A Case Study of Rural Development in Ecuador, an Analysis and Assessment of the Quero-Huachi-Pelileo Project.

Pedro Vicente Carrasco

Louisiana State University and Agricultural & Mechanical College

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A CASE STUDY OF RURAL DEVELOPMENT
IN ECUADOR
AN ANALYSIS AND ASSESSMENT
OF THE
QUERO-HUACHI-PELILEO PROJECT

A Dissertation
Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in
The Latin American Studies Institute

by
Pedro Vicente Carrasco
M.A., Louisiana State University, 1972
August, 1979
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ABSTRACT

The purpose of this study is to examine the goals and objectives of the Quero-Huachi-Pelileo rural development project in Ecuador, within the framework of agrarian reform problems and practices in Latin America. Agrarian problems are rooted in the land tenure system - latifundio and minifundio complex - lack of technical skills, lack of training in modern technology, ineffective use of available resources, poor irrigation, high unemployment and a high degree of illiteracy.

An analysis of the agrarian structure in Latin America reflects that the latifundio-minifundio complex is a cause of economic and social inequalities of peoples of Latin America, and for the Quero-Huachi-Pelileo region of Ecuador. Agrarian reform is needed for social change. This change through land reform seeks to achieve massive changes in the rural social structure by redistributing land to the peasants.

The author obtained primary data by direct interviews with the people of the area. Secondary data dealing with the project were taken from reports of the Ministry of Agriculture, the Ecuadorian Institute of Hydraulic Resources, the Bureau of Economic Planning of Ecuador, and the Institute of Agrarian Reform. For the purpose of the study lands were classified in two main groups: 1) irrigated lands, and 2) unirrigated lands. Land distribution patterns are
analyzed. Large farms contribute to the beginning of a few economically powerful families. This group occupies the top of the social pyramid, while at the bottom are poor farmers who work small minifundios. For the people in the project area, the problem is mainly the existence of minifundios.

The study concludes that the rural development project under consideration in creating new jobs can improve income levels. Consequently, it should raise the level of living for people in the project area. The study further shows that agricultural production can increase by means of new methods of cultivation and agricultural diversification. Thus, this project is an example of agricultural developmental policy in Ecuador within national agrarian reform guidelines and practices.
PART ONE

CHAPTER I

INTRODUCTION

This study of the Quero-Huachi-Pelileo area, Province of Tungurahua, Republic of Ecuador, is to examine the relationship between an irrigation and agricultural diversification project and existing social organization and the social changes projected for the area.

A product of the past, existing social organization reflects traces of a feudal economic and social system, the result of three centuries of Spanish and Creole domination. Thus, rural societies in Ecuador have in practice experienced a type of slavery throughout the period of the Republic. As very large latifundios were established, the Indians who remained on them were subjected to servitude. Within the latifundio system, small areas of land (one acre) were granted to Indians who lived on them in very poor conditions. On the other hand, and as opposed to latifundio, the minifundio of today affects social organization by limiting family income, causing unemployment, poverty, and migration of the rural population. Social stratification, castes, elites and concentrations of economic and political power are characteristics of the above mentioned social and economic factors.
Purpose of the Study

The purpose of this study is to examine the goals and objectives of the Quero-Huachi-Pelileo rural development project in Ecuador, within the framework of agrarian reform problems and practices in Latin America.

One objective in evaluating and investigating the Quero-Huachi-Pelileo project as a case study of rural development in Ecuador is to assess the project in terms of its economic and social significance.

Scope of the Study

In this study, a survey of the area includes such factors as land tenure practices, land distribution, the rural population affected, the economically active population by sex and by occupation, population growth, farmers' average income and the value and volume of agricultural production in the area. From a sociological perspective the study considers the economic and social effects of the minifundio, the social organization and processes in the Quero-Huachi-Pelileo area, an evaluation of employment and unemployment data, and a description of present and projected infrastructure work.

The Quero-Huachi-Pelileo region located in the Tungurahua province, Republic of Ecuador, with 66,624 inhabitants, reflects many of the social and economic problems that plague the people of Ecuador and Latin America in general. Affecting political administration, agricultural structure and levels of living, social,
economic, educational and health rural problems have been inherited from Spanish colonial days through the early days of independence. These derive from 1) the concentration of land ownership, 2) labor exploitation by the Spaniards (encomienda and mita) in the colonial period, 3) labor exploitation by the Creoles (hacendado and cacicazgo) in the national period, and 4) land ownership by the Church. All the above social and economic systems caused social stratification, as demonstrated by powerful and wealthy landlords who acquired political influence in Latin America. One result is that Latin America has been under great social and economic stress. Social unrest, agitation, political instability, economic depression, an imbalanced land tenure system (latifundio and minifundio), and lack of technical knowledge combine to promote ignorance, poverty, insecurity, and disease. These economic and social problems in rural Latin America are shared in varying degrees by each of those countries.

Specifically, the structure for agricultural production in Ecuador is characterized by three principal regions: the Coast, the Sierra, and the East (Oriente). The first is traditionally export-oriented. Such products as bananas, cocoa, coffee, rice, and cotton receive a marked stimulation as exports. The Sierra

---

1This is understood to be ranking of individuals on a scale of superiority-inferiority-equality, according to some commonly accepted basis of evaluation.
produces products for domestic consumption: potatoes, tomatoes, beans, cereals, vegetables, legumes, onions, barley, wheat, corn, garlic, apples, pears, avocados and other crops. The Oriente (East) is the richest region for tropical agricultural production and for cattle raising. Also, the Oriente region is complementing Ecuador's economy with 300,000 barrels of oil daily. Although the country's greatest income is from oil, Ecuador continues to be the largest banana exporter in the world.

In Ecuador many rural people live on a subsistence basis, that is, they consume what they produce. One result is that lacking income, a family can accumulate little if any savings. Their future is not promising. Thus, a plan to raise the levels of living, such as for the Quero-Huachi-Pelileo area, calls for the efficient utilization of available resources. In this case the goal is to transform the agricultural system in the region through increased irrigation and agricultural diversification, education, technical assistance and with a system of aid through which the government grants credits to the farmers of the region. It is anticipated that the campesino can change his economic status as he gets more income from increased farm production and its commercialization.

**Importance of the Study**

The importance of this study lies in the examination of planning and processes for rural development in a less developed Latin American country such as Ecuador. It reflects the accumulation
of experience through agrarian reform efforts in other Latin American countries applied to a particular situation in the light of unique national and regional characteristics, resources, and idiosyncrasies.

The Quero-Huachi-Pelliéo region is in need of social change. There are 66,624 inhabitants who demand foodstuffs, better housing, an effective education, and improvement in their living conditions. The Government of Ecuador, through the Ministry of Agriculture, the Ecuadorian Institute of Hydraulic Resources and its executive offices seeks to help the rural areas in this effort. The task, for a less developed nation with limited resources is enormous. The Ecuadorian Institute of Hydraulic Resources estimates that an infrastructure work in this project would include 9,255 hectares. Furthermore, the program projects 205 million sucres in loans to the farmers.

Communal houses are to be constructed to be used as locales for meetings, conferences, and also for teaching courses to the farmers. In the same communal houses special courses in social development are to be taught _el desarrollo social_, which means that the training program will involve the learning of agricultural methods, organization of cooperatives, home economics, rural credit, social organization, and methods of evaluation. Successful students are to be promoted and the program continued as intensive training for the purpose of preparing more and more farmers in these matters.
**Desarrollo social** is a most ambitious program for an effective social and agricultural education. Success in this area can serve as a model for further development in rural Ecuador and rural Latin America.

**Methodology**

A trip was taken to the project area for first hand observation. A six months residence made it possible to observe the people's life and their daily activities. Interviews were carried out with small farmers, governmental officials, officers from the Ecuadorian Institute of Hydraulic Resources, representatives of the Office of Agrarian Reform, and employees of the Agriculture Ministry.

The next step was to assemble the primary data. This was assessed in the light of the Government of Ecuador's goals and policies for agrarian reform. The role of the Ministry of Agriculture, **Direccion de Desarrollo Campesino**, the Ecuadorian Institute of Hydraulic Resources and lesser government agencies involved in the project are thus given special attention as agents of change for rural development in Ecuador.
CHAPTER II
LATIN AMERICA'S AGRARIAN STRUCTURE

Latin America's economic, social, and political problems are critical, and directly affect the lives of the population. These problems are caused by several factors, which are as follows:
1) the land tenure system - latifundio and minifundio complex - inhibits the social change and maintains the people's economic stagnation; 2) lack of technical skills, retards agricultural improvements; 3) lack of training in modern technology hinders efficient agricultural diversification; 4) ineffective use of the available resources fails to improve agricultural and industrial production; 5) inadequate use of fertilizers and inappropriate distribution of water for agriculture hurt farm production; and 6) high unemployment reflects the lack of income, a principal cause of economic and social problems.

Ecuador shares similar problems with many Latin American nations. The purpose of this study is to examine a case in rural development in Ecuador - the Quero-Huachi-Pelileo Project.

\footnote{Ley de Reforma Agraria y Colonización, 23 de Julio de 1964. Decreto Supremo No. 1480. Quito, Ecuador. (Appendix A).}
Scarcity of Capital in Underdeveloped Areas

As in all underdeveloped areas, in Latin America capital is scarce. Agricultural production is limited due to the absence of improved seeds, the lack of technical assistance, the absence of a working program for agricultural diversification, a non-existent or inadequate credit system. These conditions cause low agricultural production, which in turn promotes a low level of rural living. The area's subsistence agriculture has produced unemployment and migration. A contributing factor is the growth of population. In addition, a socio-economic disequilibrium originates in the land tenure system: the latifundio and the minifundio. The peculiar characteristics of the agrarian structure in Latin America has created powerful social classes who are in possession of the land, political power, and economic strength, causing social stratification, limited social mobility, and low social status of the rural peasants of Latin America.

Control Over Land and Labor

The Latin American agrarian structure determines control over land and labor, and a political domination by the elite. The poor obey the wealthy but do not participate in the decision-making process. The Latin American agrarian structure has maintained a peasant society at the subsistence level. The possibility that peasant society can change its social position or reach political power is very small.
Research on Agrarian Structure in Latin America

Inter-American Committee for Agricultural Development (ICAD) research in relation to agrarian structure in Latin America describes the distribution of farm families according to socio-economic status.² (See Table 1.)

Differences Between Land Tenure and Physical Size of Farm

We have to differentiate between "land tenure" and the "physical size of farms": the former comprises the legal and traditional relations that regulate land use and the usufruct of its products; the latter is one of the basic elements in characterizing that tenure. It is important to mention that the tenure system shows the relationship between the landowners and the peasants who effectively work the land. This relationship shows the different elements of the agrarian structure in Latin America, such as the number and area of farm units, distribution of farm families according to socio-economic status, and the agricultural work force by farm size class.

Concept of Size or Method of Classification

Because the physical size is not a good measurement or a factor by which to compare farms - even in small areas, climate,

<table>
<thead>
<tr>
<th>TABLE I</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTRIBUTION OF FARM FAMILIES ACCORDING TO SOCIO-ECONOMIC STATUS,</td>
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<tr>
<td>ICAD STUDY COUNTRIES(^a)</td>
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<tr>
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<td>1.3</td>
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<td>16.2</td>
<td>2.9</td>
<td>2.9</td>
<td>5.4</td>
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<td>1.2</td>
<td></td>
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<tr>
<td>owners</td>
<td>---</td>
<td>---</td>
<td>16.6</td>
<td>---</td>
<td>1.3</td>
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<td>Sub-family-sized farm operators</td>
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<td>25.9</td>
<td>8.6</td>
<td>6.5</td>
<td>47.0</td>
<td>52.3</td>
<td>63.6</td>
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### TABLE I (Continued)

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<td>59.8</td>
<td>47.6</td>
<td>23.2</td>
<td>34.5</td>
<td>24.8</td>
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</table>


*These data overestimate the numerical importance of both upper and middle classes while underestimating that of the lower groups. A considerable portion of the "medium-sized" farm operators would never be accepted locally as upper class while half or more of the "family-sized" farm operators are in reality little differentiated socially from the operators of sub-family units with slightly less land. Data for Peru are not included as they are not strictly comparable with those of other countries.*
quality of soil, access to market, levels of technical knowledge and economic aid differ—a concept of size or a method of classification has been used which is based on the area of land needed to provide remunerative employment to a rural family in relation to cultural values and income. Thus, according to the remunerative employment criteria based on data in censuses, the distribution of farms, estimated by size, is as follows: 1) Sub-family farms, large enough to provide employment for less than two people with the typical incomes, markets and levels of technology and capital now prevailing in such regions, 2) Family farms, large enough to provide employment for two to four persons on the assumption that most of the farm work is being carried out by the members of the farm family, 3) Multi-Family Medium farms, large enough to provide employment for four to twelve people, 4) Multi-Family Large farms, large enough to provide employment for over twelve people.3

Latifundio and Minifundio Complex

According to the above classification, we show below the relative number and area of farm units by size groups in ICAD study countries.4

For example, Table II shows that in Ecuador 89.9 percent of all farms are sub-family, or farms large enough to provide


4Ibid.
<table>
<thead>
<tr>
<th>Countries</th>
<th>Sub-Family&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Family&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Multi-Family Medium&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Multi-Family Large&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Total</th>
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<td>Argentina</td>
<td></td>
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<tr>
<td>Number of farm units</td>
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<td>48.7</td>
<td>7.3</td>
<td>0.8</td>
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<tr>
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<td>15.0</td>
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<td>100.0</td>
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<tr>
<td>Brazil</td>
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<td></td>
</tr>
<tr>
<td>Number of farm units</td>
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<td>39.1</td>
<td>33.7</td>
<td>4.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Area in farms</td>
<td>0.5</td>
<td>6.0</td>
<td>34.0</td>
<td>59.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Chile</td>
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<tr>
<td>Area in farms</td>
<td>0.2</td>
<td>7.1</td>
<td>11.4</td>
<td>81.3</td>
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<td>Number of farm units</td>
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<td>30.2</td>
<td>4.5</td>
<td>1.3</td>
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<tr>
<td>Area in farms</td>
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<td>23.3</td>
<td>49.5</td>
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<tr>
<td>Ecuador</td>
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<td></td>
</tr>
<tr>
<td>Number of farm units</td>
<td>89.9</td>
<td>8.0</td>
<td>1.7</td>
<td>0.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Area in farms</td>
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<td>19.3</td>
<td>45.1</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Number of farm units</td>
<td>88.4</td>
<td>9.5</td>
<td>2.0</td>
<td>0.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Area in farms</td>
<td>14.3</td>
<td>13.4</td>
<td>31.5</td>
<td>40.8</td>
<td>100.0</td>
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<tr>
<td>Peru</td>
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</tr>
<tr>
<td>Number of farm units</td>
<td>88.0</td>
<td>8.5</td>
<td>2.4</td>
<td>1.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Area in farms</td>
<td>7.4</td>
<td>4.5</td>
<td>5.7</td>
<td>82.4</td>
<td>100.0</td>
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</tbody>
</table>

<sup>a</sup>Sub-Family: Farms large enough to provide employment for less than two people with the typical incomes, markets and levels of technology and capital now prevailing in each region.

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**TABLE II (Continued)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>bFamily:</td>
<td>Farms large enough to provide employment for 2 to 3.9 people on the assumption that most of the farm work is being carried out by the members of the farm family.</td>
</tr>
<tr>
<td>cMulti-Family Medium:</td>
<td>Farms large enough to provide employment for 4 to 12 people.</td>
</tr>
<tr>
<td>dMulti-Family Large:</td>
<td>Farms large enough to provide employment for over 12 people.</td>
</tr>
</tbody>
</table>

employment for less than two people, and comprises only 16.6 percent of the area. This shows the dominance of the minifundio. On the other hand, in the case of Ecuador, the multi-family large farm unit represents 0.4 percent of all farms, but comprises 45.1 percent of the area in farms. Thus, these figures show the evidence of an agrarian structure based on the latifundio and minifundio complex, which is the origin of injustice, unemployment, poverty, low social status, ignorance and a lack of political power. It is important to note that Peru and Guatemala are in a situation similar to that of Ecuador.

Relationship Between Values of Agricultural Production by Size Class

The relationships between the value of agricultural production, agricultural land, cultivated land and the agricultural work force by Farm Size-Class is given in Table III.

Interpreting the above data, in Chile, and for comparative purposes, the multi-family large farms possess 79 percent of the agricultural land while the sub-family group possesses less than 1 percent. This situation in Chile also illustrates the concentration of land within the latifundios in the hands of a few, while the sub-family group has almost nothing. This is the typical agrarian structure in Latin America which produces economic stagnation and social misery. In relation to the agricultural work force, the sub-family group, in Chile, has only 13 percent of the work force while the multi-family large has 38 percent of the agricultural force. Another very important point is in relation to the
### TABLE III

RELATIONSHIPS BETWEEN THE VALUE OF AGRICULTURAL PRODUCTION, AGRICULTURAL LAND, CULTIVATED LAND AND THE AGRICULTURAL WORK-FORCE BY FARM SIZE-CLASS IN SELECTED ICAD STUDY COUNTRIES

<table>
<thead>
<tr>
<th>Country and Size Groups</th>
<th>Percent of Total in Each Country</th>
<th>Relative Value of Production as Percent of that of Sub-Family Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agrcultural Land</td>
<td>Agricultural Work Force</td>
</tr>
<tr>
<td>Argentina (1960)</td>
<td></td>
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<tr>
<td>Sub-Family</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Family</td>
<td>46</td>
<td>49</td>
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<tr>
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<td>15</td>
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<tr>
<td>Multi-Family Large</td>
<td>36</td>
<td>6</td>
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<tr>
<td>Total</td>
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<td>100</td>
</tr>
<tr>
<td>Brazil (1950)</td>
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<td></td>
</tr>
<tr>
<td>Sub-Family</td>
<td>0C</td>
<td>11</td>
</tr>
<tr>
<td>Family</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>Multi-Family Medium</td>
<td>34</td>
<td>42</td>
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<tr>
<td>Multi-Family Large</td>
<td>60</td>
<td>21</td>
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<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Colombia (1960)</td>
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<td></td>
</tr>
<tr>
<td>Sub-Family</td>
<td>5</td>
<td>58</td>
</tr>
<tr>
<td>Family</td>
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<td>Total</td>
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### TABLE III (Continued)

<table>
<thead>
<tr>
<th>Country and Size Groups</th>
<th>Percent of Total in Each Country</th>
<th>Relative Value of Production as Percent of that of Sub-Family Farms</th>
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</thead>
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<td></td>
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<td>100%</td>
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<td>100%</td>
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<tr>
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<td>30%</td>
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<tr>
<td>Family</td>
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<td>13%</td>
</tr>
<tr>
<td>Multi-Family Medium</td>
<td>32%</td>
<td>36%</td>
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<tr>
<td>Multi-Family Large</td>
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<td>21%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

aGross value of agricultural production in all countries except Argentina where the estimates are of added value. Comparable data are not available for Peru.

bNo information available.

cLess than 1 percent.

value of production; in Chile, the farms in the sub-family group produce only 4 percent of the total, while the multi-family large farms are responsible for 57 percent of value of all production.

Once again, the size of land holdings, the number of farm units, the area in farms, and the agricultural land distribution form the typical agrarian structure of underdeveloped countries in which the economically powerful, the political elite, and the upper classes predominate, while the campesinos are still living in precarious conditions.

The preceding discussion about Latin America's agrarian structure was based on information from Agrarian Problems and Peasant Movements in Latin America, edited by Rodolfo Stavenhagen.
CHAPTER III
AGRARIAN REFORM IN LATIN AMERICA

Concept of Land Reform

In order to obtain a true concept of agrarian reform it is convenient to examine the land reform programs by which large scale distribution of property has been effected for the benefit of the small farmers and landless peasants. However, before entering into an analysis of the land reform program, we should mention the concept of land tenure, which also means power, because it implies the dominance of the elite over the peasants. Land tenure reform is simply the redistribution of power. According to this definition, land reform is a transfer of power from the landlord to the peasants in order to change the peasants' social and economic status. This land reform implies social reforms aimed at obtaining economic and social changes. If land reform does not benefit the landless and small rural farmers and brings only marginal changes, it is not land reform. It has to be "massive," which means a total change from a traditional land tenure system to an equitable and rational land redistribution. It is necessary to distinguish colonization and agricultural development from land reform; colonization means the use of non-agricultural lands for agricultural purposes; agricultural development is the utilization of the available resources,
the application of capital, the use of technology to increase farm productivity; land reform is land tenure reform or the redistribution of power among the peasants. Land reform could also be effected through collective farming.

**Land Reform Within the Framework of Social Change**

Land reform in Latin America is part of the process of social change. For example, in Latin America there exists a traditional rigid social structure which is the cause for the emerging economic and social stress on the traditional structure. This tension in turn causes changes in the social value system and creates new values which continue to change the social system. It is recognized that in principle governments should encourage land reform through economic aid, technical assistance, enforcing the distribution of land to the landless, and by administering all legal matters in order to successfully benefit the peasant.

**Direct and Indirect Land Reform**

Several authors have studied land reform in Latin America and have pointed out differences between direct and indirect land reform. Direct reform must achieve massive changes in the rural power structure by means of the redistribution of the land to the peasants. The indirect reform is applied for resolving the superficial social conflicts without altering the powerful social structure which prevails in Latin America. For example, indirect
reforms include colonization, labor and tenant contract regulations, and some programs of industrialization. On the other hand, in Latin America, with the exception of Mexico and Bolivia, the peasants are still expecting a "massive" land reform. As the Brazilian Francisco Juliao, states:

The agitation must come from below. From you and from all your brothers shouting and marching. Down with the latifundio! Down with tyranny! Long live land reform! Long live liberty! All the ears will be listening to the crowd. You are the crowd. And the heart of the latifundio which is of stone will melt away, like ice. Because the clamor of the masses has the heat of fire.1

Land Reform as an Explosive Force in Latin America

According to Thomas F. Carrol, among the explosive forces operating in Latin America, perhaps "none is more controversial and hotly argued than land reform."2 In Latin American countries a semifeudal agrarian structure still exists, with the latifundio and minifundio complex. This agrarian structure is not only a matter of development and indirect reform, but also involves the distribution of wealth, political power, and income. Land reform is one of the paths through which labor policy should be implemented in an agrarian environment. Thus, land reform in Latin


America is the major cultural event because it would reach the foundations of necessary personal relations, through which the social and economic status may change. As Philip M. Raup has stated,

Land reform has become a standard prescription for countries with inhibited agricultural development. But the typical expert missions report rarely analyzes it in terms of specific barriers to be removed or new climates of expectation to be created. It is handled gingerly, sometimes with regret, as a measure that is distasteful but unavoidable. It can not be undertaken without questioning basic structural characteristics of an economy. And it hauls in its train new social and political alignments as well as new land tenure institutions.3

An examination of land reform relating to Brazil helps to further describe the agrarian environment of social and economic problems common to Latin American countries. First, it is convenient to consider wealth on farms in eleven Brazilian municipios by tenure class which involves family farms, medium sized farms, and latifundios.

Table IV shows a wide gap between the wealth of the minifundios and latifundios. The former represents only two percent of wealth while the latter represents 33 percent. This means that wealth is concentrated in the hands of few individuals. Consequently, the need for land reform legislation is apparent. Generally,

<table>
<thead>
<tr>
<th>Farm Tenure Class</th>
<th>All Eleven Municipios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per cent of Farms</td>
</tr>
<tr>
<td>Minifundios</td>
<td>25</td>
</tr>
<tr>
<td>Family Farms</td>
<td>55</td>
</tr>
<tr>
<td>Medium-Sized Farms</td>
<td>17</td>
</tr>
<tr>
<td>Latifundios</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

in Brazil, as in other Latin American countries, the latifundios' yields are not economically profitable. Furthermore, the percentage of land in crops is lower in the latifundios than in family farms and medium-sized farms, as shown in Table V.

In 1950 and 1960, land in crops on latifundios was 28 percent and 27 percent respectively, while land in crops on medium-sized farms was 45 percent and 40 percent. Minor increases were noted for minifundios and family farms.

The basic problems in the agrarian sector have emerged as national issues in many Latin American countries. These have been met with varying degrees of success by their respective governments. The utility in considering measures taken by some lies in the lessons that can be learned which can in turn serve to guide other nations in their efforts.

Agrarian Reform in Mexico

In Mexico, the land was distributed as ejidos. According to Mexican Agrarian Law, the land is granted to a community of peasants called ejidatarios or members of an ejido. In this agrarian system, the ejidatarios are not legally able to sell or mortgage the land that has been granted. The ejido is governed by the comisariado ejidal, a council of three peasants elected from the members of the community.

Under this agrarian system the communal or cooperative organization administers the land with each member undertaking
<table>
<thead>
<tr>
<th>Size-Class</th>
<th>Land in Farms 1950</th>
<th>Land in Farms 1960</th>
<th>Land in Crops 1950</th>
<th>Land in Crops 1960</th>
<th>Increase in Crop Land (Hectares)</th>
<th>Percentage of Increase in Crop Land in Each Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hectares</td>
<td>Percentage</td>
<td>Hectares</td>
<td>Percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mini-fundios</td>
<td>1.2</td>
<td>1</td>
<td>2.7</td>
<td>1</td>
<td>0.8</td>
<td>4</td>
</tr>
<tr>
<td>Family Farms</td>
<td>13.9</td>
<td>6</td>
<td>20.8</td>
<td>8</td>
<td>4.4</td>
<td>23</td>
</tr>
<tr>
<td>Medium-sized farms</td>
<td>78.8</td>
<td>34</td>
<td>85.3</td>
<td>32</td>
<td>8.4</td>
<td>45</td>
</tr>
<tr>
<td>Latifundios</td>
<td>138.0</td>
<td>59</td>
<td>155.6</td>
<td>59</td>
<td>5.4</td>
<td>28</td>
</tr>
<tr>
<td>All Farms</td>
<td>231.9</td>
<td>100</td>
<td>264.4</td>
<td>100</td>
<td>19.0</td>
<td>100</td>
</tr>
</tbody>
</table>

tasks assigned by the *comisariado ejidal*. Profits are distributed in proportion to the amount of work performed. The individual *ejido* is a plot of land worked by the family itself.

One distinction in the *ejido* system is that the *ejidatarios* have not had to pay for the land. The title deed certifies the right of the *ejidatario* to use the land indefinitely, while specifying the area of the grant. Some *ejidos* are one to two acres, not enough land to support a family. This circumstance forces the *ejidatario* to seek work on some other farm in order to supplement his income.

Established in Article 27 of the Mexican Constitution of 1917, agrarian reform has been implemented in varying degrees. During the administration of President Lazaro Cardenas, between 1934 and 1940, 16.8 million hectares were distributed. Manuel Avila Camacho distributed 6.6 million hectares during his administration, between 1940 and 1946. In the administration of President Miguel Aleman (1946-1952) 5.4 million hectares were distributed. During the administration of President Adolfo Lopez Mateos (1958-1964) 17 million hectares were distributed.

**Agrarian Reform in Bolivia**

In Bolivia, a revolutionary government seized power in 1952 and initiated a program of agrarian reform. The Movimiento Nacionalista Revolucionario (MNR), whose leader was Victor Paz Estenssoro, established the agrarian reform law which was approved in August, 1953. The law provided that the small parcels of land worked by the *campesinos* should become their personal property.
immediately on the date that the law was approved. Also the law provided that the remaining land would be divided among the landless and sharecropper campesinos. In this way peasants were granted the corresponding titles to their respective holdings. The law also provided that the campesinos should not have to pay for the land. This agrarian reform was implemented immediately after it was promulgated. Compensation for the land was to be in bonds, but due to inflation, inadequate credit, and lack of technical assistance, the Bolivian government has encountered severe economic problems. Nevertheless, there have been some significant social and economic changes through agrarian reform in Bolivia.

Agrarian Reform in Venezuela

The Venezuelan agrarian reform took place during the administration of President Romulo Betancourt in 1960. The law provides that the government can purchase large land holdings, and at the same time, divide it among peasants who are small holders or landless. Agrarian reform legislation provides the purchase of the land in cash or in bonds by the government. The Venezuelan agrarian plan granted plots individually and collectively. Individual plots were given under the name of parcela familiar, by which the ownership of the land is temporarily given for one year, after which the ownership becomes permanent.

In Venezuela the land is bought from private owners and the price is set according to the corresponding appraisal. Venezuela's
agrarian reform program differs from those in Mexico and Bolivia because in the latter countries the peasants do not pay for the land and, in the specific case of Mexico, peasants cannot sell or mortgage an ejido.

According to reports on Venezuelan agrarian reform, the beneficiaries were 230,600 families at the end of 1972. The program involved in this agrarian reform covered an area of 2,738,000 hectares. 4

Agrarian Reform in Ecuador

Ecuador's agrarian reform law 1480, dated July 23, 1964, provided land distribution to small proprietors and landless farmers for the purpose of improving their social and economic status. The law has not been implemented as a massive agrarian reform program. Nevertheless, the law states that the land will be awarded 1) to small farmers who agree to integrate their holdings into a cooperative organization, and 2) to those who work lands without actually owning any land.

Ecuador's agrarian reform law in Article 54, provides that the Institute of Agrarian Reform and Colonization give preference to campesinos, such as aparceros, arrendatarios, arrimados, sitiajeros, colonos, finqueros, sembradores, who are not land proprietors. In

## TABLE VI
### SUMMARY OF AGRARIAN REFORM IN MEXICO, BOLIVIA, AND VENEZUELA

<table>
<thead>
<tr>
<th>Issues</th>
<th>Mexico</th>
<th>Bolivia</th>
<th>Venezuela</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accompanying Circumstances</td>
<td>After fundamental Revolution</td>
<td>As part of fundamental revolution</td>
<td>By democratic regime as part of fundamental reform program</td>
</tr>
<tr>
<td>Who got the land</td>
<td>Those who cultivated it</td>
<td>Those who cultivated it</td>
<td>Those who cultivated it</td>
</tr>
<tr>
<td>How land redistributed</td>
<td>To the ejidos</td>
<td>To individual peasants and a few cooperatives</td>
<td>To individual peasants and a few cooperatives</td>
</tr>
<tr>
<td>Landlords compensated?</td>
<td>Yes, in bonds</td>
<td>In law, but not in fact</td>
<td>Yes, in bonds and cash</td>
</tr>
<tr>
<td>Credit to land recipients</td>
<td>Inadequate</td>
<td>Almost non-existent</td>
<td>Relatively adequate</td>
</tr>
<tr>
<td>Technical assistance</td>
<td>Inadequate</td>
<td>Very modest</td>
<td>Extensive</td>
</tr>
<tr>
<td>Economic effect on agriculture</td>
<td>Decline in production at first, followed by large increases in production</td>
<td>Decline in output</td>
<td>Dramatic increase in output</td>
</tr>
<tr>
<td>Political effect</td>
<td>A basis of long-term political stability</td>
<td>Made peasants major political force</td>
<td>Helped establish basis for democratic stability</td>
</tr>
</tbody>
</table>

Source: Robert J. Alexander, *Agrarian Reform in Latin America*  
addition, the law authorizes the expropriation of lands under the following conditions: 1) Expropriation of lands which are poorly exploited or exploited by absentee owners; 2) the reversion of uncultivated lands, defined as those left fallow for ten years; 3) revision of the assignment and sale of government lands in which the legal requisites have not been observed; 4) elimination of all precarious types of land tenure in agriculture. It further calls for the integration of minifundios, legalization of the peaceful possession of land, intervention of haciendas owned by the state.

In summary, the lands affected by the agrarian reform program in Ecuador are as follows:

A. Lands subject to expropriation

1. Lands which do not fulfill their social and economic functions, or are uncultivated or poorly exploited.

2. Those which maintain sharecropping systems and fail to comply with labor and social security laws.

3. Those which are too extensive (more than 2,500 hectares).

4. Rural holdings owned by non-agricultural institutions located in agrarian reform areas.

B. Lands subject to reversion to the state

1. Lands suitable for agricultural exploitation which have remained inactive for more than ten years.

2. Lands worked by those who have no contractual ties with the owner.
3. Cases of assigned public lands in which the owner has not complied with the legal regulation pertaining to such lands or which were not subject to these regulations.

The reversion of land to the state occurs when proprietors have left lands suitable for agricultural exploitation inactive for more than ten consecutive years.  

Agrarian Reform and the Alliance for Progress

The issue of agrarian reform gained international attention through the Alliance for Progress. One of the main provisions called for a cooperative program among the Latin American governments aimed to formulate reforms and set up the basis for social and economic development. The Alliance for Progress specifically stated the necessity of an equitable land reform program which might lead to a transformation of the agrarian structure, and consequently, for social change and improved welfare for millions of Latin American peasants.

The Alliance for Progress brought hope and optimism for the peoples of the hemisphere because its proclamation came not only as a promise or a panacea, but as effective, long range economic cooperation in education, health and sanitation, agricultural development programs,

^Ley de Reforma Agraria y Colonizacion, 23 de Julio de 1964. Decreto Supremo No. 1480, Quito, Ecuador. (Appendix A).
and economic integration, all measures designed to improve the economic status of the great majority of workers and peasants in Latin America.

Thus the Declaration to the Peoples of America read at Punta del Este, Uruguay on August 17, 1961, stated as a principal objective:

To encourage, in accordance with the characteristics of each country, 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 property so that, supplemented by timely and adequate credit, technical assistance and improved marketing arrangements, 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.  

Note that the Declaration encourages programs of comprehensive agrarian reform in Latin America. These steps were not taken by all Latin American countries. While it was estimated that the production levels should be raised about 2 percent in order to meet the food demands, in some cases this was offset by a population growth of 3.0 to 3.5 percent.

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Agricultural Development

In agricultural development the biological production process depends upon solar energy, soil and rainfall. Furthermore, technology must be adapted to specific conditions and locations, in contrast to industry where technology is simply transferable. Other characteristics of agriculture are, 1) production is seasonal, 2) this seasonal period requires skilled workers for each particular season, 3) agricultural production is only partly controllable by human skill, 4) while the management function in agriculture is not centralized as it is in industry, efficient management capable of applying new methods in agriculture is especially lacking in most of the Latin American farm units of production.

One important aspect is the dependence of agricultural development on a process of structural transformation. The possibilities of international specialization through trade, as in the case of Ecuador's banana exports, are a better source of monetary income for farmers than the domestic crop production. But the expansion of agricultural exports does not alleviate the economic and social conditions of farmers producing for domestic markets, because they live at a subsistence level.
In the economic development of Latin America, agriculture remains the dominant sector. Economic development is a process of modernization of agriculture rather than the creation of new industries. The factors of agricultural development are 1) the variety of physical conditions that concern agricultural production and 2) the regional variety in the population, or the human factor. Physical conditions include both raw materials and the commodities produced, as well as the relationship between them. Climates and lands also differ, illustrated by the contrast between tropical products of the low lands and products of the highlands. Different regions produce different goods at different costs and yield different returns. For example, on the coastal region of Ecuador, the plantation system still operates in the production of bananas and sugar while in the highlands the *latifundio* is dominant. Problems of development are widely divergent.

This study deals with agricultural development in Ecuador as reflected in the needs of the Quero-Huachi-Pelileo region. One of the inputs for development is the application of water to increase agricultural production, thus raising per capita agricultural income by obtaining greater yields. This will also require the use of improved seeds and fertilizers, while the need for communal houses for rural education purposes, and for training workers in agricultural subjects will become apparent. Through agricultural modernization the goals are to change the social and economic status of the farmers,
to raise their levels of living, to provide them with better education, and to demonstrate that an adequate, well-financed, technically guided, and comprehensive development program may change the traditional social structure into a more advanced, more modernized agrarian society.

The Human Factor

One observes that in the process of developing a modernized agrarian society, certain elements of the culture will have to disappear because they are incompatible with the essential characteristics of the future society. However, planners and development officers should stimulate the development of new forms of culture, rather than eliminating existing ones.

Often, planners for development may have a limited understanding of the role of the human factor. They may see it in a negative role, an element tying people to the past and hampering necessary development. Unfortunately, the "human factor" almost never plays a role in the planner's mind. The tendency is to think of higher production, better houses, better health, and other useful things. However, these phenomena collectively called the "human factor" are of importance in that they have a decisive value in determining his actions.
Beliefs, customs, habits, ways of expressing social status, ways of recreation and often highly irrational aspects of thinking and doing are the gist of the "human factor."\(^1\)

Important aspects affecting the human factor in Latin America include the wide disparity of wealth between the upper and lower classes, the uneven distribution of educational opportunities, and the workers' tendency to migrate.

**Some Aspects of Agricultural and Nonagricultural Sectors in Economic Transformation**

These are several important aspects of interaction between the agricultural and nonagricultural sectors in economic transformation. There is a shift of labor from the agricultural to the nonagricultural sector. This happens because providing food supplies to a growing urban labor force has received a higher priority in the development process. The process and creation of nonfarm jobs requires a large increase in capital to be invested in the urban sector. Since agriculture is initially the dominant sector in the economy, it is an important source of capital. Thus, the agricultural sector supplies subsistence food to a growing urban labor force, which produces capital goods that are an important capital

contribution from the agricultural sector. In turn, the agricultural sector may form necessary markets for industrial output of consumer goods. Highly productive agriculture depends on inputs which originate outside the agricultural sector.

**Limited Capital and Labor Allocations**

In developing countries, farming tends to be dominated by peasant farms. Farming units are more or less similar. Capital and labor allocations are very limited, and designed to support a subsistence agriculture. The level of agricultural production in traditional agriculture is limited by the amount and quality of land, and by the amount of labor available for production. Thus, labor is important in a traditional agricultural system. On the other hand, the economic process of modernization of agriculture could be portrayed by a production function showing agricultural outputs as a function of various inputs. These new inputs of modern agriculture are of an institutional nature: technical assistance, research, credit facilities, and educational programs. So the new inputs are designed to increase the productivity of the existing resources of traditional agriculture. For example, the investment in infrastructure work for an irrigation system and the application of fertilizers in agricultural production can be very profitable. The use of new inputs may change traditional agriculture to a modern kind by rendering greater yields and providing high quality products.
The theory of agricultural development must take into account the initial level of income in agriculture and its role in relation to labor, as well as the capital which agriculture can contribute to other sectors of the economy.

**Sociology of Development**

The sociology of development has been described as follows:

A subfield of sociology which is devoted to a study of the theory, design, and implementation of action programs which are proposed for the purpose of deliberately and fundamentally altering social structure in the interest of achieving more efficient forms of social organization, and judged on the basis of values and goals considered worthy.²

This definition of the sociology of development helps in the analysis of rural development. The discipline can be applied when considering the alteration of the traditional social structure in rural areas of Latin America by modernizing influences.

Regarding strategies of rural development, Bertrand discusses two major ideological-philosophical schools. One is the "Self-Help" approach and the second is the "Centralized Planning" approach to rural development. In the first, characterized by the "Self-Help" approach, the people themselves are willing to change and to obtain the desirable goals. On the other hand, the "Centralized Planning"

approach to rural development does not take into consideration the approval of the people affected in a development program.

In the Quero-Huachi-Pelileo rural development program there is centralized planning, although an effort had been made to develop a harmonious systematic connection between the people who are the target of planning and the goals to be achieved.

Creating a Modern Agriculture

To create a modern agriculture development and planning include both technological and institutional changes. The goal is a different kind of agriculture from that known in the past. This involves new methods of farming, a changed organization in the countryside, and new forms of local and national organization and policies.

In modern agriculture even the plants and livestock may be of different types from those previously grown. Purchased farm inputs assume greater importance. Practices of husbandry are different. Off-farm agri-support services not previously needed must be developed and operated and assume major importance. Diversified and constantly shifting combinations of enterprises or continuous specialized production may occur in response to changing relative prices. This requires a new overall organization of the countryside, and new interrelationships among farms, market towns and cities, and between agriculture and industry.

Major transformations involve both technological and institutional changes such as new crop varieties, new pest control.
materials, new implements, new sources of power, new methods of marketing, storing, transporting, and processing farm products. Others may affect the methods of producing and distributing farm inputs.

Institutional changes that are involved may include:

. . . new organizational arrangements for agricultural research and for training agricultural technicians, new ways of extending credit to farmers, new patterns of operation for organizations that market farm products and that distribute farm inputs, arrangements for influencing farmers' production incentives, sometimes for changing patterns of land tenure and tenancy and frequently new methods of arranging for the management of irrigation systems.3

Development as a Vision of Redemptive Transformation

According to Peter L. Burger,

Development is not just a goal of rational actions in the economic, political, and social spheres. It is also and very deeply, the focus of redemptive hopes and expectations. In an important sense, development is a religious category. Even for those living on the precarious margins of existence, development is not just a matter of improving material conditions; it is at least also a vision of redemptive transformation.4

Agrarian Change Trends in Latin America

Changes and innovations introduced in agriculture have not substantially altered the traditional characteristics of the system. Agricultural technique has suffered only

3A. T. Mosher, To Create a Modern Agriculture, (New York: Agricultural Development Council, 1971), p. 120.

s slight modification since 1955, with the result that the level of resource-use of both land and labour remains low.  

Important economic characteristics of the rural sector in Latin America, in spite of modernizing influences, reflect that 1) there is no marked increase in the internal market for national products brought about by an increase in the purchasing power of the peasants; 2) systems of commercialization that throw the negative burden of price fluctuations on the rural producer have developed; 3) while the rigid structure of his enterprise prevents it from adapting quickly and effectively to changes in market conditions, such as increased demands for certain products.  

Yet the resistance to development in the agrarian sector is critical. It is responding inadequately to the demands made by the urban growth on its productive capacities. While the rural growth rate remains at around 1.5 percent, the urban growth rate is correspondingly higher due to in-migration. For Latin America this implies a demand for increasing food production made on a decreasing proportion of the population.  

Thus, we see the need for the improvement of agricultural production methods and the fostering of social attitudes favorable to overall national economic development.  

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6 Ibid.  
7 Ibid.
CHAPTER V

REVIEW OF LITERATURE

The purpose of this section is to review the literature which is relevant to this study. Since this is a study of a development project in rural Ecuador, the body of literature reviewed is that which focuses on 1) rural problems and development in rural Latin America and, 2) the literature on Ecuadorian society.

The Classical North American Sociological Literature on Rural Latin America.

Among the classical North American sociological studies relating to rural Latin America is Carl Taylor's book, Rural Life in Argentina. Taylor emphasizes topics such as ownership, distribution of land, land tenure, levels and standards of living. He discusses issues related to rural localities and social organizations in Argentina's rural communities. He also describes various type-of-farming regions: the cattle belt, the sheep belt, the fruit belt, and the yerba-mate belt. For each region Taylor presents the average size of farms, the size of the farm population, and
other valuable data which demonstrate the detailed nature of his analysis of rural and social life in Argentina.\footnote{Carl Taylor, Rural Life in Argentina (Baton Rouge: Louisiana State University, 1948), pp. 214–240.}

Another classical study of rural society in Latin America is Nathan Whetten's \textit{Rural Mexico}. Whetten analyzes very important issues such as the relation of the people to the land prior to the revolution of 1910, the hacienda system, and the agrarian aspects of the Mexican revolution. In that revolution, Emiliano Zapata focused a great deal of his attention on the problem of an agrarian reform under the slogan of \textit{Tierra y Libertad} ("Land and Liberty").

His Plan Ayala in part reads as follows:

\begin{quote}
Be it known: that the lands, woods, and waters which have been usurped by hacendados, científicos o caciques, through tyranny and venal justice, will be restored immediately to the pueblos or citizens who have the corresponding titles to such properties, of which they were despoiled through the bad faith of our oppressors. They shall maintain such possession at all costs through force of arms. The usurpers who think they have a right to said properties may present their claims before special tribunals to be established upon the triumph of the revolution.

The great majority of the Mexican pueblos and citizens own nothing more than the soil they stand upon and are suffering the horrors of a miserable existence without being able to improve their social situation or to devote themselves to industry or agriculture because of the monopoly of the few of the lands, woods, and waters. Therefore, such properties shall be expropriated, upon indemnification to the powerful owners of one-third of such monopolies, in
\end{quote}
order that the pueblos and citizens of Mexico may obtain ejidos, colonies, town sites, and tillable lands. Thus, the lack of prosperity and welfare of the Mexicans may be remedied in all aspects.\(^2\)

Whetten uses statistical data in his analysis of land distribution in Mexico from 1915. It is a very detailed work which shows the number of hectares of land distributed and the number of persons that received land under agrarian reform programs. During the administration of President Lázaro Cárdenas more land was distributed than in all previous administrations together.

Whetten's definition of the *ejido* is as follows:

The term *ejido* as now used in Mexico, refers to an agrarian community which has received and continues to hold land in accordance with the agrarian laws growing out of the Revolution of 1910. The land may have been received as a outright grant from the government or as a restitution of lands that were previously possessed by the community and adjudged by the government to have been illegally appropriated by other individuals or groups; or the community may merely have received confirmation by the government of titles to land long in its possession. Ordinarily, the ejido consists of at least twenty individuals, usually heads of families, who were eligible to receive land in accordance with the rules of the Agrarian Code, together with the members of their immediate families.\(^3\)

Whetten discusses at length the *ejidos*, their organization, administration, credit and finance; types of loan; and the *ejidos* banks.


\(^3\)Ibid., p. 182.
Whetten distinguishes between the individual and the collective ejidos. He largely concentrates on the problem of the individual ejido:

An overwhelmingly large proportion of the ejidos are of the individual type. This means that each "ejidatario" is allotted a plot of farm land (parcela) which he tills in his own way with the help of his family. These plots of crop land on the average for the entire country consists of 4.4 hectares. Of the 5,650 ejidos co-operating with the bank in 1944, there were 4,886 or 86.5%, that were operating on the individual basis and 696 or 12.3 per cent, that were operating collectively. The collective ejidos are found mostly in the northern areas and in the Gulf states. Only 3.6 per cent in the central region are operating collectively, and only 5.9 per cent in the south Pacific. From the standpoint of financing the agricultural activities of these individually operated ejidos, there are a great many difficulties which present themselves. These stem from a variety of factors among which are 1) the small size of the plots, 2) the relatively poor quality of the land, and 3) the culturally retarded status of the ejidatarios.4

Whetten also describes the essential features of the collective ejido, as follows:

1. The land, including farm land, is owned and worked jointly by the members of the ejido instead of being divided into plots and assigned to individuals.
2. The capital, whether in the form of credit from the bank or accumulated in some other form, is under the control of the ejido and is not dispensed to individual members.
3. The members place themselves at the disposal of the ejido to be used in the production process according to their respective abilities under the direction of the executive committee and the various foremen.
4. The products obtained from the enterprise belong to the society and are marketed by it. The profits are distributed to its members in the form of money income or social benefits or both.5

4Ibid., p. 207
5Ibid.
In Rural Mexico, Whetten also focuses on the contemporary social and economic rural problems of Mexico, particularly through his analysis of man-land relationships. Whetten's research in the region of La Laguna on small and large irrigation projects is particularly relevant to this dissertation. Also in his article "Agricultural Development in Mexico" the author emphasizes Mexico's agricultural education program. The Rockefeller Foundation contributed with a team of highly trained professionals in the fields of agronomy, economics, genetics, soil science, plant pathology, entomology, and botany in order to develop a research program for wheat, corn, and beans, the basic staples of the Mexican diet. On the advice of the Rockefeller mission, the Escuela de Chapingo was furnished with a scientific library. In addition, several scholarships were created for Mexican students for training in the United States.

In Mexico, as in Ecuador, the development of small holdings has been enhanced by the construction of irrigation works. In many instances these irrigation works have served to make land available for farming which formerly was too dry to produce crops. In other cases land that was farmed but yielded very little because of lack of moisture has been made highly productive through irrigation.6

T. Lynn Smith in his book Sociology of Rural Life analyzes rural social organization, emphasizing the social processes of rural

6Ibid.
society. In another work entitled, The Process of Rural Development in Latin America, Smith states that the "agrarian reform is the principal necessity in any substantial program of directed social change that may be elaborated for almost any of the so-called underdevelopment sections of the world. Smith also maintains that the unequal distribution of land in Latin America creates social and economic problems in the region. The latifundio system, he says, is the main obstacle for the progress of the Latin American peasants.

Let us quote Smith's important points on agrarian reform in Latin America, because they contribute to our understanding of the crucial rural social problems of most Latin American countries.

Some Important Points of Attack for Rural Development Programs

In the remainder of this paper we merely attempt to center attention upon two of the points at which there is the greatest chance to make substantial headway in any planned programs of social development in rural areas. These are agrarian reform and rural community development.

... Thus, I have stressed that the need for agrarian reform is indicated whenever and wherever there prevails a high degree of concentration in the ownership and control of the land; wherever we find the large estates in which the land is poorly used or even deliberately withheld for productive purposes, i.e. the type of estates that are referred to as latifundia in many parts of Latin America; any place that a high proportion of all those who live from agriculture are found in the category of agricultural laborers, a group that almost always is poorly paid, fed, clothed, housed, and educated, and whose members


rarely enjoy more than the most elementary measures to protect their health or to safeguard their lives and civil rights; any time that there is a proliferation of the small, pocket-handkerchief type of holdings designated as minifundia in Latin America; wherever the system of agriculture is so rudimentary and the use of labor so prodigal that the production per worker is low; in all cases when those who live in the rural districts are unable to attain anything except very low standards and levels of living; and in all situations in which there exists within rural society as a whole a high degree of social stratification, this is to say a condition characterized by the division of the population into a small elite class at the apex of the social pyramid and a large amorphous mass of agricultural workers at the bottom, with an immense gap between the two that is filled by few if any agriculturists deserving to be classified as belonging to the middle social class.9

All the above factors that Smith mentions affect the levels of living for the rural population in Latin American countries. The levels of living are very low and, consequently, there are marginal sectors that are poorly fed and poorly educated. Clearly, people who barely produce enough to eat tend to live without hope.

Another work by Smith related to Latin America is *Sociología Rural: La Comunidad y la Reforma Agraria*.10 Smith analyzes the rural community in Latin America and gives a broad illustration of the community, specifically in matters of rural sociology or la sociología de la vida rural. Smith indicates that in places such as Mexico, Ecuador, and Peru, where the aldeano population forms

9Ibid.

settlements, the limits of the rural community are evident. On the other hand, he states that in the United States, Canada, Brazil, and Colombia, where the houses are dispersed through the area and where the home of each family is close to the areas cultivated, the limits of the community are difficult to identify.

Another contribution by Smith to our knowledge of the rural and urban problems of Brazil is Smith's book, *Brazil: People and Institutions*. In this book Smith discusses Brazil's social institutions as well as Brazilian demography. He also focuses on such topics as land tenure, land division, size of holdings, colonization and settlement patterns.

In Part Five of the book, *Brazil: People and Institutions*, Smith focuses on subjects such as marriage and marital status, size of the family, and the position of women, as well as the educational institution. In this work Smith also recommends a convenient system of land surveys, which he also recommends for Colombia.

In his article, "Major Impediments to Agricultural Development in Latin America," Smith states:

1) Inadequate or defective types of farming or the absence of what are demonstrably the most productive and rewarding symbiotic combinations of crop and livestock enterprises.

2) The almost unchallenged domination of the large landed estate throughout the vast expanses of territory in Latin America, and deadening effects of the overall rural socio-cultural system which it engenders and perpetuates.

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3) The paralyzing results of the defective system of surveying the boundaries of landed properties and the train of quarrels, disputes, conflicts, protracted lawsuits, and wasted and blasted lives which this gives rise to and feeds.

4) The persistence on a wholesale basis of the most antiquated systems of farming, i.e., the highly institutionalized procedures used by farmers and stockmen to extract products from the soil.  

It is important to emphasize in this review of the literature, the rural social and economic problems that confront Latin American countries in achieving success in their development programs. In this connection, it is important to look at Rural Cuba by Lowry Nelson. Nelson's analysis of the evolution of the Cuban land system focuses on the different phases of historical development, as follows:

1. The encomiendas, 1513-1550.

2. The mercedes and the haciendas comuneras, 1536-1729.


4. The expansion of sugar production through multiplication of the number of small mills, 1790-1870.

5. Rise of the large sugar estate, the sugar latifundium; increased use of railroad and other technological improvements, 1870-1895.

6. The sugar latifundium in full power, 1900-1933.\textsuperscript{13}

The author of \textit{Rural Cuba} describes the \textit{encomienda} system, which was "a right to labor of a specific number of Indians granted by the Crown to a colonist." The \textit{encomienda} system was the most abominable labor system practiced by the Spaniards in Latin America.

Another system of land division in Cuba during the years of 1536 to 1729 was that known as \textit{mercedes} granted by the municipal \textit{cabildos}. These had extensions between one to three \textit{leguas} (league, equal to 3 1/2 miles). The \textit{mercedes} areas were properties where livestock was raised. This property system was called \textit{hatos}, and it has a circular form. Later, \textit{las mercedes} grants became communal properties because claimants did not divide them after the original grantee died, and they took the name of \textit{haciendas comuneras}.

The development of agricultural products such as sugar and tobacco were the origin for the subdivision of land holdings and gave rise to the sugar and tobacco industries. The expansion of sugar production produced an economic boom in Cuba which meant the creation of large sugar holdings, the establishment of new mills, and improved

\textsuperscript{13}Lowry Nelson, \textit{Rural Cuba} (Minneapolis: University of Minnesota Press, 1952), pp. 79-80.
transportation. Throughout the period from 1820 to 1870 sugar production increased to about 500,000 long tons per year. In the beginning of the twentieth century, American, British, and Canadian investments rose to 6,000,000 short tons. By 1940 about 2,285,000 acres were cultivated with cane. Nelson discusses the sugar industry as follows:

The organization of the industry passed largely from the hands of the individual entrepreneurs to those of large corporations, many of which were foreign. Thus the Cuban-American Sugar Company owned six centrales with 14,867 caballerias (a caballeria equals 33.16 acres) of land; the Cuba Cane Sugar Company, twelve centrales with 10,844 caballerias; the General Sugar Company and its dependents, nine centrales with 8,972 caballerias; and the United Fruit Company, two mills with 8,578 caballerias. These four companies own about 25 per cent of the Cuban land in the hands of centrales. American owned mills account for about one-half of the production since World War I; in 1940, for 56 per cent.\textsuperscript{14}

Olen F. Leonard, in \textit{Bolivia, Land, People and Institutions}, describes the racial elements and composition of the Bolivia population, fertility and mortality, immigration and internal migration, land tenure, marriage and family, education and school, religion and the Church, housing, and health and sanitation.\textsuperscript{15}

\textsuperscript{14}Ibid.

According to Leonard, the Indians are predominant in the highlands, the cholos or mestizos in the valleys, and in the low lands there are about equal numbers of whites, Indians, and cholos.

It is important to note Leonard's analysis of land tenure in Bolivia. He divides this subject as follows: tenure in the Altiplano, (hacienda system); land tenure in the valleys, (the small farm property); Communal Indian properties; and other forms of tenure. While the hacienda system is predominant in the highlands, land holdings in the valleys are small.

Man and Land in Peru, by Thomas R. Ford is an important book in which we find an analysis of the land and the people, the evolution of man-land relational systems, land distribution, land tenure, and reform measures. Ford's description of Peru's land shows the contrast of mountains, deserts, and jungles, which are "responsible" for the complex social structure of the nation.

In the chapter on man-land relations in rural Peru, Ford's study emphasizes the historical process in order to understand the evolution of the man-land system. He analyzes the Pre-Inca period, the land system of the Incas, and the Colonial era; the chapter
concludes with a study of nineteenth and twentieth century processes of land evolution.

On the subject of land distribution, Ford divides it in two sections: land distribution on the coast, and land distribution in the highlands, as follows:

Yet the coastal acreage of Peru is highly productive and of great importance to the national economy. About 120,000 acres of the land are planted in sugar cane, and about 321,000 acres in cotton. Rice, which has become an increasingly important coastal crop, is cultivated on about 140,000 coastal acres. These three are generally considered the principal commercial crops, although rice is not exported to any appreciable extent. The rest of the coastal area is devoted to pastures and various food crops, especially maize. Because the land use is an important factor in the interpretation of land distribution, crop production areas provide logical subdivisions for analyzing the coastal holdings . . . . The data on farm sizes in the southern coastal department support the view that small units prevail where the land is used for no commercial food production and pasture . . . the pattern of farm unit sizes is one of extremes; a great many small holdings that contribute only a small proportion of the total arable area, and relatively few large farms that make up the bulk of the total hectarage. The moderate size "family farm" unit is notably absent.16

According to Ford, in the distribution of land on the highlands, an entirely different set of factors operates to give meaning to the land pattern and to the land distribution in the Sierra. Those factors, all caused by mountainous terrain, are: 1) transportation difficulties, 2) a diminished spread of industrial culture, and 3) prevention of the development of commerce to a great extent. Thus, a subsistence farming economy is still the prevalent practice, with its accompanying primitive techniques of cultivation.

Ford shows the distribution of farm units by size for the Sierra, as follows:

The average size of the smallest units, based on a crude sampling, was 1.62 hectares. Thus, the total area of the 16,978 farms under six hectares in size may be estimated at 27,504 hectares. If the average and minimum sizes of 300 and 500 hectares, respectively, are again chosen as the unit areas of the two largest-unit categories of farms, the total area of the 2,605 units in this two classes is at least 1,021,100 hectares. Using the most conservative figures again, we find that the two largest groups of units, make up 9.9 per cent of the numerical total, containing over thirty-seven times as much land as the smallest group, into which 64.6 per cent of the total number of units fall. The pattern of distribution resembles very closely that of the coast, but it does not have the same meaning. The concentration of ownership on the coast, the expansiveness of capitalistic enterprise on the Sierra represent the survival of the colonial latifundium. ¹⁷

On the subject of land tenure in Peru, Ford delineates two basic systems of land tenure. One type is rooted in the collective society of the Indians; the second type is in the individualistic society of the Spanish. The latter type of land tenure is predominant at the present time.

Land tenure problems in Peru are similar to those in Ecuador and Guatemala, where the latifundio-minifundio complex is the cause of underdevelopment. The traditional latifundio system, which has strong feudal characteristics, gives rise to a high degree of social stratification and lack of social mobility. It restricts the

¹⁷Ibid., p. 67.
development of personality, maintains "order-obey" personal relations, and perpetuates the peasant's low level of living.

Charles P. Loomis and J. Allen Beegle, authors of *Rural Social Systems*, argue for a "social system" approach, which they maintain offers the necessary understanding of rural society. They give examples of the approach for social workers, social conservationists, agricultural agents, and other professionals who are in contact with unions, families, cooperatives, churches, etc. The authors give illustrations of how to use organizational structures in order to reach the people. They argue that the organizational structures they propose are more effective than the abstract method.

The use of the social system as the framework for sociological research gives professionals and students of sociology an adequate understanding of the matter. For instance, if we consider a cooperative social structure as a social system, such as a family or a church congregation, such organizations are composed by persons who interact among themselves.

In relation to the elements of social systems, Loomis and Beegle emphasize it as follows:

1) roles or what is expected of individuals in given situations; 2) status, or the ranking given to individuals, based on the consensus of members as to traits and qualities are to be rated high and low; 3) authority, or the right and power of individuals to influence others;

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4) rights, or the immunity from authority and duties, or the required obedience to authority and the requirements associated with the individual's role; 5) ends and objectives, or those changes which members of the system expect to accomplish through the operation of the system; 6) norms, or those rules which govern the application of means in the accomplishment of the ends or objectives; 7) territoriality or the locus and space requirements of a social system.

In sum, the authors concentrate in the study of the rural family, locality groups as social systems, educational as well as social systems, political and occupational groups as social systems, and the rural service agencies as social systems. Loomis and Beegle's application of this approach to the study of rural social systems in Turrialba, Costa Rica, is a great contribution to the development of the agrarian programs in that nation.

Contemporary North American Literature

One of the most valuable contributions in identifying the Latin American agrarian structure is the book, *Agrarian Structure in Latin America*, by Solon Barraclough, in which we find studies of land tenure systems, social rural systems, social and economic development, agricultural labor, income distribution, and agrarian reform policies in seven Latin American countries: Argentina, Brazil, Chile, Colombia, Ecuador, Guatemala, and Peru. ICAD's studies (Inter-American Committee for Agricultural Development) on the

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19 Ibid.

seven countries named above show that the traditional agricultural structure dominates Latin American countries. It shows also that Latin American agriculture is integrated by large latifundios and minifundios, the latter being populated by most of the farm population who make their living within a limited economic budget. Barraclough states that the latifundio and minifundio complex present a very serious problem for economic development. For example, the concentration of land ownership in Chile and Peru where more than 80 percent of the farm land is included in very large farm units, that is, latifundios which require a permanent work force of twelve or more workers. On the other hand, in Ecuador, Guatemala, and Peru, the minifundio or sub-family-sized farms, constitute 89.9 percent, 88.4 percent and 88.0 percent, respectively. ICAD’s agrarian structure studies in Latin America determined a nomenclature, or classification referring to the size of holdings, as follows: Sub-family farms are large enough to provide employment for less than two people; Family farms are large enough to provide employment for 2 to 3.9 people; Multi-family medium farms are large enough to provide employment for four to twelve people; Multi-family large farms are large enough to provide employment for over twelve people.21

Barraclough’s detailed studies on the trends of the urban and rural population in seven countries of Latin America show several interesting factors. For instance, in 1970, Guatemala had a rural

21ICAD Studies, p. 16.
population of 3,172,000, that is, in that country 70.1 percent of the population is rural. On the other hand, Ecuador had a rural population of 3,395,000 equivalent to 60.3 percent of its rural population. Other very interesting findings in Barraclough's book include valuable statistical data in relation to the labor force. The Agrarian Structure in Latin America by Barraclough is an outstanding work which gives light and guidance to know the social and economic problems of Latin America.

*Latin American Peasant Movements*, edited by Henry A. Landsberger is a socio-economic-political analysis of peasants of Latin America who are confronting traditional societies on the road to their liberation, and in their struggle for a change in peasant societies. Landsberger states that:

1) "peasant" refers to any rural cultivator who has a low economic and political status; 2) low economic status denotes little access to economic inputs such as capital, land, and knowledge; 3) there exists little control over the management of these inputs (what to cultivate, and when to work); 4) there exists also little control over output and its distribution between the factors of production; 5) low political status likewise denotes little access to political inputs (such as votes); 6) there is also little control over the management of political affairs (elect or appoint officials); and 7) there is little control over the output of the political system (to make political decisions).22

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Landsberger's definitions of the peasants of Latin American countries are the most logical and clear concepts of their social and political status. Landsberger states that the peasant is a "rural cultivator" who shares his life and his work on the land in the rural areas of Latin America. Also Landsberger points out that a peasant looks at his position as part of a family household, but not from an economic point of view to increase his profits.

With the above concepts and definitions we can focus on the problem of peasant movements in Latin America. Landsberger's book gives a broad and valuable information, and it provides a very clear and detailed study of the peasant movements in Latin American countries. There are descriptions of the Peasant Union Movement in Venezuela; the Zapata Movement in Mexico, and a very interesting analysis of a vineyard workers' strike in Chile which describes the relationships between Church, intellectuals, and peasants.

In Chapter 10 of the Latin American Peasant Movements, Ernest Feder, writes on "Societal Opposition to Peasant Movements and Its Effects on Farm People in Latin America," as follows:
For the man who ekes out a living by working for others for the self-employed who is denied access to income and wealth producing resources, progress consists in society's adoption of institutions which allow them this access or a voice in determining their own status so that they can share more fully in the benefits which accrue to society. From this point of view the peasants in Latin America have achieved little, if any, progress. The latifundio agriculture of the hemisphere is built upon, and continues to function on the basis of, economic, social, and political weakness of the farm people. This situation is characterized by lack of bargaining power as individuals or as a group. Incomes at the subsistence level, combined with strong social and political pressures originating from the rural power elite to prevent peasants from organizing, have so far proven to be almost unsurmountable obstacles to raising individual and collective bargaining power. Traditionally, the weak position of farm people has been a by-product of a permanent rural labor surplus. This surplus now appears to be rising as, for one reason or another, despite the steady migration of peasants to the cities, less and less labor seems to be used in agriculture in the face of an ever increasing rural labor force.

Farm people do not only face landlords, merchants, police chiefs, mayors, the military, local and national politicians, and others who defend the status quo as individuals or single agencies hostile to farm people's organizations. This would be too simple a view. On the contrary, the entire social structure seems to turn against them when they seek to exercise the freedom to organize, which seems the only way of gaining increased bargaining power under conditions of surplus labor.23

Regarding the subject of creating a modern agriculture, A. T. Mosher states that to create a modern agriculture, development and planning require the concourse of both technological and institutional changes. Thus, new methods of farming, new crop varieties, new implements, new methods of marketing and transportation are

needed to create a modern agriculture. On the other hand, new institutional changes include research and training for agricultural workers.

Peter L. Burger in his book Pyramids of Sacrifice, analyzes development policies in several Latin American countries. On the matter of development, he describes the "development" in the slum area known as Alagados in El Salvador, Capital of the State of Bahia, which covers about two square miles, and it involves one hundred thousand people. Burger describes the area of Alagados as a conglomeration of huts erected on stilts in the water, also there are some solid constructions, but most of the houses are constructed with wood and tin materials. Part of the area of Alagados is occupied by garbage which comes from the city of El Salvador. It is welcome by the people because all sorts of usable and vendable objects can be found from it.

Burger also analyzes the neighborhood associations known as sociedades which exist in this area of Alagados and it takes care of internal problems, and is also in charge of dealing with outside organizations.

The author of Pyramids of Sacrifice also has made studies in relation to development problems of the barriadas in the Villa of El Salvador near Lima, Peru.


Dr. Alvin L. Bertrand in his "Definitions and Strategies of Rural Development: A Search for Coherence and Congruity," discusses the sociology of development focusing in two major ideologico-philosophical schools. One is the "Self-Help" approach, and the second, the "Centralized Planning" approach to rural development. The first is characterized in that the "Self-Help" approach, the people themselves are willing to change and to obtain the desirable goals.26

The "Centralized Planning" approach to rural development does not take into consideration the approval of the people who are involved in a development program. This "Centralized Planning" has a harmonious systematic connection with the people who are the target of planning and also with the goals to be achieved. The sociology of development as a subfield of sociology is a study of the theory, design, and implementation of rural development programs. The sociology of development should be applicable for the rural development of Latin America, and of course, for the Quero-Huachi-Pelileo rural development program.

The Relevant Latin American Sociological Literature
Roberto Agramonte in his "Sociología Latinoamericana."27 states:


La importancia de Latinoamérica en el momento presente del mundo y el papel que está desempeñando en la hora actual de la historia de la humanidad requiere que se estudie, cada vez con más ahínco, este nuevo orbe y realidad en la etapa en que cobra fuerza independiente en los asuntos mundiales, en que se reproducen los fenómenos de su desarrollo económico, de su industrialismo, al par que con los procesos constitutivos del urbanismo y la superpoblación. Anadase el auge de sus interpretres en el campo de la sociología, la filosofía, las letras y el arte. Otra obra nuestra sera consagrada a la sociología objetive y factual de la America Latina.  

Latin America's economic and industrial development is urgently needed in order to cope with urban growth and overpopulation.

Agramonte's "Sociología Latinoamericana" is a valuable book, and it contains an interesting analysis of sociological aspects. He stresses sociología martiana (referring to José Martí, Cuba's most outstanding citizen) thus shedding light on the reality of Latin America. Martí states:

La historia de América, de los Incas a acá, ha de enseñarse al dedillo, aunque no se enseñe los de los arcontes de Grecia. Nuestra Grecia es preferible a la Grecia que no es nuestra. Nos es mas necesaria.

Roberto Agramonte gives a complete description of Latin America's sociological studies, beginning with Echeverría, Alberdi, Sarmiento, Rodó, Montalvo, Freile, Mendieta y Nuñez, López de Mesa, Mendieta y Nuñez.
etc. Civilización o Barbarie by Sarmiento is an analysis of Argentine society of the nineteenth century.

Orlando Fals-Borda in his book entitled Peasant Society in the Colombian Andes, a Sociological Study of Saucío, concentrates in a detailed sociological study of the village Saucío in relation to its population, relationships between the man and the land, the settlement pattern, the levels of living, the social institutions of the area and the social stratification and social status of the community. Fals-Borda defines Saucío as an organized neighborhood, which still maintains the features of a Gemeinschaft, or the primary bonds among people. Also the author indicates that Saucío as a community in which the Liberal Party, schools, the Roman Catholic religion, the Spanish language, the economic activities, the recreational habits, and the mestizo race are the principal ties binding the neighborhood. Fals-Borda added: "Perhaps more precision can be gained by stating that Saucío belongs to the Hispano Chibcha (Mestizo) culture, as the neighborhood is mainly the results of the mixture of the Spanish with the local Indians." Borda also gives a detailed study in relation to the population of Saucío. He states that 356 persons were distributed in 77 households, with a population density of 28.5 per square

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kilo­meter.\textsuperscript{32} Referring to sex distribution he states that there were 184 males to 172 females; he also studied the age dis­tribution. On that matter he states: "As a result of a considerable number of infants and a relatively small number of old people, the median age for the total population is 18 years."\textsuperscript{33} According to Fals-Borda ninety-three percent are farmers in Saucicio.\textsuperscript{34} Chapter 13 analyzes a very important aspect of the peasants: "The Development of the Peasant Individual." In this chapter he studies the family size and composition, adult life, the myth and the facts. "The Myth and the Facts" chapter examines the Saucicio peasant, who since his childhood, is faced with a hard life. It is important to point out what the author says regarding this matter: "The child does not engage in play groups with neighbors. Instead of playing in gangs, a boy flies kites or plays with tops alone in the backyard of his home."\textsuperscript{35} Fals-Borda continues in this sociological analysis, adding: "Since the Saucicio individual has learned not to ask too much of, nor expect a great deal from life, his occasional disappointments do not convert him into a neurotic or psychotic."\textsuperscript{36} Fals-Borda's book is a very important contribution to learn about the sociology of the peasant society of the Colombian Andes.

\textsuperscript{32}Ibid., p. 48.
\textsuperscript{33}Ibid., p. 49.
\textsuperscript{34}Ibid., p. 52.
\textsuperscript{35}Ibid., p. 212.
\textsuperscript{36}Ibid., p. 213.
The concept of land tenure is related to the welfare of the population, Fals-Borda states, and for this reason his study of land tenure in Boyaca deserves special analysis. On this subject the author of *El Hombre y la Tierra en Boyaca* moves from El Dominio del Conquistador, 1537-1595; to different aspects as El Establecimiento de los Resguardos Indígenas, 1595-1642; to the analysis of individual property, 1810-1895; to the study of the present land tenure in Boyaca.  

In his *Social Aspects of Agrarian Structure in Mexico*, Rodolfo Stavenhagen analyzes the agrarian structure in Mexico, beginning with 1910-17 revolution, which brought political changes, but not a significant change, into the agrarian organization. The agrarian reform influenced the economic development of agriculture. Stavenhagen states that private ownership has been favored and indicates that the main legal limitation to private ownership has to do with the maximum size allowed to individually owned farms, which at present are 200 hectares of seasonal land, or 100 hectares of irrigated land.  

Stavenhagen's main studies are related to the ejido system of land tenure. Here he mentioned the following problems: the first is

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the size of the individual plots. The legal size has varied over the years from four hectares to twenty hectares of seasonal land, or ten hectares of irrigated land. Stavenhagen indicates that in certain areas the ejidatario receives only one hectare. Stavenhagen indicates that in certain areas the ejidatario receives only one hectare. Another fact is that ejido distribution was slow. Under Lazaro Cardenas' government this land distribution system was increased. Some other aspects about the ejido is that it is not a private property. Mexico's law in this matter provides that the ejido plots may not be sold, rented, mortgaged or transferred in any other form.

Among the problems relating to the organization of production in the ejidos are institutional factors such as internal organization. For instance, el comisariado ejidal and the vigilance committee have to be elected in democratic elections. But, many ejidatarios are not prepared to take on functions which require a degree of administrative ability.

The Literature on Ecuadorian Society

Oswaldo Hurtado, a sociology professor at the Catholic University in Quito, Ecuador, is the author of a work, Dos Mundos Superpuestos, in which he states that in Ecuador, the income

39 Ibid., p. 237.
40 Ibid., p. 238.
41 Oswaldo Hurtado, Dos Mundos Superpuestos, Ensayo de diagnóstico de la realidad ecuatoriana. INEFOS, Instituto Ecuatoriano de Formacion Social, INEDES, Taller Offset del IERAC, Quito, Octubre, 1971.
per capita is $210 dollars. Hurtado analyzes the obstacles which limited the saving capacity of the country. First, he emphasizes, the marginal masa, which is 50 percent of the country's population, live under a subsistence economy. Consequently, the saving capacity is zero. Second, the wealthy population is concentrated within a minority group which expends for sumptuous goods and services, and their savings are deposited in foreign banks. A third obstacle relates to public savings. The lack of public savings is related to an excess of imports over exports, which contributes to the balance of payments deficit. In this way the cost of living is increasing, and inflation is a product of the fiscal and monetary policy. Hurtado added that tax evasion is another obstacle by which Ecuador's economy fails to collect the proper revenues. Hurtado's point of view about the desintegration of the administrative system is focused in the autonomismos. The central government receives only 50 percent of the public revenues. The balance of this revenue goes to the municipalities, provincial councils, and autonomous organizations. Finally, he said that the national budget is not adjusted to priority criteria. The local autonomy, the political pressure, and the local interests are the causes for expending money in small and unimportant projects.

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42 Ibid., p. 17.
43 Ibid., p. 18.
In an article in 1961, J. V. D. Saunders, presents a very interesting analysis on man-land relations in Ecuador. Saunders states: "the polar extremes of land holdings, *latifundia* and *minifundia* are evident in rural Ecuador, and to a significant extent influence the levels of living of the rural population." Saunders exposes the *latifundio* and *minifundio* problems of Ecuador, and the causes of social and economic stagnation.

The Ecuadorian Juan Montalvo is an outstanding scholar and writer on social, educational, and political matters. Through his books people master political sociology, and his ideas and principles enlighten the cause of the liberal party in Ecuador. In his writings he attacks the autocratic governments of Gabriel Garcia Moreno and Ignacio de Veintimilla. His articles focus on injustice and the violation of human rights of the Ecuadorian people.

As this dissertation focuses on rural sociology and also studies traditional societies of Ecuador which Montalvo analyzes, it is appropriate to study Montalvo's literature to give emphasis to matters of social studies, and particularly, to political sociology. In his book *El Cosmopolita* Montalvo attacks the Garcia Moreno dictatorship for its theocratic, plutocratic, and authoritarian government which is an obstacle to liberty and freedom. Montalvo

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comparis Garcia Moreno's government to the government of Manuel Rosas in Argentina. Montalvo makes statements on Garcia Moreno's method of repression by which political prisoners were cruelly treated.
PART TWO

CHAPTER VI

THE SETTING OF THE STUDY

The National Setting

Geography

Ecuador is located on the Pacific coast of South America. The eastern portion of the country is located in the Amazonian jungle which is rich in oil and other minerals. Ecuador's area is 281,000 square kilometers or 109,000 square miles. Included in this area are the Galapagos Islands which is a group of land formations about 1,000 miles south of the Panama Canal and 600 miles west of Ecuador's coast. The Republic of Ecuador is named after the Spanish name for Equator. There are three distinct geographic regions which lie in a general north-south direction. These are delineated by the great twin Andean chains which flank the Sierra, or middle region. Between the Pacific and the Sierra lies the Costa, or coastal region, and east of the Sierra is the Oriente, which means east in Spanish. All three regions are approximately 400 miles in length running from the Colombian border in the north down to the southern Peruvian border. The Costa is an area of lowland spotted with chains of rolling hills. Its width varies from nine to one hundred twenty-five
miles. The northern portion of the coast, El Litoral, is the tropical plain covered by a rain tropical forest. More or less halfway down the Ecuadorean coast, the Guayas River empties into the Pacific Ocean, forming the Gulf of Guayaquil. The central highland region of Ecuador, the Sierra, is formed by two parallel cordilleras or mountain chains, between which lies the plateau which is from seventy to one hundred eighty miles wide, averaging 8,000 feet in altitude. Various rivers and mountain ridges cross this long narrow plateau, forming lofty fertile basins called hoyas. Most of Ecuador's cities and a little more than half of its population are concentrated in this plateau. About a quarter of Ecuador's total area, the Sierra, is an intricate network of mountains, volcanoes, and high valleys. To the east of the Sierra covering about half of Ecuador's area, is the Oriente. Beginning at about 10,000 feet at the foothills of the Andes, forested highland falls away to low, flat, dense tropical jungle. The Oriente hides part of the headwaters of the Amazon River. In the territory of Ecuador, the Andes form a double line. In the approximately 400 miles of the Andean Mountains in Ecuador, twenty-two peaks rise to a height of 14,000 feet or more. The climate of Ecuador is determined by altitude. The higher one goes, the less tropical the weather. The dry season from June
through November or December is called summer. From December to May
most of the coast region is tropical: hot and humid. Some southern
parts of the coast are cooled by the Humboldt Current, which flows
up from the south along the western coast of South America passing
through Ecuador, where it swings out into the Pacific and heads for
Asia. The Humboldt Current considerably modifies the heat and
humidity of the coast. Its favorable influence is shown by the way
the people of the area live, the agricultural production, and the
richness of the fishing grounds in the Pacific Ocean along the
Ecuadorian shores. In the Sierra region the weather is generally
dry and temperate. In the capital city of Quito, at 9,246 feet,
there is very little variation in temperature throughout the year.
It is almost exactly on the equator, and its daily temperature
ranges from about 70° Fahrenheit to about 40° Fahrenheit. There
is a complete cycle of seasons in Quito every day: spring in the
morning, summer at noon, autumn in the late afternoon, and mild
winter at night.

History: The Indigenous population and the Spanish colonial heritage

Historians have emphasized that many different tribes
occupied what is now Ecuador before the coming of the Incas.¹
Also, it is known that the coastal region was originally dominated

¹Juan de Velasco, Historia del Reino de Quito en la
América Meridional, 1789, Imprenta "El Comercio," Quito, Ecuador,
by primitive fishermen and hunters who gradually vanished or joined with other tribes. On the shore of the Esmeraldas River the Cayapa Indians still live in the jungle, and they engage in fishing and farming. In the jungles of Ecuador's Oriente (East) the Jivaro Indians still live isolated from modern Ecuadorian society. In the 15th century the Cara Indians conquered the Quitu tribe and organized the norther part of the highlands of the present day Ecuador into a nation. Sociologically speaking, this transformation and organization altered the social system of the Indian population. The name of Shyri was given to the kings of the Cara Indians, which extended their domain through the central region of the Sierra of Ecuador. Later, the Cara Indians were attacked by the Incas. In the middle of the fifteenth century, the Inca Empire was nearing its greatest glory, before the Spanish conquistadores arrived. After the Inca Indians won the wars over different tribes, all conquered tribes were forced to drop their own language and take up the language of the Inca. The tribes lost not only their languages but also their power. This transformation gave the Incas absolute power and the conquered tribes were frequently relocated against their will where they would be of greatest use to the Empire. These measures were conducted to

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4 Allan Carpenter, Ecuador, 1964.
organize agriculture, build roads,\(^5\) improve systems of transportation and communication, and develop the crafts.

Also in music, the Incas have given their contribution to the social organization of their Empire. Quoting Enrique Carrasco in his report, "Cultural Aspects of the Inca Empire,"

The *haravi* is one among a few other song types which endured into the colonial period. The singer supported by flute, tells of a man’s constant pursuit of his loved one. The *haravi* eventually became known as a *yaravi*, the latter a sad, nostalgic, and melancholy tune.\(^6\)

The first Inca invasion of the northern kingdom of the Cara occurred in the late fifteenth century. Shyri XIV, ruler of the Cara, gathered his armies to repel the invaders. Near the present city of Ibarra, in northern Ecuador, Huayna-Capac defeated the Cara on the shore of a lake which since that time is known as Lake of Blood or *Yaguarcocha* in Quechua, where 30,000 dead Caras were thrown.\(^7\) Huayna-Capac's triumph over the Cara gained a vast territory which the Incas incorporated into the Inca Empire. It was 3,000 miles long, and stretched from the southern border of Colombia to central Chile.


Cuzco remained the main capital. Nevertheless, Huayna-Capac built another capital on the site of the present city of Quito. A road was constructed between Cuzco and Quito. This was part of El Camino Real, (the Royal Road of the Incas). After Huayna-Capac defeated the Cara Indians, he took another wife, the daughter of the last Shyri of the Cara, and he had a son whose name was Atahualpa. His first son, Huascar, was to succeed to the throne at Huayna-Capac's death according to Inca law, but Huayna-Capac's preference for Atahualpa broke this tradition and the conflict and wars between the two brothers began. Before Huayna-Capac's death, he decided that the Empire should be divided in two: Atahualpa would rule the northern portion, with its capital Quito, and Huascar the south, with its capital Cuzco. After defeating his brother Huascar, Atahualpa became Emperor of the entire Inca Empire, but his reign was to last only a few months until Francisco Pizarro arrived. Pizarro killed Atahualpa and his people, and in this way he destroyed the Inca civilization. On the other hand, a Spaniard who had served under Cortez in Mexico, Pedro de Alvarado, landed at the Bay of Caraquez, province of Manabi, Ecuador. The highest mountains of the Western Cordillera, which are very cold, took one fourth of his army before he arrived at the Sierra. In the meantime, one of Pizarro's officers, Sebastian de Benalcazar, rushed to

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8 Dávila, Vaquero, Jesus, Génesis de la Nacionalidad Ecuatoriana Imprenta de la Universidad Central. Quito, Ecuador, 1941, pp. 78-79.

9 Allan Carpenter, Ecuador, 1964.
Quito, and on December 6, 1534, he founded the capital of Ecuador: San Francisco de Quito.¹⁰

Phelan Leddy utilizes Max Weber's writings as a basis for an analysis of the administrative system of the Spanish empire.¹¹ Weber said that since the Spanish monarchy had medieval origins, the feudal, charismatic, and patrimonial elements were important. According to Weberian theory, rulers usually develop some myth of superiority to legitimize their authority, thus the power of rulers is to command, and the duty of the subjects to obey. Weber emphasizes three principal forms of authority that have occurred in historical times: (1) charismatic, (2) traditional, and (3) legal. As charisma became familiar in the medieval monarchies, and institutionalized with the Roman Catholic Church, these elements were transmitted through education, and organization by the Church. Ecuador's social and economic systems were also a product of this culture. The encomienda and mita established during the Spanish domination as principal institutions of the land system, continued to be the vehicles for the enslavement of the rural population throughout the Republican period. Very large latifundios were established, and the Indians who remained on it

¹⁰Eliecer Enriquez, Quito a Traves de los Siglos. Quito, Imprenta Municipal, 1938.

were subjected to the most shameful servitude. Within the latifundio system, very small areas of land (1/2 hectares) were granted to the Indians (Huasipungo)\textsuperscript{12} on which they live in the most inhuman conditions. These minifundios have an adverse effect on the social processes, limit the family income, and are the cause for unemployment, poverty, misery, diseases, ignorance and migration of the rural population.

**History: Independence**

On September 23, 1830, Ecuador adopted a constitution\textsuperscript{13} and began its separate existence from la Gran Colombia. General Juan Jose Flores, a Venezuelan, was elected the first president. Quito became the capital of the new Republic, which took the name of Ecuador. Flores was a military man and a dictator. Although the new country was confronted in disagreement and civil war, Flores was interested in himself and wanted to keep his personal power. A citizen from Guayaquil was elected president, his name was Vicente Rocafuerte, who made a valuable contribution to the progress of Ecuador.

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\textsuperscript{12}Huasipungo: A Quechua word referring to the plot of land given to a worker for his own use as payment for the labor he gives to the estate.

From 1845 to 1860 political unrest swept Ecuador. From 1860 to 1875, Gabriel García Moreno led the most autocratic dictatorship in Ecuador's history. He allowed no free elections, no free press, and no free speech. García Moreno set up Roman Catholicism as the national religion and allowed no one but Catholics to be citizens.

The facts of García Moreno's life are generally well known. Born in Guayaquil in 1812, he married a middle-aged aristocratic lady from Quito. Named to the presidency by a conservative junta in 1859, when the country was ravaged by anarchy, García Moreno tried to consolidate his power through an abortive agreement with General Ramon Castilla of Peru (then at war with Ecuador). At that time he wrote some letters to charge d'affaires Emile Trinte which suggested that the country should become a protectorate of France. He finally resorted to a military campaign whose victory was climaxed by the convocation of a national assembly which, in 1861, drew up a new constitution and elected García Moreno president. It was during this administration that he executed a number of famous political prisoners. He signed the Concordat of 1862, surrendering the State's time-honored control over the ecclesiastical business of the Church, and started an ambitious program of public works.¹⁴

¹⁴ Juan Montalvo, Páginas Desconocidas. Publicación de la Revista de la Universidad de la Habana. Introducción por Roberto Agramonte, La Habana 17 de Enero de 1936, viii.
After resigning from office in 1865, García Moreno accepted a short diplomatic assignment to Chile, but a barracks revolt lifted him to the head of another provisional regime in 1869. Once again he called a convention that passed a new constitution and elected him president of Ecuador. While the construction of roads, schools, and hospitals was continued, the most outstanding feature of this regime was its ecclesiastical policies: The constitution stipulated that a person had to be a Catholic in order to be a citizen of Ecuador. García's Moreno dictatorship was practically synonymous with the City of God. It must be pointed out that both his presidential coups, 1859–60 and 1869, succeeded because of military support. Throughout both administrations, García's Moreno most trusted aide was General Juan José Flores.

At the same time, a group of liberals were outspokenly discontented. Deeply influenced by the writers of European Enlightenment, Juan Montalvo wrote a famous pamphlet called "La Dictadura Perpetua" which bitterly assaulted the dictator's regime for its ineptness and moral turpitude. Under García's Moreno leadership, said Montalvo, the entire society was sick: "The soldier over the civilian, the friar over the soldier, the executioner over the friar, the tyrant over the executioner, the demon over the tyrant, all floundering in a sea of evil

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Fanaticism bred intolerance and ignorance led to crime. There was no progress at all. Furthermore, Montalvo objected to the existence of a dictatorship on any basis whatever. Scoffing at the contention that "circumstances" required the perpetuation of García Moreno's authoritarian rule, he went on to assert that no conceivable amount of material progress could justify a dictatorship. To prove his point he offered the fictitious example of a benevolent despot in the Americas.

Once upon a time, in the new world, there was a people whose king was the sovereign, the judge, the father of the family. Nothing was done without his approval. He controlled the nation, preached in the temple, made the decisions in the courts, and guided domestic life. He knew everything and he criticized everything. The king was not a tyrant, and the nation underwent a great amount of material progress. There was a highway, for instance, the likes of which Rome had never seen, and which connected the two capitals of the empire. Historians called it another wonder of the world. And with all this the people lived in sadness, because they were not free and because happiness is not compatible with despotism. How could it be that such a great amount of material progress was not enough to satisfy the people and bring them out of barbarity? Because the people had not made any moral progress and for this reason they were barbarians in the midst of material greatness.\textsuperscript{17}

To Montalvo, who was occupied with questions of virtue and morality, a dictatorship was intolerable. Democracy was the only legitimate form of government.

\textsuperscript{16} Ibid., p. 263.

\textsuperscript{17} Ibid.
In 1895 a liberal leader, Eloy Alfaro, became president of Ecuador. He served until 1901 and again from 1906 to 1911. Eloy Alfaro's first accomplishment was to separate the church from the state. Divorce was made legal; education was no longer dominated by the Catholic Church. During Alfaro's term the Guayaquil to Quito railroad was constructed. Public health service was created during his administration. Also a modern day educational system was established. At present, in 1979 and after fifteen constitutions, Ecuadorians still live under military rule, but on July 1978 during Ecuador's presidential elections, two leaders, Drs. Jaime Roldos for President and Osvaldo Hurtado for Vice-President took the lead. On April 29, 1979, a runoff to elect a president of Ecuador took place, and Roldos and Hurtado were elected.

The Economy

Economic growth for Ecuador in the last twenty-five years has been at approximately 5 percent per annum[^18] and it came from the expansion of agricultural export crops as cocoa, bananas, and coffee.

Unemployment and underemployment have been increasing and the average level of living of a large majority of the population remains low.

Several obstacles to the modernization of Ecuador's development potential have been the limited saving capacity of the economy, a rigid social structure, and political instability.

Currently, Ecuador's great opportunity is to achieve a faster and more balanced economic growth. Foreign exchange earnings from petroleum exports should enable the economy to finance higher import levels of intermediate and capital goods, and consequently achieve much faster rates of growth of output and a higher capital income. Tax revenues from petroleum should strengthen public finances, thus enabling the government to support a high level of current expenditures and an increased public investment program without resorting to excessive borrowing.

In view of Ecuador's financial problem, the central government has lacked the mechanisms and the power to influence and coordinate the growth and allocation of the government's agencies and capital expenditures to conform with the priorities and availability of financial resources of the public sector.

The problem is that in spite of oil prospects, Ecuador will continue being a less developed country in South America, if the government does not increase the saving capacity of the public sector. If Ecuador's agricultural sector does not increase, its
nontraditional exports could be produced for an agricultural diversification.

Figures from the World Bank Report show that one of the economic problems is the deficit in the balance of payment. During 1971 this deficit of the balance of payment amounted to 209 million (U.S. dollars).^19

Balance of Payments

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports of Goods, NFS</th>
<th>Imports of Goods, NFS</th>
<th>Resource Gap (deficit = -)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>220</td>
<td>330</td>
<td>-110</td>
</tr>
<tr>
<td>1970</td>
<td>256</td>
<td>361</td>
<td>-105</td>
</tr>
<tr>
<td>1971</td>
<td>257</td>
<td>466</td>
<td>-209</td>
</tr>
</tbody>
</table>

The unfavorable economic characteristics of Ecuador are:

(1) unfavorable balance of payments; (2) low per-capita income; (3) low savings—10 percent (20 percent, 1977); (4) population growth—3.4 percent; (5) unemployment; and (6) inflation.^20


The Setting of the Project

Geographic and Demographic Factors

The rural development project under analysis here is being carried out in the Province of Tungurahua in the inter-Andean region of Ecuador. This project includes Canton Quero; Cevallos, Huachi Chico, Montalvo, and Totoras, areas of Canton Ambato; Pelileo, Benitez, El Rosario, and García Moreno areas. (See Figure 1).

For the purposes of the project, the area is divided into two sectors: a) 20,800 hectares or 51,892 acres of unirrigated land, and b) 11,200 hectares or 27,182 acres of irrigated land. The irrigated sector is located 2,500 to 2,800 meters above sea level, and the unirrigated land between 2,800 to 3,600 meters above sea level (see Figure 1).

The climate: the area is called mesotermico, or sub-humid, in Ambato. The average precipitation is 483 mm, spread unevenly during the year. The dry season is in December and January, and also in July and August. The average temperature is 12.7° C. or

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21 Figure 1, Province of Tungurahua, Ecuador, by the Instituto Geografico, Militar, Quito, 1968.

22 Ibid.
63.5° Fahrenheit. July is the coldest month with an average temperature of 11.5°. The hottest month is November with an average of 13.4° C. or 67.0° Fahrenheit.

The topography is rolling and sloped, especially close to the rivers. The Ambato river runs through a canyon with precipices that are almost vertical with a height of 300 meters (Figure 2). All this zone contains sharp gorges. Most of the water in the area has its origins in the Mocha and Ambato Rivers.

During December 1976, the water that comprised the project area had a volume of 2,675 liters per second to cover an area of 9,149 hectares, or 22,507 acres. But the distribution of water is uneven throughout the project area; some sectors are more privileged than others.

The program for the construction of an irrigation infrastructure consists of obtaining water from Ambato, Mocha, and Pachanlica rivers to cover 9,255 hectares. The irrigation system is divided in three subsectors, according to its sources: the Ambato River will irrigate Ambato, Montalvo, Cevallos, Benitez, and Guasipamba. The Pachanlica River will irrigate Benitez and Cevallos areas also, and the Mocha River will also irrigate the Quero area.24

23 Precipices are almost vertical: 300 meters or 900 feet in depth. (See Figure 2) Illustration by the author.

24 See Figure 1.
The Ambato River runs through a canyon between precipices that are almost vertical with 300 or 900 feet in depth.
The waters from the Ambato River will be taken at the point of Yanasaccha gorge which will be conducted to Huachi area throughout a tunnel of 11.8 kilometers of longitude which contains a capacity of 4.8 cubic meters per second. From the main canal the water will be distributed throughout primary and secondary canals the longitude of which is 26.9 kilometers and 46 kilometers, respectively.

The sub-area of Pelileo will be irrigated with water that will be obtained from the Pachanlica River throughout "Garcia Moreno" tunnel which has a longitude of 35 kilometers, and with a capacity of 1.2 cubic meters per second.

The sub-area of Quero will be irrigated with Mocha River waters. The waters will be obtained at the point called "Mocha-Quero" project and it will be conducted through a canal which we can see in Figure 4. The principal canal will be of 13.6 kilometers of longitude, and secondary canals with a longitude of 13.8 kilometers. It is important to point out that the canal Mocha-Quero-Pelileo has 30 kilometers of longitude with an irrigation capacity of 800 liters per second, and which will cover an area of 3,580 hectares, and supply water for 6,100 uses. This irrigation system has its beginning at the area of Quero and the water is used in the localities of Pueblo

25Tunnel: 11.8 kilometers of longitude. Capacity: 4.8 cubic meters per second. Illustration by author. (See Figure 3).

26Quero area will be irrigated with Mocha River waters. It will be conducted through a canal which we can see in Figure 4.
Figure 3

Tunnel: 11.8 kilometers of longitude.  
Capacity: 4.8 cubic meters per second.  
Water from the Ambato River will be  
conducted throughout this system of  
irrigation.
Quero area will be irrigated by Mocha River waters. It will be conducted through a canal which we can see in the above figure.
Viejo, Llimpe Chico, Llimpe Grande, Benitez, El Rosario, and Pelileo. The "Rio Pachanlica" has an irrigation capacity of 600 liters per second, it will cover an area of 1,340 hectares, and 2,000 users will be benefited.
CHAPTER VII

THE TRADITIONAL PROBLEMS OF THE QUERO-HUACHI-PELILEO REGION

In the Ecuadorian agrarian structure the productive factors are highly immobile. Land, capital and labor cannot be rationally distributed in order to maximize Ecuador's productivity. The region of Quero-Huachi-Pelileo is not an exception.

Among the characteristics of Ecuador's economy are clearly those of an underdeveloped country because its economic development is dependent upon an agrarian sector which is the source of its internal and external income.

The Man-Land System in the Quero-Huachi-Pelileo Area

The figures in Table VIII demonstrate that the minifundio is prevalent with 62.8 percent of farms, or properties up to 0.7 hectares, and 36.4 percent for properties between 0.7 to 3.5 hectares. Then, as an illustration about land tenure in Ecuador and related problems in the Quero-Huachi-Pelileo region, let us study the land classification of land tenure in Ecuador. For this purpose we divide the country in two parts: the classification of the land system of the Sierra, and the classification of the tenure system in the Coast. The land system in the Sierra shows that the hacienda does not form part of a process of entirely
autonomous change separated from the minifundistas area. Therefore, it unites and maintains the hacienda and the minifundistas area in permanent interaction. In the Sierra region there are two systems of tenure: hacienda and minifundio. The majority of Ecuador's population is affected by the land tenure system, and this is the reason that an agrarian reform is needed.

Solon Barraclough, on the subject of Ecuador's land system, states:

In a figurative sense, at least six out of every ten Ecuadorians carry through life a label or name which defines their basic status in society - a term derived from the agrarian structure. It is therefore not exaggerated to affirm that their expectations of access to education and civic and political participation, their level of income and degree of prosperity are inseparable from their social status as land owners, managers, former sharecroppers, community members, huasipungueros, arrimados, yanaconeros, unskilled workers, small owners or renters.¹

The haciendas as a nucleus have their influence throughout the Sierra estates; they have different forms of interconnection between the rural people and the landowner as is the case for the Quero-Huachi-Pelileo area.

The above illustrations show that land in Ecuador is monopolized by few big landowners and that the main problem is that the latifundio and minifundio are the two systems of land

that impede the Ecuadorian people's progress, including people on the project area. Due to these problems rural society is marginalized and isolated as a society of low status, low income, lack of education and, in sum, they create a very real problem for the people of the region and Ecuador.

Table VII reflects the distribution of total and rural populations and of agricultural and total work forces by regions for 1960.

The Coastal land system is important as well as the Sierra tenure system. The Coastal tenure system is different from the Sierra's tenure system, because the latter contains the tenure system of latifundio and the minifundio, while the former has its roots in the historical processes of the occupation of lands and lacked the homogeneous institutional and historical factors that characterized the Sierra.

The size up to 0.7 hectares has 8,334 proprietors or farms with an area of 3,812 hectares which gives an average of 0.4 hectares. On the other hand, fourteen or more hectares in size include 119 farms or properties comprising 10,244 hectares with an average of 86 hectares.² (See Table VIII) Therefore, this

### TABLE VII

**DISTRIBUTION OF TOTAL AND RURAL POPULATIONS AND OF AGRICULTURAL AND TOTAL WORK FORCES BY REGIONS, 1960**

*IN THOUSANDS*

<table>
<thead>
<tr>
<th>Regions</th>
<th>Total Population</th>
<th>Rural Population</th>
<th>Ratio of rural to total population</th>
<th>Total work force</th>
<th>Agricultural work force</th>
<th>Ratio of agricultural work force to total work force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sierra</td>
<td>2,195</td>
<td>1,514</td>
<td>54.32</td>
<td>873.6</td>
<td>452.9</td>
<td>51.84</td>
</tr>
<tr>
<td>Coast</td>
<td>1,942</td>
<td>1,209</td>
<td>43.38</td>
<td>671.0</td>
<td>302.5</td>
<td>45.08</td>
</tr>
<tr>
<td>East</td>
<td>70</td>
<td>62</td>
<td>2.23</td>
<td>28.9</td>
<td>20.3</td>
<td>70.24</td>
</tr>
<tr>
<td>Galapagos</td>
<td>2</td>
<td>2</td>
<td>0.07</td>
<td>0.7</td>
<td>0.41</td>
<td>57.14</td>
</tr>
<tr>
<td>Country total</td>
<td>4,209</td>
<td>2,787</td>
<td>0.00</td>
<td>1,574.2</td>
<td>766.1</td>
<td>49.30</td>
</tr>
</tbody>
</table>

### TABLE VIII

LAND DISTRIBUTION BY SIZE AND NUMBER OF FARMS
IN THE AREA OF THE PROJECT

<table>
<thead>
<tr>
<th>Size</th>
<th>Farms</th>
<th>Area</th>
<th>Average Area in Hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N-°</td>
<td>N-°</td>
<td></td>
</tr>
<tr>
<td>Up to 0.7</td>
<td>8,334</td>
<td>3,812</td>
<td>0.4</td>
</tr>
<tr>
<td>0.7-3.5</td>
<td>4,826</td>
<td>8,176</td>
<td>1.6</td>
</tr>
<tr>
<td>3.5-7.0</td>
<td>518</td>
<td>2,775</td>
<td>5.3</td>
</tr>
<tr>
<td>7.0-14.0</td>
<td>151</td>
<td>1,641</td>
<td>10.8</td>
</tr>
<tr>
<td>14.0 and over</td>
<td>119</td>
<td>10,244</td>
<td>86.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13,259</td>
<td>32,020</td>
<td>1.91</td>
</tr>
</tbody>
</table>

unequal ownership of land creates a problem. Again, there are 8,334 farms which average 0.4 hectares, with an average income of $211.5 dollars per year and per person.

Levels of Living in Quero-Huachi-Pelileo area

In view of the fact that the levels of living in the rural areas of Quero-Huachi-Pelileo are low compared to that of upper classes, it is obvious the land tenure system in Ecuador is the cause of much poverty and hunger.

Thus, the problem of raising the levels of living in the Quero-Huachi-Pelileo area is to effect a more efficient utilization of the available resources in order to increase per capita income, and consequently, raise the levels of living of the population of the region. In reference to the terms of levels of living, the United Nations has established a Committee that defines the terms of levels of living as follows: 1) health, 2) food nutrition, 3) education, 4) housing, 5) conditions of work, 6) employment, and 7) general levels of consumption.³

Considering the cited United Nations statement and relating it to the Quero-Huachi-Pelileo area, we found that respiratory and parasitic diseases in that area are above the average of Ecuador.

There is one doctor for 7,800 inhabitants and there is one dentist for 23,000 inhabitants.\(^4\)

In relation to food nutrition we can state that it is poor. The author, while living with the peasants, noticed that foods rich in protein, such as meat, fish, etc. were absent from their tables. Also foods rich in vitamins are not very often consumed by the people of the region.

In the matter of education, we found 109 primary schools in the Quero-Huachi-Pelileo region, a number slightly above average for the country. The work available in the highlands, where the project is located, is limited to agriculture. The working conditions are poor, with elemental methods, low salaries (one dollar per day), and unstable conditions since some kinds of work are seasonal. Salaries are somewhat higher and the agricultural methods more advanced in coastal plantations. In the area of the project, we found 23,450 unemployed, which is a social and economic problem in the region. The people of the project area must consume all that they produce, leaving no surplus for savings.

According to the levels-of-living definition given by the United Nations, the peasants of the Quero-Huachi-Pelileo region have to accomplish an efficient program of development to reach the goals given by the United Nations.

Irrigated and Unirrigated Lands in the Project Area

The contrast with respect to land distribution is given by size of farms in the irrigated and unirrigated sectors. (See Table IX and X) On the one hand, in the irrigated sector we found 6,580 farms with an average area of 0.4 hectares, which represent 63 percent of the total. On the other hand, we found that in the unirrigated sector there are 1,754 farms which represent 50 percent of the total, averaging 0.6 hectares. The most important fact is that 3,514 farms in the unirrigated land represent only 33.6 percent of the farms of the irrigated sector. The minifundia concentration with 6,580 properties averaging 0.4 hectares are the cause and result of the social and economic problem in the area of study. The income of $211.5 (dollars) per person and per year is not enough to support a family. In examining the Tables IX and X which represent each sector, irrigated and unirrigated lands, we can see that 10,445 farms are in the irrigated area within a total of 11,200 hectares, while in the unirrigated land there are 3,514 farms within an area of 20,800 hectares.


6See Table VIII. Ibid.
TABLE IX  
LAND DISTRIBUTION BY SIZE OF FARMS  
IN THE IRRIGATED SECTOR

<table>
<thead>
<tr>
<th>Size</th>
<th>Farms</th>
<th>%</th>
<th>Area</th>
<th>%</th>
<th>Average Area in Hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td></td>
<td>Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 0.7</td>
<td>6,580</td>
<td>63.0</td>
<td>2,670</td>
<td>23.8</td>
<td>0.4</td>
</tr>
<tr>
<td>0.7 - 3.5</td>
<td>3,614</td>
<td>34.6</td>
<td>5,924</td>
<td>52.8</td>
<td>1.6</td>
</tr>
<tr>
<td>3.5 - 7.0</td>
<td>188</td>
<td>1.8</td>
<td>954</td>
<td>8.5</td>
<td>5.1</td>
</tr>
<tr>
<td>7.0 - 14.0</td>
<td>42</td>
<td>0.4</td>
<td>438</td>
<td>3.9</td>
<td>10.4</td>
</tr>
<tr>
<td>14 and over</td>
<td>21</td>
<td>0.2</td>
<td>1,234</td>
<td>11.0</td>
<td>58.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10,445</td>
<td>100.0</td>
<td>11,200</td>
<td>100.0</td>
<td>1.1</td>
</tr>
</tbody>
</table>

### TABLE X

**LAND DISTRIBUTION BY SIZE OF FARMS IN THE UNIRRIGATED SECTOR**

<table>
<thead>
<tr>
<th>Farms</th>
<th>Number</th>
<th>%</th>
<th>Area</th>
<th>Number</th>
<th>%</th>
<th>Average Area in Hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,754</td>
<td>49.9</td>
<td>1,142</td>
<td>5.5</td>
<td></td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>1,212</td>
<td>34.5</td>
<td>2,252</td>
<td>10.8</td>
<td></td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>330</td>
<td>9.4</td>
<td>1,821</td>
<td>8.8</td>
<td></td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>109</td>
<td>3.1</td>
<td>1,203</td>
<td>5.8</td>
<td></td>
<td>11.0</td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>2.8</td>
<td>9,010</td>
<td>43.3</td>
<td></td>
<td>91.9</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>3,503</strong></td>
<td><strong>99.7</strong></td>
<td><strong>15,428</strong></td>
<td><strong>74.2</strong></td>
<td></td>
<td><strong>4.4</strong></td>
</tr>
<tr>
<td><strong>T.Com.</strong></td>
<td><strong>11</strong></td>
<td><strong>0.3</strong></td>
<td><strong>5,372</strong></td>
<td><strong>25.8</strong></td>
<td></td>
<td><strong>488.4</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>3,514</strong></td>
<td><strong>100.0</strong></td>
<td><strong>20,800</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td><strong>4.4</strong></td>
</tr>
</tbody>
</table>

Types of Farming and Production

In analyzing Table XI, the main product in the project area, we can see that fruits are not produced on unirrigated land. The purpose of the project is to irrigate at least 8,000 hectares for the production of fruits because the soil and climate are appropriate for growing them. On the other hand, potatoes are growing on 2,600 hectares of unirrigated land, and only 440 hectares are produced on irrigated land. The vegetables area is only 395 hectares on irrigated land. Therefore, this area could be enlarged three or four times under an irrigation system. In this way, the people of the area, and also the cities of Ambato and Quito, could be supplied with fresh vegetables. One important area is natural grass, which occupies an area of 3,598 hectares of unirrigated land, while the irrigated sector has only 320 hectares.

To give an additional view of the agricultural production and its problems in the sector of study, the author has examined the yields of main crops in the country, the province, and Huachi and Quero as a comparative study on the subject. (See Table XII) We can

---


8 See Table IX. Ibid.
### TABLE XI

**TYPES OF FARMING AND PRODUCTION**

<table>
<thead>
<tr>
<th>Products</th>
<th>Unirrigated Area</th>
<th>Irrigated Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>--</td>
<td>815</td>
<td>815</td>
</tr>
<tr>
<td>Cereals</td>
<td>1,220</td>
<td>2,200</td>
<td>3,420</td>
</tr>
<tr>
<td>Legumes</td>
<td>940</td>
<td>275</td>
<td>1,215</td>
</tr>
<tr>
<td>Potatoes</td>
<td>2,600</td>
<td>440</td>
<td>3,040</td>
</tr>
<tr>
<td>Vegetables</td>
<td>950</td>
<td>395</td>
<td>1,345</td>
</tr>
<tr>
<td>Forages</td>
<td>2,340</td>
<td>4,170</td>
<td>6,510</td>
</tr>
<tr>
<td>Natural Grass</td>
<td>3,598</td>
<td>320</td>
<td>3,918</td>
</tr>
<tr>
<td>Forestry</td>
<td>250</td>
<td>350</td>
<td>600</td>
</tr>
<tr>
<td>Not in Use</td>
<td>3,150</td>
<td>2,070</td>
<td>5,220</td>
</tr>
<tr>
<td>Others</td>
<td>380</td>
<td>185</td>
<td>565</td>
</tr>
<tr>
<td></td>
<td>15,428</td>
<td>11,220</td>
<td>26,648</td>
</tr>
<tr>
<td></td>
<td>5,372</td>
<td>--</td>
<td>5,372</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>20,800</td>
<td>11,220</td>
<td>32,020</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>Country</th>
<th>Province</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Barley</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Corn</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Potatoes</td>
<td>12.5</td>
<td>14.5</td>
</tr>
<tr>
<td>Beans</td>
<td>0.4</td>
<td>0.5</td>
</tr>
<tr>
<td>Peas</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>White Onions</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Red Onions</td>
<td>10.5</td>
<td>13.0</td>
</tr>
<tr>
<td>Garlic</td>
<td>6.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Apple</td>
<td>8.5</td>
<td>8.0</td>
</tr>
</tbody>
</table>

see that the yields in potatoes is fifteen tons per hectare in Quero while in the country we have only 12.5 tons per hectare.

The value and volume of the agricultural production is an important factor which gives the clue to the sector's production and its value. With this information, we can see that potatoes are the main crop in value in the region, followed by forages, fruits and red onions. (See Table XIII)

According to the data contained in Table XIV, we can clearly see the economic contrast caused by unequal income. On one hand, we can see the net income per farm on properties averaging 0.4 hectares, which is 5,500 sucre, while on properties with an average of 86.0 hectares, it is 385,100 sucre.

Population, Employment and Income

In relation with the Quero-Huachi-Pelileo project the author has collected the necessary information regarding population. The urban and rural population of the area shows that 61,949 people live in the rural area, and 4,675 are urban, with a total population of

---

9 See Table XII. Ibid.


11 Ibid.

12 See Table XIV. Ibid.

13 1 dollar = 26 sucre.
<table>
<thead>
<tr>
<th>Product</th>
<th>Area (Hectares)</th>
<th>Production (Ton)</th>
<th>Price (S/Ton)</th>
<th>Value (S/.000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>460</td>
<td>414</td>
<td>6,500</td>
<td>2,691</td>
</tr>
<tr>
<td>Barley</td>
<td>1,080</td>
<td>864</td>
<td>6,000</td>
<td>5,184</td>
</tr>
<tr>
<td>Corn</td>
<td>1,880</td>
<td>1,166</td>
<td>9,500</td>
<td>11,077</td>
</tr>
<tr>
<td>Potatoes</td>
<td>3,040</td>
<td>44,500</td>
<td>2,600</td>
<td>115,700</td>
</tr>
<tr>
<td>Beans</td>
<td>150</td>
<td>70</td>
<td>16,000</td>
<td>1,120</td>
</tr>
<tr>
<td>Peas</td>
<td>480</td>
<td>206</td>
<td>15,200</td>
<td>3,131</td>
</tr>
<tr>
<td>Sweet Peas</td>
<td>550</td>
<td>440</td>
<td>8,000</td>
<td>3,520</td>
</tr>
<tr>
<td>Lupine</td>
<td>35</td>
<td>21</td>
<td>17,000</td>
<td>357</td>
</tr>
<tr>
<td>White Onions</td>
<td>100</td>
<td>2,200</td>
<td>3,000</td>
<td>6,600</td>
</tr>
<tr>
<td>Red Onions</td>
<td>830</td>
<td>10,790</td>
<td>5,000</td>
<td>53,950</td>
</tr>
<tr>
<td>Garlic</td>
<td>190</td>
<td>--</td>
<td>8,000</td>
<td>9,680</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>130</td>
<td>1,210</td>
<td>6,000</td>
<td>11,700</td>
</tr>
<tr>
<td>Vegetables</td>
<td>95</td>
<td>950</td>
<td>6,000</td>
<td>5,700</td>
</tr>
<tr>
<td>Fruits</td>
<td>815</td>
<td>8,150</td>
<td>8,000</td>
<td>65,200</td>
</tr>
<tr>
<td>Forrages</td>
<td>664</td>
<td>2,340</td>
<td>--</td>
<td>81,518</td>
</tr>
<tr>
<td>Minor domestic</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>15,659</td>
</tr>
<tr>
<td>Others</td>
<td>565</td>
<td>288</td>
<td>4,580</td>
<td>6,719</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16,910</td>
<td></td>
<td></td>
<td>399,506</td>
</tr>
</tbody>
</table>


1 dollar = 26 sucres.
<table>
<thead>
<tr>
<th>Size</th>
<th>Average Size</th>
<th>Number of Farms</th>
<th>Production Value</th>
<th>Cost of Production</th>
<th>Net Value</th>
<th>Net Income Per Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 0.7</td>
<td>0.4</td>
<td>8.334</td>
<td>7.9</td>
<td>4.2</td>
<td>3.7</td>
<td>5.5</td>
</tr>
<tr>
<td>0.7 - 3.5</td>
<td>1.6</td>
<td>4.826</td>
<td>32.1</td>
<td>15.4</td>
<td>16.6</td>
<td>13.0</td>
</tr>
<tr>
<td>3.5 - 7.0</td>
<td>5.3</td>
<td>518</td>
<td>99.3</td>
<td>47.1</td>
<td>52.2</td>
<td>67.2</td>
</tr>
<tr>
<td>7.0 - 14.0</td>
<td>10.8</td>
<td>151</td>
<td>181.2</td>
<td>83.5</td>
<td>97.6</td>
<td>105.1</td>
</tr>
<tr>
<td>14.0 and over</td>
<td>86.0</td>
<td>119</td>
<td>869.8</td>
<td>484.6</td>
<td>385.1</td>
<td>385.1</td>
</tr>
</tbody>
</table>

66,624 inhabitants. The above data demonstrates that 93 percent of the people are rural.14 (See Table XV)

On the other hand, we can see in Table XVII that the economically active population, by sexes,15 out of the total population of 43,340, are 22,540 females, and 20,800 males.16 The total active population is 19,890 inhabitants or 46 percent,17 while 23,450 or 54 percent are inactive. On the other hand, the economically active population, by occupation, (19,890) shows that 12,960 or 65 percent are engaged in agriculture. (See Table XVIII)18

The population growth in the area of the project is 3.1 percent. (See Table XIX)19 This population growth is disproportionately high because of limited resources, the land tenure system, limited primitive methods of production, social stratification, lack of savings, limited knowledge, lack of technical advice, and limited or no


16Ibid.

17Ibid.

18Table XVIII shows the economically active population, by occupation. It shows also that 12,960 are engaged in agriculture.

TABLE XV  
URBAN AND RURAL POPULATION  
1974  

<table>
<thead>
<tr>
<th>Population</th>
<th>Tunguruhua</th>
<th>Quero-Huachi-Pelileo Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>N(^{2})</td>
<td>%</td>
</tr>
<tr>
<td>Total</td>
<td>279,920</td>
<td>100</td>
</tr>
<tr>
<td>Urban</td>
<td>93,668</td>
<td>33</td>
</tr>
<tr>
<td>Rural</td>
<td>186,252</td>
<td>67</td>
</tr>
</tbody>
</table>

Source: Census 1974, Quito, Ecuador.
### TABLE XVI

**POPULATION: DISTRIBUTED BY AGE AND SEX IN THE PROJECT AREA**

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Total</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>0 - 9</td>
<td>19,783</td>
<td>30</td>
<td>9,870</td>
</tr>
<tr>
<td>10 - 19</td>
<td>14,857</td>
<td>22</td>
<td>7,440</td>
</tr>
<tr>
<td>20 - 39</td>
<td>15,794</td>
<td>24</td>
<td>7,424</td>
</tr>
<tr>
<td>40 - 59</td>
<td>10,114</td>
<td>15</td>
<td>4,845</td>
</tr>
<tr>
<td>60 and over</td>
<td>6,076</td>
<td>9</td>
<td>2,824</td>
</tr>
</tbody>
</table>

| TOTAL      | 66,624 | 100 | 32,403 | 100 | 34,221 | 100 |
| Percentage | 100    |     | 49     |     | 51     |     |

TABLE XVII

ECONOMICALLY ACTIVE POPULATION BY SEXES IN THE PROJECT AREA, 1974

<table>
<thead>
<tr>
<th>Inhabitants 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
</tr>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

1Age above 12 years was included.

<table>
<thead>
<tr>
<th>By Occupation</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed in</td>
<td>19,490</td>
<td>98</td>
</tr>
<tr>
<td>Agriculture</td>
<td>12,960</td>
<td>65</td>
</tr>
<tr>
<td>Manufacture</td>
<td>2,496</td>
<td>13</td>
</tr>
<tr>
<td>Services</td>
<td>1,851</td>
<td>9</td>
</tr>
<tr>
<td>Commerce</td>
<td>643</td>
<td>3</td>
</tr>
<tr>
<td>Others</td>
<td>1,540</td>
<td>8</td>
</tr>
<tr>
<td>Unemployed</td>
<td>400</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>19,890</td>
<td>100</td>
</tr>
</tbody>
</table>

1 Age above 12 years was considered.

TABLE XIX

POPULATION GROWTH:
COUNTY, PROVINCE, PROJECT AREA

<table>
<thead>
<tr>
<th>POPULATION</th>
<th>COUNTRY</th>
<th>PROVINCE</th>
<th>QUERO-HUACHI-PELILEO REGION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>5.0</td>
<td>3.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Rural</td>
<td>2.3</td>
<td>2.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Average</td>
<td>3.3</td>
<td>3.0</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Source: Census, 1974. Quito, Ecuador
credit which limits the inputs, and therefore, limits the outputs. The author concludes that no reform can be performed if the growth of the population continues at that rate.

Also in Table XVI we can see the population distributed by age and sex in the project area which shows that from the total population of 66,624 there are 30 percent individuals between the ages of 0 and 9 years, and 22 percent are from 10 to 19 years, totaling 34,640. The first group are unable to work, and the second group are at the age of receiving education.

Finally, if we analyze Table XX which deals with present day salaries, by occupation, we can see that in agriculture (not specialized) a worker receives forty sucres per day or $1.54 dollars at the present money exchange rate.

The Problems of the Region: A Personal View

According to the basic data obtained by the author by direct interview, the family of Ulpiano Freile and Maria Villacres have eleven children. The father works in some other farms to obtain additional income for his family. They own only one hectare which does not produce sufficient income to make a living. Their property is located in Tambo-Querochaca. (See Figure 5)

---


21 See Figure 5. Illustration by author.
Figure 5

Rural Family with their own eleven children at Tambo-Querochaca Village. This rural family must feed eleven children with the products of 1.5 hectares of land. (A hectare is equal to 2.7 acres.) However the land does not grow enough to support a family of 13.
TABLE XX

PRESENT-DAY SALARIES BY OCCUPATION
SUCRES PER DAY

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Salaries At Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture (specialized)</td>
<td>70</td>
</tr>
<tr>
<td>Agriculture (not specialized)</td>
<td>40</td>
</tr>
<tr>
<td>Craftsmanship</td>
<td>40</td>
</tr>
<tr>
<td>Construction (bricklayers)</td>
<td>100</td>
</tr>
<tr>
<td>Construction (peons)</td>
<td>40</td>
</tr>
<tr>
<td>Housekeeping Services</td>
<td>20</td>
</tr>
</tbody>
</table>


1 dollar = 26 sucres
Going down to the plains of Cevallos the author interviewed Juan Carrillo, who has eight children. He works as a peon on different farms in order to make a living. Juan Carrillo is working by plowing the farm of someone else. He earns twenty-six sucres per day or one dollar. (See Figure 6)\textsuperscript{22} On an adjacent property, another farmer whose name is Amado Garces, 70 years old, works on his two acres of land. In order to get enough income, he too works on other farms. See Garces' hut in Figure 7.\textsuperscript{23}

The author's research on this socio-economic study could be seen in Figure 8 in which Maria Juana Criollo gives complete information regarding her husband's occupation: her husband, Manuel Chango, works as a peon in construction, generally in the Ambato area. They have only one and a half hectares, which is a hillside property, on which they were growing wheat at this time. They have ten children. The property is located in Atahualpa parish, five miles from Ambato.\textsuperscript{24}

In Figure 9 the author is visiting the Salasaca Indians, who are indigenous to the area which he is studying. The Salasaca

\textsuperscript{22}Figure 6. Rural worker plowing the farm near Cevallos. Illustration by author.

\textsuperscript{23}Figure 7, a farmer standing in front of his hut. Illustration by the author.

\textsuperscript{24}Growing wheat in Atahualpa parish. Illustration by the author.
A rural worker in Cevallos plowing land which belongs to someone else. He earns 26 sucres per day or one dollar. Note the basic elements of "rudimentary farm culture" as described by Smith (1953).
This farmer is standing in front of his hut. He works in his one hectare farm which is near Pachanlica village.
The above figure shows the property of one and a half hectares on which they were growing wheat. This family has ten children, and their land, again, makes enough for a subsistence way of life. The land is located in Atahualpa parish, five miles from Ambato.
The author is visiting the Salasaca Indians, who are indigenous of the area which he is studying. Note that on the wall they have rugs for sale. These indigenous people supplement their incomes through handiworks like these.
Indians are also engaged in making artifacts and rugs. Note that on the wall they have rugs for sale.\textsuperscript{25}

\textsuperscript{25}Figure 6: The author visiting the Salasaca Indians.
CHAPTER VIII

THE GOALS AND APPROACHES OF THE PROJECT

Goal: Creation of Rural Jobs

The goal for the Quero-Huachi-Pelileo project is to raise the levels of living of the people who live in the area of the project, through a rural development program which includes the creation of rural jobs. Rural unemployment will be gradually eliminated with the creation of rural jobs. There are 61,949 rural inhabitants (See Table XV), of which 23,450 individuals (Table XVII) were economically inactive. The above figures show an unemployment problem which creates a social problem. One of the main objectives of the project is to create jobs which will be sources of income. For instance, the irrigation project has created construction jobs which, although they are temporary, benefit the people of that region. In this matter, the report of the Ministry of Agriculture states:

La política gubernamental para el desarrollo del sector agrícola está dirigida a levantar el ingreso y el nivel de vida de los grupos campesinos marginados, elevar la productividad e incrementar la producción agrícola, lograr una mejor utilización de los recursos naturales renovables y racionalizar la comercialización de los productos básicos de consumo.1

Approach:

The creation of rural jobs serves to solve the unemployment of the region, to put in effect the Agrarian Law Number 1480, of July, 1964, to distribute land to the landless and small proprietors with the purpose of changing the social and economic status of the peasants of the region, and at the same time, giving the basic factor of production: land. In addition, the land distribution will also receive economic aid and technical assistance. Under Ecuador's Agrarian Reform Law the law could be applied more effectively.

Goal: Granting Loans to the Farmers

For this project the capital factor is already programmed. The amount of 205.5 million sucres or 7,903,850 dollars is available now for the program of Quero-Huachi-Pelileo area. Under the above credit system 12,555 families are considered to be beneficiaries.

Approach:

To obtain credit the farmers make application to National Development Banks (Bancos de Fomento) which are located in the area of the project. On applications the farmers give specific details in relation to their residence, size of the farm, crops which are to be grown, and their financial statement. To avoid problems and delays in the process of the papers, an inspector of the Bank together with an agronomist of the district are on hand to appraise on the spot.
the farmers' information. The program is to grant loans to small proprietors who have been discriminated for their social and economic status. The credit must reach the most needy farmers who were unable to obtain it before. The finalities of credit are to be invested in a positive production of crops for their own benefit. In order that the credit contains its appropriate flexibility, loans will be distributed at different stages of production: to buy seeds, fertilizers and implements; to pay for insecticides and appropriate labor; to pay expenses for harvesting, storage and transportation. These seasonal loans have to be granted at due time. Depending on the reports of the inspector of the Bank and the agronomist at the Bank, the Bank can furnish the money by personal signature, collateral or chattel mortgage, depending on the amount or size of the loan, and also on the purpose of it. The Bank grants loans under different terms: short term (as the Production Credit Association in the United States, PCA); medium term, and long term loans. Again, this approach is realistic. Now that agrarian reform in the region is becoming a fact, a few farmers are getting loans which are being used in their small plots.
Goal: Promoting Rural Education and Training

This is another goal in this socio-economic program. The program assures training and teaching in rural education for the inhabitants of the area who need to learn new processes and methods in agricultural enterprise.

Approach:

The construction of communal houses for educational and training programs are already under construction. Fifty percent of the houses are constructed. The development of this part of the project calls for the construction of twenty-three communal houses as locales for meetings and conferences, and also for teaching courses to the farmers. In the same communal houses special courses in social matters will be taught. El desarrollo social, which means that the training program will involve learning agricultural methods, organization of cooperatives, home economics, rural credit, and methods of evaluation. After achieving knowledge and learning in the above courses, successful students can be promoted, and the program will continue in an intensive training for the purpose of preparing more and more farmers in these needed social and educational matters. This training may be extended from one to six years. The above social and
educational matters or *desarrollo social* is an ambitious program for the improvement of agricultural education.

**Goal:** Building an *Irrigation System to Supply Water for Agricultural Use, and Therefore, for an Agricultural Diversification*

This infrastructure work is very important for successful achievement of the project.

**Approach:**

The irrigation system has its origins in the Ambato and Mocha Rivers. According to the specific reports the water has a volume of 2,675 liters per second to cover an area of 9,149 hectares or 22,507 acres. The irrigation system consists of obtaining waters from Ambato, Mocha and Pachanlica Rivers to cover 9,255 hectares. This infrastructure system is divided in three subsectors, according to sources: The Ambato River will irrigate Ambato, Montalvo, Cevallos, Benitez, and Guasipamba, the Mocha River will irrigate the Quero area, and the Pachanlica River also will irrigate the Benitez and Cevallos areas. (See Figure 1). Sixty-five percent of this infrastructure work is finished. The water from Ambato River is taken at the point of Yanasaccha gorge which is conducted to Huachi area throughout a tunnel of 11.8 kilometers of longitude which contains a capacity of 4.8 cubic meters per second. (See Figure 3) From the

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main canal the water will be distributed throughout primary and secondary canals, the longitude of which is 26.9 kilometers and 46 kilometers, respectively.

The sub-area of Pelileo will be irrigated with water that will be obtained from the Pachanlica River throughout "Garcia Moreno" tunnel which has a longitude of 35 kilometers, and with a capacity of 1.2 cubic meters per second.\(^3\) (See Figure 1)

The sub-area of Quero will be irrigated with Mocha River waters. The waters will be obtained at the point called "Mocha-Quero" and it will be conducted through a canal which we can see in Figure 4.\(^4\) The principal canal will be of 13.6 kilometers of longitude, and secondary canals with a longitude of 13.8 kilometers. It is important to point out that the canal Mocha-Quero-Pelileo has thirty kilometers of longitude with an irrigation capacity of 800 liters per second, and which will cover an area of 3,580 hectares, and supply water for 6,100 users. This irrigation system has its beginning at the area of Quero and the water is used in the localities of Pueblo Viejo, Llimpe Chico, Llimpe Grande, Benitez, El Rosario, and Pelileo. (See Figure 1)

\(^3\)Pelileo area will be irrigated with waters of Pachanlica River.

\(^4\)Quero area will be irrigated with Mocha River waters. It will be conducted through a canal which we can see in Figure 4. (Illustration by the author.)
The "Rio Pachanlica" has an irrigation capacity of 600 liters per second; it will cover an area of 1,340 hectares, and 2,000 users will be benefited.

The water is controlled by the Ecuadorian Institute of Hydraulic Resources. The wealthy landlords have no voice in selecting the Institute's members, and the members are thus independent of the landlords' control.

Goal: Construction of Roads

On this matter twenty-seven kilometers of roads are already constructed, and eighty-seven kilometers are improved within the project area. These roads are connected to the Pan American Highway.

Approach:

The construction of this infrastructure consists of improving the transportation system between the commercial centers, markets, and farms. This will facilitate the exchange of products more effectively, and the competition among the farmers will create a dynamic commercialization of crops, and specifically, fruits, because the region is appropriate for growing them. The region is suitable for pears, peaches, berries, strawberries, vegetables, apples, and other products of great demand. The increasing means of transportation will also create a reasonable price for the cost of the transportation of the

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the agricultural products, and therefore, the final value of the product will be reasonable also.

**Goal: Development of Social Service**

According to the project some social services are developed such as the construction of subcenters and health units, drinking water supply.

**Approach:**

The budget for this program is already approved and its cost is twenty-five million sucres. The cost for the training program is seven million sucres which is also approved and used for that purpose. The approach is to use all the above factors in order to develop the social services which are needed to improve conditions for the health of the inhabitants, education, cultural achievements. The supply of drinking water the modern towns provide to the people will prevent many diseases. In this way the project area will count with healthy people.

**Goal: To Raise the Levels of Living in the Region of Quero-Huachi-Pelileo**

**Approach:**

Raising the levels of living is, among other goals, the final purpose of the project. In order to obtain a rise in levels of living the farmers must increase their income to fulfill basic needs. To reach this goal - raising the levels of living - all complementary goals also have to be reached: the creation of new jobs, the loans
for agricultural workers program, the social education and training, the social services development, the irrigation system program, and the highway infrastructure. In other words, all the goals of the Quero-Huachi-Pelileo project must be accomplished. At the same time, a supervised crop production and the development of another crop which can be of market value will be made. Technical assistance, the application of irrigation, the supply of credit, the use of adequate labor, and the organization of commerce will assure a higher income for the farmers of the region.

According to the report of the Ministry of Agriculture\(^6\) the goals of the project (Metas del Proyecto) are to raise the income from 5,000 sucres per year to 30,000 per year for proprietors of 0.5 hectares; from 12,000 to 60,000 for proprietors of 1.5 hectares; and from 40,000 to 200,000 for proprietors of 5 hectares.

Even though all goals be achieved, the author does not feel the above mentioned increases in yearly income as predicted by the Ministry of Agriculture, will be reached, at least during the early phases of the project. The author of this study thinks that half of that would be a more realistic amount. The reasons are the following: 1) any change from the traditional agricultural system to a new rural organization in which the participants do not have the necessary knowledge and training on the matter will produce difficulty and

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problems; 2) if any of the factors of production (capital, land, labor, technical assistance) fail to contribute, the program will not operate adequately; 3) in countries such as Ecuador where the traditional land owners still have political and economic power, land reform at its beginning will encounter many obstacles due to the fact that wealth is yet in the hands of the remaining traditional landowners; 4) education and training takes time, therefore, the levels of living will increase slowly; 5) in Latin America, including Ecuador, the problem in using machinery is its acquisition; 6) the efficiency and effectiveness of the project is the guarantee of an increase in the level of living, but it will be weakened if one or more of the factors of production are lacking in the compound project.
CHAPTER IX

ASSESSMENT OF THE PROJECT AS A MEANS
OF SOLVING THE TRADITIONAL PROBLEMS OF
THE QUERO-HUACHI-PELILEO PROJECT

Analysis and Assessment of the Goals of the Project

After a systematic study of the Quero-Huachi-Pelileo project we can proceed to an assessment of its goals. In the first place we emphasize again the problem of land distribution in the area. According to the land distribution data (Table VIII), given by the Ministry of Agriculture of Ecuador, there are 13,160 properties or farms which are between 0.7 to 3.5 hectares with an average of two hectares, an insufficient or inadequate area for farmers' families to make a living. On the other hand, in the same Table VIII, we can see that 119 properties or farms have 86 hectares as an average. Those figures evidently show the case of an inadequate land distribution. Therefore, this fact demonstrates the necessity of an agrarian reform program in the region. It also shows that the two negative economic and social forces exist: one of them is the minifundio which causes a very limited income together with social


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stratification, unemployment, illiteracy, and low social status, and the other one is the *latifundio* which shows that only 119 proprietors monopolize the land assuring 10,244 hectares with an average of 86 hectares.

If the *minifundio* is the cause of social and economic problems, the *latifundio* system permits the landowner, through his entrepreneurial activities, to maintain the colonial servitude of the farmers. Thus, the inadequate land distribution is the cause of unemployment which involves 23,450 inhabitants together with lack of education, and absence of technological knowledge.

Thus, one goal is the creation of rural jobs to solve the rural unemployment in the region. The lack of occupation in the rural areas is due to the fact that the *latifundio* and *minifundio* exist in the region. Both land tenure systems oppress and limit the social and economic development of the peasants, the former because its traditional land tenure maintains the status-quo, originates social stratification, together with its estate and class system; the latter provides nothing to the farmer except his dependence on the big landowner together with an existing social stratification and very limited income. Thus, the basic factor to be considered is a more equitable distribution of land with the purpose of giving the farmers land possession, and through it a change in social and economic status.
In view of the social and economic conditions of the region, particularly regarding land possession, the goal is to grant land to the landless and small proprietors in order to achieve social and economic justice. Under this condition—farmers' land possession—with economic assistance through an effective credit system, promoting a successful rural education and training program, an irrigation system to supply water for agricultural use, the construction of roads, and social service programs, an increase in the level of living will be seen in the Quero-Huachi-Pelileo area. To reach this goal—to raise the level of living—all complementary goals also have to be reached: the creation of new jobs, effective and opportune loans for agricultural workers programs, social education and training, social service development, irrigation system program, and the highway infrastructure. For example, an assessment of the irrigation system consists in obtaining waters from Ambato, Mocha, and Pachanlica Rivers to cover 9,255 hectares. Under new land distribution and through an irrigation system of the area, agricultural diversification is planned. To reach this particular goal the use of machinery such as tractors, bulldozers, drills, raw materials, cement, manpower, transportation of materials, and the technical supervision in charge of a technical staff comprised of Technical Director, Agricultural Economist, Civil Engineer, Social Worker, Workers' Supervisor, Topographer, Agricultural Engineer, Administrative Economist, Sociologist, Irrigation Supervisor, Lawyer, Forestry Engineer, Agronomist, Administrative Analyst, Draughtsman,
and Accountant, are contributing to the success of the irrigation program. The author interviewed each of those professionals who are in charge of each particular activity. Also the project is supervised by a Coordinator, the Director of Desarrollo Campesino, the Director of the Ecuadorian Institute of Hydraulic Resources, and by the personnel of the Ecuadorian Agrarian Reform and Colonization. After the on-the-spot surveys, the interview with the technicians and the literature written on the Quero-Huachi-Pelileo project, the author concludes: 1) the project is effective, that is, it provides a viable possibility of raising the people's standard of living, and of benefiting 12,555 families; 2) it is efficient, that is, the long-run benefits will outweigh the initial costs. The evaluation of the Quero-Huachi-Pelileo project is significant in assessing the success of the project, and will aid in directing future efforts.

According to the Agriculture Ministry's report it will be possible to reach the following goals of the project: 1) to raise the income from 5,000 sucres per year to 30,000 sucres per year for proprietors of 0.5 hectares; 2) from 12,000 annually to 60,000 for proprietors of 1.5 hectares; 3) from 40,000 to 200,000 for proprietors of five hectares. Again, the author emphasizes that the above estimation of the increase in income as given by the Ministry of Agriculture, is excessive. The increase in income will be more moderate, but reaching the peak within twenty-three years if the program works successfully. A moderate amount will be half of
that projected by the Agriculture Ministry. The author states once again that (1) any change from traditional agriculture system to a new rural organization in which the participants do not have the necessary knowledge and training on the matter, is going to produce difficulties and problems; 2) if any of the factors of production fail to contribute, the program will not operate adequately; 3) in countries as Ecuador, where the traditional land owners still have political power, the land reform at its beginning has many obstacles to overcome due to the fact that the wealth is yet in the hands of the remaining traditional landowners; 4) education and training takes time, therefore, the levels of living will also take time to rise; 5) the levels of living rise proportionately to the support of the factors of production: land, capital, labor, technical assistance, education, knowledge; 6) the realization of the project will benefit 12,555 families; 7) the cost of the above described program is 884,900,000 sucres or $35,000,000 dollars.²

A correct assessment of the project can be described as follows: The project has been in its fifth year of active work. Because the topographic terrain is very hilly and rock-bound, the structural work goes slowly. Nevertheless, the author believes that the project is technically conceived, financially sound. In terms of economic and social goals, the project is efficiently programmed.

²Ibid.
Since income is the basic factor in improving levels of living, the author's appraisal on the effectiveness and efficiency of the project is that it fulfills all technical, scientific, economical, social, and educational finalities.

The author states that the project has the following characteristics: It is effective in relation to the objectives. It is means oriented or it emphasizes the improvements of material conditions of life or economic growth, and technical gains. The effectiveness or efficiency of the Quero-Huachi-Pelileo project expressed in economic terms is sound, and it is determined by the following specific goals: 1) to raise farmers' income; 2) to benefit 12,555 families; 3) to provide credit in an amount of 205 million sucres; 4) to raise productivity yields; 5) to facilitate marketing conditions; 6) to improve rural education and training.

The factor that must be accounted for in this kind of program is political turmoil and social unrest. Some Latin American governments lack the unity to achieve social goals because of this. With the political factors described above, and with the continuing, traditional, anti-progressive societies, social changes in Latin America have a long way to go. Nevertheless, the author believes that with knowledge, science, education, technical accomplishment, and know-how to work programs of rehabilitation together with a comprehensive, cooperative and democratic government, Latin American societies will gradually change, and of course, so will Ecuador.
The objectives of the Quero-Huachi-Pelileo project as a means of solving traditional problems are specific in order to improve social and economic conditions in the region. In this specific study these objectives are regarded as a means to achieve economic goals (increase per capita income), to improve methods of cultivation, to obtain the greatest yields, to build infrastructure works (irrigation, highways) in order to increase production quantitatively and qualitatively, and in addition, to obtain a positive technical achievement.

The development of Quero-Huachi-Pelileo provides both an improvement in economic and social status (increase in levels of living), and the development of local groups through education and training. It is proper to emphasize here that the coordination of programs and integration of structures are essential in this type of community development where the minifundio and latifundio surround the social groups.

In analyzing the Quero-Huachi-Pelileo project we should point out public support. The Tungurahua province where the project is located is very active commercially. Every Monday, at its capital Ambato, people from almost all places of the country gather to sell and buy products. Agricultural and industrial products are in adequate supply, and therefore, the demand for goods and industrial products is constant. There are textile and shoe factories as well as large industry. Also Ambato is the cradle of great statesmen, Juan Montalvo, Juan Leon Mera, among others. Montalvo's books and articles enlightened the liberal doctrine. Mera's national hymn sang
the glories of Ecuador's emancipation from Spain. Thus, economical, commercial, and cultural background support this kind of program.

In addition, the support came from the government of Ecuador in the form of financial aid in the amount of 885,000,000 sucres or 35,000,000 dollars for the Quero-Huachi-Pelileo project. As the author has stated, the project is located at the southeast of Ambato, the capital of Tungurahua province, an area crossed by many roads, and also by the Pan American Highway which are the arteries for an effective and rapid commercialization of the products. The city of Quito, only 134 kilometers from Ambato, is a potential market. The city of Riobamba is nearby; it is 56 kilometers from Ambato. Guayaquil, with more than one million inhabitants, is 289 kilometers from Ambato.

The coastal region has a great demand for products such as fresh eggs, vegetables, fruits, meat, red onions, potatoes, milk, beans, etc., because that region does not produce these products. Thus, there is an assured market.

Analysis and Assessment of the Accomplishments of the Project

Analysis:

The author found that land distribution to the landless and small farmers in the region of Quero-Huachi-Pelileo area is in its beginning phase, and consequently, it will be the first step in achieving the final goal, which is to increase the levels of living. Then, another goal is to increase per capita income through a more
efficient program of agricultural production by means of granting loans, giving technical assistance, education and training, using better seeds, and applying fertilizers the farmers will obtain greater yields, and therefore, an increase in per capita income, and of course, the levels of living will rise.

**Accomplishment**

When the above factors are properly used: land, credit, technical assistance, and the others, the accomplishment of the project will be achieved. To enforce this criteria it is convenient to quote "The Green Revolution: Cornucopia or Pandora's Box?" by Clifton R. Wharton, Jr., President, Michigan State University, in relation to the application of science and technology to traditional agriculture. He states that the application of science and technology to traditional agriculture has begun to produce dramatic results. On the one hand, he says "the race between food and population is over, that the new agricultural technology constitutes a cornucopia for the developing world." This development is as opening a Pandora's box, its very success will produce a number of new problems which are far more subtle and difficult than those faced during the development of the new technology.

Wharton added:

The Green Revolution offers an unparalleled opportunity to break the chains of rural poverty in important parts of the world . . . . Startling developments have been accomplished in wheat, rice and corn - major food staples in much of the developing world. The possibilities of doubling
or even tripling production are based upon new high-yield varieties coupled with adequate supplies of water, fertilizer, pesticides, and modern equipment.\(^3\)

Wharton's study relates to developing countries - as a comparison to Ecuador's Quero-Huachi-Pelileo region - and deals with its traditional agriculture and its possible success and accomplishment in the case of our study.

In summary, the project's present accomplishments tend to justify optimism. Two hundred five and a half million sucres are available now. Some small farmers are utilizing loans from the Bank and using it in their actual plots. Later the loans will be granted in full scale. Sixty-five percent of the irrigation system is finished. The road construction program is completed. The social services department are 60 percent complete. The education and training program is 50 percent accomplished (construction of 23 communal houses). The author's assessment in relation to the irrigation program is that it will be finished by the end of 1979 or the beginning of 1980.

The author's attempt to describe the proposed solutions to rural problems of Quero-Huachi-Pelileo, and in a broad sense Ecuador's agrarian structure, is to acknowledge the government of Ecuador for recognizing the need to implement agrarian reform. If the government

is indifferent, negligent, and apathetic, revolution will come, carrying with it mournful consequences.
SUMMARY AND CONCLUSIONS

A systematic evaluation of the Quero-Huachi-Pelileo project has been performed by the author. He evaluated the project's objectives, which are to supply land, water, capital and labor, among other resources, for agricultural production for an area of 32,000 hectares in order to benefit 66,624 inhabitants.

The problem of raising the levels of living in Latin America, including Ecuador, and specifically, in the Quero-Huachi-Pelileo area, can be solved by a more efficient utilization of the available resources in order to transform the agricultural system in that region by means of irrigation, agricultural diversification, by education, technical assistance, infrastructure work, and economic aid and by granting credits to the farmers of the region.

The use of available resources to obtain the greatest yields in agricultural production implies 1) the use of improved seeds; 2) the application of fertilizers; 3) that agricultural diversification will permit crops which are economically advantageous; and, 4) labor will be used in an effort to stop the out-migration of farmers.

According to the authors of the Quero-Huachi-Pelileo project (Ministry of Agriculture), the expectations are to raise the income from 5,000 sucres per year to 30,000 per year (1 dollar = 26 sucres)
for proprietors of 0.5 hectares; from 12,000 annually to 60,000 for proprietors of 1.5 hectares; and from 40,000 to 200,000 for proprietors of 5 hectares.¹ Thus, by the utilization of the available resources, and applying capital, land, and labor properly and adequately, the Quero-Huachi-Pelileo project aims to increase farmers' income, and therefore, raise their levels of living and change the social and economic status of the peasants of the region.

On educational and social matters the project should provide a training program in agricultural education. At present they are building twenty-three communal houses in which the farmers should receive classes on social and economic matters. The infrastructure works (irrigation and highways) will permit fundamental changes in the region because it (water) will be used for a variety of crops production, and the roads will facilitate the exchange of products, and therefore, commerce will be more active within the area. In addition, 205 million sucrés in loans are available for the farmers of the region.

The criteria for judging the project include educational, social, and economic factors by which the farmers of the area will be able to raise their levels of living. On the other hand, the creation of rural jobs, rural education, agricultural diversification, improvement of rural housing, the assurance of an appropriate diet for the

¹The author has emphasized that the above estimate of the increase in income as given by the Ministry of Agriculture is excessive. A moderate amount would be half of that projected by the Ministry.
rural people will improve the social conditions of the population. The programs which involve social, economic, technical, and educational factors are a positive asset for the campesinos of the region.

Among the many factors which are stated above, one that is important and basic for the development of rural societies, especially in Latin America, and of course, in Ecuador, is to develop an agrarian reform which will supply land to the peasants. In this matter, by Supreme Decree 1480, July 1964, the government of Ecuador established the Law of Agrarian Reform and Colonization. The law refers to the type of beneficiaries, especially, the campesinos of Ecuador. The Agrarian Reform Law provides that the land will be awarded to small farmers who agree to integrate their holdings into a cooperative organization and to those who work land without actually owning any land. The land affected by the land reform in Ecuador are the lands which do not fulfill their social and economic functions, or are uncultivated; those which maintain sharecropping systems; those which are too extensive (2,500 hectares or more); rural holdings owned by no agricultural institutions; lands suitable for agricultural exploitation which have remained inactive for more than ten years; public lands in which the owner has not complied with the legal regulations. The Ecuadorian Institute of Agrarian Reform and Colonization (IERAC) is the organization in charge of the agrarian reform in Ecuador.

The goals of the Quero-Huachi-Pelileo project are to benefit 12,555 families by raising the levels of living. The assessment of the project as a means of solving the traditional problems of the
area is to start an agrarian reform which will give adequate basis for a new economic and social organization. In addition, marketing organization, transportation facilities, new economic activities will increase the commerce in the region. Also, the technique should bring new methods of cultivation and improvements to the area.

By official assessment: Sixty-five percent of the irrigation program is finished; 50 percent of the houses are also finished; the roads of the project are completed; 60 percent of the sanitation program is finished; machinery such as bulldozers, tractors, equipment, drills, cement, raw materials and manpower are properly used. The project is supervised by a technical staff as follows: Technical Director, Agricultural Economist, Civil Engineer, Social Worker, Workers' Supervisor, Topographer, Agricultural Engineer, Administrative Economist, Sociologist, Irrigation Supervisor, Lawyer, Forestry Engineer, Agronomist, Administrative Analyst, Draughtsman, and Accountant. All the technicians, professionals, and other personnel working in the project are university graduates with field experience. These factors should assure the effectiveness and efficiency required for the project's success. (See Figure 9)

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Figure 9

Technical Staff in Charge
of Quero-Huachi-Pelileo Project
The Quero-Huachi-Pelileo project appears to be technically and economically sound and efficiently programmed. Since income is a major factor to improve the levels of living, the author's appraisal of the project is favorable, because on the one hand, it fulfills valuable technical, economical, social and educational goals, and on the other hand, the project is designed to benefit 12,555 families, raise the farmers' income, facilitate marketing conditions, while new methods of cultivation should raise productivity yields, improve rural education and training and, with the use of irrigation, obtain agricultural diversification.

The Quero-Huachi-Pelileo project is specifically aimed at improving the social and economic conditions of the people of the area. In the specifically mentioned case in study, it is regarded as a means to achieve economic goals - increase per capita income - to improve methods of cultivation, to obtain the greatest yields, to build infrastructure works such as highways and irrigation programs in order to increase production, and in addition, to obtain a positive technical achievement. On the other hand, the Quero-Huachi-Pelileo project as a social organization is evaluated in terms of an efficient application of fertilizers in farmers' plots, the use of improved seeds, and the maintenance of enough water in food production.
The Quero-Huachi-Pelileo project is a means to obtain technological achievement in order to increase production, and to teach group skills and self-reliance. The Quero-Huachi-Pelileo project provides for both an improvement in economic and social status - increase in levels of living - and the development of local groups through education and training.

Another very important aspect in the development of rural projects is the coordination of programs and integration of structures which are essential in this type of community development as it is typical where the minifundio and latifundio surround the social groups.

A decisive factor which contributes to the success of this kind of rural program is public support. The Quero-Huachi-Pelileo project is located in the most economically-active section of Ecuador. Every Monday there is an open market in Ambato where people from Quito, Riobamba, Cuenca, Guayaquil, Guaranda, Latacunga and also from Colombia gather to sell and buy products. Agricultural and industrial products are sufficient to meet present demand. In Ambato there are textile and shoe factories. The Pan American Highway and many roads cross the area of Quero, Huachi, Pelileo, and rapid communication is available.

Adding to the public support, the government of Ecuador has provided 35,000,000 dollars for the Quero-Huachi-Pelileo project. In summary, Ambato is considered a commercial and industrial center, and the
city is traditionally important as the cradle of outstanding statesmen such as the political sociologist Juan Montalvo who contributed to liberal ideas, and Juan Leon Mera whose national hymn sings the glories of Ecuador's emancipation from Spain.

Inasmuch as the Quero-Huachi-Pelileo project shows promise of being effective and efficient, the author believes that it will contribute, as a case study of rural development in that particular region of Ecuador, to the solution of similar rural problems in other countries in Latin America.

The government of Ecuador should implement more fully the Agrarian Law 1480 of July 1964, which provides for the execution of land reform in the country and of course, in the Quero-Huachi-Pelileo area. The author would like to recommend that additional budget monies be used for an agricultural diversification program, for developing rural education, for Ecuador's progress in agricultural technology and research, and for the development of social and economic rural programs which are urgently needed in Ecuador.

At present there are in Ecuador three separate institutions whose working relationships are not conducive to an efficient performance: 1) The Ecuadorian Institute of Hydraulic Resources, 2) The National Institute for Electrification, 3) The Institute for Agrarian Reform and Colonization. If the programs of the three institutions
can be coordinated we will find that the three will often coincide in reaching the same ends. For example, the Ecuadorian Institute of Hydraulic Resources is in charge of working infrastructures in the irrigation programs; the Institute of Agrarian Reform and Colonization would be on hand to assist for a better and more equitable allocation of the water resources for the agricultural projects under its jurisdiction; and, in addition to this, the Institute for Electrification would be in charge of the distribution of electricity. The three institutions should be merged into one in order to economize personnel, resources, salaries, and above all, to reach the highest degree of efficiency. The three institutions in one could be served through a Board of Directors composed of the officials who are serving now. This board could be composed of nine persons (three from each branch). They would elect the proper executive officials (President, Secretary, etc.) and of course the Minister of Agriculture would be the ex-officio representative. Technical personnel should serve in each branch. The new institution could be called the Ecuadorian Institute of Integral Development.
BIBLIOGRAPHY


Alliance for Progress. *Official Documents Emanating from the Special Meeting of the Inter-American Economic and Social Council at the Ministerial Level Held in Punta del Este, Uruguay from August 5-17, 1961*.


García, Ortiz, Humberto. La Forma Nacional. Imprenta de la Universidad. Quito, Ecuador, 1942.


Mera, Juan Leon. García Moreno. Imprenta del Clero, 1904.


______. Siete tratados, Vol. II. Casa Editorial de Garnier Hermanos. 6, Rue des Saints-Peres, 6, Paris, 1912.


______. "La Dictadura Perpetua," Paginas desconocidas. Publicación de la Revista de la Universidad de La Habana, 1936.


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. La población del Ecuador. Un Análisis del Censo de 1950.


**Survey for the Development of the Guayas River Basin of Ecuador.**


Vaquero, Dávila Jesús. *Génesis de la nacionalidad ecuatoriana.* Imprenta de la Universidad, Quito, Ecuador, 1941.


APPENDICES
EXPOSICION DE MOTIVOS

1.---El Gobierno del Ecuador, con la expedición de la presente Ley de Reforma Agraria y Colonización, inicia un cambio de trascendencia histórica en la estructura económica y social del Ecuador. Dada la importancia de la agricultura para la economía y la vida toda de la sociedad ecuatoriana, los vicios de la estructura agraria se han reflejado en las instituciones sociales del país, a las que se ha prolongado un trato menos justo en las relaciones entre los hombres que intervienen en el proceso productivo agrícola. Al modificar la base jurídica de dicha estructura y comenzar así la Reforma Agraria, el Gobierno pone la piedra fundamental para levantar un nuevo Ecuador armonioso, justo y dinámico.

2.---El actual Gobierno del Ecuador ha aceptado con entereza y decisión su responsabilidad en la política de desarrollo económico. Es menester esforzarse por dar a la economía el impulso que necesita para ponerla en condiciones de progresar de modo continuo y acelerado. El ecuatoriano debe disfrutar de un nivel de vida digno y tener la oportunidad de entregar a la sociedad el aporte de su trabajo en las tareas para las que sea más apto. Ese es el objetivo supremo de la política de desarrollo económico y es también el ideal de toda sociedad moderna. En consecuencia, dada la complejidad de la vida económica y la organización social, hace falta un esfuerzo poderoso y metódico que debe no solo actuar como un motor impulsor de la actividad, sino como un factor de remoción de obstáculos y transformación de viejas estructuras. La política de desarrollo supone una acción tanto más profunda, cuanto mayor sea la debilidad de la economía y más difíciles los escollos que se oponen al progreso.

El Ecuador necesita en estos instantes una acción de ese género: profunda e incisiva. El país ha progresado en el decenio pasado. El promedio del ingreso por habitante ha crecido, lo que puede mirarse como índice de mejoramiento en el nivel de vida. Ciertas actividades económicas se han expandido considerablemente y, con la apertura de vías de comunicación, poco a poco va llegando a todos los rincones de la Patria la posibilidad de aprovechar su potencial productivo. La sociedad misma ha adquirido un grado más alto de dinamismo y la clase media comienza adquirir personalidad e influencia; se advierten ya las señales de la aparición del espíritu de empresa y las motivaciones sin las cuales el desarrollo es imposible.
No obstante, los precios de ciertos bienes inician un ascenso sostenido, revelando una deficiencia de la producción frente a la demanda; y el exodo del campo hacia las grandes ciudades, ha provocado un aumento de la desocupación con las tensiones consiguientes. Las condiciones de vivienda se han agravado, y, de modo alarmante, han crecido las zonas de suburbio, sin contar con los servicios indispensables, provocando día a día el aumento de los conocidos cinturones de miseria característico de las principales ciudades latinoamericanas, constituyéndose en un peligroso hacinamiento humano, como en el alarmante caso de la ciudad de Guayaquil, cuya situación el Gobierno se halla empeñado en modificar, pero atacando las bases mismas del problema cuyo origen se halla en los defectos de las estructuras económico-sociales del país.

Es por ello que el actual Gobierno considera como principal objeto de su gestión y su máxima responsabilidad actuar sobre la economía y la sociedad, para restaurar los estímulos de su crecimiento y eliminar todos los obstáculos que impiden que ellos actúen firmemente sobre la economía.

Si bien el progreso del país no depende exclusivamente de la exportación y de sus actividades conexas, hay que reconocer que de ellas se derivan sus mayores impulsos económicos. Al respecto cabe señalar que después de haber soportado el país una tendencia hacia el estancamiento del ritmo de sus exportaciones, ha comenzado a cambiar tal situación, como consecuencia de la serie de medidas económicas, sociales y políticas instauradas por el actual Gobierno. Pero, lamentablemente estos importantes impulsos e incentivos a la economía ecuatoriana no son aprovechados en buena forma, debido a la estructura misma en la que se desenvuelve la actividad productiva del país.

Es por esta razón, que el Gobierno se halla empeñado en la aplicación del Plan General de Desarrollo Económico y Social, ya que solo así será posible capacitar a nuestra economía para que pueda aprovechar los estímulos de la acción decidida de su gestión, impulsándola hacia un acelerado desarrollo. Y es justamente, la reforma de la estructura agraria, uno de los más destacados aspectos del referido Plan, cuyo proceso se pondrá en marcha con la presente Ley.

3.—La estructura de tenencia de la tierra en el Ecuador es la herencia de la Colonia que con mayor rigor ha perpetuado formas de producción y modalidades de relación social que hoy son absolutamente anacrónicas y opuestas a los ideales de la sociedad del estado moderno. Su primer rasgo es la concentración en pocas manos de
gran parte de los recursos territoriales del país en actual explotación. En efecto, de acuerdo con el censo de 1954 en 1.369 explotaciones, es decir, en 0.4 por ciento del total, se concentra el 45.1 por ciento de la superficie. En cambio, mas de 250.000 explotaciones, es decir el 73.1 por ciento del total, tienen tan solo el 7.2 por ciento de la superficie, lo cual significa un promedio de menos de 5 hectáreas por explotación.

Por supuesto, hay una gran diferencia entre la situación de la Sierra y la Costa, pero en esta última también se advierten graves defectos de estructura agraria. En general, puede afirmarse que el fenómeno del latifundio se combina con el minifundio en su grado extremo, con múltiples consecuencias, entre las cuales vale la pena citar las siguientes:

a) La tenencia de la tierra es la base de un sistema institucional que produce una extrema desigualdad en la distribución del ingreso. El latifundio, en relación con su área de influencia, tiene un poder sobre el mercado del trabajo. Los salarios agrícolas en la Sierra han llegado a cifras muy bajas como en el caso de algunos huasipungeros de haciendas ganaderas. Una aparente compensación aparece en la cesión de ciertos derechos como el usufructo de extensiones mínimas de tierra, el derecho de pastos, el goce de algunas servidumbres, etc., la verdad es que estas concesiones adicionales apenas elevan el monto de los salarios reales, ya que fijan al hombre en sus localidades y mantienen una oferta abundante de mano de obra. Mucho se ha dicho sobre las diversas formas de tenencia y relaciones de trabajo a que esta situación da lugar; varían de región, pero, en todo caso, es fácil identificar en ellas rasgos comunes en cuanto al resultado de un elevado poder en el mercado de la tierra como en el de la mano de obra.

b) Esta situación ha dado lugar en la Sierra a modalidades de empresas agrícolas ineficaces, en las cuales falta casi completamente todo incentivo al cambio tecnológico y, por lo mismo, a la elevación de la productividad. Por una parte se halla el latifundio, con una oferta relativamente abundante de mano de obra que se traduce en salarios bajos y formas de producción que no utiliza mayormente al capital. En esas condiciones la modalidad de explotación lógica ha sido la de una agricultura extensiva muy rudimentaria, con bajísima productividad no solo por hectárea sino también por hombre. El índice de intensidad cultural, es decir, la proporción de tierras de labranza frente a la superficie total, fue en 1954 de tan solo el 16 por ciento en el caso
de las explotaciones de más de 500 hectáreas, es decir, de las grandes unidades. Del mismo modo, la productividad o rendimientos por hectárea se hallan entre los más bajos de América.

El estudio de CEPAL sobre la productividad de la agricultura ecuatoriana muestra rendimientos por hectárea y por hombre que son, en general muy inferiores a países de parecido estado de desarrollo. En ganadería, por ejemplo, la productividad media por hombre es menor que la de países vecinos como de Colombia. En cultivos la situación es similar, y el predominio de métodos, basados en prácticas culturales rudimentarias y de bajos rendimientos, subsisten incluso en el caso de productos de exportación, con la excepción del banano. Por supuesto, a dichos resultados carentes de eficiencia en todo el país, contribuye la presencia de todas aquellas Instituciones que regulan las relaciones de uso y tenencia de la tierra, que obstaculizan la implantación de muchos de los adelantos tecnológicos modernos. En general, pero especialmente, en el caso del latifundio, falta el auténtico empresario agrícola; la posibilidad de gozar de una alta renta de la tierra (dado el control sobre la propiedad agrícola) ha llevado a un ausentismo generalizado y a la proliferación de formas precarias de tenencia.

c) Como uno de los resultados de esta defectuosa estructura agraria, la desvastación de los recursos naturales se ha convertido en una secuela obligada de los métodos de cultivo en boga. En el latifundio, la rudimentaria agricultura extensiva, sin prácticas de conservación ni fertilización ha conducido a un lento agotamiento de las mejores tierras del callejón interandino. En el minifundio, tan difundido, la desesperada búsqueda del sustento, ha llevado a un resultado parecido, pero todavía más drástico y alarmante. En la Costa inmensas extensiones corren el riesgo de constituirse en eriales como consecuencia de una deforestación masiva y prácticas culturales inadecuadas, a cuya persistencia mucho ha contribuido la estructura agraria prevaleciente en las explotaciones tradicionales de esa región.

4.—En resumen, la estructura de tenencia de la tierra amenaza el desarrollo del país desde diversos ángulos. Su resultado más directo es la lentitud de expansión de la producción agrícola, especialmente aquella dedicada al consumo interno. Con el desarrollo de la economía y la elevación del ingreso de los últimos años, es un hecho notorio la creciente escasez de ciertos bienes especialmente
aquellos más buscados por ser alimentos superiores: carne, productos lácteos, etc. Los precios están ascendiendo, lo que revela la insuficiencia de la oferta.

Tal situación es un síntoma de una escasez generalizada que amenazaría el desarrollo del país, al producir graves desequilibrios no solo en el nivel de precios con las consiguientes presiones inflacionarias, sino también en la balanza de pagos al forzar el uso de divisas en la importación de alimentos, restando posibilidades de adquirir los bienes de capital e intermedios que el desarrollo necesita. A más largo plazo, pero con caracteres aún más trágicos, se vislumbra también la parálisis a la que podría llevar el rápido agotamiento de la tierra agrícola. Grandes zonas del país se han perdido ya para la agricultura por una erosión acelerada por malas prácticas agrícolas. A medida que la presión de la población sobre la tierra aumenta, la degradación de los suelos avanza rápidamente tanto en la Sierra como en la Costa. Lo sucedido en el reciente quinquenio en Manabí, en que una prolongada sequía causó serios desequilibrios de carácter económico y tan importante provincia es el presagio de lo que puede pasar en todo el país, si no se pone un drástico remedio a la actual situación.

En cuanto a la distribución de ingresos, es poco lo que se puede añadir a lo mucho que se ha dicho sobre la situación de miseria en la que viven los campesinos de grandes zonas del país. Si el nivel promedio de ingresos del Ecuador es bajo, aquel que prevalece en los campos especialmente en las Sierra, se acerca, al mínimo absoluto para la pura subsistencia biológica. Se calcula una cifra de ingreso en todo caso menor de 100 dólares anuales por persona, la cual quizá llegue en algunas zonas a cifras inferiores a 70 dólares. Por supuesto, son las áreas donde el analfabetismo es mal general; donde las tasas de mortalidad, particularmente infantiles llegan a niveles alarmantes; donde una degeneración biológica avanza a pasos rápidos como consecuencia de los graves déficits nutricionales y el vicio generalizado del alcoholismo. Se trata de las regiones aisladadas de la economía monetaria y aquellas en las que menos se siente y se vive la nacionalidad. Tan triste estado es no solo un reproche a las pasadas generaciones ecuatorianos que ignoraron su existencia, sino un llamado apremiante a la acción.

Por todas esas razones, es parte esencial y urgente de la política de desarrollo económico y social la realización de una reforma agraria suficientemente intensa para cambiar
la estructura social. Esta debe ser más propicia a la eficacia del esfuerzo productivo y a la armonía de las relaciones entre los hombres. Con la Reforma Agraria, como un programa paralelo destinado a aliviar la presión sobre la tierra en las regiones de congestión humana y ampliar la frontera agrícola creando nuevas posibilidades de producción, es menester también avanzar en la colonización de las zonas actualmente no ocupadas. La regulación básica de estos dos programas esenciales, es el objetivo de la presente Ley.

5.—Para alcanzar los fines mencionados, se ha concebido a la Reforma Agraria y a la Colonización en sus justos alcances y proyecciones, considerando que, para el Ecuador, su acción debe estar encauzada a poner en marcha un meditado y progresivo proceso de cambio de la defectuosa estructura de tenencia de la tierra y promover una racional expansión de la frontera agrícola.

La adopción de una política de esta naturaleza permitirá lograr un marco institucional menos rígido en las relaciones de tenencia de la tierra, eliminando toda forma de explotación del hombre por el hombre, y promoviendo el desarrollo de una moderna y progresista actividad agrícola. Con ello se persigue convertir a la agricultura ecuatoriana en un productivo negocio de campesinos y empresarios agrícolas, procurando que la tierra se constituya en un verdadero factor de producción y no en mera forma especulativa de renta.

Esto presupone una estructuración del régimen institucional que regula el uso y la tenencia de los recursos territoriales básicos, promoviendo un evolutivo y saludable cambio en las relaciones existentes entre los hombres que intervienen en el proceso agrícola.

El propósito es lograr, por una parte, la democratización en la distribución de los ingresos, que en una nación eminentemente agrícola como el Ecuador, son generados en gran medida por dicho sector, y por otra parte, promover una movilidad social que brinde iguales oportunidades a todos los ecuatorianos, para arribar en un futuro próximo a la formación de una verdadera sociedad democrática, invulnerable a la incidencia de ideologías extrañas y atentatorias contra la dignidad de los asociados.

Por otra parte, será menester restar estímulo a toda forma de inversión en tierras con ánimo de mero ahorro o de negocio que ofrece plusvalía, brindando en cambio incentivos y garantías a toda forma racional y económica de explotación. Por lo mismo, no conviene mantener de modo alguno dentro del sector agrícola ni dar acceso a la tierra, a aquellas personas que, por sus condiciones, aportarían más al país en otros sectores y actividades, evitando a la vez
la competencia desleal que sufren ahora los campesinos cuya única alternativa de ocupación y fuente de ingreso es la tierra. De esta manera, se obligaría a canalizar los ahorros de la comunidad hacia inversiones realmente productivas ya sea en agricultura o en otras actividades que impulsen el desarrollo económico del país.

Con esta filosofía de la reforma, más que atacar al latifundio por su tamaño, interesa transformar la estructura de explotación y tenencia de la tierra; con lo cual, sin perjuicio de la productividad agrícola, será posible evitar la explotación del hombre y promover la movilidad social, capaz de consolidar las instituciones democráticas y crear una sociedad apta para el desarrollo.

6.— En consideración a que el Derecho Agrario moderno se basa y fundamenta en principios de justicia social, y que es la vinculación del trabajo a la tierra en donde se origina el derecho a la propiedad, la Ley se propone crear una nueva estructura del régimen de dominio. De acuerdo con esto, se debe reconocer el derecho de propiedad sobre aquellas tierras que están explotadas económicamente y que cumplen con su función social.

En consecuencia, del vínculo del trabajo entre el sujeto y el objeto (hombre y tierra), depende la posibilidad de adquirir el dominio de la tierra y su garantía por parte del Estado.

7.— Para la realización de un proceso de Reforma Agraria como el indicado, se han concebido también algunas medidas coadyuvantes y complementarias que permitan garantizar el éxito de su aplicación. Entre ellas se destaca la colonización, como política conducente a absorber los desplazamientos demográficos que resulten de la carencia de recursos en las áreas de alta densidad de población.

En la aplicación de esta política, se procura evitar la consolidación de toda forma defectuosa de tenencia y explotación en las nuevas áreas habitadas.

Además, se ha contemplado la adopción, entre otras, de las siguientes medidas complementarias: ayuda crediticia, asistencia técnica y social, fomento de la educación, promoción del cooperativismo, etc. Muchas de estas medidas serán coordinadas en forma adecuada con los programas de la Campaña, de Integración del Campesino y el Desarrollo de la Comunidad. Se ha puesto especial énfasis en el mejoramiento de las relaciones laborales en el campo brindando una mayor seguridad al trabajador agrícola, para el cual entre otros medios, se propugna su ingreso al Seguro Social. Del mismo modo se la garantiza una mas justa participación en los ingresos generados en el sector.
En la concepción del nuevo marco jurídico que establece esta Ley en las relaciones de tenencia y uso de la tierra, se han tomado muy en cuenta las diferencias fisiográficas, no solo regionales, sino también las existentes en las diversas zonas de una misma región.

En resumen, el fondo y los propósitos de la reforma que esta Ley implica, coinciden con las necesidades antes expresadas de cambio en el aparato productivo y en la organización social. Al adoptar esta medida, la Junta Militar de Gobierno demuestra una vez más que no se halla comprometida con interés de ninguna especie y que su objetivo básico al asumir el poder, no sólo fue el de restaurar el órden, sino promover e iniciar las principales transformaciones socioeconómicas que requiere la nación, una de las cuales es precisamente la Reforma Agraria.

3.—Como ya se indicó, el estatuto jurídico que respaldará la implantación de la nueva política en materia de Reforma Agraria y Colonización, se fundamenta en el principio de la función social de la propiedad, que es el que viene a regular el nuevo concepto de derecho a la tierra.

A continuación se analizan sus más importantes disposiciones:

—En primer lugar, tomando en cuenta, que el principio de la función social de la propiedad es el que regula el nuevo concepto del derecho la tierra, se ha considerado que esta debe rendir de acuerdo con su potencialidad productiva dentro de ciertos límites de extensión que se permite poseer a un solo propietario de tierras, a fin de que vayan desapareciendo los latifundios, las tierras ociosas y deficientemente explotadas, así como los minifundios sin redención técnica posible.

—El cambio institucional que se propugna, se fundamenta básicamente en los siguientes aspectos: a) expropiación de tierras explotadas en forma absentista y defectuosa; b) reversión de tierras incultas, considerando como tales aquellas que han permanecido ociosas por 10 años; excluyendo lógicamente, razonables extensiones de reserva; c) revisión de las adjudicaciones y venta de tierras realizadas por el Estado en las que no se ha cumplido con las disposiciones legales; d) eliminación de toda forma precarista de tenencia de la tierra con fines agrícolas; e) integración del minifundio; f) legalización de la posesión pacífica de la tierra; g) intervención en las haciendas del Estado; y h) promoción de parelaciones privadas que se ajusten a los lineamientos de la Ley. Es preocupación constante de la Ley conseguir una estructura agraria no sólo más justa sino más eficaz. No se
trata de pulverizar la propiedad, sino de crear unidades productivas de tamaño adecuado para una eficiente combinación de los factores productivos.

Además, se han contemplado las siguientes medidas de carácter complementario:

a) Ayuda crediticia y asistencia técnica y social;

b) Habilitación de tierras para la colonización;

c) Ayuda a la colonización espontánea;

d) Promoción a la colonización de iniciativa privada; y

e) Racionalización del trámite de adjudicaciones de tierras baldías.

—En cuanto al pago o compensación de las tierras intervenidas, la Ley adopta un sistema justo y equitativo.

—Respecto a las condiciones en las que se efectuarían las adjudicaciones, por razones psicológicas y financieras, se ha considerado inconveniente la entrega gratuita de tierras, pero se contemplan diversas facilidades en la modalidad de pago, que permitan su adquisición por auténticos campesinos.

—En cuanto a las relaciones de tenencia y trabajo agrícola, se han eliminado las formas precarias de explotación, y las modalidades de trabajo que impliquen alguna forma servil de dependencia del trabajador frente al patrono. De esta manera, se ha contemplado la abolición del huasipungo y de otras formas similares de tenencia o trabajo.

—Se ha concebido que la aplicación del proceso de reforma se efectúe de manera gradual y progresiva por zonas debidamente seleccionadas agro-sociales existentes. Por otra parte, se tomarán muy en cuenta las características y condiciones peculiares no solo de carácter regional sino también zonal.

—Se ha contemplado el suministro de adecuados servicios asistenciales a los genuinos agricultores, quienes podrán recibir crédito oportuno y barato, así como asistencia técnica y social, considerando que con ello será exitoso su asentamiento.

—Especial atención se ha dispensado al problema de la conservación y uso racional de los recursos naturales, en coordinación con las leyes especiales sobre la materia, sobre todo en lo que respecta al desarrollo forestal y al mejor aprovechamiento de las aguas.

—Para la aplicación de la Ley, se establece la creación del Instituto Ecuatoriano de Reforma Agraria y Colonización, como organismo especializado, con personería jurídica, que en reemplazo del actual Instituto Nacional de Colonización, será el encargado de conducir la nueva política agraria del país, además de los aspectos inherentes a la colonización.
Este Organismo se halla integrado por: un Consejo Directivo a nivel Ministerial, encargado de la adopción de decisiones de tipo político; y de un Comité Ejecutivo, que en unión de la Dirección Ejecutiva del IERAC, asumirá las responsabilidades de carácter técnico y administrativo que requiera la aplicación de la Ley, contándose para ello con Departamentos especiales de Reforma Agraria y Colonización, y de otras dependencias técnicas y administrativas.

—Considerando que el éxito de la aplicación práctica de un proceso de esta naturaleza, reside en gran parte en las disponibilidades financieras, se ha prestado especial atención a los recursos destinados para tal fin.

—Para ello se ha contemplado, además de las emisiones de bonos y de partidas presupuestarias, la asignación de los fondos con que actualmente cuenta el INC, así como los que se obtengan de empréstitos internos o externos, que permitirán garantizar la aplicación de la Ley.

Cabe indicarse a este respecto que, a pesar de los elevados requerimientos financieros, sobre todo en lo que al pago de tierras intervenidas se refiere, se estima que en gran parte el costo del proceso de reforma agraria se auto-financiará, gracias al sistema de emisión de bonos del Estado de largo plazo, bajo tipo de interés y con un cierto período de gracia, y la venta de la tierra a los adjudicatarios.

—Se ha contemplado la conveniencia de iniciar un adecuado inventario y registro de la tierra, que, además de permitir la consolidación de la nueva estructura de tenencia, facilitará en un futuro próximo la organización de un racional sistema catastral, el que a su vez servirá de base para la adopción de medidas adecuadas de política impositiva con propósitos de desarrollo. Estas medidas impedirán la aparición de nuevos defectos estructurales en el uso de los recursos, sirviendo de valiosa herramienta para la conducción de una sana política agraria.

—Con miras a brindar una mayor agilidad en la tramitación y resolución de los problemas inherentes a la aplicación de la Ley, se ha considerado un procedimiento especial, que permite proceder con justicia y celeridad en las resoluciones; contemplándose la designación de Jueces de Tierras y de una Sala Especializada de la Corte Suprema de Justicia, encargados de resolver, toda, controversia surgida en la aplicación de la Ley.

Se aspira a que esta Ley sea la legítima y apropiada norma de acción para lograr un eficaz desenvolvimiento de la economía agropecuaria y el desarrollo social del País.
Es menester destacar que, es el deseo del Gobierno que esta Ley se convierta en un eficaz instrumento de progreso fundamentado en principios de equidad y justicia. En su elaboración se han tomado en cuenta las sugerencias y opiniones de los diversos sectores así como de las distintas tendencias políticas, con miras a lograr posiciones conciliatorias que eviten todo asomo posible de caos, aunque sin pretender lograr un acuerdo cabal y completo entre tan disímiles intereses y criterios.

Efectivamente, en esta tarea se han considerado y revisado los diversos proyectos elaborados por varias entidades como: la Junta Nacional de Planificación y Coordinación Económica, la Comisión Ecuatoriana de Alianza para el Progreso, el Partido Liberal, el Consejo Nacional de Economía, CERES, y la Comisión de la Cámara de Diputados, entre otros.

Además, se aceptaron muchos criterios bien encaminados, emitidos por personas versadas y de reconocida capacidad práctica en ciertos aspectos específicos.

Y con el fin de agotar toda fórmula conciliatoria y progresista de resolución frente a tan delicado y serio problema, se designó a una Comisión Especial que en forma intensiva revisó y discutió uno de los últimos anteproyectos, integrada por representantes de las Cámaras de Agricultura de la Primera y Segunda Zona, del Banco Nacional de Fomento, del Consejo Consultivo de Colonización, de la Junta Nacional de Planificación, de las Facultades de Ingeniería Agronómica de las Universidades Central, de Guayaquil y de Loja, del Rector de la Universidad Técnica de Manabí, de CERES, y de la Comisión Ecuatoriana de Alianza para el Progreso. En esta forma se brindó una magnífica oportunidad de discutir y defender los diversos puntos de vista y las encontradas opiniones de los diversos sectores, en concordancia con el ambiente democrático en que el Gobierno desea que se resuelvan los problemas candentes de la Patria.

Junto a la voz de la experiencia, se consideró y tomó muy en cuenta el criterio de la técnica, procurando conciliar en forma adecuada estos dos importantes aspectos. De esta manera se obtuvieron valiosas recomendaciones y sugerencias por parte de especialistas de USAID del BID y de la FAO, así como de diversos técnicos y especialistas nacionales.

Cabe, finalmente, hacer un llamamiento a la opinión pública nacional para que, con sentido patriótico respalde la aplicación de la presente Ley. Asimismo, es menester llamar a la comprensión a los grupos que se sienten afectados con ella, ya que su oposición podría conducir al país por alternativas de violencia de proyecciones imprevistas.
Con la presente Ley, además de colmar una justa aspiración de un sector mayoritario del pueblo ecuatoriano, se sientan las bases para una nueva economía y una nueva sociedad. El Ecuador en el futuro no tendrá ya las trabas que hoy impiden su progreso.

Es fiel copia.—Certifico.—El Secretario General del Gobierno,

f.) Dr. Hernan Donoso Velasco.

No. 1480
LA JUNTA MILITAR DE GOBIERNO,
Considerando:

Que es deber fundamental del estado y a la vez objetivo básico del Plan General de Desarrollo Económico y Social del País, procurar que el hombre ecuatoriano alcance un nivel de vida digno y pueda entregar a la sociedad el aporte de su trabajo en las tareas para las que sea más apto;

Que para alcanzar dicho objetivo es indispensable la eliminación de las formas anacrónicas de tenencia de la tierra y de contratación del trabajo agrícola, consideradas como graves obstáculos para el bienestar individual y social de las mayorías campesinas, así como para el desenvolvimiento general del país;

Que de acuerdo con las modernas concepciones del Derecho Agrario el dominio de la tierra está subordinado al cumplimiento de su función económico-social y a la abolición de las viejas formas de explotación del hombre que trabaja la tierra, para procurar una justa distribución de los ingresos generados en el sector agropecuario entre los diversos factores de la producción;

Que es necesario transformar la agricultura ecuatoriana en un verdadero sector productivo, dinámico y progresista constituido por empresarios y agricultores propietarios de la tierra, capaces de hacerla producir en forma económica;

Que la actual estructura agraria imposibilita el desarrollo de los demás sectores y en especial del sector industrial, manteniendo al margen de la economía monetaria a una parte sustancial de la población rural;

Que la política colonizadora es una importante acción coadyuvante en los procesos de cambio de la estructura de tenencia de la tierra;

Que es indispensable disponer de los adecuados medios jurídicos que, a tono con los modernos conceptos del Derecho Agrario, faciliten una de las más importantes transformaciones económico-sociales, cuyos principios el Ecuador se comprometió a cumplir al suscribir el Acta de Bogotá y la Carta de Punta del Este; y
En uso de las facultades de que se halla investida,

Decreta:

LA SIGUIENTE LEY DE REFORMA AGRARIA Y COLONIZACION

TITULO PRELIMINAR

Art. 1.—La presente Ley de Reforma Agraria y Colonización tiene por objeto corregir los defectos de la actual estructura agraria, mediante una mejor distribución y utilización de la tierra. Este cambio irá acompañado de medidas de carácter técnico, económico y social, dirigidas a aumentar la productividad y elevar el nivel de vida del trabajador agrícola.

Art. 2.—Esta Ley garantiza la propiedad privada agraria en cuanto cumpla con la función económico-social que le corresponda.

Art. 3.—La propiedad privada agraria cumple con su función económico-social cuando reúne los requisitos siguientes:
   a) Explotación eficiente de la tierra;
   b) Responsabilidad y dirección del propietario;
   c) Conservación y renovación de los recursos naturales;
   d) Cumplimiento de las Leyes que regulan el trabajo agrícola; y
   e) No constituir forma de acaparamiento de los recursos territoriales.

Art. 4.—Para cumplir con el objetivo determinado en el Art. 1, la Ley de Reforma Agraria y Colonización tiene los siguientes propósitos:
   a) Promover un cambio adecuado en la estructura de la tenencia y utilización de la tierra;
   b) Asegurar la justa distribución de los ingresos generados en el sector agropecuario, entre los factores de la producción;
   c) Garantizar los derechos del trabajador agrícola;
   d) Estimular el uso más productivo de la tierra y eliminar las formas antieconómicas de explotación;
   e) Garantizar el libre desenvolvimiento de las actividades del productor agrícola y su derecho a las asistencia técnica, social y crediticia por parte de las entidades de derecho público y privado;
   f) Incorporar las tierras baldías a la producción agropecuaria;
g) Promover la mejor utilización de las tierras en poder de la Asistencia Social y de otros organismos de derecho público o de derecho privado con finalidad social;

h) Estimular la tecnificación de la agricultura;

i) Asegurar la conservación, recuperación y defensa de los recursos naturales; y

j) Evitar el acaparamiento de la tierra.

Art. 5—Para el mejoramiento de las condiciones del campesino y del trabajador agrícola, esta Ley persigue:

a) La abolición de modalidades defectuosas de tenencia y trabajo como el huasipungo, la yanapa o ayuda, el arrimado y otras similares;

b) La progresiva eliminación de sistemas absentistas de explotación como el arrendamiento y la aparcería y su sustitución por formas directas y modernas de explotación, como empresas o cooperativas agropecuarias; y

c) La elevación del nivel de vida del trabajador agrícola y del campesino mediante el acceso a la propiedad de la tierra, el establecimiento de salarios mínimos adecuados, la participación en las utilidades de la empresa agrícola, la extensión agrícola y su incorporación al Seguro Social.

Art. 6.—Para asegurar el éxito de la Reforma Agraria, el Estado deberá:

a) Promover el incremento de la producción agropecuaria y su conservación, almacenamiento, transformación y comercialización;

b) Impulsar la forestación, reforestación y otros sistemas de conservación y defensa del suelo;

c) Orientar, fomentar y controlar el regadío de las tierras laborables y su avenamiento;

d) Fomentar y proteger la inversión de capitales mediante sistemas adecuados de crédito supervisado y orientado;

e) Proporcionar a los campesinos, empresarios agrícolas y sus asociaciones, asistencia técnica, social y educativa orientada a la producción agropecuaria;

f) Estimular y orientar los movimientos migratorios internos, con miras a lograr una más adecuada distribución de la población;

g) Promover la formación de cooperativas y otras organizaciones, especialmente aquellas que estimulen la mejor utilización de la tierra y de su producción y que faciliten la acción crediticia y asistencia técnica del Estado;
h) Alentar la formación de empresas que trabajen con métodos modernos y promuevan la inversión de capitales en la explotación de la tierra;

i) Promover el abaratamiento de la maquinaria agrícola, herramientas, abonos, fungicidas, insecticidas, pesticidas y demás medios que fomenten el desarrollo agropecuario; y

j) Coordinar los planes y programas de Reforma Agraria con el Plan General de Desarrollo Económico y Social.

TITULO I

Del Instituto Ecuatoriano de Reforma Agraria y Colonización (IERAC)

CAPITULO I

De la Organización

Art. 7.-Crease, con sede en Quito, el Instituto Ecuatoriano de Reforma Agraria y Colonización (IERAC), como organismo autónomo con personería jurídica de derecho público.

Art. 8.-La dirección y administración del IERAC estarán a cargo de los siguientes organismos:

a) El Consejo Directivo;
b) Comité Ejecutivo; y
c) La Dirección Ejecutiva.

El IERAC contará con el Departamento de Reforma Agraria, el Departamento de Colonización y los demás Departamentos y Secciones que fueren creadas por el Consejo Directivo.

Parágrafo Primero:

Del Consejo Directivo

Art. 9.-El Consejo Directivo estará integrado por los siguientes miembros:

a) El Ministro de Fomento, que lo presidirá;
b) El Ministro de Previsión Social y Trabajo o su Delegado;
c) El Ministro de Defensa Nacional o su Delegado;
d) El Director Técnico de la Junta Nacional de Planificación y Coordinación Económica;
e) El Gerente General del Banco Nacional de Fomento;
f) Dos representantes de los agricultores, elegidos directamente por las respectivas Cámaras de Agricultura de la I y II Zonas; y
g) Dos representantes de los trabajadores agrícolas, uno por la Costa y otro por la Sierra y Oriente, quienes serán auténticos trabajadores agrícolas, elegidos de acuerdo con la reglamentación que dicte el IERAC.
El Subdirector Técnico de la Junta Nacional de Planificación y Coordinación Económica y el Subteniente General del Banco Nacional de Fomento reemplazarán a sus principales.

Los suplentes de los representantes de los agricultores y de los trabajadores agrícolas se elegirán al mismo tiempo que los principales.

Los representantes comprendidos en los literales f) y g) durarán cuatro años en sus funciones y no podrán ser reelegidos.

El Director Ejecutivo del IERAC asistirá a las reuniones del Consejo con voz informativa.

El Secretario General del IERAC actuará como Secretario del Consejo.

Art. 10.- Son atribuciones y deberes del Consejo Directivo:

a) Formular y dirigir la política de reforma agraria y colonización, coordinando la acción del EIRAC con los organismos del Estado;

b) Aprobar y supervigilar la ejecución de los programas concretos elaborados por el Comité Ejecutivo;

c) Resolver todo lo concerniente a Reforma Agraria y Colonización que no sea de competencia de los demás organismos y funcionarios;

d) Rever y modificar las decisiones de los organismos inferiores y su ejecución;

e) Determinar las áreas de intervención del IERAC con fines de reforma agraria y colonización;

f) Resolver las expropiaciones permitidas por la presente Ley, con arreglo a los proyectos elaborados por el Comité Ejecutivo que hubieren sido aprobados por el Consejo;

g) Nombrar y remover con justa causa al Director Ejecutivo del IERAC y a los Directores de los Departamentos de Reforma Agraria y Colonización;

h) A propuesta del Director Ejecutivo, crear y suprimir Departamentos, y nombrar y remover, con justa causa, a sus Directores;

i) Elaborar los reglamentos para la aplicación de la presente Ley, que regirán una vez aprobados por la Función Ejecutiva;

j) Aprobar los Reglamentos Internos del IERAC, elaborados por el Comité Ejecutivo;

k) Aprobar el presupuesto anual de la Institución, a base de la proforma formulada por el Comité Ejecutivo;

l) Autorizar al Director Ejecutivo la suscripción de contratos cuya cuantía exceda de doscientos mil sucres; y

m) Los demás que le correspondan de acuerdo con la Ley y sus Reglamentos.
Parágrafo Segundo:

Del Comité Ejecutivo

Art. 11.- El Comité Ejecutivo estará integrado por el Director Ejecutivo del IERAC y los Directores de los Departamentos de Reforma Agraria y Colonización.

Art. 12.- El Director Ejecutivo y los demás miembros del Comité Ejecutivo serán profesionales y técnicos o personas especializadas que reúnan los requisitos determinados por el Reglamento, y no podrán desempeñar otro cargo ni función representativa alguna, ni ejercer su profesión libremente.

El Director Ejecutivo durará cuatro años en sus funciones y podrá ser reelegido.

Art. 13.- Son Deberes y atribuciones del Comité Ejecutivo:

a) Elaborar y ejecutar los programas de reforma agraria y colonización aprobados por el Consejo Directivo;

b) Elaborar la proforma de presupuesto anual del IERAC que será sometida a la aprobación del Consejo Directivo;

c) Sugerir al Consejo Directivo la determinación de las áreas de intervención con fines de reforma agraria y colonización;

d) Elaborar los proyectos previos a la expropiación de tierras y someterlos a la aprobación del Consejo Directivo;

e) Fijar los precios y forma de pago de las tierras que adjudique o transfiera el IERAC; y

f) Los demás que le correspondan de acuerdo con la Ley y los Reglamentos.

Parágrafo Tercero:

Del Director Ejecutivo

Art. 14- Son deberes y atribuciones del Director Ejecutivo:

a) Nombrar y remover, con justa causa, a los funcionarios y empleados del IERAC de acuerdo con la Ley y el Reglamento;

b) Organizar, dirigir y vigilar la marcha de las Dependencias del IERAC;

c) Representar legalmente al IERAC y responder del ejercicio de sus funciones de conformidad con la Ley;

d) Intervenir en la expropiación y revisión de predios rústicos para efectos de la reforma agraria, conforme a lo dispuesto en esta Ley;

e) Celebrar a nombre del IERAC, sin autorización previa del Consejo Directivo, los contratos cuya cuantía no exceda de doscientos mil sucres, con la obligación de dar cuenta a dicho Consejo;
f) Ejercer la jurisdicción coactiva para la recuadación de todos los créditos del IERAC y delegarla en los funcionarios que crea conveniente;

g) Otorgar títulos de propiedad en virtud de las adjudicaciones provisionales y definitivas de tierras que se hagan conforme a la Ley;

h) Delegar bajo su responsabilidad y mediante documento escrito, las funciones administrativas en los Directores Departamentales, o a falta de estos, en cualquier funcionario del IERAC, con excepción de las facultades contempladas en el literal d);

i) Presentar al Consejo Directivo el informe anual de las actividades del IERAC y publicarlo;

j) Resolver cualquier asunto de carácter administrativo que no sea de competencia de otros organismos a funcionarios que establece esta Ley;

k) Imponer sanciones y multas en los casos determinados en esta Ley y los reglamentos; y

l) Las demás que le correspondan de acuerdo con la Ley y Reglamentos.

Art. 15.- Por ausencia o impedimento del Director Ejecutivo le reemplazarán el Director del Departamento de Reforma Agraria o el Director del Departamento de Colonización, en su orden.

CAPITULO II

Del Patrimonio del IERAC y del Financiamiento de la Reforma Agraria

Art. 16.- Constituyen patrimonio del IERAC:

a) Las tierras baldías que por esta Ley el Estado entrega al IERAC con fines de colonización y reforma agraria;

b) Las que el IERAC adquiera con los mismos fines mediante compra, expropiación, permuta o cualquier otro título;

c) Las que por revisión pasen a poder del IERAC, de conformidad con esta Ley;

d) Los predios rústicos administrados por la Asistencia Social, tanto los nacionalizados por Decreto Legislativo de 17 de Diciembre de 1908, como los que constituyen bienes patrimoniales de las respectivas Juntas. Sin embargo, la administración y el usufructo continuarán perteneciendo a las respectivas Juntas de Asistencia Social, hasta que el IERAC disponga de los correspondientes proyectos de reasentamiento para la progresiva utilización de los predios, con fines de reforma agraria y colonización;
e) Las asignaciones que obligatoriamente constarán en el Presupuesto del Estado y que no podrán ser menores de cincuenta millones de sucres anuales;

f) El patrimonio del Instituto Nacional de Colonización y las rentas específicas asignadas a tal organismo por Decretos especiales, así como las asignaciones constantes en el Presupuesto del Estado para 1964;

g) Cincuenta millones de sucres en bonos del Estado, a veinte años plazo y 8% de interés anual, para cuya emisión se faculta al Ministerio de Finanzas. La emisión se efectuará de acuerdo con las necesidades que impongan los programas de trabajo del IERAC.

En el Presupuesto Anual del Estado constarán los recursos necesarios para el servicio de la misión de estos bonos, siendo esta, condición previa para su emisión.

Autorízase a la Comisión Nacional de Valores y a las Cajas de Previsión Social para adquirir dichos bonos; 

h) Los valores provenientes de la enajenación de tierras del IERAC; 

i) Los ingresos por los servicios pagados que preste el IERAC; 

j) El producto de las multas que se impusieren según esta Ley y los Reglamentos; y 

k) Los demás bienes y recursos que adquiera para los fines de esta Ley. El IERAC no podrá considerar como patrimonio permanente los predios rústicos que pasen a su dominio y, por consiguiente, solo podrá retenerlos el tiempo indispensable para la consecución de los fines establecidos en esta Ley. Este plazo será fijado por el Consejo Directivo y no podrá exceder 3 años.

Art. 17.- El Gobierno Nacional emitirá bonos de Reforma Agraria de la clase, plazo y tasa de interés que se indican a continuación y que serán entregados al IERAC para los fines de esta Ley:

Bonos Clase A: Con el plazo de amortización de quince años y seis por ciento de interés anual;

Bonos Clase B: Con el plazo de amortización de veinte años y cinco por ciento de interés anual, con un período de gracia de tres años; y

Bonos Clase C: Con el plazo de amortización de treinta años y el cuatro por ciento de interés anual, con un período de gracia de diez años.

Durante el período de gracia, que se entenderá incluido en el respectivo plazo, solamente se efectuará el servicio de intereses.
Art. 18.- Previamente a la emisión de bonos de reforma agraria, se suscribirán convenios especiales de fideicomiso con el Banco Central del Ecuador, señalando los recursos con que se atenderán sus servicios.

Art. 19.- Los bonos de reforma agraria emitidos de acuerdo con esta Ley serán al portador y tendrán los siguientes privilegios:
   a) Exoneración del Impuesto a la Renta y adicionales;
   b) Servirán de garantía en las operaciones agropecuarias e industriales que hagan los Bancos del Sistema de Crédito de Fomento;
   c) Servirán también como caución ante las Instituciones de Derecho Público; y
   d) Podrán ser revidados al contado y a la par por el IERAC en los casos siguientes: para el establecimiento de industrias calificadas como especiales por la Junta Nacional de Planificación y Coordinación Económica, de acuerdo con la Ley de Fomento Industrial; para la adquisición de acciones de las Empresas del Estado y para inversiones agropecuarias de alta prioridad, a juicio del IERAC.

Art. 20.- Los bonos de reforma agraria podrán ser elegibles como inversiones de las compañías de seguro y bancos privados.

Art. 21.- Los ingresos del IERAC serán depositados en el Banco Central del Ecuador, en cuentas a su orden.

Art. 22.- El IERAC podrá con la garantía del Gobierno Nacional contratar empréstitos internos o externos, para financiar los programas de reforma agraria y colonización.

Art. 23.- La Contraloría General de la Nación establecerá una Auditoría Especial para el manejo de las cuentas del IERAC.

TITULO II

Del Inventario y Registro de la Tierra

Art. 24.- El Instituto Ecuatoriano de Reforma Agraria y Colonización formará el Inventario y Registro Nacional de Tierras, con el fin de determinar la localización, cabida, formas de tenencia y situación jurídica de todas las propiedades agrícolas y de las tierras baldías aptas para la colonización. El inventario no implica reconocimiento de derechos.
Art. 25.- Todo propietario o tenedor de tierras proporcionará obligatoriamente al EIRAC los títulos, planos o croquis y demás datos que se le soliciten en relación con el Inventario y Registro Nacional de Tierras. El incumplimiento será sancionado por el IERAC con multa de cien a diez mil sucres.

Art. 26.- Todos los Organismos Gubernamentales colaborarán obligatoriamente con el IERAC en la formación del Inventario y Registro Nacional de Tierras.

Art. 27.- El EIRAC abrirá un Registro de Tierras en el que anotará las transferencias y transmisiones de dominio, los gravámenes y limitaciones que se impusieren de acuerdo con la Ley a los propiedades intervenidas por la reforma agraria y todas las transacciones de tierras que realicen, sin perjuicio de las inscripciones que corresponda hacerse en el Registro de la Propiedad.

TITULO III
De las Tierras y la Reforma Agraria

CAPITULO I
De las Expropiaciones

Art. 28.- Se considerarán tierras ociosas y, por lo tanto, sujetas a expropiación:

a) Las tierras que pudiendo serlo no fueren aprovechadas bajo ninguna explotación organizada durante 3 años consecutivos. Para este efecto se considerarán ociosas las de pastos naturales que no correspondan a una explotación organizada, con excepción de las tierras comunales, en las cuales el IERAC promoverá una eficiente y organizada explotación cooperativa, en coordinación con otros organismos especializados del Estado;

b) Las tierras laboradas por más de 3 años, por quienes no tengan vínculo contractual con el propietario, sin que este hubiera propuesto la acción judicial respectiva. Estos particulares serán suficientemente comprobados; y

c) Las tierras que permanecieren abandonadas, sin causa justificada, por más de 3 años consecutivos.

Art. 29.- Se considerarán deficiientemente explotadas, y, por lo mismo, sujetas a expropiación las tierras cuyo rendimiento sea notoriamente inferior al promedio de la zona agrícola respectiva, tomando en cuenta la capacidad productiva de la tierra.
El IERAC concederá al propietario el plazo de tres años para mejorar el rendimiento de sus tierras, y si no lo consigue, podrá ampliar el plazo o expropiarlas.

Art. 30.- Se exceptúan de lo previsto en el artículo anterior, aquellas tierras sobre las cuales su propietario hubiere presentado planes de inversión, que hubieren sido aprobados por el IERAC y por el Banco Nacional de Fomento de manera conjunta y cuya solicitud de crédito no hubiere sido atendida por insuficiencia de disponibilidades de las Entidades Oficiales de crédito encargadas de este servicio.

Art. 31.- En los casos de gran presión demográfica se podrá expropiar predios rústicos eficientemente cultivados, previo informe de la Junta Nacional de Planificación y Coordinación Económica, pero solamente en la medida que la presión demográfica lo exija.

En este caso se dará preferencia al propietario afectado para la adjudicación de tierras en áreas de colonización o de reasentamiento.

Art. 32.- En los casos de expropiación, el IERAC procurará que las tierras que queden con el propietario formen un solo cuerpo. Corresponderá al propietario la elección de las mismas.

Asimismo, procurará que las tierras expropiadas tengan acceso a los caminos, acueductos y otros servicios esenciales de que disponga la propiedad.

Art. 33.- Ninguna persona natural o jurídica podrá ser propietaria: en la Costa de más de 2.500 HAS., a las cuales podrá agregarse hasta 1.000 HAS. de sabanas y pastos naturales; y en la Sierra, de más de 800 HAS., a las que podrá agregarse hasta 1.000 HAS. de páramos o de terrenos eriales sin posibilidades de riego con aguas superficiales.

Si una persona fuere propietaria de tierras en la Costa y en la Sierra a la vez, no podrá conservar más de 2.500 HAS. en total, ni agregar a esta superficie más de 1.000 HAS. en concepto de sabanas, pastos naturales, páramos y eriales.

Art. 34.- No estarán sujetas a las limitaciones y regula-

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La propiedad rústica eficientemente explotada y destinada al suministro de la materia prima para su propia industria; y c) La empresa agropecuaria de notoria eficiencia productiva.

Art. 35.- Las tierras tropicales y subtropicales dedicadas a la explotación ganadera podrán ser objeto de un tratamiento especial en cuanto a mayor extensión, teniendo en cuenta las condiciones de la respectiva zona agrícola. El IERAC expedirá al respecto la reglamentación correspondiente.

Art. 36.- Los predios rurales afectados por esta Ley, de propiedad fiscal, municipal, de Universidades y Colegios, Bancos del Sistema de Crédito de Fomento, Juntas y Asociaciones de Beneficencia, Caja Nacional del Seguro, Caja Nacional de Riego, Compañías, Corporaciones, Asociaciones y Fundaciones de propósito no agrícola, y entidades Autónomas de derecho privado con finalidad social o pública, serán adquiridos preferentemente por el IERAC en las áreas de intervención de la Reforma Agraria.

Los predios pertenecientes a las entidades enunciadas en el inciso anterior que no estuvieren afectados por esta Ley, serán también adquiridos por el IERAC en forma gradual y de acuerdo a sus necesidades y posibilidades, mediante negociaciones directas con su propietarios, de modo que el precio pactado pueda producir una renta que compense la que percibían anteriormente.

Estas disposiciones no obstan para que las entidades en referencia puedan ser beneficiadas con herencias, legados o donaciones.

Art. 37.- Se considerarán afectados y por lo tanto sujetos a expropiación, aquellos predios cuya explotación se realize con reiterada contravención a las normas jurídicas que regulan el trabajo agrícola y la tenencia de la tierra.

CAPITULO II

De la Reversión de las Tierras

Art. 38.- Se extingue el derecho de dominio del actual propietario sobre las tierras aptas para la explotación agropecuaria que se hubieran mantenido inexplotadas por más de diez años consecutivos. Estas tierras pasarán a poder del IERAC.
Al declararse la reversión se reconocerá a favor del propietario una extensión de tierras incultas igual al área que estuviera cultivada, si lo permitieren la cabida y las circunstancias de la zona en que estuviera ubicada la propiedad, de acuerdo con el espíritu de esta Ley.

Art. 39.- Para los efectos del Artículo anterior se considerarán sujetas reversion a las tierras que hubieren sido trabajadas y cultivadas por quienes no tengan vínculos contractuales con el dueño, lo cual será suficientemente comprobado. Tales extensiones deberán adjudicarse a quienes las hayan cultivado siempre que su ocupación no haya tenido origen violento ya sea anterior o posterior a la vigencia de esta Ley.

Art. 40.- Las tierras adjudicadas respecto a las cuales el adjudicatario no hubiere cumplido las obligaciones prescritas en la Ley de Tierras Baldías y no se sujetaren a la presente Ley, revertirán al Estado, a título gratuito, pero el nuevo adjudicatario pagará al anterior las mejoras, y el IERAC asumirá las obligaciones provenientes de los derechos reales que sobre tierras se hubieren constituido.

CAPITULO III

De la Integración del Minifundio

Art. 41.- El IERAC determinará en cada zana la extensión de la unidad agrícola familiar.

Se entiende por unidad agrícola familiar la que por su extensión conforme a la naturaleza de la zona, sea suficiente para que, explotada en condiciones de razonable eficiencia, mediante el trabajo del propietario y su familia, sea capaz de suministrar ingresos adecuados para su sostenimiento, para el pago de las deudas originadas en la compra, aprovechamiento de la tierra y para el progresivo mayoramiento de la explotación, la vivienda y el nivel de vida.

El trabajo familiar puede ser complementado con el empleo de mano de obra extraña en ciertas épocas de labor agrícola, si la naturaleza de la explotación así lo requiere o con la ayuda mutua que los agricultores acostumbran prestarse para determinadas tareas.

Art. 42.- Los fraccionamientos de predios rústicos no podrán efectuarse de modo que resulten superficies inferiores a la unidad agrícola familiar establecida.
Mientras el IERAC fije la extensión de las unidades agrícolas familiares, que lo hará en el plazo de dos años, no podrá llevarse a cabo acto o contrato alguno que fraccione las propiedades en superficies inferiores a cinco hectáreas, salvo los casos expresamente autorizados por el IERAC. Si el IERAC no señale tales unidades agrícolas en el plazo indicado, podrá procederse libremente hasta cuando lo haga.

En las particiones hereditarias se tomará en cuenta lo dispuesto en los incisos anteriores. Los jueces y notarios no podrán aprobar o protocolizar, en su caso, particiones, que contravengan a lo aquí establecido.

Si, por las razones anteriores, no fuere posible realizar una partición, el Juez, después de oír al IERAC, podrá disponer la venta como cuerpo cierto o que se mantenga en la indivisión.

Se exceptúan de lo dispuesto en los incisos anteriores aquellos predios destinados a vivienda, fincas vacionales o explotaciones agropecuarias especiales que requieran extensiones menores, siempre que el IERAC así lo autorizare.

La contravención a lo dispuesto en el presente artículo causará la nulidad absoluta del acto o contrato y será sancionada con multa de cien a mil sucres que será impuesta por el IERAC al funcionario que la autorice.

Art. 43.- El IERAC planificará la integración del minifundo y organizará compañías para obtener del minifundista:
   a) La venta o permuta con miras a integrar unidades agrícolas de escala económica; y
   b) La integración cooperativista.

En el Reglamento que expedirá el IERAC se consultarán las medidas acucuadas para dar mayor incentivo a la integración del minifundo.

Art. 44.- Estarán exentos de toda clase de impuestos y timbres los actos y contratos sobre propiedades rurales destinadas a integrar minifundios.
CAPITULO IV
De la Transferencia de las Tierras del IERAC

Art. 45.— Dentro de los límites que determine el Reglamento a que se refiere el Artículo 52, el IERAC procederá a la adjudicación de las tierras que, por cualquier título pasaren a su dominio, teniendo como objetivo la formación de unidades económicas de tamaño adecuado, individuales o colectivas, que promuevan una más alta inversión y una mayor eficiencia productiva, a través de mejores técnicas y que permitan la obtención de ingresos suficientes a sus adjudicatarios.

El precio se fijará en base a la capacidad productiva de la tierra, y la forma de pago se estipulará tomando en cuenta la posibilidad económica de los adjudicatarios.

Art. 46.— La adjudicación será provisional, sujeta a las condiciones resolutorias siguientes:

a) Cultivar en un plazo de cinco años el 50% del predio si fuere baldío o revertido, y el 100% del área adjudicada cultivable en terrenos expropiados, debiendo deducirse, en este caso, la superficie de reserva prevista en los planos de adjudicación. Estos porcentajes se reducirán a la mitad en las Provincias Orientales y el Archipiélago de Galápagos;

b) Pagar el precio en los plazos y forma estipulados. En caso de incumplimiento de esta obligación, el IERAC notificará al adjudicatario, pudiendo concederle un plazo de gracia, vencido el cual, si continuare en mora, se declarará resuelto el contrato;

c) Explotar directamente el predio y radicarse en él; y
d) Cumplir las demás obligaciones constantes en el contrato de adjudicación provisional.

El adjudicatario definitivo de la propiedad así adquirida no podrá traspasar su dominio sino después de 5 años, excepto por sucesión por causa de muerte.

Art. 47.— La tierra adjudicada en forma provisional no será transferible por acto entre vivos, ni embargable, ni materia de contratos que limiten o graven el dominio, salvo, el caso de autorización expresa del IERAC.

Sin embargo, los Bancos del Sistema de Crédito de Fomento, así como la Banca Privada, podrán conceder crédito con prenda agropecuaria.
Art. 48.—Obtenida la adjudicación definitiva, la unidad agrícola familiar constituirá de pleno derecho patrimonio familiar agrícola en favor del adjudicatario. Este patrimonio solo podrá transmitirse por sucesión por causa de muerte o por contrato aprobado previamente por el IERAC.

Podrán constituirse gravámenes hipotecarios sobre dicho patrimonio, a favor de los Organismos Estatales de Crédito, pero únicamente a base del sistema de crédito supervisado, subsidiado o de capacitación. En todo caso, ese patrimonio responderá por obligaciones legítimamente contraídas antes de su constitución.

Art. 49.—Solo las tierras adjudicadas definitivamente podrán estar sujetas al pago del impuesto predial rústico.

Art. 50.—La adjudicación de tierras a grupos indígenas de asentamiento tradicional en cada zona, que las tengan en posesión y las trabajen directamente, se hará en forma gratuita y directa a su favor, cuando dichas tierras sean del Estado.

Se declara extinguida toda adjudicación anterior a la vigencia de esta Ley, con destino a dichos grupos, a través de personas o entidades intermediarias cuando aquellos no hubieren resultado beneficiados. El IERAC adjudicará las tierras a favor de dichos grupos o de sus integrantes respetando los asentamientos existentes.

Art. 51.—El IERAC, previa calificación de los programas de inversión, podrá otorgar concesiones temporales de tierra a personas naturales o jurídicas siempre que se trate de programas de explotación agropecuaria de evidente utilidad para la economía del País. En caso de incumplimiento de los programas o de las disposiciones de la presente Ley, tales concesiones caducarán, sin que los concesionarios puedan exigir indemnización alguna.

Los concesionarios responderán en todo caso por la conservación de los recursos naturales renovables, de los cuales sólo podrán aprovechar en razón de las estrictas necesidades de la empresa, con la obligación de reponerlos.

Estas concesiones estarán sujetas a la reglamentación que dicte el IERAC.
CAPITULO V

De los Adjudicatarios

Art. 52.—Las tierras serán adjudicadas, de acuerdo con el Reglamento que elaborará el IERAC, a:

1) Agricultores minifundistas que acepten integrar su predio en una organización cooperativa, cambiando o vendiendo el mismo con fines de integración y aceptando otra localización en unidades mayores;

2) Quienes, careciendo de tierra, se obliguen a trabajarla directamente.

Art. 53.—El IERAC dará preferencia en las adjudicaciones a los campesinos tenedores de tierras en precario sean arrendatarios, aparceros, sitijeros, arrimados, colonos, sembradores, finqueros y otros similares residentes en las zonas intervenidas.

Art. 54.—Las adjudicaciones serán individuales, aún cuando se trate de miembros de cooperativas o de otras entidades agrícolas. Sin embargo, el IERAC, en casos especiales, podrá hacer adjudicaciones colectivas, de acuerdo con sus reglamentos, debiendo regir para cada miembro las obligaciones establecidas en el Artículo 46.

En el caso de cooperativas de producción agropecuaria, se adjudicarán por lo menos extensiones equivalentes a tantas unidades agrícolas familiares cuantos sean los miembros de la cooperativa.

Art. 55.—El IERAC proporcionará asistencia técnica para la formación de cooperativas agropecuarias y para que las comunas y colonias actualmente existentes se transformen en cooperativas de producción agropecuaria.

Para la aprobación por parte del Ministerio de Previsión Social de los Estatutos de las cooperativas agropecuarias, deberá preceder informe favorable del IERAC, respecto a sus integrantes, planes y recursos. El IERAC tendrá también a su cargo la fiscalización del funcionamiento de las antedichas cooperativas sin perjuicio de las atribuciones que correspondan al Ministerio de Previsión Social y a la Dirección Nacional de Cooperativas.

Art. 56.—No podrán ser beneficiarios en los programas de reasentamiento quienes integran cooperativas, colonias o corporaciones agrícolas, o aquellos que con su persona o capital formen parte de entidades o personas jurídicas propietarias
de predios rústicos o posean tierras en cantidad suficiente, cuya extensión sobrepase a la unidad agrícola familiar.

Art. 57.—Podrá adjudicarse tierras a las Compañías de finalidad agrícola, cuyas acciones sean nominativas y que, estando integradas por socios que no fueren propietarios de tierras, previo contrato, celebrado con el IERAC se obliguen a explotar intensivamente la totalidad del área adjudicada.

La transferencia de las acciones nominativas, para el caso del inciso anterior, no surtirá efecto sin la inscripción en el correspondiente Registro del IERAC.

En el respectivo contrato se establecerá el plazo dentro del cual debe iniciarse la explotación, la superficie cultivable que debe ser explotada al finalizar cada período anual, y la cuantía de las inversiones a realizarse.

Art. 58.—Las adjudicaciones para explotaciones forestales requerirán informe previo favorable de la Dirección General de Fomento Forestal del Ministerio de Fomento.

Art. 59.—Las adjudicaciones de tierras a extranjeros en las zonas de frontera y en las áreas contiguas a las playas del mar requerirán informe previo favorable del Estado Mayor General de las Fuerzas Armadas, que podrá también otorgar autorización para vender o arrendar dichas tierras a extranjeros.
APPENDIX B

Jacques Chonchol in his Eight Fundamental Conditions of Agrarian Reform in Latin America states:

One. The first condition may be spelled out as follows: agrarian reform must be a massive, rapid and drastic process of redistribution of rights over land and water. By this we mean that agrarian reform and colonization must not be confused. These are two very different things and each one of them has its own objectives and characteristics. A process of colonization is generally carried out within an institutional framework that does not change or only does so very slightly. Neither does it have a time limit, and one of its characteristics, to the degree that it is an organized colonization at all, is that it is possible to select the people who will be beneficiaries by a number of already established procedures. Colonization no doubt has its advantages, but its fundamental defect is that it generally benefits very few people. Although in qualitative terms it is often an ideal procedure, in quantitative terms it implies favoring very few peasants. And it does not solve, or only solves on a very long term, the fundamental problem, that of the relations of the peasant masses to the land.

There is no doubt that the methods of colonization cannot be those of agrarian reform. This is so because, among other things, when agrarian reform is involved it is necessary that many thousands of peasant families take part, and thus it is not possible to carefully select a few peasants and settle them in all comfort. By using this system, only the problems of this small group of peasants will be solved, but not the general problem of the relations between man and land.

In other words, when we think of agrarian reform we must start from the idea that it is not possible to exhaustively select the beneficiaries, and that it is necessary to act with the people who are in a certain place, with their virtues and defects, with their way of life, their knowledge and their ignorance. It is important to keep this in mind, because a certain proportion of the new peasant beneficiaries will probably fail as entrepreneurs. Because some of these new entrepreneurs are going to fail does not mean that it will be unnecessary to carry out agrarian reform. But it will be
necessary to caution against too rigid an institutional link between the beneficiaries and the land, so that a natural selection may take place later which will allow those who fail to be eliminated. It is important to keep this in mind, because in land reform as in any economic, social and political change, we will find that as new opportunities arise for a mass of people who did not enjoy them before, some of the beneficiaries will be a success and others not. The problem is, then, to find an institutional, legal and practical formula which will allow others to replace those who do not succeed in a certain activity.

We have here, then, the criteria which fundamentally distinguish an agrarian reform process from a process of colonization, and it is that, in the case of reform, it is necessary to work with thousands of peasants in a relatively short time, with all the administrative and human difficulties that this implies. To act in a relatively short time means, in our opinion, a period of no longer than three to five years. This is important, because a transformation such as an agrarian reform, which implies so many changes in agricultural economy and the functioning of rural society, tends to create, during its very process, instability, insecurity, and unrest. This is inevitable. Consequently, the logical thing is to overcome as quickly as possible this period of instability because there is no doubt that as a result, during the beginning phase, the productive process of agriculture in the country may be affected.

Before passing on to the next point, it will be useful to point out that there generally exists an extraordinary underestimation of the real capabilities of the peasants. This has made many people of a conservative mentality pretend that no changes are possible without first educating the people. Once the people have been educated, so the argument goes, it is then possible to carry out the desired institutional changes. This is a fallacy, in our opinion, because the education of the peasant masses in Latin America means nothing if it is not accompanied simultaneously by structural changes which will give them the opportunities they lack at present. Education without structural changes will only waste resources and produce what educators call "illiterates through lack of use," that is, those people who have been taught to read and write but who, because they do not have sufficient opportunities to practice their skills, given the conditions of the environment in which they live, will quickly forget what they have learned.
In general the peasants' capability for overcoming their condition is underestimated, and it seems to us that as new opportunities are presented to them, the results are going to be much more favorable than people imagine, notwithstanding all the transitory difficulties that are to be expected.

It is in these terms then that we have to think about a process of agrarian reform which, I repeat, is not colonization and cannot be conceived of in terms of the methods employed in colonization. This is the first of the eight fundamental conditions for agrarian reform which, no matter what the specific reality of our countries be, must be taken into account.

Two. The second fundamental condition for agrarian reform in Latin America can be defined as the need to mobilize the political forces and the whole community, in an active and dynamic way, in order to permit agrarian reform to be carried out within a more or less institutional framework. But this framework will have to be changed to adapt to the new situation.

It is necessary to create a consciousness among the popular masses and the political groups which represent them, about the transcendental importance of agrarian reform. And this must be clearly understood, because in the final analysis agrarian reform implies a substantial change in the political power structure of the majority of our countries. If, under the name of agrarian reform, it is only intended to carry out the least possible number of changes and to affect only slightly the powerful dominant interests, then of course the problem would not be very far-reaching. But to the degree that the process of agrarian reform is drastic and substantially affects the land and water resources, the groups thus affected in their interests will no doubt develop strong opposition to it. In the face of this situation, there are only two alternatives: either a regime of naked power is established, or else, if land reform is to be carried out within a democratic system, it has to have such political support that the affected minorities will be in no condition to oppose it. In other words, a true agrarian reform, which is to be carried out within a democratic system, has to have the support of a clear-cut, organized political majority which will firmly back up those who are carrying it out. In the last analysis agrarian reform is not a technical process, but basically a political process. The experts will no doubt have to play a very important role in agrarian reform, which consists in pointing out the economic and social implications of the various measures to be adopted and in recommending the technically most advisable courses
of action for its success. But if we are objective, we have to recognize that nowhere in the world have successful agrarian reforms been carried out by technical experts. They have begun when certain favorable political conditions were present and when certain politicians made the decision to carry them out.

In Latin America, as regards the problem of the mobilization of political forces in order to carry out agrarian reform, there exists a fundamental factor which should not be neglected. This is the relationship of the political groups who want to carry out the reform to armies of their respective countries. The problem does not present itself in those Latin American countries in which the army does not constitute a political force of the highest importance. But there is no doubt that this is not the case in most of our countries, where the army represents a political element which supports certain interests. Any process of social change, whether it is called agrarian reform or anything else, which affects the interests of the groups allied with the army, will not be allowed to take place, unless one of the two following conditions occurs: either the army is suppressed or else it is neutralized by winning over at least a part of it for the social changes which are considered essential.

In this respect it is necessary to be very clear. The best intentions of political leaders for betterment and social change can be annulled by an army which supports or is allied to the small dominant minorities, if these leaders do not adopt an adequate strategy with respect to the army.

Three. If it is desired to carry out a radical and drastic land reform, it is necessary to limit to a minimum the payment of indemnification for the land.

The reasons for this statement are various. First, the market price of agricultural land in Latin America often has very little to do with its productivity, within the kind of economy in which it finds itself. This is due to reasons of speculation and prestige which have often raised the value of land well above its real economic profitability.

An example of this is given by Rene Dumont in his book, Lands Alive, in which some of the first changes are devoted to an analysis of the agricultural problems of several Latin American countries. He points out, for example, that in the valley of Bogotá an acre of land was more expensive than in Normandy, where surely some of the most fertile lands of Europe are to be found. This is due to a very simple fact, which is that in our countries the
land has not only been the object of agricultural commerce, but also of commercial speculation. Investment in land has been used as a defense against inflation, as a means to evade taxes, as a way to keep speculative gains won in commercial activities, as an expenditure for social prestige, etc. This has raised the price of land to such a high level that it often bears no relation to its economic productivity. Consequently, it is not desirable to pay an indemnification for the land at the going commercial rates.

But there are also other reasons which require a reduction to the very minimum in the payment of indemnification for the land. One of them is that unless the economy is very well organized and there exist very effective controls, it is quite probable that the greater part of the indemnification would be changed into foreign currency and leave the country. Naturally, it would be absurd for the community to make great sacrifices and to run the risk of increasing pressures on its balance of payments, in order to compensate people who are going to take the money out of the country. In addition, the commercial value is frequently four or five times higher than the fiscal value on which taxes on the land have been paid.

Finally, perhaps the most important reason is that if the land were to be paid for at this value, most of the Latin American countries would lack the necessary resources. For example, we had the visit last year of Professor Bandini who made a very interesting analysis of the Italian agrarian reforms. His analysis showed that the reform, which in ten years affected about 800,000 hectares, and which seems to have paid relatively modern amounts for the land, cost 1,100 million dollars, because it was necessary to carry out numerous complimentary investments. I don't think many Latin American countries can afford to pay such amounts, or even come close to them, for an agrarian reform process which will surely have to affect a much greater number of hectares. Furthermore, we have to consider that very often in our countries, and more so than in Italy, it will be necessary to spend important amounts for complementary investments, beyond and above the redistribution of land, in order for agrarian reform to be a success. These investments are fundamentally of three types: in social capital, which includes roads, housing, schools, experimental centers, training of teachers and advisers, electric power, etc.; in fixed capital investments, which include irrigation, drainage, fences, warehouses, means of transportation, plantations, etc.; and in operating capital, which includes fertilizers, pesticides, seeds, etc.
Payment for the land is not included in any of these three groups, because it is not an investment but simply a "transfer payment" which does not create new wealth.

When carrying out agrarian reform we have to make very important investments in social capital and in fixed capital, in view of the fact that in rural Latin America there exists a disequilibrium between the value of the land and the value of what is invested on the land. Furthermore, we need important resources to provide operating capital for the reform beneficiaries, a large number of whom have little, or none at all. There is also the problem that during the first few years a part of this operating capital will be provided as credit, and will not be recoverable. This is so, among other reasons, because the cost of learning, to the peasants, will surely have to be paid for.

There are thus a great many expenditures to carry out in real investments, and the more we devote the resources of agrarian reform to pay for the land, the less capital will remain for real investments. In the last analysis, leaving aside all other reasons, we find that there is a problem of economic incompatibility between paying much for the land and carrying out agrarian reform. Each country will have to solve this problem according to its ideology, its institutional system and its prevailing political ideas.

Four. The fourth fundamental condition of agrarian reform in Latin America is the need to find a system of investments which is economical. We must not wish to carry out luxury investments by which the peasant is given a completely finished house of good quality, and a fenced-in plot of land ready for sowing. Under such a scheme, only a few peasants would benefit and progress would be very slow. For the great majority of the peasant masses there would be inadequate resources for installing such facilities. To try to do things too beautifully has no meaning in an agrarian reform, except to impress visitors. The majority of the peasants who will benefit from agrarian reform have lived in miserable huts, and they do not ask to be suddenly given a marvelous home which they would surely spoil in a short time.

It is necessary to think about taking advantage of the whole investment process and, as we have pointed out previously, of the manpower of the peasant beneficiaries. Many of them will be occupied a good part of the year with
their crops and other directly productive activities. But because of the nature of agricultural work itself, they will still have many free days. These days have to be used by investing their own labor on their farms, in building their houses and in other investments which will be useful in increasing the productive capacity on their farms. This requires, then, an effort of organization and help to the peasants similar to what is being done in programs of self-help in housebuilding.

Five. The fifth condition refers to the fact that agrarian reform must affect both the land and the water. We all know that in many areas of our countries water for irrigation is a much scarcer resource than agricultural land, and that it is virtually impossible to practice agriculture without water. The available water must be put to the most efficient use for irrigation. We must also take into account that there are a number of other uses for water employed in agriculture, such as hydroelectric power projects, water needs for industrial purposes, water needs for direct consumption in cities and towns, etc. These uses, although occasionally complementary to irrigation, generally compete with it.

In the Latin American countries we generally have institutional systems of water use which lead to very inefficient usage. This is particularly true regarding water for irrigation, whether this comes from underground sources or rivers. And even though the constitutions generally establish that water is a national wealth for public use, in practice most agriculturists act as though water were a private asset over which those who own land can exercise the power of use and abuse.

Consequently, given the fact that water is such a scarce factor and at the same time so vital for the life of the community, its use must be strictly regulated. And in the same fashion as electric energy, drinking water and water for industrial uses are sold, it seems fundamental to us to find a system whereby water for irrigation can be sold. But, of course, certain minimum rights of the different farmers have to be respected. Water use should also be planned through irrigation districts, composed of representatives of the state and the farmers.

Six. The sixth condition of agrarian reform in Latin America may be stated as follows: the problem of the land cannot be solved by standard, dogmatic formulas
which come from various ideologies. There are different situations, different aspirations, different degrees of pressure of the peasant masses on the land, which require a careful analysis of every concrete reality. Nowhere can the land problem be solved adequately on the basis of only one formula, and it is most convenient to combine various formulas. Determining factors can be divided into three large groups:

1. Technical factors:
   (a) Natural conditions
   (b) Types of agriculture
   (c) Development of technology
   (d) Entrepreneurial capacity
   (e) Labor capacity

2. Sociopolitical and institutional factors:
   (a) Objectives sought by the agrarian reform
   (b) Ideology of those who carry out agrarian reform
   (c) Demographic pressure on land resources and population growth
   (d) Rule of urbanization process
   (e) Cultural, sociological and psychological realities of peasant groups
   (f) Institutional and legal history and traditions
   (g) Internal and external political conditions
   (h) Administrative ability of the state
   (i) Social consciousness about the problem

3. Economic factors:
   (a) Available capital
   (b) Markets
   (c) Quality of communications
   (d) Rate of development of the nonagricultural sectors of the economy and their capacity to absorb surplus agricultural labor
   (e) General rate of development
   (f) Relative importance of agriculture

All of these factors have to be considered not only in static terms, considering the present situation, but also in dynamic terms. Clearly, some of them are in reality much more important than others in the final decisions which are taken about formulas for its solution. Normally, the most important factors are the ideology of those who carry out agrarian reform, the social consciousness about the problem.
and demographic pressure. There is no doubt that to the degree that we can rationalize the process of agrarian reform, we will have to think about all of the items mentioned, both in terms of present reality and in terms of its probable evolution within the next years. We will thus have to think of a series of realistic formulas to be applied in each country.

In some cases, given the great demographic pressure and lack of occupational opportunities outside of agriculture, a certain degree of minifundism will be inevitable. In this case it will be necessary to try to diminish the negative effects of the exceedingly small size of properties, through their adequate cooperative organization. In other cases, especially on land near the cities, where more or less intensive farming can be carried out and where the peasantry possesses a certain entrepreneurial ability, the best solution might be family-sized farms. In still other cases it will be necessary to maintain the structure of the large enterprise, which can be done with capitalistic, socialist or communal formulas, and by combining in various degrees individual with collective farming.

Finally we wish to point out that the example of Israel seems to be extraordinarily interesting in this respect. Despite all the logical differences that exist between the situation in that country and in ours, it is an example which is worth studying, because it is perhaps the only country today where a number of complementary formulas have been employed in the solution of the land problem. The same plurality in the conception of solutions must be our guide in this respect.

Seven. The major share of responsibility of executing the agrarian reform will have to be borne by the government. There exists, however, a certain myth as regards government action. Many people think that the government acts as a unit and very often the distinction is made between private activity on the one hand, in which many groups or individuals act separately, and government activity on the other. But if we look at the reality of our countries we see that, contrary to what the unitary image reflects, our governments in practice rarely act as if they were a unit, and indeed one of the more serious problems from the point of view of the organization and efficacy of action, is the coordination of the activities of the various organs of government.
For the success of an agrarian reform process it is necessary to act simultaneously and complementarily in various fields: land has to be redistributed among the peasant beneficiaries; they have to be organized and given credit in order to carry out various investments and to operate the new enterprises that are created; they have to receive the timely supply of various productive factors; they have to receive technical training and education; their crops have to be bought at prices that will compensate them for their efforts; markets and cooperatives have to be organized; the produce has to be bought and distributed to urban centers, etc. All these functions are complementary and if one of them does not work well or fails, a large part of what is being done in the other ones will be frustrated.

In our government departments the different organs usually act for themselves, without worrying much about what the others are doing. Thus, the more government departments which take part in the execution of the various functions of agrarian reform, the less coordination there will probably be and the less effective will be the action.

The best formula for execution, then, is that the least number of possible organs be involved in the four basic functions of every agrarian reform: redistribution of the land, credit and supply of the productive factors, technical assistance to the peasantry, and organization of the market. These four functions must be concentrated, in our opinion, under one single responsibility, under a single organism (at most, in the hands of two), because if this is not so, it will be very difficult to coordinate the action in practice.

The concentration of functions under a single responsibility can, however, present a serious disadvantage, which is excessive centralization. The problem is how to combine this need to concentrate functions with the effectiveness of action, and I believe there is no other alternative than the regional decentralization of the executive organ of the reform.

The most adequate operational formula would be the following: concentration of the principal complementary functions under a single responsibility, a single organism and its regional decentralization on the basis of local chiefs or councils which should have great autonomy and power for action in the solution of the thousands of specific problems which arise in every case. Of course the general guidelines and over-all policy of the reform
has to be discussed and approved at a higher level; but, from the point of view of its execution, from the point of view of concrete action, it is essential that those who are responsible for this or that region be given autonomy and the authority to take decisions in the field.

Eight. The last condition for agrarian reform in Latin America is related to the need for the reform to be integrated with a general development plan of the agricultural sector. This seems to be obvious; land redistribution is not carried out simply to let people starve afterwards or to let them produce things which are not profitable for the new entrepreneurs and useful for the country. This production must be planned, the same way as the use of the resources which are needed to carry it out.

Plans for agricultural development, which must be the indispensable complement to processes of agrarian reform, have to establish, in the first place, certain production objectives, not only for one year but for various years. These objectives are fixed according to the probable increase of the population, the growth of income and rise in exports.

But a plan which only fixes production objectives, no matter how perfectly they have been drawn up, is not very useful. It is also necessary to set down the procedures whereby these objectives are to be attained. In this respect, it will be fundamental to combine increases in cultivated areas or heads of cattle, with increases in yields, with particular emphasis on the latter. Furthermore, the supply of credit and of the various factors of production will have to be organized, and the needs of different kinds of resources will have to be quantified, such as land, labor, equipment, fertilizers, pesticides, concentrated foods and forage crops, seeds, etc. These and many other aspects, which range from the formulation of production objectives to the quantification and mobilization of the necessary resources, are the essential complement to the processes of agrarian reform which must take place in Latin America.

Within this planning for agricultural development in relation to agrarian reform, there are two very important aspects which are worth mentioning. The first refers to something I have observed in some countries of Latin America which have initiated
processes of agrarian reform. As the majority of the beneficiaries are poor peasants who use backward techniques, the easy solution that has been found is that these peasants continue to grow, on the new units on which they grew before, when they had much less land and theoretically much less help. At the same time, more valuable crops or cattleraising is left to other agriculturists who have more resources and capacity. This attitude, though understandable at the beginning, tends in the long run to be detrimental to the peasants who have benefited from agrarian reform. Indeed, it leads to a dual agriculture; on the one hand, production for subsistence or of low-value crops for the urban populations remains in the hands of the peasants benefited by agrarian reform, and on the other, cash-crop agriculture or much more profitable farm units remain in the hands of middle-sized or large farmers.

This only produces, in the end, an agriculture for the poor, to which the agrarian reform beneficiaries will be condemned, and an agriculture of the rich, reserved for farmers with much greater resources. As credit is channeled along these criteria, and the same thing happens with technical assistance, it is very difficult for the agrarian reform beneficiaries to escape from the agricultural sector of low incomes and poor yields. This often also leads to the uneconomical use of fertile lands which have been granted to these peasants and which would deserve use for more efficient ends.

The other important problem that must be mentioned is the need to find permanent productive jobs for the land reform beneficiaries on the land they live on. The majority of these peasants do not own lands or capital; they are people who live from day to day, and who in order to live need to obtain the equivalent of a wage, either by selling their labor or by applying it on their own land. Consequently, to the degree that the new farm units which are set up will not be able to provide permanent employment during the greater part of the year to the peasant beneficiaries, these will be forced to sell their labor as wage workers to neighboring enterprises, in order to make ends meet. The only thing that will have been achieved under these circumstances is the creation of proletarians with a piece of land who will be able to survive only by selling their labor. From the social point of view, an agrarian reform leading only to this, would be a complete failure. Thus, even more important than a
property title to the land is the possibility that the peasant find productive employment during the whole year on the land which he will receive.¹

## BASIC DATA

<table>
<thead>
<tr>
<th>Population density per square mile of agricultural land</th>
<th>(1976)</th>
<th>790</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per capita GNP</td>
<td>(1976)</td>
<td>660</td>
</tr>
<tr>
<td>Average annual per capita real GDP growth rate</td>
<td>(1970-75)</td>
<td>6.1%</td>
</tr>
<tr>
<td>Average annual rate of inflation</td>
<td>(1950-1970)</td>
<td>1.5%</td>
</tr>
</tbody>
</table>
| % national income received by low 40% of population      | (1970) | 3.0%

## AGRICULTURE

| Average annual per capita agricultural production growth rate | (1955-71) | -0.1%
| Agricultural production as % of GDP                        | (1970) | 22%
| Population density per square mile of agricultural land     | (1976) | 290 |
| % land owned (%)                                           | 1 by top 10% | 0 by top 10% |

| Major crops: % of area land                               | Subsistence potatoes, plantains | 16  |
|                                                        | Cash rice | 0  |
| Subsistence rice                                         | 0  |

| Major agricultural exports: % of GDP                       | (1970) | 77%
| Major agricultural imports: % of GDP                       | (1970) | 77%

## CENTRAL GOVERNMENT FINANCES

| Total domestic revenue (In millions, U.S.)                  | (1974) | 559 |
| Total expenditure (In millions, U.S.)                      | (1974) | 767 |
| Domestic (or surplus) (In millions, U.S.)                  | (1974) | 67 |
| Defense expenditure, as % of total expenditures           | (1974) | 47.1%
| as % of GNP                                               | (1974) | 11.5%
| Official international sources, gross inflows, end of period: | (1975) | 186 |
| Equivalent in 1970S dinar of imports (1977) | 116 |

## FOREIGN TRADE

| Major export: (1977) petroleum, coffee, bananas            | (1975) | 352 |
| Exports to U.S. (In millions, U.S. dollars)                | (1975) | 76 |
| Major import: (1975) machinery, wheat, petroleum products | (1975) | 352 |
| Imports from U.S. (In millions, U.S. dollars)              | (1975) | 76 |

## SOCIAL DATA

| Population growth rate: (1967-1971)                         | 3.0%
| % population in urban area                                  | (1969) | 130%
| Total births per 1,000 population                           | (1975) | 36 |
| % married women aged 15-49 yrs using contraceptives         | (1977) | 9%
| % of the population (1975) in age groups: (1975) | 55.0 (1970) | 34.0 (1970) |
| Infant deaths during last year of life per 1,000 infants    | (1974) | 27 |
| People per physician                                        | (1973) | 2,800 |
| Major causes of death (1975) pregnancy, diarrhea, enteritis | (1974) | 93%
| Major diseases: influenza, malaria                          | (1974) | 93%
| Per capita calorie supply as % of requirement              | (1974) | 93%
| % of population with reasonable access to clean water supply | (1970) | 33%
| Total school enrollment as % of population                  | (1974) | 93%

## APPENDIX C

### APPENDIX C

#### ECONOMIC AND SOCIAL DATA

**ECUADOR**

<table>
<thead>
<tr>
<th><strong>DATA</strong></th>
<th><strong>1971</strong></th>
<th><strong>1972</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (in thousands)</td>
<td>7,802</td>
<td>8,100</td>
</tr>
<tr>
<td>Per capita GNP</td>
<td>650</td>
<td>660</td>
</tr>
<tr>
<td>Average annual per capita GDP growth rate</td>
<td>6.1%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Average annual rate of inflation</td>
<td>18.0% (1970-74)</td>
<td>17.0% (1975)</td>
</tr>
<tr>
<td>Adult literacy rate</td>
<td>60%</td>
<td>61%</td>
</tr>
<tr>
<td>Population density per square mile of agricultural land</td>
<td>270</td>
<td>290</td>
</tr>
<tr>
<td>Major crops (in 1975)</td>
<td>Subsistence: potatoes, plantains; Cash: rice</td>
<td></td>
</tr>
<tr>
<td>Major agricultural exports</td>
<td>1977: cocoa, coffee, bananas</td>
<td></td>
</tr>
<tr>
<td>Major agricultural imports</td>
<td>1977: wheat, soy oil, grease, tobacco</td>
<td></td>
</tr>
</tbody>
</table>

**AGRICULTURE**

<table>
<thead>
<tr>
<th><strong>INDEX</strong></th>
<th><strong>1972</strong></th>
<th><strong>1976</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural production at % of GDP</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Population density per square mile of agricultural land</td>
<td>290</td>
<td>200</td>
</tr>
<tr>
<td>% land owned: by: top 10%, bottom 10%, middle 80%</td>
<td>5%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**CENTRAL GOVERNMENT FINANCES**

<table>
<thead>
<tr>
<th><strong>REVENUE</strong></th>
<th><strong>1971</strong></th>
<th><strong>1976</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenue (in millions, US$)</td>
<td>659</td>
<td>751</td>
</tr>
<tr>
<td>Total expenditure (in millions, US$)</td>
<td>659</td>
<td>751</td>
</tr>
</tbody>
</table>

**FOREIGN TRADE**

<table>
<thead>
<tr>
<th><strong>GOODS</strong></th>
<th><strong>1976</strong></th>
<th><strong>1977</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Major exports</td>
<td>Petroleum, coffee, bananas</td>
<td></td>
</tr>
<tr>
<td>Major imports</td>
<td>Machinery, wheat, petroleum products</td>
<td></td>
</tr>
</tbody>
</table>

**SOCIAL DATA**

<table>
<thead>
<tr>
<th><strong>INDEX</strong></th>
<th><strong>1971</strong></th>
<th><strong>1976</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population growth rate</td>
<td>3.0%</td>
<td>3.4%</td>
</tr>
<tr>
<td>% population in rural area</td>
<td>38%</td>
<td>35%</td>
</tr>
<tr>
<td>Total births per 1,000 population</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>% married women aged 15-49 yea. using contraception</td>
<td>43%</td>
<td>41%</td>
</tr>
<tr>
<td>% of the population (15-29) in age group: 14-19 yea.</td>
<td>25%</td>
<td>26%</td>
</tr>
<tr>
<td>Infant deaths during first year of life per 1,000 infants</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>People per physician</td>
<td>3,300</td>
<td>3,400</td>
</tr>
<tr>
<td>% major cause of death (1975) pregnancy disorders, enteritis</td>
<td>48%</td>
<td>45%</td>
</tr>
<tr>
<td>Major diseases (1975) influenza, malaria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per capita tobacco supply at % of requirements</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>% of population with reasonable access to clean water supply</td>
<td>70%</td>
<td>70%</td>
</tr>
</tbody>
</table>

**ENERGY**

<table>
<thead>
<tr>
<th><strong>SOURCE</strong></th>
<th><strong>1971</strong></th>
<th><strong>1976</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy production as % of consumption</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>

VITA

The author, Pedro Carrasco, was born on November 7, 1916, in Canton Colta, Ecuador. He has studied at the Central University of Quito, Ecuador, and continued his education at the University of Chile, Santiago, where he received a degree in Agricultural Engineering. He returned to Ecuador to serve in the Economic and Social Department of the Ministry of Agriculture in Quito. He enrolled at Louisiana State University in 1969, where he received a Master's Degree in Latin American Studies.

He is presently enrolled in the Graduate School, working toward a Doctor of Philosophy degree in Latin American Studies.
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Candidate: Pedro Vicente Carrasco

Major Field: Latin American Studies

Title of Thesis: A Case Study of Rural Development in Ecuador: An Analysis and Assessment of the Quero-Huachi-Pelileo Project

Approved:

[Signature]
Major Professor and Chairman

[Signature]
Dean of the Graduate School

EXAMINING COMMITTEE:

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[Name]

[Signature]
[Name]

[Signature]
[Name]

[Signature]
[Name]

[Signature]
[Name]

Date of Examination:

July 19, 1979

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