

The cooperative buildings are planned for a central location in the north sector, also on rather poor land. The nearby soil in the stream bed might be brought into production sometime in the future, but much labor will be needed to reclaim it. By the strategic location of a coop and land reserved for it in this area, it is possible that coop members themselves will be able to do the necessary clearing job after a loan to do the technical drainage work is obtained. Only two new houses are necessary on the north part of the fundo.

Total Infrastructure: Alto Las Cruces

The total infrastructural bill for the fundo is estimated at E'166,343.85.8/

The farm (minus a parcel to be used by the IER) is valued at E'163,033.05.

---

8/ INPROA, Proyecto Específico Alto Las Cruces, Santiago, August 1964, (mimeographed). See page 40 et. seq.
The total cost of settling the 17 families then will be £329,376.90. Of this nearly 51 percent can be attributed to new infrastructure:

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houses</td>
<td>23.5%</td>
</tr>
<tr>
<td>Fences and Gates</td>
<td>4.6%</td>
</tr>
<tr>
<td>Irrigation Works</td>
<td>11.0%</td>
</tr>
<tr>
<td>Roads</td>
<td>5.6%</td>
</tr>
<tr>
<td>Electricity</td>
<td>3.1%</td>
</tr>
<tr>
<td>Drinking Water</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

50.7 percent

Only 20 percent of the cost of the reform was attributable to infrastructure on Las Pataguas (Chapter IV), on Alto Las Cruces. Infrastructure will cost nearly £9,800 per parcel holder settled; land will cost an average of £9,600 a parcel (varying in size, depending on soil quality, from 22.05 hectares to 12.55 hectares).

Unlike Las Pataguas, however, infrastructure will not be included in each colonist's land bill. There will be a separate bill for infrastructure as installations are completed since estimates may not coincide exactly with expenditures. (As pointed out in Chapter IV, they did not on Las Pataguas and INPROA lost money as a result.)

Plans for San Dionisio

Plans for the parcelization of San Dionisio are not yet complete. It is known, however, that the cooperative will have to build 53 houses. Only 20 from the old fundo can be used and many colonists are living in prefabricated houses or two families to a house until the necessary plans are completed and the
infrastructure loan from the Inter-American Development Bank obtained.

Most old but still usable fundo houses on San Dionisio are grouped along the public access roads. Since the cooperative again vetoed a villorrio settlement and because houses located in dispersed fashion on the parcels would simply have been too expensive, a type of modified hamlet settlement a bit different from that in San Dionisio was decided upon.

On San Dionisio each house will be located on its parcel, but four houses will be grouped on adjoining corners of the respective plots. In this way the cluster of four houses should be able to share the same well, have a common warehouse, and electrical installations should be less expensive than in a completely dispersed settlement.

Only a trunk road exists on the fundo now—a "U" shaped access road internal to the farm must be built and alterations made to the irrigation system (again based on turnos). Electricity and running water/ Plenty of irrigation water from the San Dionisio and Machicura Canals is available so there will be no complicated water purchase problems on this fundo as there are on Alto Las Cruces. There are plans for extending the irrigation system to the 257 hectare dry area at the base of the mountain as soon as possible. An estimate of these costs is not available at this writing, but per colonist expenses are likely to be lower than on Alto Las Cruces.
Tenure System: San Dionisio and Alto Las Cruces: 1963-64

In the 50-50 sharecropping (medierfa) system on San Dionisio and Alto Las Cruces in 1963-64, INPROA supplied the land for which it, in turn, paid a rent to the Archbishop of Santiago. Operating expenses were split 50-50 with the colonists, but labor was completely at the cooperators' expense. Income was split 50-50 between the colonists and INPROA.

Each colonist was asked how much land he felt he could care for under a sharecropping system at the beginning of the 1963-64 crop year, the first year of the reform. INPROA worked out the farming program for the fundo which called for growing wheat, beans, corn, potatoes, and sunflowers. Most of the wheat, however, was already planted when INPROA took over. Each colonist was assigned parts of large fields which represented the best compromise between his acreage desires, crops he wanted to grow, and the amount of cropping land actually available. Former fundo fields were not divided: a colonist may have had plots in four or five large fields, always knowing which part of the field was his.

This system allowed INPROA to take advantage of any economies of size there might be in large fields and maintain centralized management over such matters as fertilizer application, insecticide use, etc., as well as planning of the farm's cropping pattern. The foremost advantage of the system seems to be that it

\[2/\text{No sunflowers were grown on Alto Las Cruces.}\]
economizes on scarce technical resources, but other economies are that the irrigation system does not need to be divided, seeding crops can be accomplished with a large drill and harvesting with a self-propelled combine.\textsuperscript{10}

Each colonist had certain decisions to make on the portions of the fields which were "his:" when to weed, how to divide irrigation chores, etc. In wheat harvest, each sharecropper was given the option of combining separately and paying a higher harvesting fee or harvesting with other medieros who had their plots in the same field and dividing the yield by the number of hectares in medias he possessed. Most chose the latter alternative. Crops like potatoes and corn were harvested individually by hand. Sunflowers were cut by hand, heads were allowed to field-dry, and then were harvested with a combine.

Besides a plot on shares, all colonists who wanted could rent a smaller piece of land—usually a \textit{cuadra} (equal to four acres or 1.56 hectares)—from INPROA. On San Dionisio they could grow sugar beets on this land according to specifications set forth by IANSA (Industria Azucarera Nacional S.A.), the national sugar beet company. Sugar beets were irrigated, weeded, and harvested by hand although they were planted with machine. Alto Las Cruces did not obtain a sugar beet contract in 1963-64, and since sugar beets are grown only on IANSA contract, colonists

\textsuperscript{10}This might also have been a diseconomy. As we will see, ample labor existed on the fundo—perhaps enough so that there was little justification for the mechanization of these operations.
couldn't raise them. Colonists there planted their rented acreage to whatever crops they wanted and no central management was exerted over these plots.

On the two fundos, we attempted measurement of the same economic matters as on Los Silos and Las Pataguas. On San Dionisio we picked a random sample of 14 cases out of the 52 settlers during 1963-64—about 27 percent—to interview in depth. On Las Alto/Cruces we picked eight cases out of the ten 1963-64 colonists.

San Dionisio: 1963-64

Can Colonists Pay Their Debts?

a. A Case

Income accrued to a colonist on San Dionisio from three sources: (1) half of all gross produce on his sharecropped land after half of the operating expenses corresponding to his acreage were deducted; (2) all the net income from his rented cuadra; (3) asignación familiar.

The actual cash farm income of one rather typical colonist in 1963-64 is presented in Table I to demonstrate our calculations in the subsequent section.

Table I shows that the case we have selected had 11 hectares in sharecropping and 1.56 rented hectares of sugarbeets. Total gross income on his sharecropped land was E$5,874. Of this, he received half or E$2,937. The other half went to INPROA to pay land rent, management costs, land taxes, irrigation rights, etc. Of his half, this colonist kept out E$464 worth of wheat,
TABLE I

CALCULATION OF NET INCOME FOR ONE CASE ON SAN DIONISIO 1963-64

ACREAGE: 11 HECTARES IN 50-50 SHARECROPPING; 1.56 HECTARES IN RENTAL

<table>
<thead>
<tr>
<th></th>
<th>Gross Income: Sharecropping</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total yield</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>1 - Wheat</td>
<td>170 quintals</td>
</tr>
<tr>
<td>2 - Potatoes</td>
<td>150 sacks</td>
</tr>
<tr>
<td>3 - Beans (for exportation)</td>
<td>12 quintals</td>
</tr>
<tr>
<td>4 - Corn</td>
<td>35 quintals</td>
</tr>
<tr>
<td>5 - Sunflowers</td>
<td>12 quintals</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
</tbody>
</table>

a) *Gross cash farm income: sharecropping (Col. 6) E0 2,473
b) Gross income for rented 1.56 hectares of sugarbeets 1,750
c) Asignación familiar (8 dependents) 
Gross cash income E0 4,695
### TABLE I (Continued)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Total expenses (shares)</th>
<th>This colonist's portion</th>
<th>INPROA'S portion</th>
<th>Total expenses on rented land (all paid by this colonist)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Outside labor:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent worker (YEAR)$E^0$ 723</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weeding sugar beets</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting beans</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvest of sunflowers</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigator's wage</td>
<td>4</td>
<td>561.00</td>
<td></td>
<td>230.00</td>
</tr>
<tr>
<td>2-Meals for workers (calculated by schedule used by Ministry of Labor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-Interest (12%) on production advances ($E^0$ 230)</td>
<td>51.05</td>
<td>51.05</td>
<td></td>
<td>20.00</td>
</tr>
<tr>
<td>4-Interest (12%) on consumption advances ($E^0$ 103)</td>
<td>12.36</td>
<td>12.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-Interest on all seed and fertilizer (12% of items 7, 8, and 11 below which total $E^0$ 318 (sharecropping) and $E^0$ 97 (rent))</td>
<td>38.16</td>
<td>38.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-INPROA'S marketing fee-2% of C-6's sharecropping sold ($E^0$ 2,473) plus 2% of $E^0$ 1,750 marketed from rented portion</td>
<td>49.00</td>
<td>49.00</td>
<td></td>
<td>35.00</td>
</tr>
<tr>
<td>7-Nitrate fertilizer - 10 sacks (shares); 4 sacks (rent) at $E^0$ 8 a sack</td>
<td>80.00</td>
<td>40.00</td>
<td>40.00</td>
<td>32.00</td>
</tr>
<tr>
<td>8-Superphosphate fertilizer - 8 sacks (shares) and 2 sacks rented portion at $E^0$ 15.87 a sack</td>
<td>127.00</td>
<td>63.50</td>
<td>63.50</td>
<td>32.00</td>
</tr>
<tr>
<td>9-Pesticide (pro-rated share)</td>
<td>66.00</td>
<td>33.00</td>
<td>33.00</td>
<td>2.00</td>
</tr>
<tr>
<td>10-Weed killer (pro-rated share)</td>
<td>100.00</td>
<td>50.00</td>
<td>50.00</td>
<td>-</td>
</tr>
<tr>
<td>11-Seed:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potatoes $E^0$30 Wheat $E^0$312</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn $E^0$10 Sugarbeet $E^0$33</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans $E^0$58.50 Sunflower $E^0$18.75</td>
<td>429.00</td>
<td>214.50</td>
<td>214.50</td>
<td>33.00</td>
</tr>
<tr>
<td>12-Rent of 1.56 hectares</td>
<td></td>
<td></td>
<td></td>
<td>250.00</td>
</tr>
<tr>
<td>13-Land tilling</td>
<td>48.00</td>
<td>24.00</td>
<td>24.00</td>
<td>20.00</td>
</tr>
<tr>
<td>14-Combining charges</td>
<td>275.00</td>
<td>137.50</td>
<td>137.50</td>
<td></td>
</tr>
<tr>
<td>15-Coop administration</td>
<td>223.74</td>
<td>111.87</td>
<td>111.87</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,687.91</td>
<td>1,413.54</td>
<td>674.37</td>
<td>673.00</td>
</tr>
<tr>
<td>Total operating expenses (sharecropping)</td>
<td>$E^0$ 1,413.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total operating expenses (rental)</td>
<td>$E^0$ 673.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross cash income</td>
<td>$E^0$ 4,695.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>$E^0$ 2,086.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>$E^0$ 2,608.46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
potatoes, and corn for home consumption. Cash sales from his portion of the sharecropping were E'2,473 (E'2,937 minus E'464).

His gross income from sugar beets on rented land was E'1,750, while the total asignación familiar he received for his eight dependents was E'472. His gross cash income (E'2,473 plus E'1,750 plus E'472) amounted to E'4,695.

On the cost side, as was the case for many colonists, his greatest single operating expense (E'862.05) was for outside labor he hired together with the meals he supplied (E'561 plus E'230 plus E'51.05 plus E'20).

Lump sum advances totalling E'333 were given by INPROA through the coop in several installments. In addition, inputs in kind totalling E'415 were loaned to this colonist. A 12 percent interest was charged on all loans.\(^{11}\) INPROA also received a two percent fee for all goods it marketed.

As indicated previously, fertilizer, pesticide, weed killer, and most seeds were used in standard amounts under INPROA's guidance on the sharecropped portion. The share of each of these corresponding to this case is shown. In addition, the national sugarbeet company prescribed a standard amount of seed, pesticide, and fertilizer for the rented plot. The rent INPROA collected for this land was E'250.

The tractor used for harrowing purposes was rented from outside the coop as was the combine for the wheat and sunflower

\(^{11}\) Actual interest was higher for fewer months. Twelve percent for 12 months is a reasonable average.
harvest. On the sharecropping enterprises this rental cost was divided with INPROA. The extent of use of this labor-saving equipment was also controlled by INPROA.\footnote{Otherwise colonists might have used rented machinery to save labor (a cost they shared with INPROA) instead of hiring labor themselves (colonists bore 100 percent of hired labor costs).}

Cooperative administrative expenses include part of the payment for asignación familiar as well as some other miscellaneous expenses. (Part of the contribution made to the government for asignación familiar payments came from INPROA's half of the harvest.)

Table I shows that total operating expenses on the sharecropped and rented portion attributable to this case was E\textsuperscript{*}2,086.54 (E\textsuperscript{*}1,413.54 plus E\textsuperscript{*}673.00). Net income was E\textsuperscript{*}2,608 (E\textsuperscript{*}4,695.00 minus E\textsuperscript{*}2,086.54).

Rather than repeat all cases in a manner as complete as this one, we merely mention that all calculations of net cash income for the 14 cases have been calculated in the same manner.

b. Income and Surplus: San Dionisio Colonists, 1963-64

In this section we will determine consumption and, subtracting it from net income, arrive at debt repayment capacity. Subtracting capital payments due, we will determine surplus or deficit. Table II shows these calculations. Cases are numbered B1-B14; the case we have described appears as B-6.

Major reasons for variations in net cash income shown in column one are differences in acreage farmed, the fact that some
### TABLE II

**SURPLUS OR DEFICIT AMONG A SELECTED SAMPLE OF SAN DIONISIO COLONISTS 1963-64**

<table>
<thead>
<tr>
<th>Case No. and number of hectares</th>
<th>Net cash income available to colonists (1)</th>
<th>Self estimated family cash consumption (2)</th>
<th>Debt repayment capacity to make in 1963-64 Col. 1 - Col. 2 (3)</th>
<th>Capital payments to make in Col. 3 - Col. 4 (4)**</th>
<th>Deficit or surplus for 1963-64 Col. 3 - Col. 4 (5)</th>
<th>Calculated family consumption Col. 1 - Col. 6 (6)***</th>
<th>Debt repayment capacity using calculated consumption Col. 7 (Col. 7-Col. 4) (7)</th>
<th>Deficit or surplus for 1963-64 assuming Col. 7 (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 1-16.02</td>
<td>E0 5,364</td>
<td>E0 1,328*</td>
<td>E0 4,036</td>
<td>E0 135</td>
<td>E0 3,901</td>
<td>E0 1,328</td>
<td>E0 4,036</td>
<td>E0 3,901</td>
</tr>
<tr>
<td>B 2-20.31</td>
<td>4,987</td>
<td>2,183*</td>
<td>2,804</td>
<td>135</td>
<td>2,669</td>
<td>2,183</td>
<td>2,804</td>
<td>2,669</td>
</tr>
<tr>
<td>B 3-8.59</td>
<td>776</td>
<td>1,621</td>
<td>- 845</td>
<td>135</td>
<td>- 980</td>
<td>1,698</td>
<td>- 922</td>
<td>- 1,057</td>
</tr>
<tr>
<td>B 4-12.11</td>
<td>2,243</td>
<td>1,219</td>
<td>1,024</td>
<td>135</td>
<td>889</td>
<td>1,213</td>
<td>1,030</td>
<td>895</td>
</tr>
<tr>
<td>B 5-13.28</td>
<td>3,348</td>
<td>2,426*</td>
<td>922</td>
<td>135</td>
<td>787</td>
<td>2,426</td>
<td>922</td>
<td>787</td>
</tr>
<tr>
<td>B 6-12.50</td>
<td>2,608</td>
<td>736</td>
<td>1,872</td>
<td>135</td>
<td>1,737</td>
<td>2,426</td>
<td>182</td>
<td>47</td>
</tr>
<tr>
<td>B 7-14.45</td>
<td>3,522</td>
<td>898</td>
<td>2,624</td>
<td>455</td>
<td>2,169</td>
<td>1,940</td>
<td>1,582</td>
<td>1,127</td>
</tr>
<tr>
<td>B 8-15.63</td>
<td>3,874</td>
<td>1,208</td>
<td>2,666</td>
<td>285</td>
<td>2,381</td>
<td>1,940</td>
<td>1,934</td>
<td>1,649</td>
</tr>
<tr>
<td>B 9-11.72</td>
<td>1,755</td>
<td>866</td>
<td>889</td>
<td>315</td>
<td>574</td>
<td>1,940</td>
<td>- 185</td>
<td>- 500</td>
</tr>
<tr>
<td>B10-16.41</td>
<td>3,051</td>
<td>2,919*</td>
<td>132</td>
<td>135</td>
<td>- 3</td>
<td>2,919</td>
<td>132</td>
<td>- 3</td>
</tr>
<tr>
<td>B11-12.50</td>
<td>2,146</td>
<td>945</td>
<td>1,201</td>
<td>135</td>
<td>1,066</td>
<td>1,698</td>
<td>448</td>
<td>313</td>
</tr>
<tr>
<td>B12-5.47</td>
<td>529</td>
<td>328</td>
<td>201</td>
<td>135</td>
<td>66</td>
<td>372</td>
<td>157</td>
<td>22</td>
</tr>
<tr>
<td>B13-8.59</td>
<td>740</td>
<td>516</td>
<td>224</td>
<td>135</td>
<td>89</td>
<td>372</td>
<td>157</td>
<td>132</td>
</tr>
<tr>
<td>B14-2.73</td>
<td>651</td>
<td>585</td>
<td>66</td>
<td>135</td>
<td>- 69</td>
<td>970</td>
<td>- 319</td>
<td>- 454</td>
</tr>
<tr>
<td><strong>TOTAL in E0</strong></td>
<td><strong>35,594</strong></td>
<td><strong>17,778</strong></td>
<td><strong>17,816</strong></td>
<td><strong>2,540</strong></td>
<td><strong>15,276</strong></td>
<td><strong>23,425</strong></td>
<td><strong>12,169</strong></td>
<td><strong>9,629</strong></td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>2,542</strong></td>
<td><strong>1,270</strong></td>
<td><strong>1,272</strong></td>
<td><strong>181</strong></td>
<td><strong>1,091</strong></td>
<td><strong>1,673</strong></td>
<td><strong>869</strong></td>
<td><strong>688</strong></td>
</tr>
</tbody>
</table>

* These colonists could not make an estimate. Calculated figures (***) below used.

** These vary because some colonists have miscellaneous outstanding debts to pay. The E0 135 shown for most is payment for machinery purchased by the cooperative.

*** Calculated on the basis of number of persons in the family from the study by Hernán Burgos Mujica, *Análisis Económico Agrícola para un Plan de Crédito Supervisado: Comuna de Navidad, Año Agrícola 1960-61*, Ministerio de Agricultura, Depto. de Economía Agraria, No. 19, p. 23. Based on theses by Elvira Matte de Cruchaga (1938) and Violeta Sívori A. (1950), Escuela de Servicio Social, Universidad Católica de Chile and norms established by the Servicio Nacional de Salud.
colonists elected not to have a portion of sugarbeet land (sugarbeets yielded well in 1963-64), some colonists kept back more than others for their own consumption, some raised expenses considerably by utilizing a large amount of outside labor, and management techniques varied for such practices as weeding, irrigation, etc., over which colonists had control.

Consumption must be subtracted from net cash farm income to arrive at debt repayment capacity. To determine consumption, each colonist was asked to estimate his cash living expenses. Four colonists were unable to make this estimate. For these four, we calculated a consumption figure according to the National Health Service standards (referred to in similar calculations on Las Pataguas) and used this figure for the remainder of the computations in the table. As one measure of the accuracy of the remainder of the estimates, we calculated the living expenses for each of the ten colonists who did make an estimate. The total of the ten self-estimates (shown in column 2) was $8,922. The ten calculated cases which correspond to the ten estimates total $14,596 (column 6). Unlike the Las Pataguas colonists, who respond fairly like the calculation, this seems to indicate either that colonists on San Dionisio are not consuming up to the minimum standards or they are not able to respond intelligently to this type of question (possibly because they do not have the year's experience nearer the money economy that the other two colonies have). The former assumption is more likely, however. INPROA restricted advances on San Dionisio to a level
lower than on Los Silos and Las Pataguas and probably colonists are indeed consuming below the calculated amount.

Subtracting self-estimated family consumption from net income gives the debt repayment capacity of the cooperative members which is displayed in column 3. Only one negative number is recorded here.

The cooperative has purchased some machinery this year on which each cooperator was required to pay E1,35. With some other miscellaneous debts they have to pay this year (usually on individually owned draft animals), we have displayed total capital expenditures the 14 randomly selected colonists had to pay in 1963-64 in column 4. No land payment was due in 1963-64, of course, since colonists have not entered the land purchase stage of reform.

Assuming that each colonist was able to give a more or less accurate idea of his consumption, the deficit or surplus corresponding to each colonist is shown in column 5. Using the calculated consumption figure, deficit or surplus is shown in column 8.

The average colonist shows a net farm income of E2,542 (column 1) and average capital debts of E181 (column 4). Average consumption, based on our two methods of calculation, varies from E1,270 to E1,673 (columns 2 and 6). Average surplus ranges from E688 to E1,091 (columns 8 and 5). This indicates that most colonists could probably have met a land payment this year if eventual land payments to be made are roughly similar to those on Los Silos or Las Pataguas. Since we know that the rental paid to INPROA and the half of net income
that accrued to INPROA from the sharecropped land was used to pay the rent the Archbishop required (five percent of the value of the fundo), we can assume that the fundo is also capable of meeting necessary interest payments (which will also be five percent). In addition to interest, the part of the income accruing to INPROA pays the irrigation rights, land taxes, a few other expenses of the cooperative, and expenses of management.

c. How Did Members Spend Their Surplus?

INPROA kept an accounting for each colonist with the help of the cooperative. Lump sum advances and in-kind advances were noted as they were loaned to each member. All of the operating expenses (like those in Table I), together with a pro-rated share of machinery the coop was purchasing, were deducted from the harvest corresponding to each colonist. On November 2, 1964, each colonist was given a lump sum payment which represented his surplus from the 1963-64 crop year.

A group of 15 colonists on San Dionisio were interviewed two weeks after receiving their lump sum settlement to find out how it was spent.

Although this was a different group than our original sample, both samples are of similar magnitude. Several conclusions can be drawn from the data we gathered on our second interview:

1. Table II shows that average surplus for a San Dionisio colonist ranged between E$688 and E$1,091. Lump sum payments to the average colonist were E$1,226. There are three possible
explanations for a difference between our calculation and the average lump sum settlement:

   a) The two are not directly comparable. Colonists planned to spend part of the lump sum settlement on consumption when they received it. All of the consumption has already been subtracted from the range of E'688 and E'1,091 we established in Table II. Colonists certainly planned to make at least clothing expenditures with the cash they received at harvest time; just as inquilinos, they bought clothes or food in bulk when they sold some produce from their chacras. The fact that they did not receive their settlements for the 1963-64 harvest until the 1964-65 crop year was underway merely delayed this part of their expenditure. Since our second interview revealed that family expenses (furniture, food inventory, home improvements, clothing) averaged 39 percent of the disposition of the lump sum settlement, this means we must deduct 39 percent from the average lump sum settlement to make it comparable to the range in Table II. This deduction puts average comparable surplus at E'748, well within our established range.

   b) Colonists' self-consumption was really more accurate than the calculated consumption figure. As noted previously, INPROA gave lower consumption advances on San Dionisio than on Los Silos or Las Pataguas. And unlike Los Silos no money was regularly coming in for the sale of milk (although it was for asignación familiar). If consumption was effectively restricted, we would expect the highest number in our range (E'1,091) to more
nearly reflect the real situation. (The least consumption haseen subtracted.) Again we must remember that four calculated
consumption figures were used because four colonists could not
estimate their needs. If these four figures had been known, they probably would have been lower than calculated
consumption, and the average might have been very close to the
E1,226 calculation.

Carrying explanation (b) to its next logical step, the 1964-65 consumption may more nearly reflect the calculated figure
since the 39 percent spent on consumption from the 1963-64 lump
sum payment will really count as consumption for the 1964-65
year.

c) Our average of E1,226 is too high. The bookkeeper of the cooperative, although he did not have exact figures at his disposal, estimated average surplus at E1,000.

2. Colonists spend quickly upon the receipt of their money because they are aware of how fast inflation depreciates currency. It does not follow that foolish expenditures are made. Most colonists we interviewed were aware of their capital needs -- as they were of their consumption necessities -- and made purchases when they received their funds.

About 41.5 percent of the average cash available was spent
for farm expenses and capital between the date of the receipt of the cash and the time of our interview. As mentioned, about 39 percent had been spent for family expenses. Only about 19 per-
cent of the average cash available had been saved.
3. Of the amount saved, several methods of disposition were noted by our interviewees:

   a) It will be used to pay labor so no advances need be requested. Only two from our sample indicated their willingness to do this. This frugality is not as rational as it seems. Inflation in the 1963-64 crop year ran near 40 percent while the subsidized credit rate, available through INPROA, was about 15.6 percent. Nonetheless, upon receiving their statements, a number of colonists were shocked at the amount charged for interest on advances. When we interviewed our original sample, few knew what their interest rate would be.

   b) It will be used for consumption purposes later.

   c) It will be used for entertainment. This response was as infrequent as (a).

We turn now to a comparison of income of colonists before and after the reform.

Change in Income Under the Reform: A Comparison

This section will not repeat the method of calculation or the shortcomings of a before-and-after the reform comparison detailed in earlier chapters.

To compute a comparison of income available to the colonists now with income available before the reform, an important component is the net cash farm income arrived at in Table II. To that, however, we must add the amount of consumption in kind and "perquisites."

While the average total income of the colonists in their former situation was E$1,028, after the reform it was E$3,366,
about three times higher. About two thirds of the average E\$3,366 income in 1963-64 seems to have been used for the family's consumption.

Considering that colonists showed about enough surplus this year to make a land payment had one been required, we must conclude that consumption level should not be allowed to drift higher unless net income can be raised if everything else remains equal. Two factors indicate that, on the contrary, net income must either rise, or more funds from the portion which in 1963-64 went to INPROA must be relied upon to make debt payments in the future if consumption is maintained at its present level:

1. Asignación familiar will not be available when the colonists are assigned to individual parcels.

2. More colonists will be occupying the fundo. Unless the fundo will be able to increase its sugarbeet contract (not a very likely possibility), this high yielding crop will not be available in acreages as large as in 1963-64 to raise colonists' income. In 1964-65, for example, colonists all elected to grow sugarbeets and the amount available to be allotted to each dropped from 1.56 hectares to one hectare.

What are the possibilities of maintaining production on San Dionisio at its current level? Would it be possible to raise this level? We will turn to an investigation of these questions now.
Change in Production Under Reform and Possibilities of Raising Net Income

We have no information concerning production under the former renter since he was unwilling to give us the data we needed. Furthermore, he rented several adjacent fundos and all were included in the same accounting.

a. Reconstructed Farming Program: 1962-63

We were, however, with the help of a former field supervisor, who stayed during 1963-64 to participate in the reform, able to reconstruct the farming program for the 1962-63 crop year (the last under the renter) and compare it with this year's cropping pattern. As with most data collected in this manner, there were unsatisfying information gaps. However, we can say that the cropping pattern in 1963-64 was more intensive than in 1962-63. The neighboring farm, also rented by the same person, was cropped more intensively and his farming program called for use of San Dionisio for pasture needs. This evidence and the recollection of former fundo residents who remained to participate in the reform seem to indicate that total production on San Dionisio rose in 1963-64 over production previously.

But this short-term judgment based on one year's experience under reform is also less than satisfying. San Dionisio seems to have relied to a great extent in 1963-64 on the accumulated fertility of the well-manured pasture land. But much of the fundo soil is a volcanic type which depletes easily. Furthermore, no clover or legume was planted either in 1963-64 or in 1964-65 because the farm was being prepared for subdivision.
Only 0.32 a hectare was spent on commercial fertilizers on the fundo.

While production on rich soil can be temporarily raised by intensive cropping patterns and colonists initially benefit by the result, it does not necessarily follow that production will remain high. Production will depend, among other matters, upon the abilities of technicians to cope with the soil of the area and apply necessary inputs. This again underlines our assertion that good technicians must participate initially in reform efforts, teaching colonists the important practices they need to learn to maintain or raise production.

Perhaps a comparison of wheat production on San Dionisio and a well-run neighboring farm might be some indication of production potential on San Dionisio.

b. Production Potential

Considering self-consumption by colonists as well as grain sold, 29.75 quintals per hectare were produced on our sample area. On the entire farm, INPROA's records show that an average of 21.38 quintals were sold per hectare. (Note: The latter figure does not account for home consumption which we were able to calculate from our questionnaire material. This, in addition to sampling error, makes up for the difference in the two calculations.) Wheat production on the neighboring farm averaged 22 quintals per hectare. Half of the neighbor's wheat was planted with clover so it seems that the differences in wheat production on these two fundos were not very marked in 1963-64.
Because the only farm we found operated under good management which had relatively similar soil type and water supply had only wheat in common with San Dionisio, we will unfortunately have to confine our comparative analysis to this one case.

But observing that most colonists showed a surplus in 1963-64 of about $1,000, the intensive cropping pattern in 1963-64 when compared to 1962-63, and the similarity of wheat yields on San Dionisio compared to a well-worked neighboring fundo, it is quite likely that the immediate problem on San Dionisio centers about maintaining crop production. Later, through judicious investments in cattle, poultry, feeder pigs, etc., and obtaining a larger sugarbeet contract, gross production could also undoubtedly be raised. Steps toward this kind of intensification are being studied by the cooperative.

c. Cutting Expenses

It might be possible to reallocate some labor expenses to yield-increasing capital to maintain production at its current level without raising expenses much.\textsuperscript{13} When coefficients of labor use in the input study\textsuperscript{14} (this study was used in the Los Silos and Las Pataguas cases) are utilized, they indicate that about 42 man-days per hectare are needed for the 170.31 hectares corresponding to our sample.

\textsuperscript{13}Here again, all of the restrictions and assumptions to this approach enumerated in Chapter III hold.

Our interviews show that 67 man-days per hectare were used on our sample in 1963-64. Of this, 49.5 man-days per hectare were family labor. If it would be possible to cut labor expenditures to internal labor only, it could represent a savings to our sample of E5,511—the total amount the 14 colonists spent on hiring outside labor in 1963-64.

Concluding this economic analysis of San Dionisio, we have shown that the average colonist showed a surplus in 1963-64 about the size of a land payment. Part of INPROA's share of the income was used to pay interest on the land debt this year. The other part was used to pay irrigation rights, land taxes, and to reward the management factor. This income will all flow to the colonist when the fundo has been parcelled out. At that time each colonist will have to have developed a greater degree of management skill than he has now, since the success of the fundo will depend more on his actions.

We can say with some confidence that total production on San Dionisio after reform was greater than total production on the same fundo the previous year. A good deal of the fundo's success in 1963-64 was due to high yielding sugarbeets. But we know that at least some of this good production was due to reliance on the accumulated fertility of the soil.

Since colonists will not have asignación familiar and since the farm will be supporting more colonists under a parcelization scheme than it did in 1963-64, in order to continue to succeed economically colonists will have to do some or a combination of the following: (a) keep application of yield increasing
capital high to maintain this year's yields; (b) intensify the operation as soon as possible; (c) keep labor costs lower than in 1963-64.

The San Dionisio Cooperative: 1963-64

As mentioned in the introduction to this chapter, much emphasis on San Dionisio in 1963-64 was placed on building an effective bargaining cooperative. In broad outlines, the coop is similar in organizational structure to that described on Los Silos.

a. Education on San Dionisio

Education poses constant difficulties for the new cooperative. Average literacy on the fundo has been somewhat upgraded by in-migration under the reform. Previously, the illiteracy rate was about 60 percent, but since most colonists selected from outside San Dionisio knew how to read and write, the illiteracy rate is now about 40 percent. This still places San Dionisio with the lowest level of literacy among the five Church properties.

During the year, however, San Dionisio built a school, hired two teachers, and, since April 1964, has been offering a full day of classes to over 100 San Dionisio colonists' children and those from neighboring farms. All six primary grades are taught. Besides, courses for reading and writing are offered to adults each night. In 1965 or the government will probably begin paying teachers' salaries. Previously, area children had to walk to school--an hour and a half in each direction--for a half-day's instruction.
b. Protest Activity of the Coop

In-migration also brought some problems. Most council members in 1963-64 were elected from the new and more educated group and as the year drew toward harvest, jealousies arose among a group of old fundo residents who felt the newcomers had gotten too much power. The officers had allied themselves quite closely to INPROA's technicians and, as such, at least the previous residents felt the coop council was not fulfilling its designated role as the coop's representative body. The rift did not crystallize until the year came to a close, however, and the coop operated quite smoothly until harvest time.

The San Dionisio coop hired four bookkeepers and fired three in 1963-64. The last one came to his position in April after most of the harvest was complete, to find the books in a badly disorganized state.

In late August, during wheat planting, colonists protested because they still had not received their final accounting by stopping work for a day. This movement was not headed by the legitimately selected coop officers, but a rump-group who were occupants of the fundo prior to reform. It seems likely that a non-Christian Democrat politician holding office in the zone also had an influence over this group.

By October the rump-group persuaded the legally chosen council to travel to Santiago to demand their money. The cooperative had arranged to take the matter to a local judge if the money wasn't immediately forthcoming. INPROA argued both that the fundo records were so bad that its accounts, too, were
disorganized and also that it preferred to wait a bit longer before turning the money over to the coop while a careful investment plan for the entire coop was being drawn up.

But the coop's action was non-compromising and convincing; lump sum payments were distributed. Late receipt of the money and a complete lack of advance knowledge of the amount members would receive brought about some similar complaints to those described earlier on Las Pataguas. Even so, most colonists were quite satisfied with the amount they received.

c. Internal Growth

Although it had not completed an "investment plan," INPROA had, through the year, arranged for speakers to address the coop from time to time on matters of money management.

INPROA also suggested that if each coop member would contribute E$70, a team of workers could be contracted to go into the mountainous part of the fundo to cut fence posts and work on the fundo road could be begun, thus hastening parcelization and alleviating the necessity of waiting until the Inter-American Development Bank loan could be culminated. Apparently anxious for parcelization, the cooperative accepted this suggestion with a wide majority and work began. All coop members began contributing their labor each Saturday to work on the fundo road at the beginning of 1965.

As noted earlier, the technician who had during 1963-64 divided his time between San Dionisio and Alto Las Cruces was assigned to San Dionisio permanently. Rather than giving his suggestions directly to the head of the coop's agricultural
committee (who became thoroughly discredited as INPROA's lackey in the early part of the 1964-65 crop year), he plans to hire another technical person to work with the head of the agricultural committee to transmit his supervisory wishes.

To the extent that the growing leadership among the old fundo residents represents an integration of old and new elements to the reform and not a permanent split, the coop will undoubtedly be benefited. Much also depends on the strength of several politicians in the zone. They are, there is little doubt, working through the old fundo residents, stirring up discontent by dwelling on the themes that INPROA has been charging excessively high rates of interest, that INPROA has creamed off more than the two percent marketing fee, and that INPROA has no intention of giving land titles after the sharecropping and rental period.

d. Political Agitation Countered by the Cooperative

It is a hypothesis which we have not been able to adequately explore in this paper that middle-of-the-road land reform efforts will undoubtedly suffer attack from the far right and the far left since both sides stand to gain from their failure. Thus a land reform program prior to a thorough reform may only be satisfactory to the party which has made it.

[15] Celso Furtado has made this point discussing the difficulties SUDENE, the Northeast Brazilian Development Agency, has had with its land reform program, "...there are extremists--those of the right who really believe that the problems can be solved without deep changes. And there are others who don't want to see your experiment work because they think it is not large enough a change. Both extremes will work against you." Personal interview with Furtado, July 7, 1964.
In the case of Las Pataguas, we discovered that some neighboring landlords were highly critical of the colony and were willing to work against it. On Los Silos we discussed a few of the difficulties the project seems to have had from some previous fundo residents, apparently instigated by a Socialist alderman in the zone. We have just mentioned similar political activity with regard to San Dionisio.

In addition to some of the fundo residents coming under the influence of political leaders, San Dionisio reported the only open invasion of an INPROA fundo during the first year of its existence. On December 29, 1963, the fundo was approached by a small group of neighboring dissidents who were apparently under the leadership of a Trotskyite group.

In December 1963 the paper Rebelde, the Chilean Trotskyite organ, reported a meeting of the Interprovincial Congress of Campesinos held October 26-27 in Talca. The congress concluded that "only a violent agrarian reform impelled by the campesinos would give the land to those who really want it." Among other matters, the congress also agreed "unanimously" to:

1. "Take over lands, properties, tools, machinery, seeds, etc. and give them to the workers without charge. Facilitate the establishment of long

---


17/Ibid. (Underline in point three is the author's, Alto Las Cruces was mentioned too, but it escaped "invasion.")
term credits without interest in order to buy necessary implements and labor supplies.

2. "In case of any conflicts between land owners, the government should immediately proceed to the expropriation of fundos transferring them to campesinos.

3. "Initiate a real reform program by immediate expropriation of these fundos: San Dionisio, San Luis, San Juan de Dios, La Unión, San José (all in Linares Province) and Pirazzo Bramadero, Alto Las Cruces, Esmeralda, Mariposa, and La Suiza (in Talca Province). This should be the first step. All private farms should follow.

Late in December, then, armed with copies of the Rebelde, false titles and other documents, the invaders appeared on the fundo. They stated that their intentions were to occupy the dry part of the fundo to exploit mines there. The "invasion" was handled poorly--so poorly that when the caravan of trucks arrived, police had already been called and were awaiting the luckless group. Their leaders were immediately detained.

The hapless invasion was, in the long run, merely a propaganda victory for INPROA as it merited a story and editorial in El Mercurio (January 8), a story in La Tercera de la Hora (December 30), and a story in La Provincia (December 31). Further, it proved that new colonists were not going to give up their land easily. There apparently was no support internal to San Dionisio for the movement. And the experience seemed to unite the group living on San Dionisio against what they still consider to be a "common enemy."
e. Summary: The Cooperative in 1963-64

The mere fact that the cooperative is becoming an organization capable of taking its own actions and defending its own interests (requiring even INPROA to be on its guard so that its rights are not infringed upon) is testimony to changes wrought the past year on San Dionisio.

For most members, this is the first organization of its type they have belonged to.

During its first year, the cooperative:

1. Grappled with one of its most serious social problems--illiteracy--by installing a school on San Dionisio.
2. Began to integrate two groups--in-migrants and previous residents.
3. Discharged bookkeepers they felt were doing an unsatisfactory job.
4. Protested successfully to INPROA and received the lump-sum payments for their 1963-64 harvest after threatening to take the matter before a local judge.
5. Voted to establish a fund with which they could begin necessary infrastructural improvements.
6. Came to an apparent realization that a united position before INPROA redounds to their benefit.
7. Protected itself against an invasion.
Tenure Structure on San Dionisio: 1964-65

Few changes in tenure structure in 1964-65 over 1963-64 have been made on San Dionisio. Colonists voted down moving to a step which would involve rental of the entire fundo.

In order to build more self-discipline into the system, committees of colonists have been appointed to manage each large wheat field. A 42 hectare wheat field, for example, has a seven-man settler committee assigned to it which decides when to irrigate and then divides the necessary work. Wheat fields are undivided in 1964-65 and colonists do not know which exact plot is theirs. The wheat, as in 1963-64, was planted with a large drill and will be harvested with a self-propelled combine. Each colonist gets the yield corresponding to half of six hectares after half of the non-labor operating expenses are deducted. If he has not cooperated by doing his share of the work, the cooperative may vote to dock some of his income. This is one example of building incentives into a cooperative structure.

Sunflowers were omitted from the farming program in 1964-65 since yield in 1963-64 was low. Also on 50-50 shares, each of the 62 coop members with land rights in 1964-65 has a plot of potatoes and corn. These are also machine planted and the amount of fertilizer and seed disinfectant used is standard for all. Again, each colonist is responsible for the working of his own land, weeding and irrigating the growing crop, and harvesting.

As mentioned previously, the acreage allowable under the IANSA contract was not increased in 1964-65. Since harvest in
1963-64 was so good, all colonists elected to have sugarbeets in 1964-65, but total contract was not increased.

Alto Las Cruces

Can Colonists Pay Their Debts?

As with San Dionisio, each colonist on Alto Las Cruces had part of his land in mediéría and besides could have at least one rented cuadra. As mentioned previously, unlike San Dionisio, the rented plot could be planted to whatever the colonist wanted, but not sugarbeets, since the fundo did not have an IANSA contract. Many of the colonists used the rented land for growing crops which the family planned to consume. Few sold any of this produce as cash crops.

Since the calculation of net income for each colonist on Alto Las Cruces has been made in precisely the same manner as in Table I, we shall not repeat a case here. We shall also omit mentioning the assumptions and the detailed reasoning which accompanied the analysis of other cases.

Two colonists suffered losses in net income, as noted in Table III, column 1. They registered very low yields coupled with extremely high expenses.

Five colonists show a negative debt repayment capacity and the average debt repayment capacity is E"-303. Required capital payments (E"419) averaged higher than on San Dionisio. Capital expenditures in Table III, column 6 represent only E"45 each for cooperative capital bought; the remainder is for draft animals purchased which must be paid off this year.
TABLE III

SURPLUS OR DEFICIT AMONG A SELECTED SAMPLE OF ALTO LAS CRUCES COLONISTS: 1963-64

<table>
<thead>
<tr>
<th>Case and No. of hectares</th>
<th>Colonists' net cash income (1)</th>
<th>Calculated family consumption (2)*</th>
<th>Self estimated family consumption or Col. 1 if colonists unable to estimate (3)</th>
<th>Debt repayment capacity (available cash) assuming self estimated consumption when available (Col.1-Col.3) (4)</th>
<th>Capital payments to make this year (1963-64) (5)</th>
<th>Deficit or surplus for year Col. 4 - Col. 5 (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1- 25</td>
<td>EO 2,074</td>
<td>EO 3,628</td>
<td>EO 2,923</td>
<td>EO - 849</td>
<td>EO 595</td>
<td>EO -1,444</td>
</tr>
<tr>
<td>C2- 20.70</td>
<td>1,168</td>
<td>3,409</td>
<td>3,409**</td>
<td>- 2,241</td>
<td>380</td>
<td>-2,621</td>
</tr>
<tr>
<td>C3- 19.92</td>
<td>932</td>
<td>3,409</td>
<td>1,830</td>
<td>- 898</td>
<td>45</td>
<td>- 943</td>
</tr>
<tr>
<td>C4- 16.02</td>
<td>3,469</td>
<td>1,698</td>
<td>887</td>
<td>2,582</td>
<td>265</td>
<td>2,317</td>
</tr>
<tr>
<td>C5- 20.70</td>
<td>- 523</td>
<td>1,328</td>
<td>1,131</td>
<td>- 1,654</td>
<td>353</td>
<td>-2,007</td>
</tr>
<tr>
<td>C6- 18.16</td>
<td>3,185</td>
<td>2,426</td>
<td>839</td>
<td>2,346</td>
<td>325</td>
<td>2,021</td>
</tr>
<tr>
<td>C7- 28.13</td>
<td>1,096</td>
<td>970</td>
<td>787</td>
<td>309</td>
<td>765</td>
<td>-456</td>
</tr>
<tr>
<td>C8- 19.53</td>
<td>- 404</td>
<td>728</td>
<td>1,618</td>
<td>- 2,022</td>
<td>623</td>
<td>- 2,645</td>
</tr>
<tr>
<td><strong>Total</strong> 168.16</td>
<td>10,997</td>
<td>17,596</td>
<td>13,424</td>
<td>- 2,427</td>
<td>3,351</td>
<td>- 5,778</td>
</tr>
<tr>
<td><strong>Average</strong> 21.02</td>
<td>1,375</td>
<td>2,200</td>
<td>1,678</td>
<td>- 303</td>
<td>419</td>
<td>- 722</td>
</tr>
</tbody>
</table>

* Calculated on the basis of number of persons in the family from the study by Hernán Burgos Mujica, Análisis Económico Agrícola para un Plan de Crédito Supervisado: Comuna de Navidad, Año Agrícola 1960-61, Ministerio de Agricultura, Depto. de Economía Agraria, No. 19, p. 23. Based on theses by Elvira Matte de Cruchaga (1938) and Violeta Sivori A. (1950), Escuela de Servicio Social, Universidad Católica de Chile and norms established by the Servicio Nacional de Salud.

** Could not make an estimate. Calculated figure used in this case.
Two colonists who marketed some produce from their rented cuadra and kept operating expenses down, show a surplus (column 6), but the average of all colonists produces a deficit of E\textsuperscript{*}722.

If calculated consumption (column 2) is used instead of self-estimated consumption (column 3) the losses would be more pronounced since the sum of column 3 (excluding D-2 who was not able to make an estimate) was E\textsuperscript{*}10,015 while the sum of column 2 (again excluding D-2) was E\textsuperscript{*}14,189.

We turn now to a comparison of income of colonists before and after the reform.

Average income (cash plus "perquisites") under the reform was E\textsuperscript{*}2,345, about E\textsuperscript{*}800 more than the year previous to reform.

Cash that went for consumption purposes in 1963-64 seems to have been higher on Alto Las Cruces than San Dionisio, ranging from about E\textsuperscript{*}1,678 to E\textsuperscript{*}2,200. (Table II shows that on San Dionisio the comparable range was E\textsuperscript{*}1,270 to E\textsuperscript{*}1,673.) In part, this was due to the fact that average family sizes were larger—on Alto Las Cruces eight people as contrasted with six on San Dionisio. In part, it seems to have been due to higher pre-reform consumption habits on Alto Las Cruces that were carried over into the post-reform situation.

All—or nearly all—of the net cash income on Alto Las Cruces was probably spent on family consumption in 1963-64. Furthermore, home consumption of in-kind production and "perquisites" was higher by about E\textsuperscript{*}150 than on San Dionisio. Again
we must remember that colonists consumed rather than sold most of
the produce from their 1.56 rented hectares.18/

If this project is to succeed economically, it would seem
as though family consumption will have to be lowered while debts
are being paid off.

If average consumption had been E'750 lower this year, the
average colonist would still have been better off than before
the reform and there would have been little deficit. Still there
would have been no surplus

which would have permitted them to make a
land payment had one been required.

Are there possibilities of raising net income on Alto Las
Cruces?

Possibility of Raising Net Income

It is impossible to compare the situation of Alto Las Cruces
this year with that of any neighboring fundo since there are too
many variables involved. With Los Silos, Las Pataguas, and San
Dionisio, we were able to state with some confidence that soil
types on the fundos compared were more or less similar and there
were no special irrigation problems. As pointed out in earlier
sections of this chapter, Alto Las Cruces is a special case.
For years much of the fundo was planted to rice and fertility
dropped. Besides impoverished soil, there were many irrigation

18/ This difference was even more pronounced when only in-kind
crop consumption is considered. It averaged E'582 on San Dionisio
and E'764 on Alto Las Cruces—a difference of E'182.
problems which were not rectified before the 1963-64 crop year began. These two factors—soil type and irrigation—which we had to hold constant to make our case previously, cannot be assumed equal in the case of Alto Las Cruces.

It must be sufficient to state that if production is to be raised, the irrigation system must be improved. Further, the E$5,984 spent for commercial fertilizer on our sample (approximately E$36 a hectare), although slightly above San Dionisio's application (E$32 a hectare), certainly was not enough to compensate for the much lower initial fertility of the fundo. Indicating the problems of education which remain in practical matters on Alto Las Cruces, only two of our sample felt fertilizer use sufficiently important that they made an application to their rented cuadra over which they made most of the management decisions.

We may again look to labor use to suggest a possible cut in operating expenses. The input study$^{19}$ shows that 38.3 man-days of labor per hectare for the same combination of crops as grown on our sample of Alto Las Cruces is average for the zone.

Our interviews show an average of 54 man-days a hectare were used on our Alto Las Cruces sample. The contracted portion of this was paid E$5,778. Yet 33.72 man-days of labor per hectare were already available in our sample. This, when compared to the study standard of 38.3 man-days, seems to indicate some outside labor will need to be hired, but probably not as much as last year.

$^{19}$CORFO, Ministerio de Agricultura, Universidad de Chile, op cit.
Presentation of many Alto Las Cruces colonists with deficits in 1963-64 brought understandable complaints. Impoverished soil, irrigation irregularities, high labor expenditures and absence of a high yielding cash crop (like sugar beets on San Dionisio) seem to have brought on Alto Las Cruces' problems and emphasized the necessity of doing better next year to colonists. To some, however, it brought disillusionment so extreme a group threatens withdrawal from the coop. A sugarbeet contract was obtained for 1964-65. This should raise cash sales and colonists should benefit from the type of instruction that IANSA gives and the inputs that it makes available.

The Cooperative: Alto Las Cruces

As on San Dionisio, the Alto Las Cruces cooperative showed a great deal of development during its first year of operation. It voted to proceed with renting in 1964-65. The farm was not to be divided into parcels during rental, Crops would be planted in large fields so that large planting and harvesting equipment could be used. Row crops were to be managed in the same manner as on San Dionisio. The rental payment due INPROA is pro-rated to each colonist depending on the acreage he has.

Well past planting time, in the 1964-65 crop year, however, the coop had not agreed on what rental payment it would make, regarding the original amount set by INPROA as too high. Chances are good that because of this protest, INPROA will have to reduce the rent that it is asking.
Summary: San Dionisio and Alto Las Cruces

1. INPROA is attempting to apply what it learned on Los Silos and Las Pataguas to Alto Las Cruces and San Dionisio. The dialogue between the coops and INPROA seems to be improving so that the coops are influencing INPROA policy to a greater extent than at least on Las Pataguas.

a) INPROA is moving more gradually toward private property than it did on Las Pataguas, using longer intermediate steps of centrally managed sharecropping and rental. (There was a year of sharecropping on Las Pataguas, but it was not centrally managed.) During these steps, INPROA can maintain control of the technical phases of the cooperative's operation and work toward building up both the coop and the farming skills of its members. The coop can vote on how long it wishes a step to last. Although both farms used a system of mediería coupled with a small rented plot in 1963-64, only Alto Las Cruces voted to move to the rental phase in 1964-65. Parcelization plans are limited by the speed with which the Inter-American Development Bank loan is received since subdivision, as currently conceived, cannot proceed without large infrastructural expenditure loans which must come largely from outside the country. In the case of San Dionisio, the coop itself will underwrite some initial infrastructure in the absence of other funds. Upon parcelization, INPROA will have to rely heavily
on supervised credit to force compliance on technical matters. Hopefully the intermediate period will have also stimulated adoption of some key practices.

b) Unlike Las Pataguas in which the irrigation system was adapted to small parcels using measured water gates (marcos partidores), a cheaper system of turnos will be used as the irrigation system is adapted to small plots on Alto Las Cruces and San Dionisio.

c) A modified villorrio system which combines some of the economies and social advantages of hamlet settlement and gives as many settlers as possible the opportunity to live on their land has been adopted. On Las Pataguas the villorrio system showed that colonists preferred living on their land. This experience, plus the expressed desire of each coop, has influenced INPROA's decision on this matter.

d) On Las Pataguas the infrastructural costs were added to the land bill. The actual expense of infrastructure was more than the estimated cost plus its readjustment for inflation so that INPROA lost some money in the process. On Alto Las Cruces and San Dionisio the land and the infrastructure bills will be separate. INPROA will bill colonists for infrastructure as it is completed and actual costs are known.

2. Infrastructure on Alto Las Cruces will account for about 51 percent of the cost of settling colonists. Since San
Dionisio's parcelization plans are not as far along, this calculation cannot be made yet.

3. The fertile land on San Dionisio, coupled with an intensive cropping pattern, contributed to the economic success of the fundo in 1963-64. The fact that the volcanic type soil of the area depletes easily, the intensive manner under which the fundo was farmed in 1963-64, and the fact that no legume was seeded with wheat, underscore the importance of fertilizer application in subsequent years if a drop in productivity is to be avoided.

4. Irrigation problems and a depleted soil worked against Alto Las Cruces colonists this year. Unlike San Dionisio, where colonists grew sugarbeets on a small plot of land they rented, on Alto Las Cruces colonists used production from rented land to increase their consumption. This should be remedied in 1964-65 since Alto Las Cruces now has a contract to grow sugarbeets, but it again illustrates the strong desires which exist among Chilean campesinos to increase their consumption.

5. Total production on San Dionisio seems to have risen since the reform. We have no data on which to base a similar statement on Alto Las Cruces. But after the irrigation system is fixed and legal processes to get more water rights are complete, much land that was inadequately watered previously on Alto Las Cruces will undoubtedly be brought into production.

6. Average income of colonists on San Dionisio before the reform was £1,028. This income rose to £3,366 after the reform. Approximately 2/3 of this was consumed by the families. The remainder was used for:
a) Coop capital payments
b) Individual capital
c) Savings

Average income for colonists in Alto Las Cruces before the reform was E'1,535. After the reform it was E'2,345. All of this, it appears, was consumed.

On both Alto Las Cruces and San Dionisio it seems as though family consumption could be reduced to meet some investment needs still leaving families better off than before. That this is a painful and hard-to-achieve alternative should be admitted, however.

7. On both fundos some savings could be realized by reducing hired labor.

8. Both fundos are supporting more families now than before the reform.

We have lacked, in the last three chapters, necessary perspective to complete our analysis. Each of the cases described has been new and has been analyzed within the short period of one year. In each we have qualified our results somewhat because of the short time-period involved.

We have, however, other land reform laboratories open to us in Chile: the program of the government and of a private Italian settlement company. Each of these has settled farmers on parcels of land--INPROA's professed goal. How have inquilinos and medieros who received farms years ago under this program progressed? What have their problems been? We shall turn, in Chapter VI to a selected sample of these farmers to attempt to discover answers to these questions.
CHAPTER VI

THE GOVERNMENT COLONIZATION PROJECT:

PERSPECTIVE AND PRESENT PROGRAMS

The Constitution assures to all inhabitants of the Republic:
...The inviolability of all property without any distinction...
The exercise of the right of property, however, is subject to the limitations or rules that demand the maintenance and progress of the social order; this means that the law will be able to impose obligations or public utility services which favor the general interests of the state...The state will promote the convenient division of land into family property.

--The Constitution of Chile
September 18, 1925.

To put our discussion of INFROA into perspective, we must search for and document other departures from the traditional land tenure system in Chile which established inquilinos or medieros on their land long enough ago to afford some insights into their successes and failures.

To that end, we turn to land reform efforts of the Chilean government.
Historical Development of Government Colonization Programs

Planned colonization in Chile had its nominal beginning in the Constitution of 1925 which, for the first time, admitted that a proper distribution of land resources of the nation was a legitimate government concern. On December 10, 1928, Law 4496 established the Caja de Colonización Agrícola (Agricultural Colonization Bank) to carry out land redistribution activities.

The first Caja colony was settled on January 1, 1929. Forty-three German families were established on a colony near Santiago in the comuna of Peñaflor. The Caja purchased the fundo Santa Adela, divided it into small plots of about ten hectares each, and sold parcels to the immigrants on a partial payment plan. Instead of beginning colonization with Chile's own landless, the Caja settled foreigners because, as Caja officials reasoned, "intelligent thrifty Germans" would serve as models after which small farms for Chileans could be patterned. Although Chileans got land after this, Caja officials were reluctant to grant farms to common agricultural laborers.

The Caja program picked up speed immediately after the enactment of Law 5,604 in 1935 largely since this legislation provided new sources of finance. In addition to funds furnished directly by the government, the law permitted the Caja to borrow

---

from the Social Security Banks. 2/

In February 1960, the Caja was reorganized by DFL (Decreto con Fuerza de Ley--Decree with the Force of Law) No. 76, passed in 1959. Previous to DFL 76 there were "no fixed norms so that political influence, among other factors, played a prime role..." in colonist selection. 3/ The old law merely stipulated that to be eligible to acquire a parcel the colonist must not be younger than 21 or older than 60, be married, in good health, and have "good habits." These criteria, together with a new point system, were the basis for colonist selection under the 1960 legislation:

(a) For each three years of practical work in agriculture 1 point

(b) For having specialized in the type of work to which the new farms will be dedicated or for having worked five years consecutively on the farm to be colonized 1 point

(c) For having worked as a farm manager or supervisor for more than five years:

---


3/ CIDA borrador, Chile, op. cit., p. 308. An advisor to the Caja told the author the following anecdote: The Caja Council would meet the "técnicos" carrying their brief cases full of information on deserving new colonists. The political chiefs of the Caja would go into the meeting with lists of people whom they had promised land. The politicians, who represented different parties, would make deals with their fellow council members. "I'll vote for your four candidates for parcels if you'll help me fulfill my five promises by voting for my applicants," they'd say. In the end very few of the "técnicos'" choices were awarded land.
1. In any part of Chile 3 points
2. In the province where the project is located 4 points
3. On the farm that is being colonized 5 points

(d) For college training as follows:

1. College degree in agriculture or veterinary science from a Chilean university 5 points
2. The same from a university in another country 4 points
3. Title of Práctico Agrícola 2 points
4. Enrollment in a college of agriculture or of veterinary science 2 points

(e) For each E$400 of savings deposited in a bank, up to E$800 1 point

(f) For each family dependent 1 point

(g) For each E$400 saved in the Caja's bank that has been on deposit two years 1/2 point

This system was still hardly weighted to favor farm laborers.

On one of the last colonies given out under this point system, Esmeralda, only three of the 40 parcels were assigned to inquilinos; the remainder went mainly to higher-level fundo employees.

Other important innovations of DFL 76 were:

1. It permitted the Caja to settle colonists on huertos as well as parcels. These smaller lots would provide for inquilinos and fundo workers who would not qualify to receive a parcel and for those with trades--like mechanics--who, it was

---

4/ It was replaced, as we shall note later, with a new system in 1963.

planned, would work for those given parcels. Many former fundo inquilinos on Esmeralda, for example, were accommodated on huertos.

Several observers who visited Chile after the enactment of DFL 76 wrote, in a confidential report:

"...The system...now implies the continuation of a social system similar to that existing in feudal agriculture, with settlers employing hired labor on a permanent basis but with less job and income-earning security for farm workers. 'Huerzos agrícolas' are only apparently a solution to excess farm labor. It must lead to strong social conflicts in the long-run and rural slums in the short run."

We have made similar comments about INPROA's experience on Las Pataguas (Chapter IV).

2. The Caja was given an increased budget and was permitted to acquire capital by issuance and sale of colonization deposit certificates having an initial value of 50 escudos, each carrying three percent interest. The certificates would be readjusted annually in accordance with the percent increase in price of wheat or baled wool. Few of these were sold.

3. Each annual payment due from colonists for land became subject to a yearly readjustment for inflation according to the percentage variation in the wholesale price index of soft wheat in the Central Zone. In the case of land allotted primarily for sheep raising, the index used in making the adjustment may be the price of baled wool. 6/

6/ From Decreto con Fuerza de Ley No. 76, Diario Oficial, February 24, 1960.
It was no accident that DFL 76 dealt in detail with financial matters. For 14 years the Caja had been nearly paralyzed since it was, for all intents and purposes, bankrupt. Previous to 1960, mortgages were not adjusted for inflation. Since no provision was made for deferred payment either, the Caja found itself buying farms at somewhere near market value, paying for the land immediately, and giving 42 year mortgage fixed in currency to parcel recipients. (DFL 397 in 1953 shortened the mortgage to 28 years.) The value of each year's pay-back diminished as Chilean currency depreciated. In the mid 1960's, making their land payments seemed to be the least of established colonists' worries: most had paid off their land in much less time than necessary and many of those who still had a land debt had to make but a nugatory payment each year.

The vice president of CORA (before the new government took over in November 1964), cited one case where parcel holders were paying only 210 pesos a year (in 1963-64 about $0.07) for their land.2/ One parcel holder bought and assumed the debt of E$2 apiece on three parcels which he now rents out yearly for E$1,000 each, the lease adjustable for inflation.

By 1959 only 5.5 percent of the Caja's yearly budget was being supplied by mortgage payments from colonists.3/


Chile's present land reform legislation is embodied in Law No. 15,020 of 1962. This law created the Corporación de Reforma Agraria (CORA) to replace the Caja de Colonización Agrícola. It gave inquilinos and medieros who farmed on the fundo previous to its division more preference for land assignment than previous legislation. This program will be referred to in more detail later in this chapter.

Accomplishments of the Caja de Colonización Agrícola

From its founding until June 30, 1962, the Caja settled 4,206 colonists on farms in 166 colonies from Arica to Magallanes. This averages 124 colonists each year for the 34 years of the Caja's existence. Only about 15 percent of the colonists (618) land were sold in the central nucleus (the ten provinces from Aconcagua to Nuble)--the best farming area of Chile.

The CIDA study estimated that "in 1960 the parcels formed by the Caja represented less than 2.5 percent of the farms in Chile and the colonists and their families represented not more

---


10/ This distinction is used in the CIDA report. The Central Nucleus is distinguished from the Central Valley, running between the Andes and the coastal plateau from Aconcagua or Santiago to Magallanes, and the central zone running from Aconcagua to the Bio-Bío River. This data has been calculated from the Cuadro de Parcelizaciones Efectuado por la Caja de Colonización Agrícola desde el 1° Enero 1929 al 30 Junio 1962, Corporación de Reforma Agraria, unpublished, Santiago, July 1962. A few of these land divisions were actually somewhat larger than parcels and were technically called lotes. They were awarded to highest level fundo employees. The number of huerteros (including the calculations in the text) established from the passage of DFL 76 until the approval of Law 15,020 was 527. These figures do not include some subdivision in the far southern and extensively farmed provinces of Magallanes.
than one percent of Chilean families engaged in agriculture. "\(^{11}\)

**Inquilinos-Medieros as Parcel Holders**

Since the main purpose of this chapter is to describe the current situation of islands of former inquilinos or medieros who are now established, we selected colonies in which settlers had been given their land at least 12 years ago for close scrutiny.

Given the basically unchanged structure of land tenure existing in Chilean agriculture, that Church land or CORA parcel holders will confront the same sort of problems as those encountered by fundo workers who become Caja colonists should be a valid assumption. Should a broader reform be possible in Chile one day, its administrators also might benefit by a close look at some problems which former landless had upon being awarded property. We do not imply that all the problems of small settlers in the midst of a traditional system would be the same if reform occurred across-the-board. But neither would they all be irrelevant. Furthermore, it does not seem likely that across-the-board reform in Chile is an alternative in the foreseeable future.

**Methodology and Sample Choice**

We picked twelve colonies at random--eight within the central nucleus, three colonies to the north, and one to the south--on which to interview. We chose colonies to represent differing sizes (vis-à-vis number of settlers) and geographic dispersion.

---

\(^{11}\) CIDA borrador, *Chile*, op. cit., p. 303.
On eight of these we attempted to ascertain the background of the original 544 colonists so we could determine how many former inquilinos or medieros were available for depth interviews.\(^{12}\)

Of the 544 parcels studied, 108 or 19.8 percent were assigned to inquilinos or medieros. By the time of our interview this percentage had dropped to 15--of the 108 inquilinos or medieros originally given parcels, 82 remained. Twenty-six had sold out for varying reasons--usually because parcel holders had left no heirs but also because they found they could not make a living on their land. Considering the entire universe of our sample, 263 out of 544 parcels had transferred ownership. This indicates that there was a higher percentage of parcels which changed hands considering the universe (263 out of 544 or 48.4 percent) than considering only former inquilino-medieros (26 out of 108 or 24 percent).\(^{13}\)

---

\(^{12}\)This approach differs from the one used in the excellent study of the colony Pedro Aguirre Cerda in 1959. See República de Chile, Ministerio de Agricultura, Dirección General de Producción Agraria y Pesquera, Departamento de Economía Agraria, Estudio de la Colonia Pedro Aguirre Cerda (El Tambo) de la Caja de Colonización Agrícola, Santiago, 1959. This study investigates the economy of this colony in depth, usually not separating colonists on the basis of their background.

\(^{13}\)On Colony Pedro Aguirre Cerda "of the 89 original colonists who received 96 parcels, only 36 kept their property and some have purchased neighboring parcels. The 53 property holders who sold their parcels have been replaced by 35 new colonists so that now there exists a tendency toward larger properties since the 96 parcels are in the hands of 71 persons. Ibid., p. 115. (This colony was founded in 1942 and the study written in 1959.) Now, each property transfer must be approved by the council of CORA and, according to the current agrarian reform legislation (Law 15,020), each parcel buyer must have the same qualifications as new colonists.
Of the original 544 parcels, a percentage breakdown of their owners' former occupations reveals additionally that: 4.6 percent were professionals; 10.8 percent had worked for the Caja de Colonización Agrícola; 9.9 percent had worked for another government agency; 8.4 percent were engaged in some sort of business; 10.7 percent were old fundo employees; 16.7 percent were engaged in some other form of agriculture (like being an owner of another parcel elsewhere, a fundo, or an Ingeniero Agrónomo); and 9.9 percent of the colonists were remembered by our informants simply as "they came from elsewhere," or "they had never worked on agriculture," but were neither inquilinos nor medieros. The percentage of parcels reserved for community use was 9.2.

On these eight colonies, 212 or 39 percent of the parcels are now owned by absentee landlords.

On the average, one or two colonists per colony were originally assigned two parcels. Today 11.2 percent of the parcels or 62 parcels have come into the hands of less than half that number of owners indicating some tendency toward uniting of parcels through purchase.

The fact that only 15 percent of the original inquilinos or medieros remained--82 out of 544--cut the universe we could pick for depth interviews considerably.

Of these, we drew 21 colonists or about 26 percent. Later we added nine more cases (which met our requirement of being inquilinos or medieros prior to settlement) located on the four colonies in our sample on which we did not gather background
information for all colonists.\textsuperscript{14/}

Parcels were originally established as family units--small enough so no labor in addition to that of the family would need to be contracted except in rush seasons and large enough to provide a decent family living. They were equalized on the basis of soil type and irrigation possibilities and, in the Central Nucleus, average about 16 hectares.

The purpose of the following analysis of 30 former inquilino-medieros who were settled on parcels at least 12 years ago is to:

1. Detail the current system of land tenure which the parcel is being farmed.
2. Determine each colonist's cash income situation.
3. Enumerate some of the colonists' current economic problems.

Classification of Land Tenure Systems on Thirty Selected Parcels

The law under which colonies were founded prevents issuing more than one title per property. Its intent is to prevent a minifundio problem.\textsuperscript{15/} Although a \textit{de jure} division is impossible, we found a \textit{de facto} division quite common.

The 30 cases we studied in 1964 lend themselves to the

\textsuperscript{14/} Two of these were settled by the Italian Colonization Company (CITAL) and not the Caja. This does not affect our later analysis, however.

\textsuperscript{15/} This law supercedes the usual inheritance laws in Chile which provide that in most cases where no will is left half of the estate goes to the surviving wife and the other half is divided equally among the children. There are, of course, many complex exceptions to this general case.
following land tenure system classification:

1. Parcels farmed as a unit: singular management. (18)
   a) Family: in community without inquilinos, medieros, or other permanent workers. (7)
   b) Family: acting as medieros of owner (their father or mother). (3)
   c) Non-family mediería. (2)
   d) Family: with inquilinos or other non-mediería permanent workers. (6)

2. Parcel farmed in divided fashion: pluralistic management. (9)
   a) Heirs farming separately with medieros or inquilinos in at least some sections. (5)
   b) Mediero from outside the family farms at least one section while owner farms the remainder. (1)
   c) Owner has non-family mediero and his sons work as mediero of mediero. (1)
   d) Family: acting as medieros of owner. (2)

3. Family has reached no agreement as to disposition of parcel upon death of owner. (3)

In our sample, 18 parcels are farmed as one management unit, while nine are physically divided in some manner, each section of the parcel under different management. In three cases, the family is in a state of indecision over the disposition of the land since the owner has recently died and no equilibrium situation has been reached.
Of those parcels worked under singular management, seven are farmed by the family without other hired workers. The most general case is that there are older but unmarried sons who provide much of the labor while most management decisions are made by the parcel owner. Usually, operating expenses are paid by the owner and he receives all of the income. He provides for his sons during the year and possibly pays them something extra at harvest time.

A mediería arrangement is a more formal variation of the same system. We found three cases where family members are sharecroppers for their father or mother (the parcel owner) while the farm remains undivided. Married sons are likely to sharecrop since this system gives them a more formal claim on the parcel's income. In this arrangement, the parcel holder expects his sons to provide all of the labor, most of the management, and half of the operating costs. The owner gets 50 percent of the gross income at the end of the year and the sons divide the other half. Since parcel holders need not supply labor, this system is often used in cases where the landowner is too old for physical labor, but still wants to maintain control over his land. In two of these cases, labor and management are provided by non-family sharecroppers.

We found six undivided parcels utilizing the labor pattern of Chilean fundos. The former mediero or inquilino is
now fulfilling a patronal role, making all of the management
decisions and acting as overseer. Labor is supplied by resident
or non-resident permanent laborers who are paid in cash and often
get about the same perquisites that might be given on a fundo.
It is the general case, however, that inquilinos working for
colonists get a lower cash salary and fewer perquisites than
inquilinos in the neighborhood working on fundos.

Of the nine farms worked in divided fashion, seven also
involve some labor by either inquilinos or medieros and, hence,
retain the traditional structure, but on an even smaller scale
than above.

Five of these parcels had been divided because of the
owner's death. In some cases, sections of the parcels are farmed
personally by heirs who built a house on their part; on others,
families still live together in the original parcel house but
farm their land as completely separate accounting units. In
other cases, parcel fragments are managed separately, while working
capital--like horses or a simple plow or harrow--are owned in
common. Women heirs, if they had some management experience
previously, may have set up an inquilino on their part. If they
had no management experience or if they don't live on the parcel
themselves, they may have a sharecropper who supplies the labor,
management, and half of the operating expenses and collects 50
percent of the income. There are combinations of these systems within the same parcel. For example, upon the death of one parcel holder, his wife took over half of the 21 hectare unit, half of which she farms personally and the other half which she works with a mediero. Each of the three children got a sixth of the parcel. A son farms his sixth personally. One daughter set up a sharecropper on her portion and another daughter rents out her fraction.

We found one instance of a mediero from outside the family farming one section of a parcel while the owner farmed another section.

In another case, the farm is physically divided among all sons but to relieve the owner of all responsibilities, he has put a mediero from outside the family in charge and each of his sons is a sharecropper to the mediero. This case is most difficult to classify within our system of "unitary" and "pluralistic" operation since some management functions are retained by the trusted mediero from outside the family and some by the sons.

In still another two cases, we found sons operating their own sections of the parcel but acting as sharecroppers for their father. Thus they made management decisions and paid 50 percent of the operating expenses, collecting the other half from the owner. Gross income was split 50-50.
That parcels now support more families than the original one seems to be caused by a number of inter-related factors:

1. The economy is growing too slowly to accommodate family members who might seek off-the-farm employment. Forty-seven new families (sons and daughters of the original landholder) now live on the same parcel as the 24 living original owners. As we might suspect, instances of division among family members is higher in oldest colonies. The 14 settlers on the six colonies founded between 1931 and 1942 averaged 1.95 "new related families" per parcel. The 16 colonists on the five colonies founded between 1945 and 1953, were supporting an average of 1.25 "new related families" per parcel.

2. Education in the countryside is so poor that even if jobs are available off the farm, the families of parcel holders are ill-prepared to take them. The average number of years of formal schooling of children over 12 of parcel holders we studied is about four. This says nothing about the quality of their education which is certainly below a comparable number of years of schooling in the city.

3. Parcel holders lack a knowledge of techniques which would result in more productive employment on their farms. But 12 of these 30 farms are worked with only family labor, in seven of the cases by more than one family with kinship ties to the
owner. The other 18 parcel holders employed a total of 33
inquilinos, sharecroppers or other permanent laborers. In most
cases where workers were hired, there was ample family labor
available (a total of 37 families on these 18 parcels). The
result is either increased operating costs to the parcel holder
(in case he has inquilinos) or division of income (if he has
medieros). This suggests that the parcel holder may be forced
by the economic system, characterized by large numbers of laborers
whose marginal product approaches zero, to shelter more workers
than principles of maximization would dictate. Besides, a farm
owner may feel his status so improved by land ownership that he
can hire laborers just as his former patrón made use of a con-
tracted labor force. This also seems to imply that the coloni-
ization program has done little to break the traditional social
pattern existing in Chilean agriculture.

On the 30 parcels originally assigned to 30 families, 104
families now earn the major part of their income. There is some
indication that this is a continuing trend. The older colonies
have more families supported per parcel than newer ones. The 14
parcels on the older group of colonies studied were supporting 55
families or an average of 3.93 families per parcel. The 16 farms
on the newer group of colonies were supporting 49 families or an
average of 3.06 families per parcel.

To clarify and expand upon these points, we must turn to
the income situation on these parcels.
Income on Thirty Selected Parcels

The fact that so many people are attempting to make a living on one "family sized" parcel of land makes an economic study of the farms extremely difficult. On each of the 30 parcels we studied, we attempted to locate the person most knowledgeable about the operation to obtain income information. The usual case was that the parcel was supporting so many families that our informant did not know the economic situation of the remainder of the families. In some cases, we were able to piece together the information we needed by asking the other families in question for the data; in others, their absence from the farm at the time of our interview or their reluctance to give us the figures we needed made that impossible.

Thus, we were not able to get data on the entire parcel's operation from 12 of our respondents and had, in these cases, to concentrate on detailing the income for but one of the families living there. These parcels supported six inquilinos or permanent workers and 34 other families in addition to the family from which we elicited data. This equals 52 families or 4.3 families per parcel.

In the 18 cases in which we gathered cash income data for the entire parcel, 52 families were supported in addition to the one interviewed—12 inquilino and 40 other families. These 40 were usually families of grown children or medieros from outside the family. In these 18 cases, the average parcel supported 2.9 families.

Later, information gathered in this manner will enable us
to show how more families crowding in on the original colonist lowers per family income accordingly.

From each case we gathered information on all income which accrued to the parcel holder from (a) sale of crops; (b) sale of animals or animal products; and (c) miscellaneous sales or inventory additions. We found the inventory portion of (c) to be very minor largely since parcel holders tend to add capital only if surplus is left over at the end of the year. We include no produce consumed in kind, since in this analysis we are seeking a measurement of cash position. Operating expenses were similar to those detailed in former chapters.

Total net cash farm income for the 12 "one family" cases studied was £14,272 in 1963-64 averaging £1,189 per family. Six families found it necessary to work outside the parcel to augment their income. They earned £3,654. Averaging this figure over the 12 cases adds another £305 bringing average cash income per family to £1,495.

These 12 families estimated the cash needed for consumption purposes during the year at £23,407 or an average of £1,950. Since average cash income only totalled £1,495, colonists either estimated their consumption too high or went into debt. It is also quite obvious that these 12 families are consuming most of their cash income. There was no average surplus (net income minus family consumption) for the "one family" units studied.

All net cash farm income earned on the 18 entire parcels studied totalled £60,626, giving an average parcel a net income
of E\textsuperscript{3},368. On 11 farms some income was added to this by family members who worked outside the parcel. E\textsuperscript{16},958 was earned in this manner averaging, over the 18 cases studied, E\textsuperscript{942} per farm. Average cash income per farm considering income earned on the farm and brought in from some residents working elsewhere was E\textsuperscript{4},310.

Inquilino support and wages and perquisites for workers has already been subtracted from this calculation as an operating expense. But 40 more families depend on the E\textsuperscript{77},584 which is the total net income (E\textsuperscript{60},626 plus E\textsuperscript{16},958) accruing to families living on the parcels. To arrive at a rough estimate of the amount of income available per family, this total figure must be divided by 40.\textsuperscript{16} This division places per family income at about E\textsuperscript{1},939.

The cases on which we had one family data averaged a net cash income of E\textsuperscript{1},494. We noted previously that there were more families per parcel in this group (4.3 compared with 2.9) where there were fewer families per parcel there was a higher net cash income available to each—E\textsuperscript{1},939.

The result in the former paragraph is certainly not surprising. But what surplus remains in the latter situation? While we were able to tabulate income figures for an entire parcel, attempts to elicit self-estimated cash consumption for every family living there were unsatisfactory. While one

\textsuperscript{16} Of course, this is only a rough measure. The owner of the parcel would probably get more than \(1/40\); sons would probably get less; outside medieros less than sons; etc.
person may have known the over-all management of the farm, he did not know the consumption needs of all families living there.

We may, however, turn once again to our "one family" data for an estimation of cash that went for consumption purposes. If consumption per family among the 40 families on the 18 farms we studied was as high as estimates for the 12 families (E1,950 per family), consumption for the 40 families would have been E78,000 (E1,950 times 40). Since total cash income for the 18 farms was E77,584, consumption this high would leave nothing for surplus.

Considering that some of the 40 families are sharecroppers and would not be likely to consume at as high a level as the 12 parcel holders, chances are good that average cash consumption among the 40 families was lower—probably more in line with the E1,494 average income families had available to them. This figure would set cash income at E59,760 (E1,494 times 40) and mean that in our sample of 40, about a E17,824 surplus would be available (or an average of about E446 for each of the 40 families). We noted that there was a deficit in the comparable average considering "one family" data.

Considering that in our sample "one family" net income ranged from E1,494 to E1,939, income for parcel holders in our sample was about three or four times the average inquilino's cash income and 50 to 100 percent above that of very highly paid inquilinos (mentioned in Chapter III).

This calculation does not consider consumption in kind of products grown on the farm which, although we did not attempt
a measurement, we established earlier (in the case of INPROA projects) that it is undoubtedly higher for colonists than for even the best provided for inquilinos. Of course, inquilinos are given perquisites as part of their incomes. Yet most of these same regalfas are still available to colonists: house, grazing rights, garden, etc. Only minor items would still not be available: bread, firewood, a free noon meal, etc.

But concluding that colonists are better off than inquilinos does not answer another more interesting question: are parcel holders doing well? In 17 out of the 30 cases we studied, colonists had to depend at least partially on income they earned outside their farm. Even so, the vast majority of our sample are living at little better than subsistence levels. As more years pass, income is divided among more and more families. Surplus for investment purposes is lowered accordingly.

Besides a de facto subdivision of parcels which has split income among many families, what are other factors responsible for the average poor performance of the parcels studied?

We shall proceed by listing some difficulties of parcel holders. These problems are not mutually independent. In the long run they seem to indicate a lack of education; in the short run, a lack of technical assistance.
Principal Problems of Inquilino-Medieros as Parcel Holders

a. Extensive Land Use

Our 30 cases represent 736.86 hectares (considering now total farms); of this, 379.80 hectares or 51.5 percent is devoted to pasture. Excepting the two largest parcels located in a livestock raising area of Chile, the total land area drops to 442.86 hectares; the land in pasture to 152.80 hectares; and the percentage of land in pasture to 34.5. Of the 28 cases in question, the average parcel contained 15.8 hectares of which 5.5 hectares was devoted to pasture. The majority of the seeded area was usually devoted to wheat.

This extensive land use, it may be hypothesized, is also a carry-over from colonists' experience on a fundo where, as farm workers, they learned many of the agricultural practices they use today. Few of them have ever had instructive visits by extension or Caja personnel, nor admit to seeking out such information. Their best source of technical farming information is probably their own experience—unadulterated by new learning—under a patrón.

In addition, there are other possible reasons for this high percentage of land in pasture:

1. There is not enough water to irrigate the entire parcel. This may be true—or partially true—in some cases, but the interview used involved a personal inspection of each parcel and the visit revealed that a vast majority of pasture land was irrigated or irrigable.
2. The pasture is improved. Only about ten hectares in our sample were seeded to improved pasture— that is, to a stand of from one to three year old alfalfa or clover. (From Linares south this included only a two year stand of clover since alfalfa usually freezes out after the first year.)

3. The non-seeded portion of the parcel is land incapable of supporting row crops. Again, for some of the land in natural pasture this is probably true. Yet through judicious applications of fertilizer and other inputs, even less productive land can be brought into production. While large extensions can afford to omit poorest land from cropping, it can be argued that small parcels cannot. It should be noted that risks are attendant upon investment in these inputs, however, and it seems that parcel holders are afraid to invest in untried inputs when they are not certain their decision won't push them below subsistence income levels. Input prices in Chile do tend to follow produce prices, however, so it is doubtful that we could argue that fertilizer wouldn't pay if correctly used.17/

4. No more crops could be marketed if they were grown. In the central nucleus colonists can depend on an organized market for their wheat, beans, corn, sugar beets, and sunflowers.

5. The pasture is needed for the farm's animals. A relatively few animals (247) graze on a high percentage of the

---

farms' total area (51.5 percent) or about three animals per hectare.

6. In the majority of the cases studied, in the estimation of the author, the amount of land in pasture could, conservatively speaking, be cut by one-half, the remaining pasture improved somewhat for the animals the parcel holder owns, and per-parcel net income increased accordingly. But colonists simply don't know of alternatives to the present extensive farming system practiced on the parcels.

b. Lack of Use of Conventional Inputs and Working Capital
    
Our interviews showed that four of the parcel holders we visited used no fertilizer and five spent under E$\text{'}100 on it.

That this seems like an extremely low quantity of fertilizer used is accentuated by the fact that eight of the parcel holders we interviewed farm in the La Serena area on land that is nearly pure sand. They must use generous applications of fertilizer or nothing will grow. Not considering these eight cases and using the artificial limit of E$\text{'}100 to indicate fertilizer adequacy, 41 percent use either no fertilizer or merely a token amount. Nearly all colonists have a vague notion what crop rotation is--they tend to move crops from one part of their parcel to another. But a legume is not always included in the rotation scheme. Those in the south part of the central nucleus tend not to seed anything in the years in which the soil is "resting" (colonists' usual term); they merely rely on white clover to come up by itself on irrigated land. Nearer Santiago,
a number seeded clover or alfalfa with wheat, grazed it soon after the wheat was cut thus killing the stand, and left the soil to "rest" without any cover save weeds for five or six years. In the cases we studied in the central nucleus we found only two cases where what seemed to be a successful rotation was used.

The Caja de Colonización Agrícola claimed to offer the following credit program to colonists:

a. Two year credit for seeds and fertilizer.

b. Five year credit for animals and tools.

c. Ten year credit for fences, machinery, fruit trees, chicken houses (and other small farm industries), irrigation and general improvements.

d. Fifteen year credit for permanent improvements.

e. Under certain conditions, 20 year credit could be given for house construction.18/

None of this credit was supervised and because of a lack of funds the Caja was not able to keep up its lending program. By 1959 a quantity equal to only six percent of its operating budget was designated for loans.

The situation today has doubtless improved somewhat. Even so, 17 out of the 30 colonists we interviewed used no short-term credit for fertilizer or seed expenses in 1963-64. They usually indicated an awareness of the possibility of getting a loan but used the following excuses for not obtaining it:

18/Leiva and Maturana, op. cit., p. 27, 58-59.
1. There is too much red tape (tramitación) involved in obtaining credit. We heard this general statement modified according to (a) or (b):

(a) I have formally asked for credit. They told us they would come with the money but nobody has come. And I'm not going to ask again.

(b) I was told I could get credit when a group of officials visited my parcel. I was merely to go to the office and pick it up. But I have gone several times and each time/told to come back later. Each trip takes nearly all day and I can't afford to keep going back.

2. We have tried credit in years past, but defaulted.

3. They won't loan us money because it is against the law to subdivide our property. Although there is but one title, the inspector who came noticed that we live in several houses on the parcel so he wouldn't give us credit.

4. We would never use credit under any condition.

Those 13 among our interviewees who received credit in 1963-64 borrowed an average of $250 from the Banco del Estado (Bank of the State) or the new Instituto de Desarrollo Agropecuario (INDAP--Institute of Agricultural Development) created by the Agrarian Reform Law of 1962. The Banco del Estado charged about 17-18 percent interest in 1963-64 and INDAP charged 12 percent. Both interest rates are negative since inflation last crop year was about 40 percent. Once acquainted with credit, users are often habitual borrowers, realizing operating on
borrowed money was a "buen negocio" (good business). Three colonists used credit for the first time in 1963-64 under the INDAP program.

Some credit is given in cash, some in kind. Cash was merely granted at the beginning of the crop year and paid back with the harvest. In-kind credit—fertilizer and seed—was picked up at the central office and money was remitted by colonists at harvest time. No visits to parcels were recorded by officials of the lending institution in any of the cases.

Medium and long-term credit was unknown among our interviewees.

Twelve colonists used no seed disinfectants, weed killers, or pesticides.

There has been little substitution of capital for labor on the parcels studied. Four of the 30 had a tractor with some implements. Twenty-two farmed with $3,000 or less working capital (without including buildings). The general case was that the parcel holders farmed with several horses, a crude plow and harrow; only the most fortunate had a horse-drawn cart for trips to town.

c. Lack of Technical Help

Only seven of the 30 established parcel holders we visited had ever received an extension-type visit from Caja personnel or
from any other agency.\footnote{19/}

Even in 1964, before the new government took over, few CORA technicians were available to give new colonists extension assistance. Of 537 CORA staff members in June 1964, 159 or only about 30 percent, were professional and technical. Only 32 professional and technical people were stationed at 12 provincial offices from Tarapacá to Magallanes. In contrast, nearly four times that number, 127 were stationed in the Santiago offices. (Some of these are in charge of colonies near Santiago, however.) Of 378 administrative and service personnel, 62 are located in the provinces. Five times that number are stationed in Santiago.

Of the 537, 81 or about 15 percent (about half of the professional staff) have had some specialized agricultural training. Fifty-three of these hold the degree of Ingeniero Agrónomo. The remaining 28 hold the "Práctico Agrícola" degree. (The training of a "Práctico Agrícola" is similar to a high school education in vocational agriculture.)

Most of the 32 professional and technical people stationed in the provinces have had some formal agricultural education. The remainder of CORA's technical and professional staff—most of which is Santiago based—is made up of civil or building engineers, topographers, accountants, and lawyers.

Originally, we thought we would be able to determine how many colonists were once either inquilinos or medieros by visiting

\footnote{19/} The study of Pedro Aguirre Cerda affirmed that 25 percent of its colonists had received the visits of "one or more experts." \textit{Ibid.}, p. 115.
the provincial CORA office. Few could supply us with the data we requested on the occupation of the colonists who originally obtained parcels and the number of inquilinos who persist today. And we thus had to rely on informants on each colony.

Since former fundo residents—especially medieros and inquilinos—would be those needing the most technical advice under an extension program, should one be carried out, the very fact that they couldn't be located by the provincial office seems to be another indication that no such program is available. 20/

d. Lack of Cooperative Organization

Some lack of centralized technical help could presumably be made up by a strong cooperative organization which could bargain to obtain cheaper inputs and sell production advantageously. Furthermore, a well organized cooperative might be a vehicle through which technical help within each colony might be mobilized.

Sixty-six cooperatives were established on the 116 Caja colonies when they were founded. Inter-related factors hampered

20/ For more elaboration on this point applied to an earlier age in the Caja's history, see Edmundo Vilensky Marinot, La Caja de Colonización Agrícola, Editorial Jurídica de Chile, Santiago, 1951, who concludes: "The role of the Agencies of the Caja de Colonización Agrícola that operate in different provinces doesn't correspond to the role they should have. They are just "red-tape" offices with no authority which do not offer technical help because they lack personnel..." p. 100. This is undoubtedly less so now than when Vilensky's paper was written. As late as 1959 the Caja employed only 43 technical people. Now they employ about 3.5 times that number. The ratio of technical people to administrative personnel has remained about the same, however, 1:3.3. See Leiva and Maturana, op. cit., p. 28.
their effectiveness from the very beginning. Little capital was supplied by the Caja. Heterogeneous backgrounds meant that members had little in common. Leadership, when it developed at all, tended to be provided by the most educated and wealthiest colonists, because there were usually more of them, and a wide social and economic gulf separated them from former inquilinos and medieros who were also colonists and cooperative members. A loose organization usually developed. More affluent colonists had less need for a cooperative since they usually had economic interests elsewhere to provide some of their livelihood. One by one, most difficult functions to be performed by a cooperative--those dealing with buying and selling advantageously--fell by the wayside.

A sense of loyalty to or participation in the organization was simply never developed. The cooperative had no control whatsoever over its own membership--colonists were selected by the Caja de Colonización Agrícola.

Little emphasis was placed on institution building. In some cases, an able person was promised two parcels if he would come to the colony and act as a "manager." It was not unusual to find the "manager" not getting along well with the cooperative--or at least not having much contact with it. In most cases the "manager" regarded his coop position as a sinecure and his major interest was to obtain land promised him.

The CIDA report notes:

"Regarding another important aspect, colonies as a social community, the failure has been complete."
The marked heterogeneity of the colonists which implies a diversity of interests difficult to unite, and the little attention given by the Caja to community development, has resulted in the social disintegration of the group. Each colonist—separated from his own group—has arrived at this new nucleus with a heritage of experience and traditional attitudes which has impeded obtaining the hoped for results. There are cooperatives, but in name only. [21]

Recent Land Reform Legislation in Chile

Changes to existing legislation introduced in DFL 76 were further modified with the passage of the Agrarian Reform Law, effective November 26, 1962 (Law 15,020). Together, these two measures constituted the agrarian reform program of the government of President Jorge Alessandri (1958-1964).

The acclaimed law must be recognized as an extension of existing colonization legislation now called "agrarian reform" mainly because of its incorporation of the ideas of regional agricultural planning. This differed from the usually strictly colonizing approach of the old Caja. Indeed, the Charter of Punta del Este called for more than a colonization program and, as signatory to the document, Chile agreed:

"To encourage programs of comprehensive agrarian reform leading to the effective transformation, where required, of unjust structures and systems of land tenure and use, with a view to replacing latifundia and dwarf holdings by an equitable system of land tenure so that, with the help of timely and adequate credit, technical assistance and facilities for the marketing and distribution of products, the land will become for the man who works it the basis of his economic stability, the foundation of his increasing welfare, and the guarantee of his freedom and dignity." [22]

[22] Charter of Punta del Este, Title I, Sec. 6.
Pursuant to her pledge, in 1961 Chile submitted a broad national plan for economic and social development. Although begun independently of the two Alliance conferences, this plan fell within the terms of the Charter of Punta del Este.

The *Yale Law Journal* traced the emergence of Law 15,020:

"In early 1962, the bill, drafted by a committee composed of representatives of the three parties in the Chilean coalition, was introduced in that country's legislature. Its terms were shaped to a considerable extent by the displeasure which had been voiced with respect to the land tenure aspects of the 1961 Chilean proposal to the Alliance. The first draft provided the Executive with broad, but discretionary, special decree powers for establishing agencies, standards, and rules to bring about land reform. The parties of the left outside the coalition, however, were constantly pressing to have stronger, broader laws enacted faster. The least conservative party in the government coalition was sympathetic to this position, in part because of its need to attract popular support for the upcoming presidential election in 1964. Passage of the bill as originally introduced was blocked in the Senate, which insisted on maintaining greater legislative control of the program. A compromise was reached which resulted in the elimination of certain provisions from the law and the addition of a framework of limitations upon the Executive's power. In November 1962, this land reform bill was finally approved.\(^{23}\)

The main provisions of the 104 article new law, its eight transitory articles, and its 26 enabling amendments were:

1. The Caja de Colonización Agrícola became the Corporación de Reforma Agraria (CORA).\(^{24}\)

---


\(^{24}\) Law 15,020, Article 11.
Investigaciones Agrícolas (CONFIN) became Instituto de Desarrollo Agropecuario (INDAP). CORA will have its own credit department for new colonists\(^{25}\) and INDAP will serve established colonists and other small farmers.\(^{26}\) CORA is empowered to acquire land for division, prepare it for parcelling, regroup minifundios, and establish cooperatives. It has sole responsibility for land reform in Chile. The efforts of these two organizations will be coordinated by the new 21 member Consejo Superior de Fomento Agropecuario (CONSFA) which will outline priorities for agrarian reform.\(^{27}\) INDAP and CORA are both responsible to CONFSA: the secretary general of CONFSA reports to the Minister of Agriculture although he is appointed by the President of the Republic.

2. It became possible to establish regional councils which would plan for the development of all the land in a specified area and be delegated powers accordingly.\(^{28}\)

3. Elaborate provisions are made for expropriation of land.\(^{29}\) Only a cursory summary is possible here. Poorly used

\(^{25}\) RRA 11 Article 135. See also Hugo Ossio Sivilá, El Crédito Agrícola Supervisado en Chile, Memoria para Optar al Diploma de Graduado en Economía Agraria, Programa de Estudios Económicos Latinoamericanos para Graduados, Universidad de Chile, (mimeographed), Santiago, 1964.

\(^{26}\) Law 15,020, Article 12.

\(^{27}\) Ibid., Article 4, Article 5.

\(^{28}\) Ibid., Article 5a; Article 13; Article 16.

\(^{29}\) Ibid., Articles 15 through 33.
or abandoned land, land not used directly by its owner, currently unusable land on which improvements are possible, minifundios (for regrouping),\textsuperscript{30/} land rented out for less than six years (which has not received special permission for a shorter lease—see Article 45), land up for public sale assigned to credit institutions, and land needed to round out a regional plan may be expropriated.\textsuperscript{31/} An owner whose land is expropriated may retain a minimum of ten "economic units" for himself, plus one unit for each child up to a maximum of 20 units (an "economic unit" is land valued at 20 times the minimum annual wage for private employees in Santiago).\textsuperscript{32/} A two-thirds vote of CORA's council is necessary prior to expropriation.\textsuperscript{33/} A special court of agrarian expropriations shall review claims against expropriation.\textsuperscript{34/}

4. Unlike DFL 76 the point system was weighted more definitely so former fundo residents would get first preference in

\textsuperscript{30/} The government apparently regards consolidation necessary for 100,000 minifundistas. See President Alessandri's message of March 3, 1962 in Boletín No. 165 Câmara de Diputados.

\textsuperscript{31/} Law 15,020, Article 15. A law to expropriate badly used land and 30 percent of all private land improved by public funds had, however, been in existence for years.

\textsuperscript{32/} Ibid., Article 18.

\textsuperscript{33/} Ibid., Article 21.

\textsuperscript{34/} Ibid., Article 29.
obtaining land. Those who have worked on the property at least three years and don't qualify for a parcel are to be paid an indemnification.

5. Parceleros or huerteros who are up to date in their land payments may get a two percent discount on their remaining debt for each child who finishes the sixth year of grammar school or a four percent discount for each child who gets a certificate as a Práctico Agrícola or finishes the third year in a college of agriculture, forestry or veterinary medicine.

6. Those who come from outside the fundo to be colonized must make a downpayment neither less than three percent nor more than five percent. The remainder of the parcel value is payable in no more than 20 and no less than 30 years.

For former fundo residents CONFSA may reduce the downpayment to one percent which may be paid over two years. This represents easier terms than outlined in DFL 76.

7. According to the new law, the parcel holder must live on his parcel (not live in a residence elsewhere and maintain another on the parcel). He must not rent out his land without

35/ Ibid., Article 11c.
36/ Ibid., Article 67.
37/ Ibid., Article 66.
38/ Ibid., Article 11d; RRA 11, Article 63.
CORA's permission. He must work his land personally except for some occasional labor which he may hire from outside.\footnote{RRA 11, Article 70.} As in the Caja legislation, parcels are indivisible. Now, however, a small landowner can have his land declared an "agricultural family property," agreeing not to divide it in return for certain tax exemptions unless certain improvements are made so that the property could support more than one family\footnote{Law 15,020, Articles 34-36; Article 51.} (in which case the government may release it from its indivisible status).

Clear title to one's land should be easier to receive under Law 15,020 than previously. Land can be divided into irrigated lots of less than 15 hectares or non-irrigated lots of less than 50 hectares only with special permission.\footnote{Ibid., Article 62.} CORA - divided parcels are exempt from this provision, however.\footnote{Ibid., Article 63.}

One regional plan--that of Maule Norte--is being developed. It will be supported through studies of the Chile-California AID contract/Alliance for Progress funding. This project, located in the province of Talca, will include 199,860 hectares of which 124,000 hectares will be brought under irrigation for the first time. The secretary-general of CONSFA and the director
of the Maule Norte Project estimate the project will double the
area already irrigated in five comunas of Talca. It should, ac-
cording to its planners, also have especially favorable effects
on the development of the city of Talca. They estimate that in
three or four years the area should be ready to be declared an
agrarian reform zone in which three or four thousand campesino
families can be settled.\footnote{43} The priorities of the new Christian
Democrat government made it appear, in mid 1965, that progress on
this project might be retarded considerably.

The knottiest problem which Law 15,020 faced was deferred
payment for land it purchased which, in a country with as much
inflation as Chile, may be tantamount to confiscation. Even
readjustable payments may not return the commercial value to
its owner. The new law stated:

"The purchase price will be paid with a maximum of 20
percent cash payment and the balance in equal install-
ments in not less than 10 years. The installment pay-
ments shall bear an annual interest rate of four per-
cent which can be adjusted according to the same index
which is applied to the prices of the parcels."\footnote{44}

Since the constitution provides for "inviolability of all
property without distinction," the deferred payment portion of
the law in cases of expropriation was soon declared unconstitut-
tional and could not be put into operation until a constitutional
amendment was passed.

\footnote{43}{\textit{El Mercurio}, "Programa para el Desarrollo Regional y
See also Sesión Ordinaria del H. Consejo Superior de Pomento
Agropecuario, (mimeographed), April 7, 1964, pp. 13-26.}

\footnote{44}{Law 15,020, Article 11a. The readjustment system was
established in legislation after the original law and its
enabling acts were passed.}
Although President Alessandri transmitted his version of an amendment to Congress January 16, 1962, it wasn't passed until October 1, 1963 (Law 15,295), as section 10 of Article 10 of Chile's constitution. Its major provisions state:

"...If for the purpose of facilitating the suitable division of the rural property, abandoned lands, as well as those which are naturally poorly exploited and those below the adequate levels of productivity, land may be expropriated for public use, the owner must previously receive 10 percent of the indemnification and the balance in equal installments not exceeding 15 years, with the interest rate fixed by the law.

This form of indemnification can only be applied in conformity with the law that permits the presentation of claims against the expropriation before a special Tribunal whose decision is subject to appeal in the respective court of appeals, and that establishes an annual readjustment system for the balance of the indemnification, in order to maintain its value..."

This amendment cannot be put into effect until an enabling act is passed. Although an enabling act to set up provisions for this new amendment has been written, it was not presented to the Assembly for action before Alessandri left office. At present, CORA is restricted to lands it can purchase for immediate cash (in cases of expropriation), transfers of farms from one government agency to another (which are also cash transactions although there is usually a certain downpayment after which readjustable payments are made over a number of years), and sale agreements (in which the owner of a fundo offers his farm for sale to CORA and the two parties agree to a certain amount down and the remainder in readjustable payments over a set number of years).

The land reform law of Chile, with its enabling amendments is an extraordinarily complicated document. At first glance,
one would think that armed with it and assuming provision for deferred payment is made, the government should be able to carry on a program within its rubric in which any number of formulas for land reform would be legal. It is, however, cumbersome and laden with possibilities for delay. Should the enabling act have been passed, delay--through the court appeals--would have retarded the progress of its intent. Added to the inherent complications was the political make-up of the agencies it created during the Alessandri regime. CONSFA's head was a Liberal Party member; COHA's, a Conservative; and INDAP's a Radical.

As Carroll has commented:

"Land reform laws are invariably long, complicated, and detailed. This makes their implementation very difficult. Only a fraction of the laws have actually been carried out..."45/

Hirschman dwells on a similar theme:

"More generally, passage of the Land Reform may have been facilitated by the long tradition of issuing well-meaning and socially advanced laws which turn out to be ineffective because of lack of enforcement or clever obstruction. This tradition means that politicians, confident that nothing of importance is going to change, will frequently ostensibly vote in favor of "progressive" measures because of the political advantages connected with such a stand..."46/

Hirschman does inject a note of a bit more optimism in his observations, however:


"Yet, every once in a while, these politicians outsmart themselves by acting in this way and they find out too late they have started up a machine which they cannot control...\(^{47}\)

In Chile the politicians have not "outsmarted themselves" yet. It is beyond the scope of this chapter to analyze the political pressures that were important to passage of the law and its subsequent administration, to analyze the law, or to speculate on what changes the government of Eduardo Frei will attempt. Present indications are that Frei will present a new law to Congress and attempt yet another constitutional amendment to supercede Article 10, Section 10 that will permit delayed payment and not be laden with opportunities for court obstruction. Frei's present program calls for 100,000 new owners in the six years of his administration.\(^{48}\)

We will devote the remainder of this chapter, rather, to a brief analysis of what the new law has been able to accomplish in the first year and a half of its existence.

**Scope of Recent Government Parcelization**

The 1955 census shows that there are about 200,000 hired agricultural workers in Chile. Assuming there are 100,000 minifundistas, there are probably at least 300,000 families in need of land.\(^{49}\)

\(^{47}\)Ibid., p. 157.

\(^{48}\)See mention of this in Chapter II and El Mercurio, "Gobierno Hará 100,000 Nuevos Propietarios en Seis Años con Aplicación de Reforma Agraria," November 19, 1964.

\(^{49}\)This figure is probably too low. Although some of the 100,000 could be satisfied by regrouping on land they now own, the 1955 figure should probably be much larger since there is a yearly net increase in farm families of between 5,000 and 15,000.
CORA originally planned to create 5,200 new properties in 1963 and 7,500 in 1964 assuming funds were made available. Its program fell far short of that goal, however.

By July 22, 1963, no land had yet been distributed under the new law, but 99 parcels and 15 huertos were distributed to complete work begun by the Caja. Since all distribution of land was suspended between the signing of the law on November 27, 1962 and publication of decree number RRA 11, March 27, 1963, this property was actually distributed between March 27 and July 22, 1963. By mid 1963 CORA had approved projects calling for the assignment of 639 parcels and 495 huertos during the balance of 1963. This modification of original plans was made partially due to the delay in passing the enabling acts to Law 15,020 and the resultant postponement of the Inter-American Development Bank funding for infrastructure which required a high degree of planning prior to completion of the loan.

The goal for 1964, announced late in 1963, provided for the establishment of 7,288 units of which 1,725 would be huertos. When the Social Progress Trust Fund annual report for 1963 went to press in February 1964, it reported more modest goals, "Plans

---


51/ RRA 11, however, was passed February 5, 1963. This was the last of RRA implementing decrees published; there were 26.
for 1964 call for the formation of 4,208 parcels and 921 family garden plots." 52/

Soon, publications began to mistake plans for progress, and the Yale Law Review listed the Pan American Union and the New York Times as sources for its statement, "Administrators contemplate the creation of 15,000 such farms per year, a marked increase from the present rate of 5,000 per year." 53/

However, on May 3, 1964, El Mercurio reported:

"From the promulgation of Law No. 15,020 (Reforma Agraria) CORA has effected 1,354 land divisions totalling 51,442.58 parceled hectares corresponding to 885 parcels and 469 huertos. 54/

Even this last statement, however, appeared a bit too optimistic. In a questionnaire we administered to the Corporación de Reforma Agraria personnel, agency representatives revealed that until June 30, 1964, CORA had effected land divisions on nine colonies in 1963 and the first half of 1964. On these properties, 615 parcels and 313 huertos were established in 1963 and 183 parcels in 1964. Total 1963-64 land divisions to June 1964 were 1,111.


However, on only a part of this land had titles actually been given out.

As we have shown, the current CORA program has proceeded slowly with land division despite the optimistic goals set at the time Law No. 15,020 was passed.

Leaving aside all political and bureaucratic factors which have played a very important part but are beyond the scope of this paper, this also seems to be due to a number of economic bottlenecks:

1. **Lack of provision for deferred payment in cases of expropriation.** Land transfers to CORA to date have been limited largely to land bought from another government agency or landlords who were willing to sell on deferred payment terms. Most of the purchases from landlords seem to have been made at a level comparable to or higher than what the landlord would have gotten by selling his fundo on the open market. CORA and the landlord who wants to sell usually have arranged a mutually agreeable "cash down and the remainder in readjustable payments over a specified number of years." The speed of the program has been made contingent upon funds the government of Chile allowed for land purchase purposes which, in 1964, was only about 34 percent of CORA's $7,700,000 budget.55/

It is extremely unlikely that U.S. funds could be used to purchase land since the Social Progress Trust Fund (Inter-American Development Bank) is prevented by statute from allocating funds

---

for land buying purposes and, although AID funds can legally be used, objections of the U.S. Congress would probably be adamant. Furthermore, it is doubtful that Chileans would approve of U.S. money being used to purchase their land regardless of the good intentions of the transaction.

This implies that if Chile is interested in an agrarian reform, she must provide for deferred payment. Chonchol has called this one of the fundamentals of agrarian reform in Latin America:

"The more paid for land the less agrarian reform can do. 
... (1) Productivity has little to do with land values in a land market in which there is prestige to land ownership and speculation in land is rampant due to inflation, as a defense against taxation, etc. (2) Landlords will tend to use the land payments for investments outside of the country, thus aggravating balance of payment difficulties. (3) Commercial values are four or five times higher than the evaluation on which land owners have been paying real estate taxes. (4) Latin American countries simply do not have funds to pay for land without necessary remuneration completely stopping the land reform."

2. As currently conceived, land reform in Chile involves large expenditures for infrastructure. These funds must come largely from outside the country. Lending agencies are anxious that these projects be well conceived and plans carefully formulated. Delays in receiving the foreign funds slow the entire effort.

---

56/ Article 1, Section 1.04 (a) of Social Progress Trust Fund Agreement.
57/ See 106 Congressional Record, 16843 (196).
It is possible that the new government will reduce the per parcel funds necessary for infrastructure. Rafael Moreno, new vice president of CORA, indicated some change in CORA's policy might be in the offing:

"... (CORA will) not give out more finished houses nor fenced-in parcels. The investment will not be more than E$2,000 or E$3,000 each. We will give colonists a foundation, sanitary facilities, and a roof. Then we will draw up a zonal plan and the parcel holder will receive credit for buying capital and animals and technical assistance for building his own house. As far as fences are concerned, we will establish parcel boundaries and each parcel holder will receive credits for posts and wire so that he will be able to fence in his own land."

3. Parcelization itself will always be a costly answer to land reform in Chile. Not only is it necessary to develop entrepreneurial talent on a large scale, which is a long and costly process, but individual farms necessarily involve division of the irrigation system, for example, which is currently adapted to large fields. Even if social overhead capital is reduced, economic overhead capital is bound to raise the costs of a land reform parcelization program enough to slow the program considerably.

Apparently with this in mind, Moreno stated:

"...There will be two types of properties: a family unit and cooperative property. The first will enable the agricultural family to produce and prosper without hired workers. In the second, the worker is just as much a property holder as the former, but a cooperative farming system will be used."


60/ Ibid.
As mentioned earlier in this chapter, it is too early and proposals of the new government on land reform too vague to speculate on the specifics of the new government's plans.
CHAPTER VII

In Conclusion

Deprived of purchasing power and without necessary resources to raise their income, Chile's landless laborers are at the very margins of existence under the traditional system. While developing and utilizing this heretofore only exploited human resource, it would seem that agriculture can be raised from its present static state to become, in time, a positive component of a developing economy.

But reform, as we have noted time and again in this study, is an exceedingly complex issue since it alters traditional institutions which, until the moment of change, form the very framework of the lives of its participants. Neither campesinos nor the institutions set up to administer reform on a bureaucratic level have much experience in coping with problems brought on by institutional change. Yet knowledge of difficulties which reform brings should not discourage the reformer, who must learn from experience what the problems are and how they may be solved or circumvented.

Types of Economic Organization for Reform

We have noted that INPROA and CORA's programs omit them to establishing family farms. For its part, INPROA now regards its cooperative farming experience on Los Silos and centrally managed sharecropping and rental on San Dionisio and Alto Las Cruces as
intermediate training steps lending to individual proprietorship. The Christian Democrat government has but mentioned "cooperative farming" and, for the immediate future, all indications point to the establishment of colonists on individual units.

Yet there is no reason to believe that Chile need settle on either cooperative farming or family farming. As Dorner has asserted, "There is room for and indeed need for diversity, depending always on the circumstances now existing." Family farms may be feasible in one area "while under other circumstances (they) may be a complete failure. The same can be said of any other alternative."

Since alternatives may be clarified and refined with experimentation, it is indeed unfortunate that Chile has had little experience with cooperative farming in its central nucleus. Los Silos is one of the first cooperatively farmed fundos in Chile's history. For this reason it is especially lamentable that the experimental program on Los Silos seems due for termination in favor of individual farms. One can only hope that other experiments with cooperative farming, based on some of the lessons of Los Silos, take its place. If government officials are serious about an eventual system involving cooperative management as an alternative to the current land tenure structure, more trial laboratories are needed in Chile. To attempt to model a large reform program drawing on the little experience Chile has had

---

and from successful foreign systems (where the cultural milieu is different) may result in costly and avoidable errors. 2/

But if the government really wants to attempt cooperative farming, it will have to do more than iron out the inherent

---

2/ Cooperative farming is, of course, a rather ambiguous term. The Los Silos experiment, described in this study, is one type of cooperative farming. In the same sense, San Dionisio and Alto Las Cruces may also be considered cooperative farming. Another possibility is the corporate structure described in Peter Dorner and Juan Carlos Collarte, "Land Reform in Chile: A Proposal for an Institutional Innovation," Inter-American Economic Affairs, Vol. 19, No. 1, Summer 1965.

While experience with cooperative farming is rare in the central nucleus, it is true that Chile has at least two experiences with communal property outside its major farming area to draw on. One of these is the comunidades agrícolas. The comunidades are found particularly in the province of Coquimbo, just north of the central nucleus. See CIDAN borrador, Chile, op. cit., pp. 254-283 and Patricia Cañon Valencia, Las Comunidades Agrícolas de la Provincia de Coquimbo Frente a una Reforma Agraria; el Caso de Mincha, unpublished thesis, Facultad de Agronomía, Universidad de Chile, Santiago, 1964. The other type is found in the Araucanian Indian reservations of the south. See CIDAN borrador, Chile, op. cit., pp. 166-178; 183-193 and Alejandro Palacios Gomez and Patricio Pinto Pérez, Estudio Socio Económico de la Agricultura Índigena en la Provincia de Cautín, unpublished thesis, Facultad de Agronomía, Universidad de Chile, Santiago, 1964. Inheritance has played a major role in these two instances and institutions have grown up over centuries. In most cases title to these properties is joint, but land is farmed individually save some pasture land which may be common. Yet policy makers who are aiming at some kind of cooperative arrangement cannot afford to overlook a careful study of these experiences.

Of course there exists a body of literature on/collective ejido in Mexico. See, for example, Juan Ballesteros Porta, Explotación Individual o Colectiva? Instituto Mexicano de Investigaciones Económicas, Mexico, 1964; Nathan L. Whetten, Rural Mexico, University of Chicago Press, 1948, pp. 207-239; Charles J. Erasmus, Man Takes Control, University of Minnesota Press, 1961, pp. 183-305; Clarence Senior, Land Reform and Democracy, University of Florida Press, 1958. Some information also exists on the proportional profit farms in Puerto Rico.
technical problems of the system. Cooperative farming as a policy for reform will initially have to counter a great deal of adverse public opinion and political pressure. Even INPROA tends to condemn cooperative farming largely because of the economic difficulties on Los Silos in 1963-64. More dangerous because it is usually based on lack of evidence, some abhor cooperative farming on prima facie grounds. The family farm is somehow surrounded with an almost sacred aura because of its success in North America. Politically, cooperative farming is condemned by rightists partly because it could probably move faster than parcelization and, more obviously, because of the automatic association of any ideas that smack of collectivism with the far left.

An advance sample of the political pressure coop farms are likely to encounter is found in an editorial responding to the speech in which CORA's new executive vice president revealed his favorable attitude toward cooperative farming. Even though El Mercurio had thus far supported the new government, on this issue it was clearly in opposition:

"Neither have aspirations of raised productivity been fulfilled by experiences of cooperative farming in which the fundo is considered co-owned by its members. Only a shallow understanding of the psychology and customs of our campesinos is enough to foster all sorts of doubts about work discipline, about policies of owning capital and receiving remuneration, and over the custody of goods in this type of collective property."  

2/El Mercurio, December 17, 1964, p. 3.
Since, as we have indicated, the choice does not seem to be between family farms or cooperative farming and organization for reform purposes may vary within one country's reform program, we have not argued the merits of individual versus collective ownership in Chile. We would be remiss, however, to not re-summarize and compare some of the conclusions about reform that emerge from earlier analyses. Since parcelization is currently the most feasible political alternative and since our analysis is based on cases where the family farm is or will be the predominant tenure form, these concluding remarks are weighted in this direction.

Difficulties of systems which involve cooperative farming aspects when compared with individual units which we have documented are:

a. Technical mistakes are more costly. Since decisions are made centrally, a wrong decision usually means a loss for all participants in the reform.

b. It is extremely difficult to build meaningful economic incentives into a cooperative system. It is very easy for one individual member of a cooperative to reason that all functions of the coop will be performed just as efficiently if he, one member in a group, shirks his responsibilities. Perhaps the statement of debts given to each cooperator on INPROA directed fundos will help him to realize the seriousness of a loss another year. Perhaps the committee system established for the working of large fields on San Dionisio will prove successful. Or maybe the
system of docking members who don't work conscientiously (according to coop vote) will help the coops to function more effectively.

c. Without strong institutional control it is difficult to capture all of the income necessary to cover coop expenses without having it accrue to and be spent by members.

On the other hand, cooperative systems seem to have these major advantages:

a) They preserve the economies of size that exist in large fields and permit work to be done with large machines (if indeed this is an economy since the labor factor is so abundant). 4/

b) They permit the present irrigation system--very expensive to divide--to be utilized.

c) They may economize on scarce technical resources.

Difficulties of parcelization when compared to centrally managed schemes are that:

---


Also the long run average cost curve in agriculture reaches its increasing phase with greater firm size more quickly than in industry. Any positive effects of economies of size are soon over-balanced by a more clumsy organization. Opportunities for division of labor are less than in industry since the seasonality of agricultural chores precludes simultaneous "assembly line" task performance. And management difficulties are more complex due to the spatial spread of agricultural work over a large area and the variety and non-routine nature of decisions to be made. See John M. Brewster, "The Machine Process in Agriculture and Industry," Journal of Farm Economics, Vol. 32, February 1950, pp. 69-81.
a. Infrastructure—both social and economic overhead capital—is extremely expensive and the surveys that accompany land division, as it is currently conceived, are very costly. Infrastructure and parcelization costs added about 20 percent to the cost of reform on Las Pataguas and about 50 percent to reform on Alto Las Cruces. The higher figure in the latter case was due largely to irrigation problems. The comparable figure on current government projects is running about 50 percent.

b. Many times parcel owners, inexperienced as managers, are not prepared to make rational economic decisions when they are awarded their parcel. Heretofore, patróns and higher level fundo empleados have tended to make most of the decisions that need to be made.

c. It is doubtful that large equipment could be used as efficiently on small parcels.

On the other hand, parcelization seems to offer clearest economic incentives to reform participants.\(^5\)

\(^5\) Raup has asserted that investments of an individual owner’s time (and that of his family) and capital are undoubtedly greater and incentives to produce more clearly defined when each farmer has undisputed land rights to his own plot of land. Philip M. Raup, "The Contribution of Land Reform to Agricultural Development: An Analytical Framework," Economic Development and Cultural Change, Vol. 12, No. 1, October 1963. The point is closely related to the idea that secure tenure leads to the surest development of accretionary capital in agriculture, an argument presented by Raup.

Some scholars argue that yeoman owner-operators help to promote the development of a much needed "middle class," the basis of a true democracy and an egalitarian society. See for example, T. Lynn Smith, editor, Agrarian Reform in Latin America, Alfred A. Knopf, New York, 1965. See Smith's introductory essay, pp. 3-62 and the article by Salvador Camacho Roldán, pp. 80-84.
It would seem that parcelization would be at its best as a land reform instrument if/campesino organization effective contribute to its enough to/own infrastructural necessities were developed. Only the basic infrastructure should be supplied—reform beneficiaries should be encouraged to build their own roads and make their own irrigation system revisions (as part of a cooperative plan of work, based on study, of course). Colonists can erect their own fences and even construct their own houses and graneries. This would lower original costs to parcel holders mean less expense for the reform agency, and give colonists some sense of participation in their own future.

Campesino Organization: An Important Factor in Reform

In Chile, quite unlike Mexico, Bolivia, and Cuba in Latin America, the traditional land tenure system is still very much intact. Viable campesino organizations pressing for reform have been suppressed in Chile due to laws all but preventing them the heterogeneity of agriculture, the class structure of the society, and differing policy desires of landed and non-landed campesinos. In the absence of spontaneous campesino groups to express their desires, organizations must be set up by the reform agency to relay the wishes of the beneficiaries of the reform to its administrators in some orderly, systematic fashion.

As campesino organizations or cooperatives become effective, they can act as a vehicle through which inputs and technical assistance are channeled. Due to the scarcity of technicians in a developing country, it is unlikely that any broad scale reform
will allow continuous and direct contact between the agency performing extension functions and each participant in reform. If campesino leaders are trained they, in turn, can learn to pass information and techniques on to members. It is not even necessary that the country rely solely on Ingenieros Agrónomos (there is only one for each 5,000 persons in the agricultural labor force in Chile) for technical agricultural assistance to coops. Lower level technicians with but one or two years in college or even trade school and with as heavy an emphasis on extension methods as on technical agriculture could perform an invaluable service and would not be separated by such a vast social distance from the people served. 6/

In addition to these functions, the campesino group can, in time, develop into an organization that has "self help" attributes, (i.e. San Dionisio's coop voting to collect $70 from each member to proceed with infrastructure).

6/ Lately the U.S. has found that subprofessionals can be effective antipoverty workers. About 15,000 slum residents who show promise have been recruited from welfare roles or ranks of the unemployed, put through short courses, and set to work doing jobs for which professional social workers are not essential: helping the needy find jobs or housing, assisting slow learners, or simply directing families to social workers or agencies that can help them. This helps to fill the gap of about 10,000 needed social workers. Besides, since their knowledge of poverty is firsthand, they seem to have a special ability to communicate with the poor. Utilizing subprofessionals for training in cases of agrarian reform should be carefully explored by countries since training funds are so scarce. Scanty reports reaching the U.S. seem to indicate the literacy teams in Cuba have been rather successful in teaching Cuban campesinos to read and write.
Since the success of a reform agency-campesino organization arrangement is predicated on good communications internal to each and one with the other, every effort should be made to facilitate "feed back" by making each organization conscious of the other's structure and functions. In addition to a badly functioning organization—or one that is simply too young to operate effectively—one bottleneck to communications is the existing social system in Chile. If reformers are not careful to avoid it, the patrón-inquilino relationship tends to grow back (or, perhaps it has never been eradicated) in the "reformed" situation.

On Los Silos and Las Pataguas, we noted a tendency for the technical person to be regarded as a patrón. Social divisions on Las Pataguas between huerteros, parceleros, and hijueleros maintained the old system. On projects of the Caja de Colonización Agrícola, cooperatives did not function smoothly largely because of social rifts. An inquilino or mediero, when awarded land, tended to set up another inquilino on his new farm. On Los Silos, even an elected member of the coop—a campesino himself—was voted out of power partly because of the gulf that had developed between him and other cooperators. Some of this relationship is still evident as INPROA deals with the respective campesino cooperatives it organized. Institutions are not changed easily and, especially in a traditional society where wealth and power are still in the hands of the landlords, old patterns of social relations tend to persist.

This does not mean that it is impossible for communications feed back to occur between the reform agency and the campesino
organization. On the contrary, once this difficulty is known and understood, overcoming it should not be an insuperable problem. As feedback between agencies improves, the reform agency has a responsibility to modify some of its policies based on pressures from campesino groups. On the other hand, the reform agency has as impelling a responsibility to veto some of the coop's actions because of its obligations and restraints: (a) It has only limited funds; (b) it has obligations and limitations placed upon it by its lenders and donors; (c) it has a number of coops within its program—if demands of one infringe upon the rights of others the reform agency must veto or modify the action; (d) the land reform agency represents a concentration of technical knowledge which gives staff members professional obligations, i.e. if the coop wants to supply a certain amount of fertilizer and the professional is aware that the amount is not sufficient or of the wrong quality for maximum production, his duty is to veto the coop's decision.

There are indications that the campesino organization in INPROA's charge and INPROA itself have strengthened and communications have improved during 1963-64. This interplay between institutions and the learning process it involved has brought about policy modifications:

a. The cooperative voted to have each house built on parcels on both San Dionisio and Alto Las Cruces. This request simply involved too high an outlay of funds. Yet INPROA heeded the coop's request and kept in mind the failings of a villorrio
(hamlet) settlement system on Las Pataguas. Therefore systems were designed to allow most colonists to live on their land while retaining some of the advantages of the villorrio.

b. The amount set for the rent of Alto Las Cruces was judged as too high by the campesinos' coop. While this action will probably result in lower rent for the coop, INPROA is responsible for making rental payments to the Archbishop. INPROA is certainly not free to lower the rental without considering its own financial responsibilities if it is to remain solvent.

c. INPROA lost money as the result of adding infrastructure estimates to land costs and giving the entire bill to colonists before infrastructure was complete. Learning from this experience on Alto Las Cruces and San Dionisio, infrastructure is to be billed separately from land—when actual costs are known.

d. The cooperative on San Dionisio demanded lump sum settlement payments for their 1963-64 harvest. INPROA was delayed partially because of its bookkeeping procedures but partially because it wanted to devise a rational scheme for investment for cooperative members. Action of the coop was non-compromising and carried the threat of a possible legal suit and INPROA was forced to comply.

This interplay between two institutions involved in land reform is important. As a result of demands made as a cooperative, individual members and the service agency learn. This give-and-take seems to be the essence of a pragmatic approach to land reform—one which can settle issues as they arise. It is quite distinct from the early Caja de Colonización Agrícola in which
Caja-cooperative-campesino contact was infrequent. INPROA's approach does not always function smoothly. Indeed, we have cited instances where it seems obvious that the institutions involved still do not understand each other. Considering their youth, this is to be expected. But INPROA is conscious of the necessity for good communications and strong cooperative organization. In order to assist the cooperatives to develop into bargaining organizations, INPROA is:

a. Allowing the cooperative (in large part) to choose its own landholding members (exception: Las Pataguas). Realizing that unless a reform program begins with inquilinos or other landless it has done little toward reform, most new land holders were old fundo residents and the majority of colonists were either inquilinos or mediros.

b. Attempting to give all members equal land rights (except, again, on Las Pataguas where INPROA realized earlier mistakes and is now trying to rectify the situation by encouraging hijuela operators to withdraw from the coop and making more land available for purchase by huerteros).

c. Placing a person skilled in cooperative techniques on each fundo under reform.

d. Splitting up the fundo into parcels only after a number of years of centralized management during which members are dependent on the cooperative for many of their needs. This is regarded by critics as a mere extension of the patronal system; in fact, it seems to be a rational step during which campesinos
are trained for the trying experience of becoming land holders. Besides, in this intermediate period, they come to rely more on the cooperative as an institution that can help them with problems they could not cope with alone.

**Economic Components of Reform**

Reform tends to raise the incomes of campesinos immediately. We have shown that the income of new land holders was, on the average, increased two or three times under the reform system.

In addition to supporting campesinos with a better standard of living than formerly, reform makes it possible for the fundos to support more families. When the reform on the four Church-land fundos studied has settled all families now planned for, the farms will be supporting 182 families or 23 percent more than prior to the reform. In 1963-64 the four fundos averaged 12 percent more families than before the reform.

It was quite obvious that total production on all of the Church-land farms studied was greater after reform. Even so, production on each—with the possible exception of San Dionisio—was lower than potential. And even on San Dionisio, where great reliance was placed on accumulated fertility of the soil, production may not remain high. This meant that in a number of cases colonists will not be able to cover their new debts—land payments and necessary capital. More intensive farming seems to be the most obvious remedy for production below potential. In order to raise productivity, more yield increasing inputs will have to be applied and the farm will have to be better managed.
There are other manners in which current debts can be paid; in each case they involve more sacrifices than raising productivity:

a. Since consumption of campesinos rose with income under reform, consumption could be cut back thus leaving members better off than they were previous to the reform and better off than even the best paid inquilinos in Chile. We noted that consumption on Los Silos was $2,158, on Las Pataguas about $3,317, on San Dionisio $2,222, and on Alto Las Cruces $2,345. On Las Pataguas, where the entire plot was under individual management, family consumption was highest, possibly indicating another advantage for centralized management early in the reform process. There is some indication that home consumption of goods the colonist raises also is lower when the farm is centrally managed.

b. One manner of raising net income might be to cut back on the amount of hired labor used until it is possible to intensify the operation. This means that individuals would have to become more efficient. All evidence points to the fact that much more labor than average was used on the farms under reform. The defect of this recommendation is that one way effects of a reform can be spread to a larger group is through employing labor. Calling for a cut in labor supply reduces this beneficial effect of reform. On the other hand, once the farm is worked more intensively and the individual campesino is solvent enough to make his land and capital payments, he should be better able to employ the superabundant labor which exists more productively than at present.
The Importance of Developing Entrepreneurship to Reform's Success

Merely giving campesinos land will not turn them into entrepreneurs. Comparing the development of entrepreneurial ability with the task of effecting a reform in the first place, T. Lynn Smith has called bringing about a widespread distribution of land ownership "child's play in comparison with the one of developing the necessary managerial skills on the part of the heads of families whose only roles previously have been the limited ones of the agricultural laborer."\(^7\)

Stating that campesinos have not learned how to make rational technical decisions regarding their own land does not say they are incapable of being taught.\(^8\) Quite the contrary, as we have shown in the case of San Dionisio, campesinos probably learn quickly how funds, once available, can be wisely spent. On the other hand, if no direction is given them, the decisions they make may merely copy the system they know best—that of the latifundia which hires abundant outside labor and involves extensive farming.

Colonists given land under the direction of the Caja de Colonización Agrícola tended to remain at a subsistence level at

---

\(^7\)Smith, *op. cit.*, p. 11.

least partly because of the paucity of technical help they were given. Showing the participants in reform how to produce, how to keep accounts, and supplying them with credits they need to purchase inputs, indeed, helping them to make decisions—even through coercion for a time—are important components of successful reform. Once a colonist is settled on his land, the responsibilities of the reform agency are only beginning unless a country is willing to sacrifice marketed agricultural production to campesino's consumption.

The Los Silos experience seems also to point out that the campesino leader and the technician cannot be the same person—at least initially. But this should change as campesino leaders learn the techniques they need to become successful managers.

Large Scale or Across-the-Board Reform vs. Isolated Efforts

There would probably be definite economies of size involved if reform occurred on a large scale rather than as an isolated effort.

1. Larger marketing institutions and other organizations serving campesinos could be developed thus economizing at least on technical and organizational and administrative talent. (Of course there is a point beyond which a larger organization becomes less efficient as bureaucracy becomes more cumbersome.)

2. Larger campesino organizations would probably be feasible. Again this could economize on technical and leadership talent and would mean that administrative units could be nearer an optimum size.
3. Social and economic overhead capital might be usable by a number of fundos thus lowering its per settler cost.

Across-the-board reform does not bring the same political problems and pressures as isolated reform efforts either. Since land reform is such a politically charged issue, a colonization effort which represents a center solution may be under attack from the far right and the far left. The left claims that the program doesn't go far enough; the right claims that independent campesinos cannot possibly succeed. The type of opposition these groups offer may be either subtle or open. Both may be equally dangerous.

Then too, more importantly, if reform proceeds slowly, land-owners who see the handwriting on the wall may neglect their fundos even more than previously exacerbating still further the inelasticities in food supply:

"Should the transition to the new system be prolonged, the large-scale agrarian reform, when it comes with its own inherent costs, will, in addition, have to be carried out in a production context already impaired by having been subjected to the prior lengthy period of costly and debilitating uncertainty."\(^2\)

A quicker reform will enable all concerned to determine the nature of the post-reform situation and return to a more stable situation with its pressing problems of raising production.\(^10\)

---


\(^10\)Ibid.
Private vs. Government Reform

Land reform which proceeds as a private effort rather than a government program runs into distinct problems, intimately related with problems presented in the last section since:

a. It is not able to attract land to its program. INPROA's program, although extremely valuable as an experiment, is necessarily small, depending on Church property and external funds. It has no funds to purchase land and no power to expropriate.

b. Land must be sold to colonists at near commercial value with some possible reductions to reward laborers who formerly worked there at extremely low wages. The Church (or any other private organization) will not--nor can be expected to--reduce the price of land since it does not fear expropriation. The Church, as we have pointed out, is responsible for maintaining the value of the possessions of its faithful, many of which come into its hands as a trust to support some specific Church benevolence.

A government reform should channel some of the campesino's new earnings into productive investments in the economy as a whole while offering incentives to campesinos for investing in their own property and holding down luxury consumption. Thus campesinos could pay for their property regardless of how land was obtained for the reform. Some of this payment might be excused if the campesino invests in land improvements on his farm and the annual amount due could be delayed in bad crop years. Mortgage amortizations could successfully substitute for a real estate tax (whose benefits to campesinos would be less obvious)
and would tend, through mechanisms as sure as taxation, to draw surplus production from the farm into over-all development purposes. Besides campesinos will probably tend to regard their tenure as more secure if they have paid for their land as they are accustomed to paying for other goods. A dearer good will probably merit more interest, and, hence, personal investment, than one that was cheap and did not involve sacrifice. Of course, if the land were taken by a series of peasant uprisings charging for land may be politically impossible.

b. Infrastructural funds are more difficult to attain for a private organization than for a governmental agency. The large Inter-American Development Bank loan to INPROA was blocked by the office of the President of the Republic prior to the September 1964 elections. It is quite possible that government and private institutions may find themselves competing for external funds in which case the governmental agency is most likely to be favored.

**Reform: An Integral Part of Development**

Land reform must be regarded as an integral part of the economic development program of the country. We have seen how a few isolated plots given out by the government to inquilinos or medieros do not result in an economically successful enterprise. In the face of lack of off-the-farm jobs and educational deficiencies in the countryside, grown sons and heirs are forced to remain on the parcel, thus dividing income between more and more families.
Although in the short run an agrarian reform in Chile must aim to employ people more productively on the land, as the market develops industries must draw rural people off the land while offering goods campesinos are willing to raise their own production to purchase. If an over-all development program is not implemented and if agriculture does not move in the direction of a more intensive cropping pattern, it is difficult to imagine that an agrarian reform will result in anything but a minifundio problem, subsistence farming, and havens for unemployed or under-employed.
CHILE'S EXPERIMENTS IN AGRARIAN REFORM

BIBLIOGRAPHY

Books


Ballesteros Porta, Juan, Explotación Individual o Colectiva?, Instituto Mexicano de Investigaciones Económicas, Mexico City, 1964.


Barros Arana, Diego, Riquezas de los Antiguos Jesuítas de Chile, Editorial Ercilla, Santiago, 1932.


Boizard B., Ricardo, La Democracia Cristiana en Chile, Editorial Orbe, Santiago, 1963.


Domínguez, Oscar, El Condicionalmiento de la Reforma Agraria, Université Catholique de Louvain Collection De l'Ecole Des Sciences Politiques et Sociales, Number 173, E. Warny, Louvain, Belgium, 1963.


Góngora, Mario, Origen de los Inquilinos de Chile Central, Editorial Universitaria, Santiago, 1960.

Hirschman, Albert O., Journeys Toward Progress, The Twentieth Century Fund, New York, 1963. (See especially the chapter "Inflation in Chile").


Houtart, François and Emile Pin, The Church and the Latin American Revolution, (Tr. by Gilbert Barth), Sheed and Ward, New York, 1965.


Martin, Gene Ellis, La División de la Tierra en Chile Central, Nacimiento, Santiago, 1960.

McBride, George McCutchen, Chile: Land and Society, American Geographic Society, New York, 1936.


Ministerio de Agricultura, Departamento de Economía Agraria, Estudio de la Colonia Pedro Aguirre Cerda (El Tambo) de la Caja de Colonización Agrícola, Santiago, 1959.


Phipps, Helen, Some Aspects of the Agrarian Question in Mexico, University of Texas Press, Austin, 1925.


Silva Cotapos, Carlos, *Historia Eclesiástica de Chile*, Imprenta San José, Santiago, 1925.


Vilensky Marlnot, Edmundo, La Caía de Colonización Agrícola, Editorial Jurídica de Chile, Santiago, 1951.


Warriner, Doreen, Land Reform and Development in the Middle East: A Study of Egypt, Syria, and Iraq, Oxford University Press for the Royal Institute of International Affairs, 1957.


Articles and Conference Presentations

Becket, James, "Land Reform in Chile," Journal of Inter-American Studies, April 1963, pp. 177-211.


Kaldor Nicholas, "Problemas Económicos de Chile," Trimestre Económico, Vol. 26 (2), No. 102, Mexico City, April-June 1959, pp. 170-221.


Sunkel Osvaldo, "Change and Frustration in Chile," paper presented to the Conference on Obstacles to Change in Latin America, Royal Institute of International Affairs, February 1965.


Manuscript

Comité Interamericano de Desarrollo Agrícola (CIDA), Estudio Sobre Tenencia de la Tierra en Chile, draft copy, (mimeographed), Santiago, 1964. (See also the excellent bibliography prepared by CIDA pp. 494-522 of this report.)

Legislation


Diario Oficial, Decreto con Fuerza de Ley No. 397 (to Law 5,604), Santiago, August 5, 1935.

Diario Oficial, Decreto con Fuerza de Ley No. 76, Santiago, February 24, 1960.

Diario Oficial, Law 15,020 (Ley de Reforma Agraria), Santiago, November 27, 1962.

Church Encyclicals


Unpublished Theses


Chonchol, Jacques, Informe Pericial, Tasación y Cálculo de Rentabilidad del Fondo "Los Silos," Facultad de Agronomía, Universidad de Chile, Santiago, 1948.

Collarte, Juan Carlos, Análisis de una Alternativa de los Sistemas de Tenencia de Tierra en Chile, Facultad de Agronomía, Universidad de Chile, Santiago, 1964.

de la Paz Gajardo, Mónica, Estudio Socio-Económico de Puntilla de Pirque, School of Social Work, Universidad Católica de Chile, Santiago, 1961.


**The Press: Articles and Releases**


*Clarín*, "Reforma Agraria sin Campesinos en el Fundo 'Los Cuatro Silos'," Santiago, July 9, 1963.


El Mercurio, "Reforma Agraria" (Editorial), Santiago, December 17, 1964.


Morales Benítez, Otto, manuscript prepared for publication in El Tiempo, Bogotá, received by the International Development Foundation, Inc., New York, October 8, 1963.


Unpublished Reports


 Corporación de Fomento de la Producción (CORFO), Cuentas Nacionales de Chile, 1958-1963, (mimeographed), Santiago, June 1964.

 Corporación de la Reforma Agraria, Ref: Eleva Proyecto de Parcellización del Sector No. 1 del Grupo Los Alamos No. 1210, (mimeographed), Santiago, September 11, 1963.
Dorner, Peter, "Problems in Chilean Agriculture and Land Reform" (Prepared for AID), (mimeographed), Santiago, 1964.

Instituto de Promoción Agraria, Estudio de Parcelización Hacienda "Las Pataques," (mimeographed), Santiago, 1963.

Instituto de Promoción Agraria, Informe de INPROA, (mimeographed), Santiago, 1963.

Instituto de Promoción Agraria, Institute for the Promotion of Agricultural Development, (mimeographed), Santiago, June 10, 1963.

Instituto de Promoción Agraria, Proyecto Específico Alto Las Crucces, (mimeographed), Santiago, August 1964.

Instituto de Promoción Agraria, Proyecto INPROA-AID, Request for grant, (typewritten), Santiago, 1964.

Instituto de Promoción Agraria, Proyecto PL 480 AID-INPROA, (mimeographed), Santiago, July 30, 1964.


Ministerio de Agricultura, Departamento de Economía Agraria, Sinopsis de la Agricultura Chilena, 1951-63, (mimeographed), Santiago, August 1964.

Puga, Gonzalo and Hugo Jordán, INPROA, Plan de Trabajo e Inversiones, transmitted to Mr. John Robinson, AID Director, (mimeographed), Santiago, July 13, 1964.


Troncoso, Hernán, Trade Union Freedom, English translation of a pamphlet originally published by Acción Sindical Chilena (ASICH) and prepared for the Congreso Nacional de Abogados de Concepción, (dittoed), Santiago, 1957.


US Department of State, Unclassified Airgram, AIDTO A-667, Agrarian Reform Program of the Catholic Church in Chile, (mimeographed), Washington, D.C.

US Department of State, USAID, Rural Cooperative Development Institute, INPROA, Project Number 513-13-140-159, Agreement Number INP-1-64, Pro-Ag, (Dittoed), Santiago, June 30, 1964.