

SOCIO-ECONOMIC COMPARISONS OF
FOUR ETHNIC GROUPS IN THE
STATE OF SAO PAULO, BRAZIL

DISSERTATION

Presented in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy
in the Graduate School of The Ohio State University

By

Hagop Karekin Kayayan, B.S., M.S.

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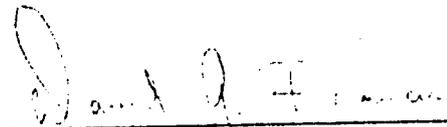
The Ohio State University

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Reading Committee:

Dr. Bruce W. Marion
Dr. J Robert Warmbrod

Approved By



Adviser

Department of Agricultural
Economics and Rural Sociology

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Professor David G. Francis, Adviser

Contacts between ethnic groups are occurring at an increasing rate throughout the world. Brazil is populated with a large variety of ethnic groups. The present study is concerned with the socio-economic comparison of farmers of four ethnic backgrounds (Brazilians, Italians, Japanese, and Sirio-Lebanese) in the State of Sao Paulo, Brazil.

The comparative study of ethnic groups has been approached theoretically from three major standpoints: (1) social psychology; (2) human ecology; and (3) conflict theory.

The social psychological framework is essentially concerned with the interrelationship between individual and societal variables. It emphasizes the impact of social processes at the individual level.

The human ecology school of thought deals with the interaction of

society and its segments with their ecological environment. Intergroup relations with respect to the use of the ecological environment are characterized by processes of competition, invasion, succession, segregation and accommodation.

Conflict theory deals with societal phenomena at the structural level under the premise that social structure and social change are based on self generated continuous processes of conflict relations.

The historical background of the various ethnic groups in their country of origin and Brazil was reviewed.

Italians, and subsequently Japanese, farmers came to Brazil starting in the second half of the nineteenth century as farm workers in the expanding coffee plantations. The Sirio-Lebanese immigrants arrived in Brazil as petty merchants. Italian and Japanese farm workers acquired land at times of major coffee crises when large plantations desintegrated. Financially, successful Sirio-Lebanese merchants and professionals acquired agricultural land for purposes of investment diversification and tax relief.

This study was conducted in eight municipios near the city of Riberao Preto in the northwestern part of the State of Sao Paulo.

Brazilian, Italian, and Japanese farmers were compared with regard to a number of economic variables. Analyses of variance and Scheffe's post-hoc test indicated a number of significant differences in economic indicators at the farm level among ethnic groups growing annual crops. Per unit of land Japanese farmers spent significantly more than others on fertilizers and interest per unit of land operated, Japanese farmers also had a significantly higher value of crops.

Analyses of variance and chi-square tests, and their respective post-hoc tests, indicated a number of significant differences among the four ethnic groups (N = 343) in individual and family level sociological variables. In addition, significant differences were found among ethnic groups in level of knowledge about fertilizers, attitudes toward work, and propensity to have economic relations with relatives.

The economic and sociological analyses suggest an interrelatedness of the two areas of behavior.

The present study indicates that ethnic background is an important interviewing variable in the study of economic and sociological behavior. Differences among ethnic groups should be taken into consideration in the formulation of local and national agricultural policies. Stronger national solidarity can be achieved by further understanding the differences among ethnic groups.

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VITA

May 16, 1943 Born - Beirut, Lebanon

June 1962 Baccalaureat II, Lycee Francais de Beyrouth

1962-1965 B.S. in Agriculture and Ingenieur Agricole,
American University of Beirut, Beirut, Lebanon

Summer 1965 International Exchange Student, Ecole Superieure
d'Horticulture de Versailles, France

1965-1968 M.S. Rural Sociology, American University of
Beirut, Beirut, Lebanon

1965-1967 Graduate Assistant, Rural Sociology, American
University of Beirut, Beirut, Lebanon

1967-1970 Research Associate, United Nations Economic and
Social Office in Beirut, Lebanon

1970-1973 Ph.D. Rural Sociology, The Ohio State University,
Columbus, Ohio

1970-1971 Research Assistant, The Ohio State University,
Columbus, Ohio

1971-1973 Research Associate, The Ohio State University,
Piracicaba, Brazil, and Columbus, Ohio

Publications

With D. G. Francis

"Mechanization and the Division of Labor: A Study of Farm
Families in the Beqa's Plain of Lebanon". To appear in Inter-
national Journal of Comparative Sociology.

Fields of Study

Major Fields: Rural Sociology, Methodology

Minor Fields: Sociological Theory, Urban Sociology, Sociology of the
Family

DEDICATION

This work is dedicated to my parents, Karekin and Mariam Kayayan, who taught me to understand and love people.

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Chapter I

INTRODUCTION

International migration has occurred during most periods of recorded history. Such movements of population were either forced or voluntary. Wars, famines, enslavement, deportation, prejudice, and other man-made or natural disasters have forced various groups of people to move to new locations. Voluntary movements of groups of people have also occurred as a result of the discovery of new lands and the knowledge of better living conditions in different countries. (Wagley and Harris, 1958: 237-295)

Since the discovery and reduction in cost of mass transportation during the nineteenth century, the movement of population to new regions has intensified. Some of these movements were planned while others occurred spontaneously and without advance preparation in the area left or in that of destination. Among other major events, the two world wars resulted in the massive relocation of various nationality and ethnic background groups in Europe. North America, South America, and Australia have been major poles of attraction to European and Asian groups.

Such international movements of population are potential sources of conflict, cooperation, mutual avoidance, and symbiotic relations.

Purpose of the Study

This study is concerned with the comparison of various ethnic groups in Brazil in terms of their economic and sociological behavior. Brazil has been a country of colonization since its discovery by Europeans in the sixteenth century. At present, its native population of Indians is insignificant relative to the total population of the country (Wagley and Harris, 1958: 21-47). A number of nationality background groups have settled in Brazil at various times. These include Portuguese, African, Italian, Spanish, German, Japanese, Sirio-Lebanese, and Eastern European settlers.¹ This study will examine four major nationality background groups engaged in farming in rural Brazil, i.e., non-Indian Brazilians, Italians, Japanese, and Sirio-Lebanese. These groups will be compared and contrasted as to their family characteristics, attitudes toward work, level of education, technological modernization, land ownership, and economic decision making.

Importance of the Study

An examination of the relevant bibliography has indicated that there have been exceptionally few comparative studies of the various

¹See **Appendix A** for detailed figures of immigrants by national origin and year of arrival.

nationality background groups in Brazil. In a country with such diversity in national origin, it is highly useful to understand possible areas of behavioral differences.

A. Theoretical Implications

The comparative study of ethnic and nationality background groups has led to the development of different theoretical orientations among sociologists. One school of thought has attributed ethnic differences to socio-psychological processes such as socialization, anomie, and the "marginality" concepts. Another theoretical framework used in the study of relations between ethnic groups has been conflict theory. These two approaches will be studied in detail in Chapter II. An attempt will be made to test some of these concepts in the context of this study. It is hoped that some clarification and empirical evidence will provide increased understanding of the utility of these conceptual frameworks. Similarly, the relationship between ethnic background and some economic variables will be studied. However, a complete test of either theoretical framework will not be possible due to the limited scope of the study.

B. Practical and Policy Implications

1. In countries with diversified national origin groups it is common to find specialization of these groups in various economic endeavors. This may result from the conditions under which the various sections of the population were settled in the country, from their positions in the socio-economic structure or from relations between these groups. Division of labor in society by ethnic background may, in the long run, lead to wide discrepancies in income and level of living.

This study will investigate farm size, type of farming, labor and technology use, and certain aspects of capital formation of the four nationality background farmers.

2. Comparisons of the four ethnic groups with respect to their family characteristics and educational level may lead to policies specific to each group in areas of family planning and education.

3. The comparative study of family solidarity, cosmopolitanism, risk taking, knowledge about, and attitudes toward modern inputs, and attitudes toward work may provide extension personnel with guidelines in the motivation of farmers to adopt improved technological practices.

4. In the event that some ethnic groups are found to have lower production costs or use more efficient means of production, such practices could be suggested for the other groups engaged in similar activities.

A Note on Objectivity

The pursuit of absolute objectivity is futile in sociology. The likelihood of achieving a desired level of objectivity is improved by recognizing explicitly the researcher's personal motivations and experiences and potential sources of bias. But it must be recognized that the choice of the topic of inquiry is often an expression of the researcher's value positions.

Efforts to run away from the valuations are misdirected and foredoomed to be fruitless and damaging. The valuations are with us, even when they are driven underground, and they guide our work. When kept implicit and unconscious, they allow biases to enter. The only way in which we can strive for objectivity in theoretical analysis is to lift up the

valuations into the full light, make them conscious and explicit, and permit them to determine the viewpoints, the approaches, and the concepts used. In the practical phases of a study, the stated value premises should then, together with the data-established by theoretical analysis with the utilization of those same value premises - form the premises for all policy conclusions. (Myrdal, 1968: 33).

The choice of the topic of this research is a result of the author's interest in relations between, and the comparative study of ethnic groups. Coming from a country (Lebanon) which has been termed a "mosaic of ethnic groups" (Coon, 1951) and being a member of a minority group, past experiences in this subject have had a subjective influence on the author's choice of the topic. It is also possible that these experiences have affected the choice of the various ethnic groups involved in this study and biases toward some groups. It is hoped, however, that recognition of these possible sources of bias will aid in maintaining an acceptable level of objectivity.

Scope of the Study

Since 1967 the Department of Agricultural Economics and Rural Sociology at The Ohio State University has been conducting a series of economic studies concerning capital formation and related aspects at the farm level in the States of Rio Grande do Sul and Sao Paulo. In order to provide a more complete and multidisciplinary overview of the process of capital formation, a number of sociological studies have been completed (Chase, 1972; Guerrero, 1973; Michael, 1972) and others are still being investigated.

The present study will be limited to the analysis of ethnic

behavioral differences, especially with respect to capital formation processes in the state of Sao Paulo, Brazil. Geographically, the study was limited to the northwestern part of Sao Paulo. More precisely the area covered includes five municipios (counties) around the regional capital of Riberao Preto (Altinopolis, Batatais, Jardinopolis, Pontal and Sertaozinho) and three municipios in the Barretos adjacent area (Barretos, Colombia, and Guaira). A more detailed description of the location of the study can be found in Chapter V.

Four major ethnic groups were investigated in the study. These are Brazilian, Italian, Japanese and Sirio-Lebanese. A total of 343 farmers were interviewed. Most of these had been included in previous economic studies.

Overview

In some respect the organization of this study is different from the traditional structure of dissertations. This was deemed necessary by the nature of the topic. A theoretical framework is provided in Chapter II. It details three general sociological theories in the study of ethnic differences. The "marginal man" concept uses a strictly individual level framework of analysis. Human ecology and conflict theory both approach the problem of ethnic differences from a structural viewpoint.

Because of some limitations in the collection of data a formal test of these theories will not be possible. However, if theory testing is viewed from the more general viewpoint, an historical analysis can provide at least an illustration of theoretical concepts. An historical

analysis of the four ethnic groups as well as the socio-economic conditions in Sao Paulo and the rest of Brazil at various periods can be found in Chapter III. In the context of this study a review of such literature seems relevant, especially since comparative ethnic studies in the Brazilian context are very rare.

A detailed description of the area in which the present research was conducted is presented in Chapter IV.

Chapter V presents the methodology used in the collection and analysis of the data. In order to avoid repetition, a detailed description of the previous data collection processes is not provided. Such information can be found in the sociological studies mentioned earlier and monographs describing the collection of the economic data. (Meyer, et al., 1971)

Results of the statistical tests applied to the sociological and economic behavioral patterns of the four ethnic groups are presented in Chapter VI. A summary of these findings and the conclusions based on them are found in Chapter VII.

Chapter II

THEORETICAL BACKGROUND

The comparative study of ethnic groups has been approached theoretically from three major standpoints: (1) social psychology; (2) human ecology; and (3) conflict theory.

The social psychological framework is essentially concerned with the interrelationship between individual and societal variables. It emphasizes the impact of social processes at the individual level.

The human ecology school of thought deals with the interaction of society and its segments with their ecological environment. This theoretical framework deals with the process of intergroup relations in respect to the use of the ecological environment.

Conflict theory deals with societal phenomena at the structural level under the premise that social structure and social change are based on self generated continuous processes of conflict relations.

These theoretical frameworks will be analyzed in the context of ethnic relations and ethnic differences with the purpose of clarifying these concepts and critically evaluating their validity to understanding the topic under consideration.

The Social Psychological Framework

A variety of conceptual frameworks have been developed to

explain ethnic behavioral differences from a social psychological standpoint. Some of the concepts to be discussed, as will be observed, are closely related while others are independent. They are included in this section because of a common characteristic, the emphasis placed on individual level phenomena.

The Marginal Man Concept

The concept of the marginal man and its equivalent "stranger", was first developed by Park (1950) and further expanded by Stonequist (1961). The marginal man is:

"...a cultural hybrid a man living and sharing intimately in the cultural life and traditions of two distinct peoples; never quite willing to break, even if he were permitted to do so, with his past and his traditions, and not quite accepted, because of racial prejudice, in the new society in which he now sought to find a place. He was a man on the margin of two cultures and two societies which never completely interpenetrated and fused." (Park, 1928: 892)

Similarly, Stonequist (1935; 8) defines the marginal man as a person who is:

"...Poised in psychological uncertainty between two (or more) social worlds; reflecting in his soul the discords and harmonies, repulsions and attractions of these worlds, one of which is often 'dominant' over the other; within which membership is implicitly if not explicitly based upon birth or ancestry (race or nationality); and where exclusion removes the individual from a system of group relations."

Thus the marginal man lives in the twilight of two cultures one of which he is born into and the other in which he attempts to participate. He is rejected by his descent group for lack of conformity and snubbed or rejected by other groups since he was not born into them. Typically, the marginal man is one who was socialized during his early youth into one group. At the time of adolescence or maturity he tries to reject his original group background and becomes a member of another group or culture for which he is inadequately socialized. An alternative situation, with similar results, is the case in which the individual rejects his descent group and adopts a more universalistic conception of group membership. The marginal man thus has a wider horizon and a more cosmopolitan outlook. In every case the marginality is the result of the physical and ideological contact of various descent groups such as nationality groups, racial groups, religious sects, or tribes. The phenomenon is likely to occur during periods of immigration into a country. The immigrant is considered a prime example of the marginal man.

"Without making a detailed or extensive analysis, is it not clear that the immigrant who has left his home culture and is not yet assimilated into the new situation may, if he encounters an unfriendly attitude, become a marginal man? If not the immigrant then the children of immigrants - the second generation - frequently are in this position."(Stonequist, 1935: 7).

"Migration as a social phenomenon must be studied not merely in its grosser effects, as manifested in changes in custom and in the mores, but it may be envisaged in its subjective aspects as manifested in the changed type of personality which it produces...The individual is free for new adventures, but he is more or less without direction

and control!" (Park, 1928: 881-893).

If Stonequist's and Park's contentions are correct, the concept of marginal man should apply to the three ethnic groups (Italian, Japanese, and Sirio-Lebanese) studied in this research since they, or their fathers were born abroad.

The marginal man is not bound by local customs and conventions and is thus freer in his behavior. His relations with others are characterized by a critical detachment, and the use of rationality and objectivity in his economic decisions. "The effect of mobility and migration is to secularize relations which were formerly sacred." (Park, 1928: 881-893) The marginal man is therefore more likely to accept changes in his social and economic behavior based on rational rather than traditional bases.

The marginal man experiences uneasiness and mental stresses of various levels.

"When the standards of two or more social groups come into active contrast or conflict, the individual who is identified with both groups experiences the conflict as an acute personal difficulty or mental tension. He may be compelled to choose between two national loyalties, or only between two minor groups:...the external conflict of the groups finds an echo in the mind of the individual concerns." (Stonequist, 1961: 6)

The "uprooted" characteristic of the marginal man makes him subject to conflicting allegiances and forms of behavior. This need not necessarily occur, given the possibility that the individual may behave differently with the various groups. Since the mental problems

of the marginal man partly result from the problems encountered by the contact of two or more cultures, he may generalize his attempts to solve his personal problems to the objective social conditions. (Stonequist, 1961: 221) Thus, the marginal man may contribute to the resolution of conflict between the groups with whom he is involved.

The marginal man concept has been criticized from a variety of angles. The relationship between the social and personality traits of the marginal man needs clarification:

"However it is not always clear what the nature of the relationship is between the status and the personality characteristics. It is not always clear whether the marginal man is one who exhibits the described personality characteristics, or both." (Kerkhoff and McCormick, 1955: 49)

Kerkhoff and McCormick (1955: 48-55) suggest that within the same ethnic group, differentiation is necessary to isolate the marginal groups. Green (1947: 167-171) questions the methodological validity of the marginal man concept. "The search for causation is the search for the specific difference. It seems questionable that 'marginal man' serves this purpose." (Green, 1947: 168) In their analysis of the marginal man both Park and Stonequist use autobiographies of prominent Jewish writers as illustrations of the marginal man concept. This type of data is considered to be atypical of the situation of the Jewish group by Green. Another methodological objection to the concept is its circular assumption of causation and

effect:

"There is in the marginal man concept the circular assumption that cultural conflict per se, causes personality conflict: the individual is not marginal until he experiences 'the group conflict as a personal problem' and that to the extent that the two cultures conflict, this conflict is experienced as a personal problem!" (Green, 1947: 169)

Empirical evidence does not seem to support the statements of Park and Stonequist concerning the mental tensions and disorders experienced by the marginal man. For example, the claim that the marginal man would exhibit high levels of social disorganization in the form of crime and delinquency has not been verified by existing empirical research. (Golovensky, 1952: 334-335). Similarly, the monolithic nature of the surrounding society (in terms of values, norms and social organization) is questioned. Therefore, the marginal member of a minority group, is not faced with one major different culture but with a number of different cultures in relation to which he represents one behavioral model among others rather than the amodal type. Even the assumption that the marginal man lives in two cultural settings does not preclude the possibility that he can adapt to the varying cultural norms and values. (Golovensky, 1952: 335-336).

Goldberg (1941: 52-58), Golovensky (1952: 333-339), and Green (1947: 167-171) all question the specific application of the marginal man concept to some ethnic groups. The validity of the concept is

recognized when applied to subjects who are children of mixed marriages, or those who willingly attempt to abandon their descent group and try to become members of another 'dominant' group. (Golovensky, 1952: 339).

In summary the heuristic utility of the marginal man concept appears to be in the context of the larger scale phenomenon of cultural contact. As Park himself suggests "the marginal man is an incidental product of a process of acculturation" (Park, 1928)

Some of the characteristics of the marginal man, especially those concerning his mental and social pathological aspects, do not seem to stand the test of empirical validity. Thus it appears that while the marginal man may seek membership in another group, he may retain membership in a closely knit primary group which continues to provide him with social control and security. (Gans, 1962).

The Human Ecology School

Human ecology has emerged from three main sources: plant and animal ecology; geography; and studies concerning the spatial distribution of social phenomena. The classical position of the human ecological school introduced by Park and Burgess in 1921, was developed during the 1920's and 1930's. Ecological theory had a strong link with the biological sciences. Many of the concepts were derived from biology and adapted to human conditions. Human ecology

has been characteristically associated with studies in the spatial distribution of social groups in an urban environment. (Theodorson, 1961: 3). Human ecology has been conceived of as part of four contrasting areas of study: "(1) as an inclusive synthesis of several traditional fields of study; (2) as identical with human geography; (3) as a branch of sociology; and (4) as a specialized marginal field that cuts across various traditional fields."(Quinn, 1940: 713)

The utility of the theoretical framework of human ecology for this study, is to be found in the concepts describing the processes of interaction of various social groups in a given ecological set of conditions.

Human ecology like other sociological theories, is concerned with social structure and social change as its two major areas of consideration. (Hawley and Steward, 1968).

"Human ecology is fundamentally, an attempt to investigate the processes by which the biotic balance and the social equilibrium (1) are maintained once they are achieved and (2) the processes by which, when the biotic balance and the social equilibrium are disturbed, the transition is made from one relatively stable order to another." (Park, 1936: 15)

The basic premise upon which human ecological theory is built is the interactive process between social forces and the environment.

However, "human ecology was less concerned with the relationship between man and his habitat than with the relationship between man and man as affected among other factors by his habitat." (Wirth,

1945: 484). McKenzie (1924: 288) defines human ecology in a somewhat different way:

"as a study of the spatial and temporal relations of human beings as affected by the selective distributive and accommodative forces of the environment. Human ecology is fundamentally interested in the effect of position in both time and space, upon human institutions and human behavior."

Quinn (1939: 167) provides a more detailed definition of interactional (human) ecology which studies:

"(1) Those impersonal sub-social aspects of communal structure - both spatial and functional - which arise and change as the result of interaction between men through the medium of limited supplies of the environment and (2) the nature and forms of the processes by which this sub-social structure arises and changes."

The processes that apply in animal and plant ecology are complicated by the fact that in human ecology man has the capacity for locomotion and symbolic communication the power to modify his environment and rational behavior. Because of culture and technology and the conscious use of rules, norms, laws, and formal organizations and institutions, the study of human ecology is drastically more complex than plant and animal ecology. (Hawley and Steward, 1968; Park, 1936: 12-13; Quinn, 1971: 7).

McKenzie (Park et al., 1925: 64-65) classifies these differences under two characteristics that humans possess:

"The human community differs from the plant community in two dominant characteristics of mobility and purpose, that is, in the power to select a habitat and in the ability to control or modify the conditions of the habitat."

The human ecology approach deals strictly with phenomena at the societal rather than the individual level. "Organization is exclusively the property of a population as a whole and not of an assemblage of individuals." (Hawley and Steward, 1968: 330).

Human Ecological Processes

The central process which governs interaction between human groups is competition for scarce resources and space. Competition is a relation of incompatibility of goals between two or more social groups. The success of one necessarily interferes with the success of others. Cooperation, in contrast, involves a reciprocal relation in which the success of one group enhances the chances of success of the other cooperating group. (Quinn, 1971: 296) The competitive ability of various social groups influences their position on the social hierarchy scale as well as their chances of obtaining the desirable quality and quantity of limited goods. Since human ecological theory was developed with respect to urban studies, the concept of competition was often used in the location of various groups and institutions within the city. Groups and institutions with a stronger competitive capacity obtained the more desirable locations within the city.

Because of a high level of interdependence and the division of labor in society, competition must include cooperative action.

"Thus every crisis that initiates a period of rapid change, during which competition is intensified, moves over finally into a period of more or less stable equilibrium and a new division of labor. In this manner competition brings about a condition in which competition is superseded by co-operation." (Park, 1936: 7).

Competition according to Park, Burgess, and McKenzie (1925) is essentially impersonal, continuous and common to most living organisms. Quinn minimizes the importance of competition as the basic pattern of ecological behavior. Ecological behavior, he explains, often involves cooperation rather than competition: "In the first place, many instances of impersonal ecological interaction involve cooperation rather than opposition." (Quinn, 1971: 298). Wirth (1945: 484-485) indicates that competition among human beings is not a "blind struggle for life and survival." It is regulated and controlled by cultural norms.

At any point in time, the situations emerging from competitive, "cooperative competition", or cooperative relations are in process of change. Assuming that an equilibrium situation results after either one of the above processes, the various segments of society distribute themselves within a given spatial pattern. The appearance of a new group (national, religious, racial, or regional), referred to as invasion, tends to disrupt the existing equilibrium. Invasion is a function of the nature of the invader, the point of entry, the resistance or inducement of the existing population, and the effects upon the nature of the existing conditions of equilibrium. The invading group usually enters from a high mobility and low resistance point. (McKenzie, 1924: 298-299). An illustration of this process in the present study is the invasion of Japanese immigrants into the frontier area of Sao Paulo. This area was one of high mobility by its nature and of low resistance since the previous occupants (Italians) demonstrated low resistance and the coffee growers induced their entrance.

An invasion results in a wide range of possibilities. The extreme cases are exclusion of the existing population or of the invading group. The more common possibility is one of accommodation whereby the invading group is accepted into the community. Accommodation is a function of the solidarity of the first settlers, the advantages offered by the invading group to the community, and its competitive advantages, and the existing resources in the community. The early stages of invasion are usually characterized by keen competition. Except in rare cases, the invading group is limited (occupationally and residentially) to a given part of the community which is least desirable in quality. Thus, through this process of segregation, the community resolves the competition.

The process by which a "successful" invasion takes place is referred to as succession. "The thing that characterizes a succession is a complete change in population between the first and last stages, or a complete change in use." (McKenzie, 1925: 153) One identifiable group replaces another one, usually within the least desirable part of the community or under the least desirable social conditions. For example, socially least desirable occupations may be relegated to the invading group by the previous least advantaged group. In the case of the present study, the Japanese immigrants gradually replaced the Italians as cheap farm labor on the coffee plantations.

The sections of communities which appear after a period of invasion, segregation, and accommodation are the "natural areas". These "natural areas" establish a new pattern on the basis of segregation, repelling

culturally incongruous elements and attracting homophilic subunits. (McKenzie, 1924: 287-301; Wirth, 1945: 487-488; Park, 1936: 7-10; Quinn, 1971: 707, 358-368; Hawley, 1945: 398-405).

The relations governing the occupation of an ecological environment, and the resulting patterns of use of the environment are summarized by Barth as follows:

(1) The distribution of ethnic groups over a given area is influenced by the economic and political organization of each group. The level of economic and political organization of each group influences the ability of each ethnic group to exploit a "natural area";

(2) If different ethnic groups exploit different resources of an area they will be in a condition of stable co-residence. This situation is reinforced if the various groups establish symbiotic economic relations;

(3) If various ethnic groups exploit the same resources of an environment, the more powerful will tend to replace the weaker;

(4) With respect to the above situation if the weaker group can exploit marginal environments or resources, the groups may co-reside in the same areas. (Barth, 1956: 1079-1089).

Conflict Theory

The central concept of human ecology, that of competition, is closely related to conflict theory. Park, Burgess and McKenzie (1925) included conflict as one of the few basic processes of human interaction.

Conflict theory was essentially developed by Simmel. In the history of American sociological thought, until recently, conflict theory has been of relatively minor importance. (Bernard, 1950: 11-16). Conflict theory was the main topics of the 1907 American Sociological Society meeting (Coser, 1956: 15). Only a quarter of a century later there was a short-term revival of interest in conflict theory. In his presidential address to the American Sociological Society in 1930, Odum (1931) indicated that conflict theory had been a relatively neglected area of inquiry among American sociologists. Many of the papers presented at that meeting, including one by Park (1931), were devoted to the study of conflict.

Max Weber (1947: 132) defined conflict as action directed "intentionally to carrying out the actor's own will against the resistance of the other party or parties." Coser provided a more detailed definition:

"Social conflict may be defined as a struggle over values or claims to status, power and scarce resources, in which the aims of the conflict groups are not only to gain the desired values but also to neutralize, injure, or eliminate rivals."

Oberschall (1972: 30) modifies this definition by stating that "the aims of the conflict groups are to gain the desired values, and the consequence of the struggle is frequently the neutralization, injury, or elimination of the rival group." Thus, while competition is object centered and impersonal (the parties involved are not necessarily aware of each other), conflict is oriented toward opponents and the

parties involved actively seek mutual neutralization. Competition often leads to conflict (Stern, 1971).

Most conflict theorists have asserted that conflict is not an ephemeral phenomenon in society (Carver, 1908: 628-637). It is inherent to society and is self-perpetuating. Social structure is such that the hierarchical organization creates positions and institutions to maintain the social order. Constraint and coercion have to be used to maintain the privileged positions of the ruling group (Oberschall, 1972: 28-29). Thus, Dahrendorf's (1959: 159) definition of social change and conflict paradoxically emerges from his definition of social structure which is "a form of organization held together by force and constraint and reaching continuously beyond itself in the sense of producing within itself the forms that maintain it in an unending process of change."

Similarly, Coser contends that in every social structure there is an inherent conflict possibility. At various periods of time it is likely that different groups will enter into a conflict relation competing for scarce resources, power, and prestige (Coser, 1956: 152). Oberschall (1972: 33) also indicates that "social conflict arises from the structured arrangement of individuals and groups in a social system - from the very fact of social organization." Viewed from this perspective social conflict is therefore inherent to social action, is self-perpetuating and is almost unavoidable. Conflict is not restricted to certain societies. It is a universal phenomenon. According to

Dahrendorf (1959: 162):

- "(1) Every society is at every point subject to processes of change; social change is ubiquitous;
- (2) Every society displays at every point dissensus and conflict; social conflict is ubiquitous;
- (3) Every element in a society renders a contribution to its desintegration and change;
- (4) Every society is based on the coercion of some of its members by others."

An additional element which makes conflict a continuous process is the nature of the material and non-material resources over which conflicting groups have claims. Resource allocation is not a finite process. The amount, nature, and number of resources may vary over time. Thus, the distribution of the national wealth among classes and regions is a continually questioned national policy issue in most countries.

Similarly, with the rise of new ideologies (political, religious, racial), attempts are made by interest groups to convert, convince or impose on other groups such non-material resources.

For conflict to operate in society, it need not exist overtly. There may be in society various issues of conflict which are not openly fought. Cultural norms and values may regulate the overt expression of conflict. In other cases, conflict between groups may be regulated by official policy and may therefore, be covert. Unfavorable conditions and inappropriate timing create behavior which may not be expressed overtly.

Forms of Conflict

There is such a variety of forms of conflict that a schematic approach is necessary.

1. Level of intensity

Conflict between individuals or groups can range from mild regulated competition to its most violent form of war. The level of intensity of conflict depends on the nature of the groups in competition, the issues or resources at stake and the cultural values regulating cultural behavior.

2. Realistic and Nonrealistic Conflict

Simmel (1955: 27-28) recognizes two types of conflict with regard to their justification. "Conflicts which arise from frustration of specific demands within the relationship...and which are directed at the presumed frustrating object can be called realistic conflicts." (Coser, 1956: 49). Nonrealistic conflict is not necessarily caused by rival ends of the antagonists, but by the need of at least one of the parties involved to release tension. "Scapegoating" is an excellent example of non-realistic conflict.

3. Level of Conflict

Conflict behavior is expressed at various levels of social action. Individual level conflict can be found in such dyadic forms of association as husband and wife, friends, and child - parent relationships. Conflict is also expressed at the group level such as in the interaction between gangs, between teams of workers, and among

other informal groups. At the institutional level, conflicts are apparent in the behavior of labor unions in interacting with management, the conflict opposing one social class or ethnic group to another, and the competition between political parties. At the national and international level, conflict assumes such forms as warfare, invasions, economic competition, and ideological disagreement (Zinnes, 1962: 236-243; Nieburg, 1963: 43-54; Oberschall, 1972: 31-32; Bernard, 1950: 11-16).

4. Communal and Non-communal Conflict

Organizationally, conflict could be classified in terms of communal and non-communal conflict. Communal conflict involves essentially primary groups within which there is a common goal. Conflicts arise over the means of achievement of the goal. Non-communal conflict occurs between groups which do not share common goals. Both the means and the ends of resource distribution are subject to conflicting interests. It is contended that communal conflicts are less violent than non-communal conflicts (Simpson, 1937: 41-47).

5. Ideological and Individual Conflict

According to Simmel (1955: 39-40), two types of conflict can be distinguished on the basis of the beneficiaries of the outcome. When the goal is personal and subjectively defined it serves the advantage of an individual. In ideological conflict, the object of contention is impersonal and more objectively defined. Simmel contends that ideological conflicts are likely to be more radical since individuals act as representatives of groups and ideas and their issues are given respectability and sacred characteristics (Cosser, 1956: 111-119).

Sources of Social Conflict

Sources of conflict are numerous and without a classificatory framework they may be difficult to conceptualize. It has to be recognized that these sources of conflict often act concurrently and are classified separately only for the purpose of clarity.

1. Economic sources of conflict

The basic concepts of the science of economics such as supply and demand, marginal utility, and resource allocation, have an implied assumption of conflicting interests at the individual, institutional, and national level.

Changes in the economy of a community or a nation create conditions of conflict. Often the changes in the general economy may be favorable and yet create tense situations of conflict. As Olsen (Oberschall, 1973: 38) indicates "economic growth...can significantly increase the number of losers". Long term economic growth can often be associated with short-term disadvantages for certain groups, e.g. wages may rise slower than prices or may decline, and an increase in the rate of unemployment may occur. This aspect is particularly relevant in the case of Brazil where despite recent high rates of growth, the distribution of income regionally and by social class was detrimental to the lower income groups and some regions such as the Northeast (Duarte, 1971).

2. Political sources

Conflict may occur at the community and national level due to the existing political structure and changes in it. Conflict and discontent may occur if an alien authority is established. Examples of

this type have been common during the nationalistic struggles in Asia and Africa to avoid foreign rule. Similarly conflict may occur if the authority is exclusive. This situation occurs under one party systems or military dictatorships. Insufficient authority may create a situation of political anomie whereby various interest groups could enter into conflict to fill a "political vacuum" (Oberschall, 1972: 44-49).

3. Cultural sources

In areas where different cultural groups coexist, it is likely that conflict may occur. The presence of a minority group culturally different from the majority creates friction. Often minorities enter into a relationship of super- and sub-ordination with the majority group.

"The relationship of sup-ordination and sub-ordination which characterizes the majority vis-a-vis the minority, stems...from differential control over the economic, political, and ideological mechanisms of social stratification. In brief, the basic model for a majority-minority situation is commonly understood to be that in which a dominant social subgroup prevents or restrains a lower ranking subgroup from achieving a comparable status" (Harris, 1959:248).

In culturally heterogeneous environments the various cultural groups (ethnic, nationality, religious, racial) may be involved in conflict over the distribution of wealth, work, power, and other symbols of status. Similarly, real differences in values, beliefs, personal habits and customs may lead to conflict of emotional importance to the parties involved. Variations in the modal patterns of family conditioning may lead to significant behavioral and attitudinal differences among individuals living in the same environment. Such differences may become sources of friction, dislike, and conflict. For instance a study has

indicated that culturally conditioned child rearing practices among various ethnic and religious groups leads to differential personality types among children (Prothro, 1961).

The appearance of hostility between cultural groups is conditioned by:

- a. The visibility of the groups both in the terms of their appearance (color, physiognomy, dress) and as socially defined. In this respect, the Japanese in Brazil are clearly the most "visible" cultural group.
- b. The extent of contact between groups affects the extent of conflict.
- c. As previously indicated by the human ecology theory, the presence of objects of competition creates conditions for the emergence of conflict. Cultural groups who are engaged in complementary or unrelated activities are less likely to engage in conflict.
- d. The extent of differences in values and behavior patterns is another conditioning factor.

Outcome of Conflict

Conflict resolution can be achieved through a variety of means, previously described. The outcome of conflict is a function of the means used in conflict resolution the relative importance of the contested resources or values to the groups involved, the presence

of intermediary forces, the relative power of the contestants, and the prevailing rules, norms, and values governing the conduct of conflict.

As can be observed in Figure 1, conflict can range from "nil" to a "maximum" beyond which the involvement in the conflict ceases to exist. However, between these two levels, a "normal" degree of conflict prevails in society.

Conflicts may vary in duration in different societies. In the long run conflict resolution brings the level of conflict to the "normal" position over a given issue. Other issues may simultaneously or consequently raise the level of conflict.

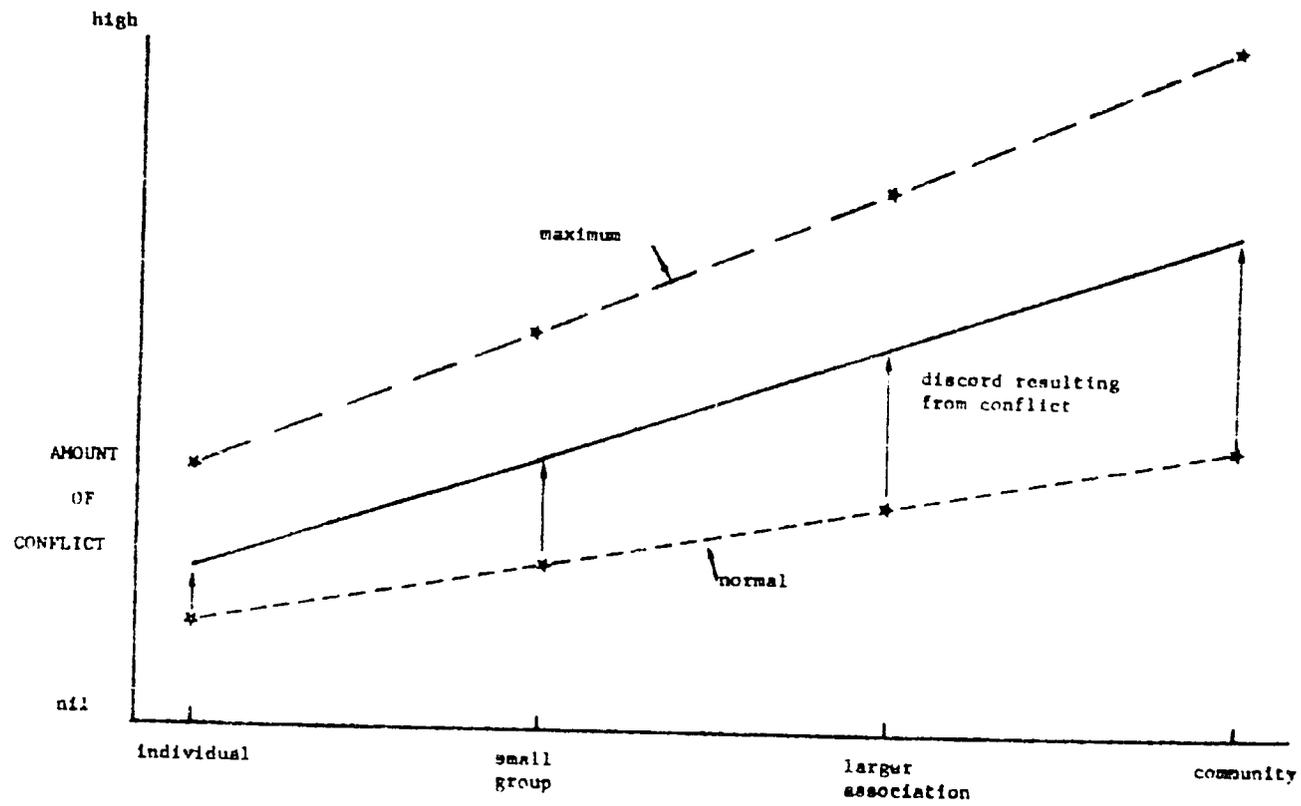
The settlement of conflict may occur in the following patterns:

a. Total imposition of the will of one of the contestants on the other parties involved. Examples of this type of outcome include slavery, successful coup d'etat resulting in total change in the political system, and extermination of an entire population.

b. Given a potential conflict situation, one of the parties may forfeit the contest because of the relative power of the opponent or because of its cultural values prohibiting particular types of conflict. Forfeit of the contest may be permanent or deferred in the expectation of more favorable conditions.

c. Under certain circumstances, the parties involved may reach a compromise solution with the actual occurrence of conflict. This type of settlement is facilitated by the use of an arbitor or intermediary. In many cultures individuals belonging to some social group have fulfilled this customary role. In industrial societies

FIGURE 1.
Theoretical Conflict Situations by Size of Group



Source: Coleman, J. S., Community Conflict, New York: The Free Press, no date, p. 23.

such processes are conducted through courts of law.

d. The actual conduct of conflict is one of the more common outcomes. The parties involved may obtain varying proportions of the resources or issues contested. These proportions are not necessarily relative to numerical size of the contesting groups. What is often confounded as a status quo situation in a society or between nations is only the outcome of recent conflict and which because of the discontent of one of the parties may be a potentially conflicting situation.

Summary

Three theoretical approaches to the study of ethnic relations and ethnic behavioral differences have been described.

The marginal man concept uses a socio-psychological level analysis to explain differences in behavior among minority groups vis-a-vis the majority. The marginal man is rejected by the group in which he is born and the group to which he attempts to belong. The marginal man has a cosmopolitan outlook, and is not bound by traditional behavioral patterns. Thus, the marginal man is innovative. The basic criticism toward the marginal man concept is its level of analysis. Critics contend that the marginal man is only a product of a sociological process, conflict, at the societal level.

The human ecology school of thought asserts that human groups compete among themselves for the possession and control of scarce resources and status in their ecological environment. A minority group invades an ecological niche and through processes of competition, succession, accommodation and segregation replaces other groups earlier

established in the environment. The basic process of action is competition. Each cycle of struggle results in a period of equilibrium after which the forces are renewed.

Conflict theory is similar to human ecology in its dynamic nature of explaining social change. While human ecological thought contends that the various processes of social action eventually result in an equilibrium situation, conflict theorists assert that social conflict is continuous and self generating. Social conflict occurs at various levels, i.e., individual, group, communal, national, and international levels. Social conflict is not necessarily destructive of social structure. It has a number of positive functions in reinforcing social structure.

While these theoretical frameworks will not be intensely tested for empirical validity, they provide a conceptual understanding of ethnic behavioral differences.

The following section concerning the historical background of the various ethnic groups included in this study provides illustrations of the various theoretical approaches described in this chapter.

Chapter III

HISTORICAL BACKGROUND

An historical analysis is crucial to arrive at an understanding of the present day comparative economic and sociological behavior of ethnic groups in Brazil. The purpose of this endeavor is threefold:

1. The social, economic, and political processes, especially between 1850 and 1935, explain in part the present social and economic behavior of ethnic groups;

2. An historical analysis will indicate the comparative evolution of the various ethnic groups under different, as well as similar conditions.

3. This section concerning the historical background of the immigration of the various ethnic groups illustrates the theoretical framework, especially human ecological and conflict theories, described in the previous chapter.

Throughout the formative period of Brazilian history, it will be demonstrated that:

1. Both the socio-economic conditions prevailing in Brazil (pull factors) and those prevailing in Italy, Japan, and Syria (push factors in the countries of origin) conditioned the movement of large scale international migration.¹ Emphasis will be placed on the

¹"Push" factors refer to those conditions in the country or region of origin which are unsatisfactory and cause a movement away from the area by its inhabitants; concurrently, "pull" factors refer to the favorable situation in a country or region which attracts population from other areas.

conditions in Brazil.

2. The socio-economic conditions of the various ethnic groups under study, were heavily influenced by their social class positions as underprivileged cheap labor vis-a-vis the landowners who were the economic and political elite.

3. The socio-economic welfare of the immigrants depended to a large extent on the current profitability of the predominant crop, coffee. Fluctuations of the coffee economy affected favorably or adversely the conditions of the immigrants in Brazil. It will also be shown that a succession of countries were included in sending immigrants to Brazil in direct response to the needs of the coffee producers.

The Sao Paulo Economy and Early Immigration

Apart from the early colonization of Brazil by the Portuguese, and sporadic settlement by French and Dutch colonists, there were no sizable immigratory movements to this vast and sparsely populated country until the middle of the nineteenth century (Prado, 1971). A few small-scale settlements became perceptible between 1800 and 1830. Migrants from the Azores were settled in the states of Para and Rio Grande do Sul. Similarly, Swiss and German farmers were settled in the state of Rio Grande do Sul. However, most of these settlements experienced limited success because of poor planning, indiscriminate selection of

settlers, distant location from market centers, unavailability of roads, and unfavorable economic conditions (Hall, 1969: 5-14).

The reasons for the limited immigration to Brazil from other countries during the period immediately preceding the 1850's were partly due to the unfavorable economic conditions. Passage from a sluggish economy to an active one was basically due to the vital position of coffee as a new export commodity.

The Brazilian economy underwent a basic structural change around the middle of the nineteenth century. From an economy that was essentially stagnant, Brazil emerged as a dynamic, expanding economy by the end of the century.

"By the mid-nineteenth century it would have been difficult for an observer studying the Brazilian economy to conceive the scope of the transformations which were to occur within its framework during the next fifty years. Three-quarters of a century of stagnation or decay had elapsed...Phases of progress, such as the one in Maranhao, were predominantly local in their effects, and had no bearing on the country as a whole (Furtado, 1968: 119).

Prospects for improving prices and for increased exports of sugar and cotton, major export items, were dim due to the favorable position of Cuba vis-a-vis the North American market. (U.S. investors had interests in the Cuban sugarcane plantations). Another major market, England, was supplied by the British West Indies. Exports of cotton received similar competition. Increased production in the U. S., partly because of the acquisition of Louisiana, and cheaper freight rates to England competed with Brazilian cotton (Furtado, 1968: 120-122).

The Major Role of Coffee

While coffee was introduced early in the eighteenth century, its importance did not surpass local consumption levels until after the disorganization of production in Haiti. Production data definitely indicate the emerging importance of coffee in the 1850's as is demonstrated by the following table:

Table 1. Coffee Production in Brazil, 1836-1944.

<u>Year</u>	<u>Coffee Production in Sao Paulo</u> (Sacks of 60 kilos)
1836	147,034
1854	883,564
1870	1,043,112
1901	7,988,000
1906	15,000,000
1927-28	17,982,000
1940	10,000,000
1943-44	6,936,000

Source: P. Monbeig, Pionniers et Planteurs de Sao Paulo, Paris: Librairie Armand Colin: 1952, p. 14.

Initially, coffee production was concentrated in the hilly areas around Rio de Janeiro. It expanded to the Paraiba do Sul Valley (Stein, 1957). However, with the reduction in productivity of these areas, the discovery of the terra roxa, soils well suited for coffee, and the increasing demand for coffee on the international market, Sao Paulo took a predominant and almost exclusive position in coffee production in Brazil. The areas under cultivation in Sao Paulo expanded at a rapid rate as shown by Maps 1 and 2.

The expansion in coffee production was in response to the increasing rate of coffee consumption in the principal European and North American markets around the middle of the nineteenth century. The table below demonstrates this increasing consumption in France and the United States.

Table 2. Coffee Imports by France and the United States, 1832-1875

Country	Year	Millions of Kilos of Coffee Imported
France	1832	10
	1846	17
	1870	70
United States	1865	50.3
	1870	100.8
	1875	122.5

Source: Adapted from P. Monbeig, Pionniers et Planteurs de Sao Paulo, Paris: Librairie Armand Colin, 1952, p. 93.

Constantly increasing demand and prices, the relative abundance of land, and low wages encouraged the western Sao Paulo farmers to rapidly expand the areas under production. However, the excellent economic conditions prevailing at the end of the nineteenth century soon led to overexpansion.

"The so-called speculative fazendas were established with money borrowed at very high rates of interest and went bankrupt with some frequency after coffee prices began to fall, since they had not yet paid off their heavy indebtedness" (Hall, 1969: 154).

By 1900-1905, the production of coffee was double the amount grown between 1890 and 1895. By the middle of the 1890's, prices of

coffee were still favorable in spite of decreasing prices on the world market. This occurred because of the falling exchange rate which provided the planters with a reasonable profit in Brazilian currency. After 1896, prices fell markedly and eventually led to a crisis around 1905. This crisis affected more strongly the planters in the western part of the state because of their additional costs in transporting coffee to the port of Santos (Hall, 1969: 153-155; Monbeig, 1952: 130).

A number of social scientists who have studied this period of Brazilian history have identified coffee planters as particularly responsive to market conditions. The planters exhibited characteristics of modern capitalists oriented toward reinvestment of profits. Using knowledge of local and international market conditions they diversified their investments and participated in political decision making at all levels of government (Dean, 1966: 138-152; Monbeig, 1952: 121-128; Ianni, 1972: 375-398; Hall, 1969: 81-115).

While land was in large supply, the expansion of coffee plantations caused additional transportation costs to the western Sao Paulo coffee growers. The government, after requests from the growers, guaranteed a seven percent interest rate to investors in railroads. The capital necessary for the completion of the Santos-Jundiai railroad was thus raised and the project was completed in 1868 (Graham, 1968: 26-30). The coffee growers also participated in financing the construction of additional railroads such as the Mogiana and the Companhia Paulista de Estradas de Ferro (Monbeig, 1952: 86-89). Maps 1 and 2 demonstrate clearly the concomittant relationship between the expansion of railroads

and the growth of coffee plantations. A recent study indicates that the development of the Sao Paulo economy is closely linked to the expansion of the transportation network (Gauthier, 1968: 77-94).

The expansion of the railroad network reached the northwestern part of Sao Paulo at Barretos, an area most suited to cattle raising. The coffee growers thus adapted to the new situation by investing large sums of money in cattle raising, in the building of a frigorifico (cold storage unit), and by applying their capitalist skills to these new ventures. Cattle raising became very lucrative with the growing demand for frozen meat during World War I. At the same time coffee production decreased.

After 1918, coffee prices improved again. As in the past, growers responded immediately by planting new trees. Based on past experience, and at the request of coffee growers, the government organized the Coffee Institute in 1924. It was given wide responsibilities for regulating coffee production, marketing and exports. The Institute could purchase excess stocks of coffee, paying fifty percent of the value of the crop at the support price. The Institute was thus entrusted with the control of the coffee supply. In years of excess production, coffee was stockpiled. The Institute was financed through a tax on coffee and by foreign loans, especially from England (Graham, 1968: 74-77; Monbeig, 1952: 100-102; Furtado, 1968: 193-195).

New policies after the price boosting Taubate agreement of 1906, and the creation of the Coffee Institute, resulted in relatively high and stable coffee prices in Brazil. Planters responded with an additional expansion of area under cultivation. Credit was now provided by

agricultural banks (e.g. the Banco Paulista de Credito Agricola) instead of the commissarios as in the past (Graham, 1968: 78; Monbeig, 1952: 98). The fact that planters received only fifty percent of the value of their crops upon delivery compounded their financial problems in trying to finance the new plantations. Planters were thus obliged to borrow heavily from banks and to mortgage their land. Foreign banks made loans to individual planters as well as to the Brazilian government to finance the coffee price support policy.

The second overexpansion of production coincided with a series of unfavorable conditions which led to the catastrophic crisis of 1929-1932. While production was increasing, the price of coffee fell by 41 percent during 1929. The seriousness of the situation increased during the next three years as the trees planted in the late 1920's came into full production. General depression among the financing countries made further loans to Brazil impossible.

"...It was quite impossible to obtain credit abroad to finance withholding of new inventories, in as much as the international market was deep in the grip of the depression and government credit had evaporated with the disappearance of metallic reserves."(Furtado, 1968: 203)

Despite a devaluation of the currency, which was favorable to the growers, and an increased volume of exports, a situation of crisis was inevitable because of low world coffee prices. The financial crisis of 1929-1933 forced large coffee plantation owners, especially those in the western part of the state, to sell part of their land to pay their debts. Similarly banks, which after 1933 were allowed to foreclose on

only up to fifty percent of the mortgaged land, sold land which had declined significantly in value due to low coffee prices. Small farmers and former agricultural workers who had some savings and were not affected by the coffee crisis bought such land at reduced prices. This process was operative in the area around Riberao Preto, where five of the eight municipios included in the study are located.

In times of major economic and financial crises large agricultural landholdings in monoculture economies (as present in Brazil at the turn of the century) are expected to disintegrate (Prado, 1935: 52-68). This was one of the two major processes by which small landholdings appeared. The other process was the sale of lots of land of former fazendas after the intensive cultivation has resulted in soil erosion (Prado, 1935: 52-68; Bernardes, 1961: 363-420; Prado, 1944: 17-31).

Throughout the period of 1850-1935, the coffee plantation owners influenced or directly participated in the political decision making process.

"Very early, the leaders of coffee production, understood the enormous importance that the government could have as an instrument of economic action. This tendency of the subordination of a political machinery to the interests of an economic group will receive its full expansion with the conquest of state autonomy... It is by this clear consciousness of their own interests that (the coffee growers) are differentiated from other earlier or contemporary dominant groups." (Ianni, 1972).

A number of coffee plantation owners from Sao Paulo directly participated in government either as elected representatives or appointed officials (Hall, 1969: 81-115; Monbeig, 1952: 107-111, 121-128). For purposes of clarity, some of the major instances of influence on, or exercise of power in government will be mentioned. First, as will be demonstrated later in this section coffee growers directly influenced

the government's decision to encourage and subsidize large scale European and Japanese immigration in order to provide the coffee economy with cheap labor (Rios, 1958: 245-339, Monbeig, 1952: 120, 123,137-138; Hall, 1969: 11-12, 82-86). Second, the coffee planters after favoring slavery in earlier years, were among those favoring the abolition of slavery, when they found it to be a deterrent to attracting immigrants from Europe (Dean, 1966: 138-152; Graham, 1968: 123-137; Furtado, 1968: 136-137). Third, as indicated earlier, at the request of western Sao Paulo coffee growers, the government guaranteed a fixed return on foreign loans for the building of railroads and port facilities. Fourth, in order to cushion the negative effects of falling coffee prices, on a number of occasions the government devalued the currency. This favored the coffee producers and exporters whose main costs did not involve imported items. Inversely, this monetary policy was detrimental to the general population.

Fifth, the government, under pressure by the coffee growers, organized the Coffee Institute which provided support prices for coffee, stockpiled the product during excess production years, and provided favorable terms of credit to the growers. Finally, after the abortive revolution of 1932 against his administration, President Vargas, to appease the coffee plantation owners, reduced by fifty percent the amount of mortgaged land banks could withhold from indebted coffee growers (Young, 1967: 81-91).

Impact of Slavery on Immigration

The initiation of heavy immigration from Europe and Japan is

closely linked to the last stages of slavery in Brazil. During this period of Brazilian history there seems to have been a strong correlation between progress toward abolition of slavery and efforts to recruit European immigrant laborers.

Slavery, beginning in the mid-sixteenth century came into effective and large scale use in Brazil around the middle of the seventeenth century (Prado, 1971: 17, 144). Slavery was especially concentrated in the Northeastern region of Brazil.

Starting in 1807, the British government exerted pressure on Portugal to end the African slave trade. This pressure only succeeded in 1831 when the Brazilian government declared that all slaves brought thereafter to Brazil would be free. This legislation was not enforced despite threats of invasion by England (Graham, 1968: 160-186). Rising internal public opinion in the cities against slavery, coupled with further pressure from England brought the African slave trade to an end in 1850. The use of slave labor, however, continued for the next two decades without significant changes. Organized internal anti-slavery movements culminated in the abolitionist "Manifesto of the Liberal Party" in 1868. Such internal and external pressure led to delaying tactics among the slaveowners. The first step was the Rio Branco "Ventre Livre" Law of 1871. This law declared children born of slave women to be free when they reached the age of 21. This law delayed by at least 22 years the abolition of slavery. Similarly the "Sexagenario" Law which freed slaves above the age of sixty was only a delaying measure with a seemingly humanitarian purpose (Ianni, 1972: 383). A third measure used by the

Sao Paulo coffee plantation owners was the purchase of slaves from the north and northeastern states. "Although natural increases in the slave population were always very low, the number of slaves in Sao Paulo rose from 117,000 in 1854 to 156,000 in 1872 and to 174,000 in 1883" (Hall, 1969: 29). The expansion of the railroad network, described earlier, reduced the need for teams of mules accompanied by slaves and shifted about 20 percent of the labor force from transportation to production of coffee. Similar labor saving mechanisms operated with the introduction of machinery in the processing of coffee (e.g. coffee dryer).

These measures were insufficient during the 1880's to stop a movement, first in isolated instances, and later on a large scale, of slaves escaping plantations. In addition, health conditions were such that mortality rates surpassed birth rates thus causing a net decrease of the slave population after 1850. Faced with the prospects of a dwindling number of slaves, internal abolitionist movements in the cities, and with external pressure from European countries, the government legalized the fait accompli by abolishing slavery in 1888, through the "Lei Aurea" (Graham, 1968: 123-173, 171-175; Hall, 1969: 12, 22-32; Monbeig, 1952: 89-90; Furtado, 1968: 43-92, 148-154).

The remaining part of this chapter will examine in further detail the historical and socio-economic conditions under which each of the three ethnic groups under study came to Brazil, the conditions prevailing in the country of origin, and the immigrants' role in the economic development of their country of adoption.

A considerable number of studies are available concerning the Italian and Japanese immigrants in Brazil. A detailed review of the

information in Portuguese, French, and English literature concerning these groups are presented. However, despite searches in the Portuguese literature in Brazil and English sources in the United States very few studies were found concerning Sirio-Lebanese immigrants in Brazil. In the case of this study the problem is limited since only 16 of the 343 informants were of Sirio-Lebanese origin.

Italian Immigration

Immigration of free labor started in the 1850's when a few planters, such as Senador Vergueiro, predicting the abolition of slavery, turned to cheap sources of labor in Southern Europe. Senador Vergueiro recruited Portuguese families to work on his coffee plantations under a parceria system.²(Hall, 1969: 13-21; Schmidt, 1943: 242-247). This system was soon discontinued since it was less profitable than the use of slaves.

It was not until the late 1880's that revival of interest in European immigrants occurred. The imminence of abolition as well as the expansion of coffee plantations created the "hunger for labor" among the plantation owners. The attention of the growers and the Brazilian government was directed towards Italy, which was a large source of manpower. During the same period, Italy was experiencing political and economic unrest. The country was undergoing political

²Under the parceria system, the coffee plantation owner paid the passage of the families to Brazil and supported them for a period of time. The families were assigned a number of trees to care for and harvest, and they could use some land for raising food. Net profits from the coffee crop, and sometimes from the foodstuff plots, were equally divided between the immigrant and the company. The family was restricted to the farm and could not leave it until it had paid its debts on the cost of the passage and had given a written notice a year in advance of intent to move.

unification. The southern region, where agricultural productivity was low, experienced strong competition from the northern region. A state of chronic depression prevailed. Similarly between 1888 and 1898, industrial production in Italy was almost zero (Furtado, 1968: 137-140; Hall, 1969: 87-109). "The marked decline in Italian economic growth during the period 1888-1896 generated an important 'push' factor that obviously worked to the advantage of Brazil, given the lack of alternative or competitive countries to absorb the departing immigrants" (Graham, undated: 23).

Until 1885, immigrants were recruited privately by coffee plantation owners. Contracts were made with shipping companies and private agents. This resulted in some unfair modes of recruitment. Exorbitant promises were made in Italy to induce prospective immigrant to migrate. Upon their arrival in Brazil, they were forced to sign five-year contracts to work on plantations and were asked to pay the cost of the passage which was supposedly to have been paid for by the plantation owners (Hall, 1969: 89).

After the passage of a bill in 1885 authorizing the state government to subsidize immigration by refunding plantation owners the cost of passage of the colonists, the movement of Italians into Sao Paulo was intensified. Between 1887 and 1900 Sao Paulo received 863,000 immigrants, representing almost a third of the immigrants who entered the state in the century between 1827 and 1936 (Monbeig, 1952: 130). This major Italian immigratory movement was partly due to slackening economic conditions in the United States, which was Brazil's major rival in attracting Italian immigrants (Graham, 1968: 22).

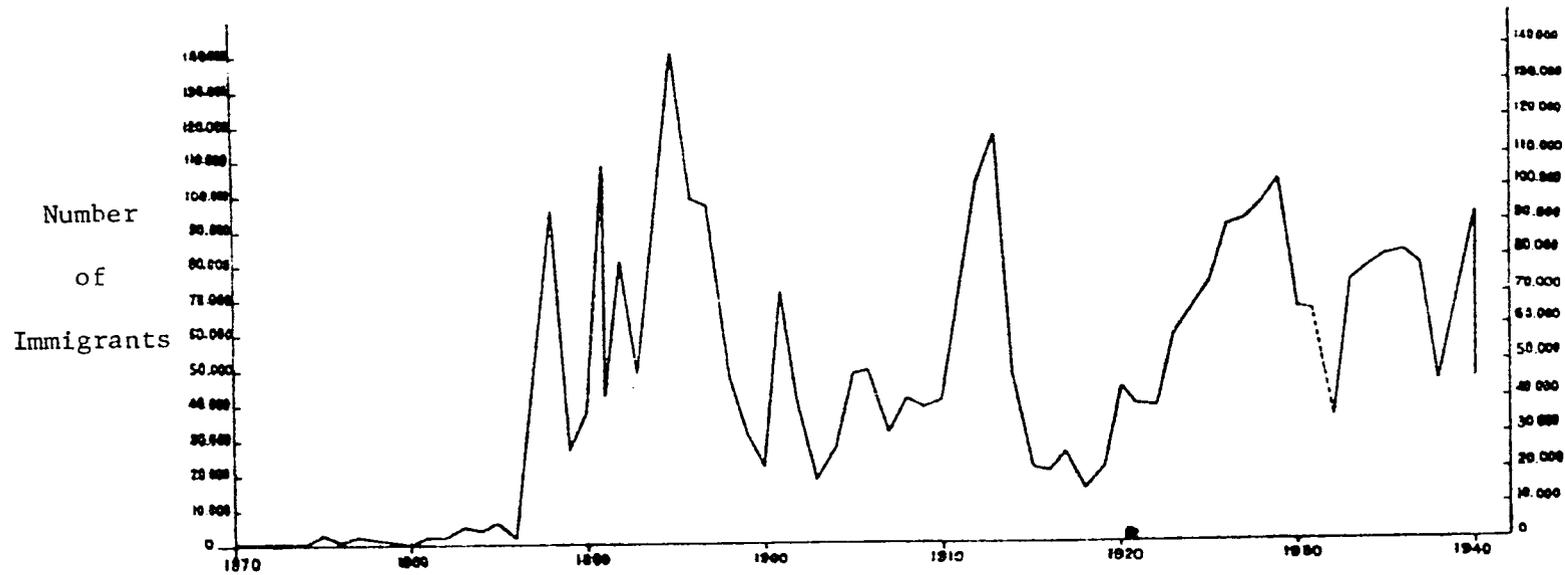
An examination of Figure 2 clearly demonstrates a strong correlation between the number of foreign immigrants entering Brazil and the periods of greatest coffee production and expansion (1889-1897, 1910-1914, and 1924-1929). While detailed data are not available concerning each nationality group on a yearly basis, the proportions of various nationalities for selected periods can be seen in Appendix A.

Until the middle 1880's slavery was still providing the necessary manpower for coffee farming. As previously demonstrated, the period from 1880 to 1900 was an era of large expansion of coffee production and favorable international prices. During the first five years of the twentieth century, the first major coffee crisis occurred, culminating in 1905. By 1910, the supply of coffee had made the necessary adjustments to the market conditions and coffee production experienced another major period of growth until World War I. Between 1884 and 1914, about 900,000 Italians immigrated to Brazil (Hall, 1969: 116). World War I brought a temporary halt to the movement of Italians out of Italy. Potential immigrants were in the age groups mobilized into the armed forces. After World War I, stabilized prices, price support, and regulation of supply resulted in another era of prosperity for the coffee economy that lasted until the 1929-1933 crisis (Graham, 1968: 2-7). At about this time, the rise of fascism in Italy limited immigration to Brazil.

The government also influenced the flow of immigrants during an earlier period. In 1902, the Italian government restricted subsidized recruitment of Italian immigrants to Brazil due to the disappointment of the Italian government over the conditions of Italian immigrants on Brazilian coffee plantations (Hall, 1969: 169).

FIGURE 2.

IMMIGRATION INTO THE STATE OF SAO PAULO, BRAZIL, 1870-1940



Source: Pierre Monbeig, Pionniers et Planteurs de Sao Paulo,
Paris: Librairie Armand Colin, 1952, p. 131.

Some of the major complaints of the plantation workers were:

1. Withholding of wages³
2. Imposition of fines
3. Cheating in the accounting of the amount harvested
4. Physical punishment
5. Restriction of workers to the fazenda
6. Cheating at the vendas⁴
7. Poor housing and health conditions (Hall, 1969: 118-140)

Apart from the action of the Italian government, a return movement was noticeable among the Italian immigrants. Thus, while 288,637 entered the state of Sao Paulo between 1903 and 1910, 277,549 left the⁵ state during the same years. In 1900 more immigrants left Santos than entered (Hall, 1969: 168-169).

In an effort to provide new incentives to Italian immigrants, the Brazilian government established colonies of small farmers near Campinas and in the Mogiana region, extending from Campinas to Riberao Preto. This was mainly accomplished during 1910-1911. The intention of the government was that these small farmers would be available as laborers on the coffee plantations during the peak agricultural periods (Monbeig, 1952: 143).

Data concerning immigration into the state of Sao Paulo indicate the declining proportion of Italians in relation to the total number of immigrants. Table 3, which deals with numbers of immigrants into the state of Sao Paulo by country of origin, is indicative of this trend. The decreasing proportion of Italian immigrants was thus due to:

³The parceria system having proven to have been unsuccessful, wages were paid to agricultural workers.

⁴Rural store usually owned by the plantation owner.

⁵The exit figure is underestimated since it only includes departures from Santos. Those immigrants who went to Rio by rail and departed from there are not included. Entries from Rio on the other hand are usually recorded in the entrance data.

Table 3. Proportion of Immigrants by Nationality Entering the State of Sao Paulo: 1890-1899; 1908-1917; 1918-1927; 1928-1937

Period	Nationality	Percent*
1890-1899	Italian	64.0
	Spanish	12.0
	Other	12.0
	Portuguese	10.0
	Austrian	2.0
1908-1917	Spanish	29.0
	Portuguese	27.9
	Italian	23.2
	Brazilian	5.5
	Turkish and Syrian	4.3
	Japanese	3.6
	Slavic	2.2
	German and Austrian	1.8
1918-1928	Brazilian	23.4
	Slavic and Baltic	21.0
	Italian	13.2
	Spanish	11.6
	Portuguese	8.6
	Japanese	7.0
	German and Austrian	6.9
1928-1937	Brazilian	59.1
	Japanese	18.7
	Portuguese	8.4
	Slavic and Baltic	4.3
	Syrian and other	2.5
	Italian	2.4
	Spanish	1.6

*For detailed data concerning the number of immigrants entering Brazil by year refer to Appendix A.

Source: Adapted from Monbeig, P., Pionniers et Planteurs de Sao Paulo, Paris: Librairie Armand Colin, 1952, p. 136.

1. The coffee crises of 1905 and 1929-1933;
2. The 1902 Italian decree limiting subsidized Italian immigration to Brazil;
3. World War I;
4. Competition from the United States and Argentina for Italian immigrants (Graham, 1968: 1-50)
5. Improving economic conditions in Italy;
6. The rise of fascism in the 1930's;
7. The quota system imposed by the Brazilian government in 1934.

Japanese Immigration

After the Meiji Restoration of 1867 in Japan, small farmers were slowly evicted from the land. The advent of a monetary economy which resulted in the imposition of taxes on feudal lords who in turn transferred these taxes to the small farmers, forced the latter to sell or mortgage their land (Ando and Wakisaka, 1971: 4-34).

"Thus, in the period between 1883 and 1890, none less than 367,000 farmers lost their properties by confiscation and in the period between 1884 and 1886 one seventh of all arable land was lost through mortgages. It was in this manner that a large part of the small owners became sharecroppers or were directed to the cities."

At the same time the rate of growth of the Japanese population was progressing rapidly as indicated by the following data:

Table 4. Population of Japan in Selected Years, 1888-1940.

Year	Inhabitants in Millions	Year	Inhabitants in Millions
1888	40.1	1918	58.1
1893	42.0	1925	59.7
1898	45.4	1930	64.5
1903	48.5	1935	69.3
1908	51.7	1940	73.1
1913	55.1		

Source: Albuquerque, E.A., "Transformacoes Gerais na Sociedade Japonesa e Imigracao para o Brasil" in O Japones em Sao Paulo e no Brasil, op. cit., p. 53.

Japanese immigration overseas started in 1885. With the 1902 restrictions on Italian immigration, the state of Sao Paulo turned to Spain and Portugal for sources of labor. However, these countries were aware of the conditions of work and the discontent of the Italian government and therefore did not encourage their citizens to immigrate (Fujii and Smith, 1959: 4-5).

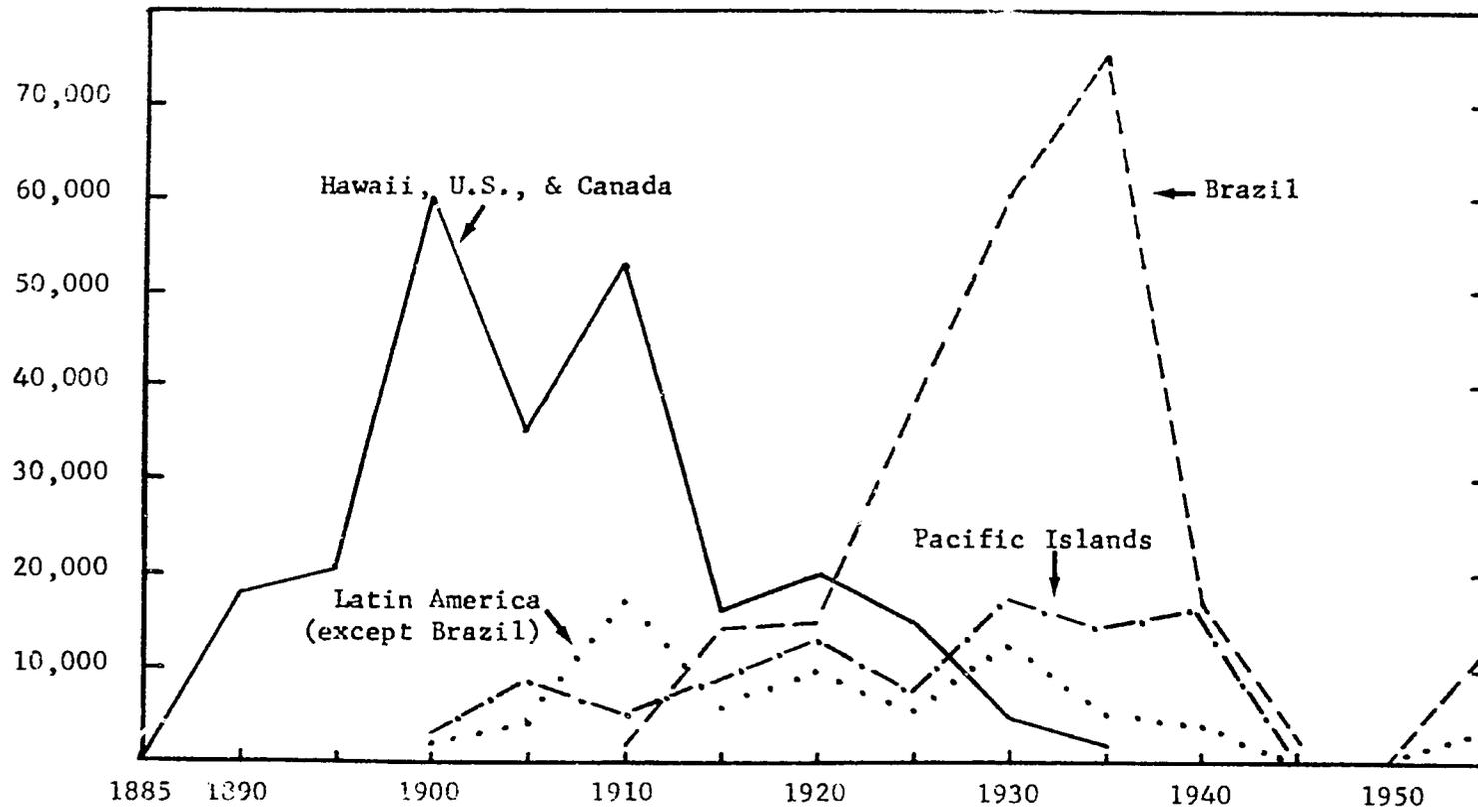
In Table 5 it can be observed that during the first period of Japanese emigration, 1885-1923, the United States and Hawaii absorbed about two thirds of the Japanese immigrants, while Brazil received only 6.4 percent (all between 1908 and 1923). The direction of immigration changed with the Gentlemen's Agreement of 1908 which restricted the entrance of Japanese immigrants into the United States. In 1924, Japanese immigration to the United States was completely forbidden. The negative relationship between Japanese immigration to the United States and Brazil can be observed in Figure 3.

The second period of immigration, 1924-1934, was essentially characterized by immigration to Brazil. Sixty-three percent of the immigrants who left Japan between 1924 and 1934 went to Brazil.

During 1935-1945, (after the Sino-Japanese War), Japanese emigration was directed mostly toward Manchuria. In an effort to colonize this area conquered by Japan in 1932, 85 percent of all emigrants during this period were settled there. Of the 312,413 immigrants only 7.2 percent settled in Brazil in that decade. During World War II emigration to Brazil was completely halted.

FIGURE 3.

JAPANESE EMIGRATION OVERSEAS BY DESTINATION
(1885-1955)



Source: H. Saito, O Japones no Brasil (Sao Paulo: Editoza "Sociologia e Politica", 1961).

Table 5. Japanese Emigration by Destination and Period

	Total	1885-1923	1924-34	1935-45	1952-63
Total	1,070,132	487,282	214,431	312,413	56,006
USA	107,640	101,644	5,609	---	387
Hawaii	231,206	227,012	4,194	---	---
Canada	35,507	29,280	6,170	57	---
Peru	33,070	21,420	9,542	2,108	---
Brazil	234,636	31,414	135,077	22,495	45,650
Paraguay	6,579	---	1	520	6,058
Other countries of					
Latin America	25,870	13,252	6,347	2,360	3,911
Southeast Asia & Oceania	88,176	36,123	33,342	18,711	---
Manchuria	270,007	---	4,218	265,789	---
Others	37,441	27,137	9,931	373	---
Annual Average	14,659	12,494	19,494	28,401	4,667
Percentage					
Total	100.0%	100.0%	100.0%	100.0%	100.0%
USA	10.1	20.9	2.6	---	0.7
Hawaii	21.6	46.6	2.0	---	---
Canada	3.3	6.0	2.9	0.0	---
Peru	3.1	4.4	4.4	0.7	---
Brazil	21.9	6.4	63.0	7.2	81.5
Paraguay	0.6	---	0.0	0.2	10.8
Other countries of					
Latin America	2.4	2.7	3.0	0.8	7.0
Southeast Asia & Oceania	8.2	7.4	15.5	6.0	---
Manchuria	25.2	---	2.0	85.0	---
Others	3.5	5.6	4.6	0.1	---

Source: T. Suzuki, The Japanese Immigrant in Brazil, (Tokyo: University of Tokyo Press, 1969), p. 14.

Between 1952 and 1963 a total of 56,000 persons emigrated from Japan, of which Brazil received 81.5 percent. While the annual rate of emigration reached 8,000 persons in 1960, it has been declining since then despite the payment of transportation subsidies by the Japanese government. This decline is basically due to the constantly improving capacity of the Japanese economy to absorb labor (Suzuki, 1969: 14-16).

Japanese Emigration to Brazil

As early as 1895 a treaty of friendship, commerce and navigation was signed between Japan and Brazil in preparation for an experimental Japanese emigration. However, the first major coffee crisis (which ended in 1906) delayed the arrival of immigrants until 1908. Thus, an agreement written in 1897 between the Brazilian government and a Japanese emigration agency for the arrival of 2,000 Japanese immigrants was rescinded at the request of the Brazilian government (Ando and Wakisaka, 1971: 22-23). The first group of 150 Japanese families arrived in Santos in June, 1908. By 1923, 31,414 Japanese immigrants, representing 13.4 percent of all Japanese emigrants, had arrived in Brazil. This period was experimental in nature for both the Japanese and Brazilian governments. The flow of Japanese immigration to Brazil was also dependent upon the supply of southern European immigrants. Thus, after the 1902 decree of the Italian government restricting subsidized immigration of Italians, the Brazilian government provided partial subsidy to Japanese immigrants in 1908. This subsidy was temporarily suspended shortly before World War I at the height of southern European immigration from Portugal, Spain and Italy.

The Japanese government, in an effort to encourage emigration to Brazil, then began providing the transportation costs of the Japanese immigrants. As a result Japanese immigration to Brazil increased from 4,000 persons in 1924 to 16,000 in 1929. After a recession between 1930 and 1932 due to the coffee crisis and the 1930 revolution, the proportion of Japanese immigrants to Brazil surpassed that of any other nationality between 1932 and 1935. With the introduction of the quota system in Brazil in 1934, and the Japanese interest in the colonization of Manchuria, Japanese immigration to Brazil was drastically reduced. It came to a complete halt from 1942 to 1951 as a result of World War II and the American occupation of Japan (Suzuki, 1969: 14-17).

After 1952, Japanese emigration declined to an average annual rate of 4,000 persons mainly due to the improved economic conditions in Japan. In 1954, the Japanese represented four percent of the immigrants entering Brazil (Suzuki, 1969: 17; Movimento, 1955: 66-67). Trends of Japanese immigration to Brazil can be observed in Table 6.

Distribution of the Japanese in Brazil

As in the case of Italian immigrants, the major purpose for the importation of Japanese immigrants was the provision of cheap labor for the coffee economy (Ando and Wakisaka, 1971: 23-25; Wagley and Harris, 1958; Saito, 1961: 28-29). Thus most of the Japanese immigrants settled in the state of Sao Paulo (Crissiuma, 1935: 110-114). The distribution of the Japanese population in Brazil by state for four different years was as given in Table 7.

Table 6. Japanese Immigration to Brazil 1908-1956.

Year	Number of Japanese	Percentage of all Immigrants	Year	Number of Japanese	Percentage of all Immigrants
1908	830	0.9	1933	24,494	53.2
1909	31	*	1934	21,930	47.6
1910	948	1.1	1935	9,611	32.5
1911	28	*	1936	3,306	25.9
1912	2,909	1.6	1937	4,557	13.1
1913	7,122	3.7	1938	2,524	13.0
1914	3,675	4.6	1939	1,414	6.2
1915	65	0.2	1940	1,268	6.9
1916	165	0.5	1941	1,548	5.6
1917	3,899	12.9	1942	---	---
1918	5,599	28.3	1943	---	---
1919	3,022	8.4	1944	---	---
1920	1,013	1.8	1945	---	---
1921	840	1.9	1946	6	*
1922	1,225	1.1	1947	1	*
1923	895	2.8	1948	1	*
1924	2,673	2.8	1949	4	*
1925	6,330	7.7	1950	33	*
1926	8,407	7.1	1951	106	0.2
1927	9,084	9.3	1952	216	0.3
1928	11,169	14.3	1953	1,928	2.4
1929	16,648	17.3	1954	3,119	4.3
1930	14,074	22.5	1955	4,051	7.3
1931	5,632	20.5	1956	4,912	11.0
1932	11,678	37.1			

Source: Y. Fujii and T. Smith. The Acculturation of the Japanese Immigrants in Brazil (Gainesville: University of Florida Press, 1959), pp. 5-8.

Table 7. Percentage Distribution of Japanese Immigrants by State
(1923, 1939, 1950, 1958)

State	Distribution of Japanese Population by State			
	1923 ¹	1939 ¹	1950 ²	1958 ³
Sao Paulo	89.9	92.0	84.1	75.7
Minas Gerais	3.1	.9	.7	.7
Parana	2.7	2.1	11.1	18.2
Mato Grosso	3.5	3.7	1.1	2.1
Other	.8	1.3	3.0	3.3 ⁴
Total	100.0	100.0	100.0	100.0

¹Source: Gonzaga, A.G., "Contribuicao para o Estudo das Imigracoes no Brasil" in Revista de Imigracao e Colonizacao, Ano III, No. 1, Avril 1942, pp. 89-98.

²Source: Fujii, Y., and Smith, T.L., The Acculturation of the Japanese Immigrants in Brazil (Gainesville: The University of Florida Press, 1959), p. 22.

³Source: Suzuki, T. The Japanese Immigrant in Brazil, (Tokyo: University of Tokyo Press, 1969) p. 33.

⁴Source: Mostly concentrated in Rio de Janeiro (Guanabara) and the Amazon region.

As can be observed from Table 7, the state of Sao Paulo, by 1958, still had the highest concentration of Japanese immigrants. In Parana, the proportion of Japanese has increased at a rapid rate from 2.1 percent in 1939 to 18.2 percent in 1958. The concentration of Japanese in Mato Grosso and Minas Gerais has declined while the city of Rio de Janeiro and the Amazon region have attracted 2.6 percent of the Japanese (Suzuki, 1969: 33-34).

The Japanese Immigrants and the Sao Paulo Economy

In 1908, the first coffee crisis had just ended. The Valorization

policy through the Taubate agreement of 1906 and stabilization of international coffee prices had created renewed optimism in the expansion of coffee among plantation owners (Furtado, 1968: 195). Thus, Japanese immigration was encouraged. One of the criteria for the selection of Japanese immigration was encouraged. One of the criteria for the selection of Japanese immigrants was the necessity for the immigrant family to be composed of at least three economically active members. In addition, a larger proportion of the cost of passage was paid to adults than to minors. These policies led to the "composite family" phenomenon, Kosei-Kazoku. Families were constituted through "adoption" of relatives (Ando & Wakiska, 1971: 23-24; Suzuki, 1969: 168; Saito, 1961: 61-62). The first Japanese immigrants to Brazil intended to stay for a short period of time, accumulate savings, and return to Japan. Since the early phase of immigration was experimental, Japanese families who arrived in 1908 were assigned to six fazendas. They were treated in a pattern similar to that of the Italian immigrants. As a result two thirds of these families did not complete one year of work on the fazendas and left for the cities of Sao Paulo and Santos (Ando & Wakisaka, 1971: 25-26). Realizing the difficulty of accumulating savings within two to three years the immigrants, individually or in association with other Japanese, decided to become tenants.

Another alternative was to become contratistas.⁶ This type of work was an Contratistas or formadores de cafe refers to those immigrants who worked for plantation owners on a special contract. The plantation owner would provide the settler with uncleared land. The colonist had to clear the land, plant coffee trees and care for them for a period of four to six years. The owner provided the colonist with a house, a well, tools and seedlings. The colonist could raise intercalary crops. At the end of the fourth year, the colonist was paid for his work according to the number of trees planted. Another variation of this arrangement was a six year contract whereby the colonist, instead of being paid in cash, received the value of the coffee crop from the 4th to the 6th yrs.(Ando & Wakisaka;1971: 27-28).

intermediary stage between agricultural labor and independent ownership of land. It provided the immigrants with the necessary experience and capital that could be saved over a period of four to six years. A number of Japanese acquired land through this process in the region of Araraquara, a region contiguous to the area investigated in this research. Another source of land acquisition was a result of the cultivation of rice on leased land. Brazil imported rice until the 1920's. High prices of rice provided the immigrants with enough savings to become independent small landowners (Ando and Wakisaka, 1971: 28-30). The coffee crisis which culminated in 1905 forced some large landowners to sell part of their land. This pattern occurred on a larger scale during the 1929-1933 period when the crisis was more acute. As in the case of the Italian immigrants, but with a more favorable coincidence, Japanese immigrants could buy land which had been depreciated in value. A final process of land acquisition used by Japanese immigrants was the buying of cheap eroded plots near Sao Paulo. Such lands were intensively fertilized and cultivated in vegetables. It should be remembered that Brazilian industrialization and urbanization experienced their impetus just before World War I. Therefore, from that time, a large demand existed for the products of truck farms. Thus, by 1941, the proportions of Japanese farmers by land tenure category were: (Fujii and Smith, 1959: 29)

independent owner-operator	31.2%
owner-tenant	20.7%
tenant-owner	20.0%
tenant	27.7%
laborer	.4%

The distribution of land tenure categories in 1958 was:

owner-farmer	52.1%
renter	25.8%
sharecropper	11.6%
colonist	9.8%
administrator	.7%

Saito (1961: 198-208) traces the vertical and spatial mobility of a group of ten Japanese families composed of a total of 32 members in Brazil. These case studies demonstrate the vertical social mobility and geographic mobility of these ten families and another group of ten families. Among immigrants who arrived before World War II, 76 percent achieved upward social mobility, 11 percent did not change their status, and 13 percent indicated downward social mobility (Cardoso, 1972: 50). Suzuki provides a detailed analysis of status mobility among Japanese immigrants in Brazil in Table 8.

There has been considerable occupational diversification among Japanese immigrants. While about 70 percent of those who entered Brazil at the age of 15 or above were farmers, this percentage had declined 56.2 percent by 1958. Other occupational categories have appeared.

Vertical occupational and social mobility has been achieved among Japanese immigrants through land acquisition and education. The Japanese immigrants have placed high emphasis on children's education especially in technical and professional fields (Nobre, Araujo and Piza, 1971: 156-157). While the proportion of the population of Japanese origin in the state of Sao Paulo was less than three percent in 1958 (Suzuki, 1969: 33), twelve percent of the students were of Japanese origin at ESALQ, the college of agriculture of the University of Sao Paulo (Nobre, Araujo and Piza, 1971: 157). Similarly, in 1955, 7.4 percent of the students at the University of Sao Paulo were of Japanese origin (Hutchinson, 1956: 96-97).

TABLE 8. Patterns of Status Mobility for Prewar Japanese Immigration Family Heads Who Are Farmers or Non-farmers since Arrival by Employment Status at Present

	N	Total	Ascent					Descent			
			Sub-total	Linear ascent ↗	Simple zigzag ascent ↘↗	Complex zigzag ascent ↘↗↘	Without ascent or descent →	Sub-total	Linear descent ↘	Simple zigzag descent ↗↘	Complex zigzag descent ↗↘↗
Total	9,580	100.0%	75.4	59.9	2.8	12.7	11.2	13.4	2.0	9.6	1.8
Farmers	9,069	100.0	77.2	61.2	2.8	13.2	9.3	13.5	1.9	9.7	1.9
Owner-farmers	5,877	100.0	91.3	72.7	3.5	15.1	8.7	--	--	--	--
Renters	2,206	100.0	63.4	50.2	2.1	11.1	11.6	25.0	4.0	17.8	3.2
Sharecroppers	754	100.0	31.4	21.7	0.8	8.9	3.6	65.0	7.5	47.4	9.9
Colonos	218	100.0	--	--	--	--	21.1	78.9	11.0	56.0	11.9
Non-farmers	511	100.0	44.2	38.7	2.2	3.3	44.7	11.1	3.3	6.8	1.0
Employers	124	100.0	74.2	64.5	2.4	7.3	25.8	--	--	--	--
On own account	209	100.0	51.7	47.9	1.9	1.9	43.5	4.8	1.4	2.9	0.5
Managers	43	100.0	60.4	41.9	9.3	9.2	25.6	14.0	7.0	4.7	2.3
Employees	135	100.0	--	--	--	--	69.6	30.4	8.1	20.0	2.3

Source: H. Saito, O Japones no Brasil (Sao Paulo: Editora "Sociologia e Politica", 1961).

Table 9. Employed Japanese Immigrants - Persons 10 Years Old and Over
by Occupational Grouping and Percentage of Women in Each
Occupation

	N	All employed persons	% female
Total	150,408	100.0%	22.0%
Farmers	84,408	56.2	22.1
Professional	5,328	3.5	34.2
Managerial	1,262	0.8	1.2
Clerical	5,088	3.4	28.8
Sales	23,881	15.9	15.9
Fishermen	129	0.1	2.3
Miners	4	0.0	----
Transport	3,272	2.2	0.2
Craftsmen	18,451	12.3	22.0
Unskilled	464	0.3	12.7
Service	7,984	5.3	34.4

Source: T. Suzuki, The Japanese Immigrant in Brazil (Tokyo: University of Tokyo Press, 1969), p. 55.

The relative participation of Japanese women in the labor force can be observed in Table 9. Education permitted the second and third generations to have diversified occupational patterns (see Table 10). The index of occupational diversification for the immigrants was .033 in 1958 while that of their descendants was .041. Thus, the descendants of Japanese immigrants have a higher degree of educational and occupational diversification than their parents or grandparents.

Table 10. Occupation of Japanese Immigrant Fathers and Sons, 1958

		Fathers	Sons
Total	N	22,275 100.0%	22,275 100.0%
Farmers		83.6	35.6
Professional		2.5	.9
Managerial		---	.7
Clerical		---	1.6
Fishermen		.1	.1
Transport		---	4.4
Craftsmen		4.9	10.7
Sales		5.7	36.5
Service		3.2	9.5
<u>Index of Diversification</u>		<u>.017</u>	<u>.058</u>

Source: T. Suzuki, The Japanese Immigrant in Brazil (Tokyo: University of Tokyo Press, 1969), p. 251.

Agricultural Patterns

Japanese farming patterns in Brazil have undergone drastic changes. It has been demonstrated earlier that the Japanese immigrants acquired land through various processes. Table 11 indicates the distribution by amount and value of land owned by Japanese farmers in each state. While approximately a quarter of the land owned by Japanese is located in the state of Sao Paulo, the value of these properties is 56.8 percent of the total value of land owned by Japanese farmers. Conversely, land owned by Japanese in Mato Grosso represents 53.1 percent of the total land ownership among Japanese in Brazil, but represented only 7.4 percent of the total value (Suzuki; 1969: 91).

Table 11. Area and Value of Property Owned by the Japanese Population
By State

	<u>Rural Property</u>		
	Area	Value	Average Value Per alq.*
	(alq.)*	(Cr\$)**	(Cr\$)
N	1,903,520	37,455,850	19,677
Total	100.0%	100.0%	100.0%
Sao Paulo	25.9	56.8	43,297
Parana	13.8	32.1	46,144
Mato Grosso	53.1	7.4	2,749
Goiias	4.1	1.0	4,775
Rio de Janeiro and Guanabara	0.5	1.1	34,976
Amazon region	1.9	1.2	12,360
Minas Gerais	0.3	0.2	9,365
Others	0.4	0.2	9,340

*Exchange rate at the time of the census (June, 1958): 1 dollar = 135 cruzeiros.

**1 alqueire = 24,200 sq. meters = 2.42 hectares.

Source: T. Suzuki, The Japanese Immigrant in Brazil, (Tokyo: University of Tokyo Press, 1969), p. 91

Japanese farming patterns have proceeded through distinctive phases in Brazil. The importance of coffee as a major crop has steadily decreased among pre-World War II Japanese immigrants. In 1912, 92.6 percent of the farmers raised coffee as their principal crop. This percentage decreased to 28.8 in 1953. Cotton was the major crop of 1.2 percent of the same farmers in 1912. This proportion increased to a peak of 39.3 in 1942, and then declined to 8.5 percent in 1958. The decrease in importance of cotton was partly due to Japan and Germany stopping the importation of Brazilian cotton. Rice farming has followed a pattern similar to cotton in production trends. Suburban farming of vegetables, tomatoes, potatoes, poultry, and similar

products has constantly grown. While these products were the major crops of only 0.6 percent of the same group of farmers in 1912, this proportion has increased to 40.1. (See Table 12). Products of this type are often marketed by Japanese. Japanese colonists introduced technological innovations in agriculture (e.g. jute and rice production) and fishing (Miyazaki and Ono, 1958: 366-396; Mussolini, 1946: 172-183).

Sirio-Lebanese Immigration

Sirio-Lebanese immigration to North and South America started in the 1890's. Until then, emigration (except to Egypt) had been forbidden by the Ottoman government.

Population pressure accompanied by fragmentation of land in rural areas contributed to the necessity of an emigratory movement from Lebanon and Syria (Baer, 1964: 31-32; Tannous, 1942: 62-74; United Nations, 1970: 124-125).

The relatively early establishment of French and American missionary universities resulted in an increase in the number of graduates in professional fields. Many graduates of these universities migrated first to Egypt then to Europe and North and South America. The geographic position of Lebanon has placed its population in contact with western influences. The widespread use of French and English contributed to a cosmopolitan orientation of the population.

Until the end of World War I, both Lebanon and Syria were under Ottoman Turkish rule. Mandatory military service in the Turkish army was one of the factors affecting the decision of Syrian and Lebanese youth to flee the country.

Table 12. Percentage Distribution of Principal Farm Products For Prewar Immigrant Farmers who are Family Heads Since Arrival by Period

	1912	1917	1922	1927	1932	1937	1942	1947	1952	1958
N	161	1,121	2,215	4,448	9,606	14,980	15,030	13,956	12,455	11,208
	%	%	%	%	%	%	%	%	%	%
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Country farming	99.4	93.8	87.3	87.9	86.3	85.1	79.3	71.0	63.4	52.2
Coffee	92.6	76.8	52.0	62.2	59.0	32.1	24.3	23.6	27.5	28.3
Cotton	1.2	4.5	12.1	11.1	14.0	39.0	39.3	31.2	20.5	8.5
Rice	2.5	9.5	17.6	10.5	8.3	6.0	4.5	3.8	3.0	3.0
Country polyculture	1.9	2.5	4.0	2.2	2.4	4.8	6.0	6.0	5.7	4.6
Others	1.2	0.5	1.6	1.9	2.6	3.2	5.2	6.4	6.7	7.8
Suburban Farming	0.6	4.1	9.6	10.1	11.9	12.9	18.0	25.2	31.7	40.1
Vegetables	---	1.9	4.4	4.8	5.1	4.7	6.5	8.7	11.5	15.8
Tomatoes	---	0.2	0.3	1.0	1.9	2.4	3.6	5.2	5.8	6.4
Potatoes	0.6	1.8	3.8	2.9	2.7	3.0	2.9	3.7	4.1	4.4
Poultry	---	---	0.2	0.2	0.3	0.7	1.5	2.7	4.3	6.2
Suburban polyculture	---	0.2	0.6	0.7	1.1	1.6	2.5	3.6	4.4	4.1
Others	---	---	0.3	0.5	0.8	0.5	1.0	1.3	1.6	3.2
Others	---	2.1	3.1	2.0	1.9	1.9	2.8	3.7	4.9	7.6

Source: T. Suzuki, The Japanese Immigrant in Brazil (Tokyo: University of Tokyo Press, 1969), p. 227.

The advent of a market economy in rural Lebanon and Syria stimulated emigration as a way of increasing cash income. Initially the objective of the emigrants was to settle temporarily in foreign countries to save and subsequently to return to their country of origin.

In 1957..."the number of Lebanese living abroad was 1,100,000 (about equal to the number of inhabitants of Lebanon) of whom half a million were in the United States and Canada, another half million in South and Central America and the rest in Africa and Egypt." (Baer, 1964: 32).

Immigration of Sirio-Lebanese to Brazil was initiated in the 1890's. Until 1920, the proportion of emigrants who went to Brazil was relatively low. As in the case of the Japanese, the imposition of the quota system in the United States diverted the stream of emigrants to Brazil. Immigration to Brazil has been continuing up to the present. In 1958, the number of Lebanese in Brazil was estimated at about 250,000. Compared to the other nationality origin groups, this represents a relatively low proportion of the Brazilian population. However, it becomes significant when compared to the population of Lebanon (estimated at about one and a half million) during the same period.

The Sirio-Lebanese have been traditionally city dwellers and have specialized mostly in trade:

"While the problem of the integration of foreign immigrants focuses primarily on rural areas and among agricultural colonists, it occasionally arises among ethnic groups in urban centers. This has been especially true of immigrants from the Near East such as the Syrians and Lebanese who have enjoyed great financial success as merchants and traders." (U.S. Department of Army, 1964: 81)

Arab restaurants, Sirio-Lebanese clubs, and the use of the Arabic language are some indicators of this situation. During the early development of the frontier areas of Sao Paulo, the Sirio-Lebanese immigrants established themselves as traders and money lenders. These immigrants had shops or were ambulant -- selling urban origin artifacts in the cities of the interior. Other Sirio-Lebanese immigrants loaned money to farmers, often at usurious rates until harvest time (Ando and Wakisaka, 1971: 51-32). Successful businessmen and professionals continue to send remittances to Syria and Lebanon. For instance in 1952, it was estimated that about 22 million dollars were contributed by Lebanese emigrants to relatives, friends, and non-profit organizations in their home country (Hitti, 1961: 694). Sirio-Lebanese immigrants in Brazil have maintained economic, financial, and social relations with their counterparts in Lebanon as well as with Sirio-Lebanese immigrants in West Africa (Gayet, 1957: 161-171). These contacts have provided the Sirio-Lebanese in Brazil with a competitive advantage in the area of trade.

Sirio-Lebanese immigrants being essentially an urban group in Brazil, their involvement in agriculture is a very recent phenomenon. Economically successful urban traders and professionals of Sirio-Lebanese origin have bought land and operated farms in response to recent tax incentives for capital invested in agriculture. The agricultural enterprises of Sirio-Lebanese immigrants are a marginal aspect of their occupation and income.

Summary

In summary, as has been indicated throughout this section, the

economic, political, and social conditions prevailing in Brazil at various periods affected the rate, intensity, and countries of origin of the immigrants. It has been pointed out with respect to Sao Paulo that the economic conditions affecting the major crop, coffee, have significantly influenced the number and country of origin of immigrants. Furthermore, as one group of immigrants (Italians) declined in importance, another nationality group became the source of cheap agricultural labor. Immigration policies of the Brazilian government can thus safely be said to have been mostly affected by the needs of the plantation owners.

The relations of the two major ethnic groups studied vis-a-vis the plantation owners were described.

As previously indicated, these relations were characterized by a continuous process of conflict. In very few cases, the conflict situation emerged into violence. This was essentially due to the strong dominant position of the plantation owners and the weak position of foreign immigrants. An indication of conflict and discontent is provided by the high rate of return to the country of origin, especially among Italian and Japanese immigrants. Another major indicator of the conflict situation has been the intervention of the Italian and Japanese governments to protect the interests of their citizens. The Italian government restricted subsidized Italian immigration to Brazil. The Japanese government provided assistance through credit and cooperative facilities, to Japanese immigrants in Brazil. The comparative evolution of the various ethnic groups was traced. Limited studies concerning the Sirio-Lebanese in Brazil made it difficult to provide a complete description of this group.

Chapter IV

LOCATION OF THE STUDY AREA

The present study was conducted in the State of Sao Paulo, Brazil. Eight municipios from Sao Paulo were selected. Sao Paulo was chosen as the area of study since it presents ethnic diversity in its rural population and previous economic data were available concerning a large sample of farmers.

To aid in understanding the economic, geographic, and social conditions a description of the State and the region will be provided. Such a description facilitates the placing of the eight municipios in their regional context.

The State of Sao Paulo

The State of Sao Paulo is situated in the southeastern part of Brazil. Its total area is 247,898 square kilometers (about 3 percent of the national territory) (Ministerio, 1971b: 13). It is bordered by the state of Minas Gerais in the North and Northeast, the State of Rio de Janeiro and the Atlantic Ocean in the Northeast and East, the Atlantic Ocean and the State of Parana in the South and Southeast, and the states of Parana and Mato Grosso in the Southwest and West.

Sao Paulo is the most populated state of Brazil with a population

of 17,958,693 inhabitants representing 19 percent of the national population in 1970 (Ministerio, 1971b: 83). It has the fourth highest population density, 72.6 inhabitants per square kilometer, after the states of Rio de Janeiro, Guanabara and the Federal District (Ministerio, 1971b: 86). Sao Paulo is a highly urbanized state since 80.36 percent of the population lives in urban and suburban areas while the rest of the population (19.64 percent) is rural. In addition to the capital city of Sao Paulo (population 5,186,752) there are fifteen cities having more than 100,000 residents (Ministerio, 1971b: 17). The population of the state is growing at a rapid rate. During the decade of 1960/1970 the net rate of growth was 3.3 percent and the population density passed from 52.5 inhabitants per square kilometer to 71.9 (Ministerio, 1971b: 16). The annual urban population growth rate is 4.6 percent while this rate for the rural areas is 1.1 percent.

Economically, Sao Paulo is the most developed state in the federation. In 1970, it had the highest index of industrialization (.36) compared to other regions of the country (Wiendl, 1972: 9). It generated 32.2 percent of the total annual internal income of Brazil! About one third of the country's electrical energy is produced in the state of Sao Paulo, which also has one fifth of the Brazilian railway mileage. Sao Paulo has the longest road mileage in the federation with about 155,000 kilometers of roads (Ministerio, 1971a: 398). The extension of

¹Fundacao Getulio Vargas, "Estatisticas Basicas. Contas Nacionais do Brasil - Atualizacao." *Conjuntura Economica*, Vol. 25, No. 9, Sept. 1971, pp. 91-117, adopted from table 37, p. 111. Duarte J.C., "Aspectos da Distribuicao da Renda no Brasil em 1970." Universidade de Sao Paulo, ESALQ, Unpublished M.S. thesis, 1971, estimates this proportion to be 34.43 percent.

the highway network has contributed to the industrialization of the state.

The agricultural sector of the state of Sao Paulo is growing at a rate of 3.4 percent annually. For a number of crops Sao Paulo is a leading state in the total area under cultivation, tonnage produced, and total value of crops as indicated by the following table. Table 13 (p.76) below also indicates Sao Paulo's favorable rank in the production and value of cattle, swine, and poultry.

Mineral resources are practically non-existent in Sao Paulo except for dolomite and forforite, zirconium and talcum (Gauthier, 1968: 77-96).

The state of Sao Paulo is one of the most industrialized states of Brazil. Its industries are varied in such areas as cement, steel, aluminum, copper, paper products, meat and leather products, vegetable oil, petro-chemical industries, alcoholic and nonalcoholic beverages and sugarcane processing. In 1970, 1,450,000 persons representing 46.6 percent of the Brazilian labor force were employed in industrial plants in Sao Paulo.

The Region under Study

This study was conducted in eight municipios of one of the nine regional administrative divisions of agriculture, "DIRA's" (Divisoes Integrais Regionais Agricolas) in the state of Sao Paulo. The DIRA of Ribeirao Preto consists of 80 municipios and is located in the northeastern corner of the state on the border with the state of Minas Gerais (see map on page 78). This DIRA is further subdivided into eight administrative sub-regions (Araraquara, Barretos, Bebedouro,

Table 13. Position of the State of Sao Paulo Relative to Other States in Brazil Relative to the Area Under Cultivation (in Hectares), Quantity of Production (tons or 1,000's of heads), and value of Crop or Animals Produced (in 1,000) in 1970.

Crop	Area	Rank by Quantity (tons) Produced	Rank by Value (Cr\$ 1,000) Produced
Unginned cotton	2	1	1
Peanuts	1	1	1
Rice	3	4	3
Bananas	1	2	1
Potatoes	3	3	1
Coffee	2	1	1
Sugarcane	1	1	1
Onions	2	2	2
Beans	5	5	5
Oranges	1	1	1
Castor oil bean	3	2	2
Marioc (cassava)	3	8	8
Corn	4	2	2
Soybeans	4	3	3
Tomatoes	1	1	1
Grapes	2	2	2
Cattle	-	3	2
Swine	-	7	4
Poultry	-	1	1

*Measured in 1,000's of head.

Source: Ministerio do Planejamento e Coordenacao Geral Fundacao IBGE, Anuario Statistico do Brasil - 1971, IBGE: Rio de Janeiro, 1971, adapted from pp. 144-169.

Franca, Orlandia, Ribeirao Preto, Sao Carlos, and Taquaritinga). Soil and climatic conditions are described in detail by Wessel and Nelson (1971).

The Municipios

The DIRA of Ribeirao Preto is composed of 80 municipios, eight of which were studied in this research. These municipios are Altinopolis, Barretos Batatais, Colombia, Guaira, Jardinopolis, Pontal, and Sertaozinho (Medina, no date: 144). Three of these municipios (Barretos, Guaira, and Colombia) are located in the northwestern part of the DIRA, while the other five are found in the center-east of the DIRA around the city of Ribeirao Preto.

Table 14 provides a demographic description of the municipios included in this study and the municipio of Ribeirao Preto. The city of Ribeirao Preto is a regional center of trade, industry and services for these and other municipios.



ÁREAS.
 DIRA RIBEIRÃO PRETO 3.611.252 HA.
 EST. DE SÃO PAULO 24.700.000 HA.

MAP 3
 ADMINISTRATIVE REGIONS
 STATE OF SÃO PAULO

Source: Meyer, et. al.
 1971: 6

Table 14. Some Demographic Characteristics of the Municípios Studied
DIRA of Ribeirão Preto - São Paulo, Brazil, 1970.

Município	Pop. in 1960	Pop. in 1970	% Urban 1970	% Rural 1970	% rate of 1960-1970
Altinópolis	10,900	10,694	49.0	51.0	+ 1.8
Barretos	59,204	56,097	81.6	18.4	+11.6
Batatais	26,812	29,588	72.1	27.9	+10.4
Colombia	5,149	4,226	37.0	63.0	-17.9
Guaira	21,561	27,147	63.0	37.0	+25.9
Jardinópolis	16,625	17,212	64.6	35.4	+ 3.5
Pontal	13,334	13,777	53.4	46.6	+ 3.3
Sertãozinho	26,441	31,235	73.7	26.3	+18.1
Ribeirão Preto	143,553	218,584	92.3	7.7	+51.9
Total (ex- cluding Ribeirão Preto)	180,027	200,376	61.8	38.2	7.1

Source: R.L. Meyer, F.F. Cidade de Aranjó, et. al. Aspectos
Economicos da Agricultura no Região de Ribeirão Preto,
Ano Agrícola 1960/70. Universidade de São Paulo, ESALQ,
Piracicaba, 1971. Mimeographed

As can be observed in Table 14, all of the municípios studied have lost population on a relative basis if the national annual rate of growth of 3.0-3.3 is applied. Colombia has ever lost population in absolute terms. Guaira is the least affected by the phenomenon of loss of population. In contrast, it can be observed that Ribeirão Preto, the regional capital, has grown at an annual rate (5.19 percent) higher than the national average. These data are indicative of

the rapid process of urbanization in the major cities (Rycroft and Clemmer, 1963; Rios, 1971: 269-288). The above table also indicates the differential levels of urbanization in the eight municipios. The urban population is concentrated in the capital of each of the municipios.

The social, economic and communications services and conditions in each of the municipios was studied through a structural differentiation questionnaire. A partial tabulation of these services is presented in Table 15.

Table 15. Indicators of Social, Economic and Communications Conditions in Eight Municipios of the State of Sao Paulo, Brazil, 1970.

<u>Município</u>	Population per Medical Doctor	Population per Nurse	Population per Hospital	Population per Pharmacy	Population per Primary Schoolteacher	Population per Secondary Schoolteacher	Number of University level Educational Institutions
Altinópolis	3698	3698	202	3698	191	740	None
Barretos	2196	2448	189	3672	217	238	2
Batatais	1849	1409	218	3699	170	228	1
Colômbia	None	None*	None	2113	201	384	None
Jardinópolis	5737	2869	210	5737	215	302	None
Pontal	3444	2296	212	3444	189	810	None
Sertãozinho	2403	1358	240	2938	274	568	None
Guarira	3878	2262	798	3878	219	494	None

*Includes practical nurses.

Source: Ministério do Planejamento e Coordenação Geral Fundação IBGE., "Informações Básicas, 1970."
Unpublished data.

Table 15. (Continued)

<u>Município</u>	No. of Banks	No. of Cooperatives	Industrial Plants Employing 5 or more Persons	Population per Telephone	Number of Hotels and "pensions"	No. of "Agronomos" and Veterinarians	No. of Syndicates
Aitinópolis	3	1	3	55	1	1	1
Barretos	14	5	35	31	19	19	7
Batatais	7	3	23	40	6	7	2
Colômbia	0	0	2	2,113	2	0	0
Jardinópolis	7	0	-	58	5	0	0
Pontal	5	0	17	38	1	1	1
Sertãozinho	2	0	6	128	1	1	1
Guarira	8	3	19	112	3	5	2

Table 18 (Continued)

<u>Município</u>	No. of Newspapers (daily or periodical)	No. of Movie Theatres	No. of Public Libraries	Public Transportation within the city
Altinópolis	0	1	1	No
Barretos	4	4	5	Yes
Batatais	1	2	2	No
Colombia	1	0	0	No
Jardinópolis	1	2	0	No
Pontal	0	2	1	No
Sertãozinho	0	3	1	No
Guarira	3	3	1	No

Chapter V
METHODOLOGY

The General Sample

In July 1970, an economic study was conducted in the region of Riberao Preto concerning capital formation and technological change at the farm level. The area of Riberao Preto was selected for the following reasons:

1. Specializations in coffee, sugar cane, cattle and annual crops with a sufficient number of properties in various size groups.
2. Relative homogeneity in type and quality of soil and topography within the various types of farming areas.
3. Minimization of distance between and within areas (Meyer, et.al. 1971: 3).

The selection of the farmers to be included in the study was based on the following criteria:

1. The sample would be chosen at random;
2. The sample would be stratified by size of land operation, varying between 10 and 3,000 hectares;
3. The farms would be owner operated;

4. The major part of each farm would be used in a productive activity;
5. The farms would be specialized in the major activity of the area (município);
6. The sampling procedure would facilitate pre-contacts and interviewing (Meyer et al., 1971: 11-12; Wessel and Nelson, 1971).

Based on an initial random sample, 383 farmers fulfilling the above conditions were selected.

The questionnaires were administered by university students from the Escola Superior de Agricultura Luiz de Queiroz (ESALQ) under the supervision of five professors from The Ohio State University and ESALQ.

The Sample for the Sociological Study

Three hundred and eleven farmers from the economic study sample were reinterviewed for the present research. One município, Sales de Oliveira, included in the economic study was excluded from the sociological research since only eleven farmers were found in the first round of interviewing. The remaining 61 farmers were not interviewed for the following reasons:

1. The farmers were not found at their homes usually after two visits;
2. The farmers had changed their residences to other cities;
3. Refusal by some farmers (about 10);

4. Some farmers had sold their land and moved to other areas;
5. Some names of farmers included in the economic study were not available.

Special Purpose Sample.

In the economic study sample there was a sufficient number of Italian and Brazilian background farmers for purposes of the present statistical analysis. The number of Japanese and Sirio-Lebanese farmers was limited: fifteen and six respectively. It was thus decided to increase the number of Japanese and Sirio-Lebanese farmers. The total population of Sirio-Lebanese farmers owning 10 to 3,000 hectares in two municípios, Altinópolis and Jardinópolis, was obtained from the Instituto Brasileiro de Reforma Agraria list of 1960. The reason for the selection of certain municípios was the relative concentration of the nationality background farmers in these municípios. In addition, the total population of Japanese farmers owning 10 to 3,000 hectares in three municípios, Guaira, Colombia and Barretos, was obtained. Since these farmers had not been included in the economic study, an abridged and adapted form of the economic questionnaire was administered in addition to the sociological questionnaire. Thus, the number of Japanese nationality background farmers was increased to 54 and the number of Sirio-Lebanese farmers was increased to 16. The farmers to be included in the sample were chosen on the basis of their names as indicators of their nationality background. Because of the author's familiarity with Arabic names and the striking difference of Japanese names, errors of omission were limited. A cross check was performed by asking a few farmers in each ethnic

group and leaders of agricultural organizations to list the names of members of these nationality backgrounds in the municípios. Very few names were added as a result of this cross checking.

Among the 311 re-interviewed farmers there were 12 farmers of Portuguese nationality background and five of Spanish origin. Due to their being so few in number, these were not included in the analysis of the data. This reduced the number of re-interviewed farmers in the sample to 294. With the addition of 49 Japanese and Sirio-Lebanese farmers interviewed for the first time, the total number of farmers included in the present statistical analyses was 343.

By nationality breakdown the sample for the sociological analysis consisted of 182 Brazilian, 91 Italian, 54 Japanese, and 16 Sirio-Lebanese farmers.

All of the Brazilian and Italian farmers had been previously interviewed in the economic study. Of the 39 Japanese farmers, 15 were included in the earlier economic study, while seven of the 16 Sirio-Lebanese farmers were included in the same study.

For the purpose of the economic analysis in the present study, only farmers from the 1969/70 sample were studied. Control for farm type was found to be necessary in the economic analysis. Since the Japanese farmers were all annual crop farmers, it was decided to compare them with the Brazilian (43) and Italian annual crop farmers (13).

The Economic Questionnaire.

The economic questionnaire was developed by a number of

professors at the Ohio State University and ESAIQ. A copy of the questionnaire and a description of its content can be found in Appendix B.

The major economic variables included in the present research are production data, land data, fixed capital data, and farm expenses.

The Sociological Questionnaire.

The sociological questionnaire used in this study included sections pertaining to several subjects since a number of researchers was involved in the overall project. An outline of the major topics of investigation and the specific questions can be found in Appendix B.

The questionnaire was modified based on the suggestions of a number of Brazilian social scientists and also on the basis of a limited pretest in the field. For this purpose farmers visiting the extension office in one of the municipios were interviewed. In addition, each interviewer was asked to complete a questionnaire from one farmer that he could choose. Based on the responses of the farmers included in the pretest and the comments of the interviewers, parts of the questionnaire were revised.

Choice of the Interviewers.

A group of 16 prospective interviewers were trained through an explanation of the questionnaire and mock interviews. Eight interviewers were selected after the training period. Constant supervision during interviewing and review of the completed questionnaires provided additional "on the job" training.

Three of the interviewers were university students; two had completed secondary school and were teaching elementary school; and three were secondary school students.

Interviewing and Coding.

The 311 questionnaires conducted with previously interviewed farmers were completed between November 1971 and February 1972. The additional special purpose sample was interviewed between July and September, 1972. The time lag between the two sets of interviews was thus not enough to create problems of variety of response due to time. The interviewers were supervised throughout the interviewing period. The writer and one other graduate student assisted at about half the interviews.

Upon completion and correction of the questionnaires, eight coders were hired and trained. One had been an interviewer and two had previous coding experience. In addition to the training each trainee coded three questionnaires for practice. These were corrected and further instructions were provided. Each questionnaire was coded twice by different coders. Their code sheets were then compared. In case of differences, the coders referred back to the questionnaire for correction. After punching the computer cards, the computer printout was checked against one of the code sheets. Further differences between the two were corrected on the cards and re-punched. A third check on coding and punching was performed based on the percentage runs. Whenever data appeared that did not exist in the codebook, they were checked and re-punched. Because of this coding and checking procedure, errors in the data were kept to a minimum.

Hypotheses

The present study is exploratory in nature. Three ethnic groups are compared with regard to a large number of economic variables. An

additional ethnic group, the Sirio-Lebanese, was added for use in the ethnic group comparisons concerning sociological characteristics. In both types of comparisons, the hypotheses were non-directional.

The comparative historical backgrounds of the four ethnic groups and the review of theoretical frameworks suggested the possibility of economic and sociological differences among the ethnic groups.

Two general theoretical hypotheses were therefore formulated, one suggesting that there are significant differences among the ethnic groups in their economic behavior, and another suggesting that there are significant sociological differences among the groups.

Although a very large number of variables were used in attempting to test the above two general hypotheses only examples of the variables in each area of the analysis will be discussed here.

Some of the more specific hypotheses tested in the economic analyses include:

At the farm level and per unit of land (controlling for farm type) there are no significant differences among the three ethnic groups (Brazilian, Italian, and Japanese) with regard to:

1. Farm expenses;
2. Value of fixed capital;
3. Value of crops and total gross output.

In the sociological analyses the more specific hypotheses were:

There are no significant differences among the four ethnic groups (Brazilian, Italian, Japanese, and Sirio-Lebanese) with regard to:

1. Individual characteristics (e.g. education, occupation and residence)
2. Family level characteristics (e.g. family size, number of dependents, children's and wives' education)
3. Attitudinal and knowledge characteristics (e.g. attitudes toward business relations with relatives, superstition, and work ethic).

Both in the economic and sociological analyses a series of more specific hypotheses were tested for each of the above hypotheses.

Definition of Variables

The independent variable for the present study, ethnic background, is generally a fluid term. It can be justifiably defined in a variety of ways. Extensive information was collected on the nationality background of the respondents, their wives, and the parents and grandparents of the respondents and their wives. In addition the farmers were asked about their subjective ethnic background identification.

Father's country of birth was chosen as the classificatory variable for farmer's ethnic background. This choice is justified since extensive ethnic intermarriage was indicated by the data.

In the text reference is made to the four ethnic groups as "Brazilian," "Italian", "Japanese," and "Sirio-Lebanese." These are of course classificatory terms which should not be confused with the actual citizenship of the farmers.

The dependent variables are the economic and sociological variables discussed in the previous section. These variables are

described in Chapter VI.

Methods of Analysis

In the economic comparisons of the three ethnic groups analysis of variance was used to test for significance of differences between means. Whenever a significant difference was indicated by the analysis of variance Scheffe's post-hoc test was used to test for significance of difference between each pair of ethnic groups. The acceptable level of significance was established at .05 both for the analysis of variance and Scheffe's post-hoc test.

The basic assumptions of analysis of variance are that the respondents are sampled at random from normal populations with equal variances and that the different samples are independent (Glass and Stanley, 19 : 340). Some of these assumptions can be violated, however, without affecting significantly the results of the test (Glass and Stanley, 19 : 368-377; Kennedy, no date: 4.27,2.83-4 91). Scheffe's post-hoc test is applicable in the cases where N's for the various groups are unequal. Compared with other post-hoc tests it is least responsive to violations of underlying model assumptions. Regardless of the number of comparisons, Scheffe's post-hoc test maintains the probability of alpha error at the established level. The major disadvantage of this procedure is its limited sensitivity to the detection of differences among pairs of means.

For the sociological comparison, analysis of variance and Scheffe's post-hoc test were used whenever interval data for the four groups were compared.

Whenever sociological data were nominal in nature the chi-square test was used. For cases in which chi-square tests indicated significant differences among the four groups, the chi-square post-hoc test for homogeneity was used to test for significance of differences among ethnic groups at each level of the independent variable (Marascuio, 1971: 373-392). The .05 level of significance was used both for the chi-square and the chi-square test for homogeneity.

Null hypotheses were rejected whenever the probability of the differences occurring by chance were less than 5 percent.

Chapter VI

RESULTS

The four ethnic groups have been compared with regard to a number of economic and sociological variables. This chapter presents the findings from these comparisons. Initial discussion concerns geographic location (by município), farm size, and farm type of the four ethnic groups. In the second part of the chapter the results of the economic comparisons are discussed. The third section presents the findings from the sociological comparison. Finally, the relationship between the economic and sociological findings is discussed in the last section of the chapter.

Geographic location of Farms

An analysis of Table 15 demonstrates concentration of some ethnic groups by município.

Italians were concentrated in Jardinópolis, Pontal, and Sertãozinho. The latter two municípios are sugarcane producers. The Japanese farmers were mostly located in Guaira and Barretos. Sirio-Lebanese farmers were found in Altinópolis and Jardinópolis. The Brazilians were evenly distributed in the eight municípios.

Table 10. Geographic Distribution (by municipios) of 343 Respondents By Ethnic Group.

	Altinopolis	Borretos	Batatais	Colombia	Guaira	Jardinopolis	Pontal	Sertaozinho	Total
Brazilians	21 (11.5)	33 (18.1)	31 (17.0)	7 (3.8)	53 (29.1)	18 (9.9)	10 (5.5)	9 (4.9)	182 (99.8)
Italians	5 (5.5)	5 (5.5)	8 (8.8)	2 (2.2)	4 (4.4)	29 (31.9)	11 (12.1)	27 (29.7)	91 (100.1)
Japanese	0	13 (24.1)	0	2 (3.7)	37 (68.5)	2 (3.7)	0	0	54 (100.0)
Sirio-Lebanese	6 (37.5)	1 (6.2)	0	0	2 (12.5)	7 (43.8)	0	0	16 (100.0)

As it has been indicated in Chapter III, Italian immigrants settled the coffee growing areas adjoining Ribeirão Preto. The three municípios where they are concentrated are the same areas where they first settled. Over a period of time through savings these immigrants bought land that was depreciated during the successive coffee crises.

The Japanese, as has been observed in the "Historical Background" chapter, have been and still are of high geographic mobility. Their movement into Guaira and Barretos has been recent. At present there is the beginning of a movement out of these municípios toward Paraná and Goiás.

Farm size.

For the purpose of the present analysis land size was classified into three categories of operation: "small" (4-12.5 alqueires¹), "medium" (12.6 - 82.4 alqueires) and "large" (82.5-1,250 alqueires).

Table 1 indicates significant differences in distribution of the four ethnic groups by land size.

There were significantly more Italian farmers owning small size farms than among any of the other three ethnic groups.

One of the major sugar processing factory owners in Sertãozinho, where Italian farmers are heavily concentrated, indicated that small size sugarcane growers were not efficient. He further indicated that the factory owners are exerting strong pressure on the small size

¹An alqueire is equivalent to 2.42 hectares (5.98 acres).

farmers to sell their land. In addition it was learned from a number of sources (farmers and local extension agents) that the four sugar processing factory owners have agreed to buy land from farmers each in only one of the four parts of the município. This process reduces competition among the factory owners. Farmers are therefore under stronger pressure to sell their land to them at their prices. A number of farmers indicated that neighbors have sold land to the factory owners (usineiros). Continued pressure of this nature may lead to the gradual disappearance of small Italian farmers in this area.

Type of Exploitation.

Type of farm exploitation is related to the geographic distribution. Some of the municípios are producers of sugarcane (Sertãozinho, Pontal), some of annual crops (Jardinópolis, Colombia, and Guaira), and others of livestock (Guaita, Batatais) and coffee (Altinópolis). Since a concentration of certain ethnic groups was observed in some municípios it was expected that there would be product specialization by ethnic group.

Table 13 presents type of farm exploitation by ethnic groups.

In farm type classification the following criteria were used:

1. A farm was classified into annual crop type if the farmer planted more than 50 percent of the area in corn, soybeans, cotton, or rice;
2. A farm was classified as "perennial crop" if the farmer planted more than 50 percent of the area in coffee or sugarcane;
3. A farm was classified into livestock and livestock and crop, if the farmer derived 50 percent or more of his income from these products.

Table 1. Size of Land Ownership by Ethnic Group

	Brazilian	Italian	Japanese	Sirio-Lebanese
4-12.5 alqueires	18 (9.9%)	28 (30.8)	5 (9.3)	0 (0)
12.6-82.4 alqueires	93 (51.1)	42 (46.1)	31 (57.4)	6 (40.0)
82.5-1,250 alqueires	71 (39.0)	21 (23.1)	18 (33.3)	9 (60.0)
Total	182	91	54	15

*Percent of the total ethnic group.

Chi-square = 30.30 $p < .05$

Table 1. Type of farm exploitation by ethnic group

	Annual Crops	Perennial Crops	Livestock and Livestock and Crops	Mixed Crops	Total
Brazilian	43 (23.6*)	23 (12.6)	68 (37.4)	48 (26.4)	182 (100.0)
Italian	13 (14.3)	39 (42.9)	19 (20.9)	20 (22.0)	91 (100.0)
Japanese	53 (98.1)	0 (0)	1 (1.9)	0 (0)	54
Sino-Japanese	7 (43.7)	7 (43.7)	2 (12.5)	0 (0)	16 (99.9)
Total	116	69	90	68	343

*percent of total ethnic group

A farm was classified into mixed crops if the farmer planted a number of crops none of which exceeded 50 percent of the area cultivated.

The data indicate an almost exclusive specialization in annual crops among Japanese farmers. There were proportionately more Italian farmers growing perennial crops, especially sugarcane, than any other product. The Sirio-Lebanese were equally divided into growers of perennial crops (only coffee) and annual crops. Proportionately more Brazilian farmers produced livestock and livestock and crops than any other products. Similarly, proportionately more Brazilians than any of the other three groups raised livestock.

Economic Analyses

This section will be concerned with the comparison of the economic activities of selected farmers in three ethnic groups, Brazilian, Italian, and Japanese. While the descriptive data indicate that the inclusion of the Sirio-Lebanese farmers would have been interesting, this was impossible in view of the limited number included in the earlier economic study and the ensuing statistical problems of analysis.

Control for farm type was found necessary. Since all of the Japanese farmers derived 50 percent or more of their farm income from annual crops, it was decided to limit the analysis to annual crop farmers in the three ethnic groups. There were 43 Brazilian, 15 Japanese and 13 Italian farmers who derived 50 percent or more of

their incomes from annual crops. In view of the limited size of the sample, findings should be cautiously interpreted.

This section is organized into three main parts. First, gross comparisons (farm data) are made among ethnic groups. Second, the same economic comparisons are made per unit of land cultivated, per unit of land operated and per unit of land used (unit area data). Finally, in the third part, conclusions are drawn based upon the two levels of analyses.

Farm Data.

This section will be concerned with comparisons of the three ethnic groups at the farm level, without controlling for size of land farmed. Comparisons are made on a large number of variables. The results of the analyses are presented in a summary form in Table 19. Analysis of variance was used in all of the tests. Whenever an analysis of variance indicated significant results at the .05 level of significance or less, Scheffe's post-hoc test was used to determine the significance of differences of means between pairs of ethnic groups. In one comparison the analysis of variance indicates significant differences in means but Scheffe's post-hoc test failed to discriminate significance between two groups by a very narrow difference (.02). As indicated in Chapter V, Scheffe's test is considered as one of the least sensitive post-hoc tests. The difference between the two groups was therefore considered significant.

Analysis of variance tests were performed on 24 farm level economic variables to test for significant differences among the three ethnic groups. As indicated in Table 19, significant differences were found

TABLE 1
 Analysis of Variance for Three Ethnic Groups of Annual Crop
 Farmers, São Paulo

Variable	Means			Standard Deviations			Significance *Significant at .05 or less	Scheffe's Post-Hoc Test Results **
	Brazilians N=43	Italians N=13	Japanese N=15	Brazilians N=43	Italian N=13	Japanese N=15		
1. Value of Crops	53,150	27,857	167,713	125,802	30,516	249,635	.02*	J>I, J>B
2. Total Gross Output	76,147	38,756	199,130	166,549	43,534	332,971	.07	
3. Cultivated Land	207	92	360	342	107	483	.13	
4. Land Operated	272	119	451	439	127	536	.16	
5. Land Used	242	98	427	423	107	633	.14	
6. Land Rented-In	70	48	224	86	24	316	.34	
7. Value of Land Operated	2,730	1,204	4,517	4,395	1,275	5,362	.16	
8. Value of Me- chanical Equip.	75,495	21,133	181,548	215,150	24,684	284,043	.12	
9. Value of Trucks	7,461	3,776	22,875	17,057	7,043	38,807	.04*	J>I, J>B
10. Value of Non- mechanical Equipment	95	1,167	334	1,040	2,035	591	.20	
11. Value of Build- ings	45,906	19,430	62,500	94,725	16,212	79,366	.61	
12. Total Value of Fixed Capital	153,522	61,938	281,494	303,999	46,237	347,652	.13	
13. Value of Live- stock	1,318	1,225	591	2,175	1,455	92	.5	
14. Fertilizer Ex- penses	9,921	4,469	39,123	15,307	4,360	69,266	.01*	J>I, J>B
15. Other Crop Expenses	6,130	3,151	24,756	18,690	3,248	39,543	.03*	J>I, J>B
16. Total Crop Expenses	16,052	7,621	63,880	33,098	7,596	108,363	.01*	J>I, J>B
17. Machinery Rent- al Expenses	1,479	509	1,376	2,645	969	1,968	.59	
18. Other Machin- ery Expenses	9,040	3,972	33,969	15,493	4,746	61,335	.01*	J>I, J>B
19. Total Machin- ery Expenses	10,519	4,482	35,345	16,138	4,261	60,999	.01*	J>I, J>B
20. Total Livestock Expenses	1,550	1,578	795	2,316	2,387	1,506	.50	
21. Hired Labor Cash Expenses	19,698	9,413	53,710	40,174	14,490	113,714	.11	
22. Interest Ex- penses	1,693	197	11,061	4,425	507	15,898	.0001*	J>I, J>B
23. General Expenses	6,629	735	5,498	35,406	789	11,380	.81	
24. Land Rental Expenses	364	3,151	12,791	1,516	194	77,624	.005*	J>B

J = Japanese, I = Italians, B = Brazilians

For instance, J>I would mean that the mean value for the Japanese farmers was significantly larger than the mean value for Italian farmers.

**1% P < .05

among ethnic group means on nine variables at the .05 level or less. No significant differences were found among ethnic group means on the remaining 15 variables.

A few comments are warranted about the nature of the distributions suggested by the data in Table 1:

1. The ranges in observations (highest value less lowest value) were large;
2. The means indicate that the distributions are strongly skewed toward upper values; it is difficult to assess whether the distributions are an accurate reflection of the populations;
3. Small sizes of samples may have caused the strongly skewed nature of the distributions;
4. These characteristics of the sample distribution resulted in very high standard deviations;

The combination of these factors led to the lack of significance of differences among means for the various ethnic groups in a number of cases.

A larger sample size or the exclusion of some of the extreme values could have resulted in a higher incidence of significant differences among the means for the three ethnic groups under study.

Cultivated land referred to total amount of land in hectares

under annual cultivation. This included irrigated and non-irrigated crop land and improved pasture, i.e., pasture land replanted each year. Land operated represented the sum in hectares of cultivated land, natural pasture and other land which was indirectly related to agricultural activities (i.e., roads, built and forested areas). Another operational definition of operated land is the sum of owned and rented-in land less land that was rented-out. Land used referred to the amount of land actively used on the farm enterprise. It was equivalent to land operated minus other land indirectly related to farming (areas devoted to roads, buildings, and forests).

The mean amounts of land cultivated, operated used, or rented-in were not significantly different among the three ethnic groups, despite large mean difference as indicated in Table

Production Data

Two measures of production were used. Value of crop sales represented the total value of crops sold or to be sold from the quantity harvested during the year of record. Total gross output represented the sum of crop and livestock sales, family privileges, hired labor privileges, changes in the value of livestock inventory, value of abnormal losses, value of rent payments in kind less the value of livestock purchases.

There was a significant difference in means among ethnic groups in

the value of crops. The average value of crops for the Japanese farmers was 167,713 cruzeiros while the average value of crops for the Brazilian and Italian farmers were 51,150 cruzeiros and 27,857 cruzeiros respectively. Scheffe's post-hoc test indicated significant differences at the .05 level between the main crop value of Brazilians and Japanese, and Italians and Japanese.

Total gross output means for the three ethnic groups showed differences of marginal significance (.07). Scheffe's post-hoc test was not applied since the F value exceeded the .05 level of significance.

Value of Fixed Capital

Component parts of the value of fixed capital were separately tested for significance of difference in means. Only the mean values of trucks were significantly different among the three groups. The mean value of trucks owned by Japanese farmers was significantly larger than the mean value of trucks owned by Brazilian and Italian farmers.

Value of mechanical equipment, non-mechanical equipment, buildings and livestock were not significantly different for Brazilian, Italian and Japanese farmers. As indicated in Table 19 the mean value of each of these components of fixed farm capital (except for value of livestock), was considerably larger for the Japanese farmer than that of the Italian farmers, and somewhat larger than the Brazilian farmers, although differences were not statistically significant.

The total value of fixed farm capital was not significantly different among the three ethnic groups at the .05 level. It should be observed however, that the mean total value of fixed capital of Japanese farmers was 281,494 cruzeiros compared to 153,522 cruzeiros among Brazilian farmers and 61,938 cruzeiros among Italian farmers.

Farm expenses

Overall, there were significant differences in farm expenditures among the three ethnic groups. Japanese farmers spent significantly more than Brazilian and Italian farmers in total crop expenses. This was also true for the component parts of total crop expense, fertilizers and other crop expenses.

Similarly Japanese farmers spent significantly more than Brazilian and Italian farmers in total machinery expenses. Breaking down total machinery expenses into its component parts it was observed that there were no significant differences among the three ethnic groups in machinery rental expenses. However, the Japanese farmers spent significantly more than their Brazilian and Italian counterparts in cash expenses on such items as fuel, lubricants, tires and other maintenance costs of mechanical equipment.

Hired labor expenses were not significantly different among the three ethnic groups although, on the average, Japanese farmers spent more than five times as much for hired labor as Italian farmers.

Interest expenses on loans were significantly higher among Japanese farmers than either Brazilians or Italians.

Similarly, land rental expenses were significantly higher among Japanese farmers than among Brazilian farmers.

General farm expenses were not significantly different among the three ethnic groups.

Economic Analyses Per Unit of Land

In order to complement the farm level economic analyses, the three ethnic groups were compared concerning their economic performances per unit of land. Unit of land was measured in three ways, cultivated land, operated land, and used land.

Most of the variables on which the three ethnic groups were compared were tested per unit of these three types of land use described in the previous section.

Table 20 summarizes the results of the findings of this section. Analysis of variance and Scheffe's post-hoc test were used in comparing the various means of the three ethnic groups.

Production Data

Value of crops per unit of land operated was significantly higher among Japanese than Brazilian farmers. Japanese farmers had a higher value of crop per unit of land operated than Italian farmers but this difference was not significant at the .05 level. While the mean value of crops per unit of land cultivated and land used was higher among Japanese farmers these differences were not significant.

Similarly, gross output per unit of land cultivated, operated, or used did not indicate significant differences between the three groups.

Value of Fixed Capital

Value of machinery per unit of land used, operated or cultivated did not indicate significant differences among the three groups. The average value of machinery per unit of land for Japanese farmers was about twice as much as the value of machinery per unit of land among Italians or Brazilians.

Table 20. Results of Duncan Analyses (Analysis of Variance) Per Unit of Land for Three Ethnic Groups of Annual Crop Farmers, São Paulo.

Variable	Means			Standard Deviations			Signif. F ¹ (if F is .05 or less)	Scheffe's test (if F is .05 or less)
	Brazilians N=43	Italians N=13	Japanese N=15	Brazilians N=43	Italians N=13	Japanese N=15		
1. Value of Crops/C.L. ²	291.94	332.62	436.36	247.57	228.88	178.83	F>.11	
2. Value of Crops/L.O.	217.77	273.86	358.33	176.51	225.82	141.60	F>.04*	J>B ²
3. Value of Crops/L.O.	256.90	318.12	387.96	201.11	235.82	168.77	F>.09	
4. Gross Output/C.L.	404.89	461.14	486.86	254.94	211.05	188.80	F>.53	
5. Gross Output/L.O.	301.92	377.75	392.84	184.94	214.88	151.55	F>.18	
6. Gross Output/L.O.	354.84	430.91	426.32	209.56	228.89	169.33	F>.34	
7. Value of Machinery/C.L.	300.69	283.24	367.39	660.66	294.14	875.71	F>.33	
8. Value of Machinery/L.O.	205.73	227.05	503.61	371.53	249.06	636.08	F>.12	
9. Value of Machinery/L.O.	259.66	255.74	537.32	530.98	266.11	884.24	F>.27	
10. Value of Trucks/C.L.	26.69	84.11	53.00	43.92	184.21	35.89	F>.10	
11. Value of Trucks/L.O.	18.25	70.78	44.45	26.89	163.16	30.12	F>.17	
12. Value of Trucks/L.O.	24.14	80.41	47.65	40.31	178.13	31.89	F>.09	
13. Value of Machinery and Trucks/C.L.	327.38	367.35	640.39	659.64	55.58	861.05	F>.29	
14. Value of Non-mechanical Equip./C.L.	17.86	35.25	2.07	78.37	35.61	2.82	F>.03*	I>J
15. Value of Non-mechanical Equip./L.O.	12.16	23.87	1.84	16.56	35.61	2.64	F>.02*	I>J
16. Value of Non-mechanical Equip./L.O.	15.10	34.91	1.47	22.40	55.74	2.82	F>.01*	I>J
17. Value of Buildings/C.L.	314.52	347.23	267.18	400.26	357.89	401.74	F>.86	
18. Total Value of Fixed Capital/C.L.	782.07	896.81	956.51	753.20	645.37	950.47	F>.73	
19. Total Value of Fixed Capital/L.O.	569.33	725.97	778.92	500.53	607.06	870.80	F>.54	
20. Total Value of Fixed Capital/L.O.	687.21	832.24	637.13	630.52	601.46	926.51	F>.69	
21. Hired Labor Expenses/C.L.	82.41	86.04	95.63	74.33	51.26	57.32	F>.84	
22. Overhead/C.L.	52.15	107.67	13.64	211.43	155.57	218.82	F>.50	
23. Family Labor Overhead/C.L.	-88.79	181.69	506.79	760.72	418.36	1736.67	F>.18	
24. Fertilizer Expenses/C.L.	59.75	50.19	92.62	35.65	25.51	38.58	F>.003*	J>B, J>I
25. Machinery Expenses/C.L.	66.59	65.73	95.98	41.84	77.67	44.04	F>.13	
26. Fertilizer and Machinery Expenses/C.L.	126.34	115.92	188.61	60.07	94.81	60.96	F>.008*	J>B, J>I
27. Interest Expenses/C.L.	9.27	4.34	16.81	12.40	10.96	20.04	F>.0001	J>I, J>B
28. Interest Expenses/L.O.	6.41	4.05	30.32	8.16	10.11	16.84	F>.0001	J>I, J>B
29. Interest Expenses/L.O.	8.34	4.17	21.07	11.51	10.74	14.44	F>.0001	J>I, J>B

C.L. = Cultivated Land, L.O. = Land Operated, L.U. = Land Used.

J = Japanese, I = Italian, B = Brazilian.

For instance, J>I would mean that the mean value for the Japanese farmers was significantly larger than the mean value for Italian farmers.

Similarly, value of trucks per unit of land used, cultivated, and operated was not significantly different among the three ethnic groups. It can be observed however that per unit of land operated, the value of trucks owned by Italians was in excess of four times the Brazilians' and slightly more than one and one half times the value of trucks owned by Japanese.

A compiled measure of the value of trucks and other machinery did not indicate significant differences among the three ethnic groups.

Mean values of non-mechanical equipment for each type of land use were significantly different among the three ethnic groups. Italians farmers had, per unit of all the three types of land, non-mechanical equipment worth significantly more than the Japanese farmers.

Value of buildings per unit of land was not significantly different among the three groups.

Total value of fixed capital per unit of land used, operated, or cultivated was not significant among the three ethnic groups. It is interesting to note however, that by all three measures the Japanese farmers had more fixed capital per unit of land than the other two groups.

Farm Expenses

Hired labor expenses were similar among the three ethnic groups.

A combined measure of fertilizer and machinery expenses per unit of cultivated land indicated the existence of significant differences among the three ethnic groups.

Japanese farmers spent significantly more than Italian and Brazilian farmers on fertilizer and machinery. Fertilizer and machinery expenses were then used separately to test for differences between the

three groups. Fertilizer expenses were found to be significantly different. Japanese farmers spent more per unit of cultivated land on fertilizers than the Italian or Brazilian farmers. A similar test using machinery expenses failed to indicate any significant differences.

Per unit of land cultivated, operated, or used Japanese farmers had significantly higher interest expenses than Brazilians or Italians.

Return to Family Labor

A measure was devised to test the returns per unit of land per unit of family labor. The formula for this measure was:

Return to Unit of Land Cultivated =

$$\frac{TGO - (TCXP + TMXP + HLXP + CFC + TLXP + IXP + GXP + LRXP)}{\text{Cultivated Land}}$$

$$\text{Return to Unit of Family Labor} = \frac{\text{Return to Unit of Cultivated Land}}{\text{Total Family Labor}}$$

where,

TGO = Total Gross Output

TCXP = Total Crop Expenses

HLXP = Hired Labor Expenses

CFC = Charge to Fixed Capital (at the rate of 9 percent)

TLXP = Total Livestock Expenses

IXP = Interest Expenses

GXP = General Expenses

LRXP = Land Rental Expenses

No significant differences were found among the three ethnic groups with regard to return to unit of land cultivated (Termed "Overhead/C.L. in Table 20.) There were no significant differences in the average total family labor used in the farm enterprise among the

three ethnic groups. Similarly, returns to Unit Family labor per unit of land cultivated use not significantly different among three graphs (Termed "Family Labor Overhead/C.L." in Table 20).

Summary and Conclusions

The comparison of the three ethnic groups indicated more significant differences at the farm level than on the basis of unit of land cultivated, operated or used. At the farm level significant differences were noted among the three groups with regard to their total value of crops, value of trucks, fertilizer expenses, other crop expenses, total crop expenses, machinery expenses (other than rental expenses), interest expenses, and land rental expenses. The Japanese farmers owned, produced, and spent significantly more than Brazilian and/or Italian farmers each time the differences were significant.

Per unit of land operated, value of crops was significantly higher among Japanese farmers than among Brazilian farmers. For each of the three types of land use Italian farmers had non-mechanical equipment worth significantly more than among Japanese farmers. Japanese farmers, however, spent significantly more than Brazilian and Italian farmers. The combined expenses on fertilizers and machinery were significantly higher among Japanese than Brazilian or Italian farmers.

For two major statistical considerations the economic analyses should be interpreted cautiously. The sample size, at least for the Italian and Japanese farmers, was small. Since the original purpose of this study did not include economic comparisons, among ethnic groups it was difficult to control problems of sample size. Secondly, because of wide fluctuations in most variables among farmers within the same

ethnic group, the standard deviations were large. The combined effect of these factors could have contributed to the acceptance of the null hypothesis when means for the three groups were different. An example is the difference in mean value of machinery per unit of land among the three groups. Although the mean value of machinery per unit of land for Japanese farmers was about twice that of Brazilian or Italian farmers, the difference was not statistically significant because of the very high standard deviations involved. For this reason the standard deviation of each variable for each ethnic group is indicated below the mean value.

The farm level analysis indicated various differences in production and expenses among the three ethnic groups. However, the additional analysis indicated that these differences were frequently due to differences in size. When repeating the analysis for the same variables by unit of land two major farm expenses, fertilizer and interest expenses, proved to be significantly different among the three groups. Japanese farmers spent significantly more on fertilizers and interest than Italian or Brazilian farmers. It is interesting to note that concomitantly the value of crops per unit of land operated was significantly higher among Japanese than Brazilian farmers. The causal relationship between fertilizer expenses and value of crops per unit of land operated however is not within the scope of the present research and further investigation seems necessary. With regard to this aspect it is significant to note that Japanese farmers exhibited more precise information about fertilizers than Italian or Brazilian farmers. Further discussion on this topic is presented in the analysis of the sociological data.

Higher cash interest expenses were found among Japanese farmers than Italian or Brazilian farmers for each of the three types of land. However,

no significant differences were found in the mean total value of fixed capital. Interest on capital used for variable farm expenses (e.g., fertilizer, insecticides, etc) in Brazil is almost non-existent. The bulk of the interest expenses has to be attributed to fixed capital. One possible explanation for this situation could be that Japanese farmers are still in the process of making payments on loans for fixed capital, while Italian and Brazilian farmers have already made these payments. It should also be observed that while mean total values of fixed capital were not significantly different among the three groups, the mean total value of fixed capital for Japanese farmers was almost double that of Brazilian farmers and more than four times that of Italian farmers.

An alternative explanation is that loans are contracted for operating expenses. Under this assumption it could be that higher fertilizer expenses (at the farm level and per unit of land) are financed through loans. Therefore, it would be expected that the interest expenses of Japanese farmers would be higher than for the other two groups.

A third possible, but less likely, explanation would be the use of varying sources of loans among the three ethnic groups and the use of more expensive sources of credit by Japanese farmers.

Further extensive research is necessary to provide a definitive explanation of the relationship between fertilizer expenses, interest expenses, and value of crops produced.

At the farm level, without controlling for farm size it can be concluded that Japanese farmers in general have a higher value of crops, higher total crop expenses, higher machinery expenses, higher interest expenses and higher land rental expenses than one or both of the other two

ethnic groups. Most of these, except for the variables discussed earlier, are related to larger land size among Japanese farmers.

In the following section dealing with the comparison of the four ethnic groups concerning sociological variables an attempt will be made to relate the economic variables to some sociological factors.

Sociological Analyses

Sociological comparisons were made concerning a number of variables of the Brazilian, Italian, Japanese and Sirio-Lebanese farmers. There were 162 Brazilians, 91 Italians, 54 Japanese, and 16 Sirio-Lebanese. The statistical methods used in the comparisons included analysis of variance and Scheffe's post-hoc test for interval type variables, and chi-square and the post-hoc test for nominal data. The .05 level was chosen for determination of significance in all comparisons. The results of all the statistical tests are presented in Table 21.

The present section is divided into four parts. First, the four ethnic groups are compared on individual variables such as age, education, residence, occupation, geographic mobility, membership in associations, and political participation. The second part deals with family level variables such as number of children, number of dependent and education of wife and children. The third part discusses the comparison of the four groups on attitudinal and knowledge questions concerning such topics as business relations with relatives, superstition, and work ethic. In the last part of this section the results are summarized and discussed. Relations between the sociological and economic comparisons will also be discussed in this section.

Age (Variable 1.)

Significant differences were found in the ages of farmers. Italian

Table 21. Results of Sociological Analyses For Four Ethnic Groups in the State of Sao Paulo, Brazil

Variable No.	Means				Test ¹	Significance	Post-Hoc ² Test Results
	Brazilians	Italians	Japanese	Sirio-Lebanese			
1. ⁴	46.13	56.53	43.96	46.44	F=24.31	F<.001	I>B, I>J, I>S
2.	N.A.	N.A.	N.A.	N.A.	X ² =54.61	P<.001	"No education": I>B ³ I>S "6-10 years": B>I
3.	N.A.	N.A.	N.A.	N.A.	X ² =19.45	P<.001	"Farming and other": S>B, S>J, S>I
4.	N.A.	N.A.	N.A.	N.A.	X ² =66.46	P<.001	"Rural and urban": S>B, S>J, S>I
5.	N.A.	N.A.	N.A.	N.A.	X ² =.56	--	--
6.	N.A.	N.A.	N.A.	N.A.	X ² =28.36	F<.001	"3 or more": S>B, S>J, S>I, B>I
7.	N.A.	N.A.	N.A.	N.A.	X ² =3.55	--	--
8.	N.A.	N.A.	N.A.	N.A.	X ² =7.14	--	--
9.	N.A.	N.A.	N.A.	N.A.	X ² =35.75	P<.001	"Voted": B>I, B>J
10.	5.11	5.38	2.48	5.31	F=11.73	F<.0001	B>J, I>J, S>J
11.	.79	.41	.60	.61	F=3.96	F<.009	B>I
12.	31.46	42.30	19.70	35.06	F=21.83	F<.0001	I>B, I>J, B>J, S>J
13.	3.56	4.89	4.70	3.62	F=6.09	F<.0008	I>B

Table 21. Results of Sociological Analyses For Four Ethnic Groups in the State of Sao Paulo, Brazil (Continued)

Variable No.	Means				Test ¹	Significance	Post-Hoc Test Results ²
	Brazilians	Italians	Japanese	Sirio-Lebanese			
14.	.55	.56	1.46	.37	F=5.30	F<.002	J>B, J>I
15.	N.A.	N.A.	N.A.	N.A.	X ² =68.27	P<.001	"No education": I>S "11-15 years": S>I, S>J
16.	1.79	1.65	2.14	N.A.	F=1.09	F>.05	
17.	3.41	3.23	3.00	N.A.	F=.72	F>.05	
18.	5.26	5.92	6.00	N.A.	F=1.86	F>.05	
19.	6.18	7.36	7.08	N.A.	F=3.12	F>.05	
20.	7.39	8.22	7.69	N.A.	F=1.01	F>.05	
21.	8.63	7.16	9.79	N.A.	F=3.16	F<.05	I>J
22.	7.40	6.86	9.90	N.A.	F=2.73	F<.05	
23.	7.29	6.44	7.00	5.81	F=3.32	F<.02	B>I, B>S
24.	N.A.	N.A.	N.A.	N.A.	X ² =15.11	P<.01	"Yes": J>I
25.	N.A.	N.A.	N.A.	N.A.	X ² =14.47	P<.005	"Yes": I>B
26.	N.A.	N.A.	N.A.	N.A.	X ² =6.42	P>.05	
27.	N.A.	N.A.	N.A.	N.A.	X ² =9.77	P>.05	

Table 21. Results of Sociological Analyses For Four Ethnic Groups in the State of Sao Paulo, Brazil (Continued)

Var- iable No.	Means				Test ¹	Signifi- cance	Post-Hoc Test Results ²
	Brazilians	Italians	Japanese	Sirio- Lebanese			
28.	N.A.	N.A.	N.A.	N.A.	$X^2=12.18$	$P<.01$	"No": B>I
29.	N.A.	N.A.	N.A.	N.A.	$X^2=5.97$	$P>.05$	
30.	N.A.	N.A.	N.A.	N.A.	$X^2=7.07$	$P>.05$	
31.	N.A.	N.A.	N.A.	N.A.	$X^2=4.56$	$P>.05$	
32.	N.A.	N.A.	N.A.	N.A.	$X^2=3.22$	$P>.05$	
33.	N.A.	N.A.	N.A.	N.A.	$X^2=30.68$	$P<.001$	"Know": J>I, J>B

¹ X^2 = Chi-square, F = Analysis of Variance

²Scheffe's post-hoc test was used after analyses of variance

The chi-square post-hoc test of homogeneity was used after a chi-square test.

³B = Brazilians, I = Italians, J = Japanese, S = Sirio-Lebanese

For instance, in the case of chi-square post-hoc test of homogeneity, I>B would mean that proportionately there were significantly more Italians than Brazilians in the category specified.

In the case of Scheffe's test I>B would mean that the mean value of Italian farmers was significantly larger than the mean value for Brazilian farmers.

⁴Variable numbers are found in the text immediately after the first time the variable is discussed.

farmers were significantly older than the Japanese, Brazilian and Sirio-Lebanese farmers.

Education (Variable 2.)

The Brazilian educational system before college is divided into three subdivisions. Primario is similar to the North American primary school but consists of only four years of schooling. This is followed by an additional four years of "ginasio". The "colegio", comparable to the U.S. secondary school, provides the next four years of education. In most cities free education is provided in the primario, ginasio and colegio. Because of the limited number of school and classrooms most of these schools operate on two or three shifts. Rural schools are also faced with serious staffing problems.

Acceptance into state and federal universities is based upon results of a standard examination. Students who obtain the required grade level can enter these universities at a very reduced cost. Admissions to universities are very selective; the college entrance examination often requires one or two years of preparation after high school graduation.

The four ethnic groups were compared with regard to their formal educational levels. Educational levels were classified as "No education" one to five years, six to ten years and 11 to 15. Farmers who had an university level education were also grouped together.

As indicated in Table 21, significant differences were found in educational level by ethnic background. Proportionately, there were significantly Italian farmers with no education than Brazilians or Sirio-Lebanese. Proportionately, there were significantly more Brazilian farmers who completed six to ten years of formal education than among Italian farmers.

In general these data indicate lower levels of formal education

among Italian farmers. This situation may have resulted from their former situation as farm laborers. As previously indicated, Italian farmers are older than the other three groups. Educational services may have been more limited at the time when they were of school age than when the other groups were of school age.

Occupation (Variable 3.) and Residence (Variable 4.)

Significant differences in occupational patterns were found among the four ethnic groups. Proportionately more Sirio-Lebanese farmers than any of the other groups had another occupation in addition to farming. Similarly, significant differences were found in residential patterns among the four groups. Proportionately more Sirio-Lebanese farmers were found to have urban and rural residences than any of the other three groups.

These results indicate that the Sirio-Lebanese farmers, in sharp contrast to the Brazilians, Italians and Japanese, are an essentially urban group in residence and occupation. This fact may have important implications concerning their professional contacts and sources of information in relation to their farm enterprises. Unfortunately, an economic analysis to study the impact of these two factors on their economic behavior was impossible due to the limitations of the data.

Membership in Associations (Variables 5. and 6.)

The four groups were compared as to their membership in terms of number and type of associations (professional or non-professional).

Among those farmers who were members of one or more associations there were no significant differences in type of associational membership by ethnic group (Variable 5.). However, significant differences were

found in levels of membership among ethnic groups (Variable 6). Proportionately, the Sirio-Lebanese were members of more associations than any other group. Proportionately, the Brazilians were members of more associations than the Italians. The fact that the Sirio-Lebanese had a significantly higher number of memberships in associations reinforces the previous hypothesis that they may have a wider number of urban contacts. Most of the non-professional associations have an urban orientation.

Political Awareness and Political Participation (Variables 7, 8 and 9)

Formal political awareness was measured by asking respondents the name of the mayor of the closest town (Variable 7) and the name of the minister (federal) or secretary (state) of agriculture (Variable 8). It should be noted that these variables do not index knowledge of political processes or ideologies.

The large majority of the respondents of all four groups, 86 to 97 percent, knew the names of the mayors. However, a high proportion of all four ethnic groups, 67 to 85 percent, did not know the name of the minister or secretary of agriculture. Proportionately more Japanese than any of the other groups did not know the name of the minister or secretary of agriculture.

While these results yielded no significant differences among ethnic groups, they suggest that farmers are more knowledgeable of the local leadership than the state or federal leadership.

There were significant difference among the four ethnic groups in voting participation (Variable 9). Proportionately more Brazilians (96.7 percent) than Italians (84.6 percent) or Japanese (88.5 percent) voted in the last election. These differences could be due to eligibility

if some of the Italian or Japanese farmers do not yet have Brazilian citizenship. If it could be answered that all farmers of the four ethnic groups were eligible to vote, the voter participation among Japanese and Italians was low. This may express lower levels of political assimilation for these two ethnic groups.

Geographic Mobility (Variable 10, 11 and 12)

The four ethnic groups were compared with regard to three measures of geographic mobility: number of times changed residences, (Variable 10.) number of times respondents left the State of Sao Paulo during the past year, (Variable 11.) and number of years respondents lived at their present residence (Variable 12.).

The means for the four ethnic groups on all three indices of geographic mobility were significantly different (see Table 21).

Brazilians, Italians, and Sirio-Lebanese respondents moved residences significantly more often than Japanese farmers. However, these differences should be cautiously interpreted since Japanese farmers have been in Brazil for a shorter period of time.

Brazilian farmers went out of the State of Sao Paulo more often than Italian farmers during 1971.

A number of pairwise significant differences were indicated in the residence variable. Italian farmers lived at their present residences longer than Brazilian, Japanese or Sirio-Lebanese farmers. Brazilian farmers in turn lived longer at their present residences than Japanese farmers. This may result in stronger political, economic, and social ties with the local leadership among Brazilians.

In general the data on geographic mobility indicate a high mobility

rate among the farmers. Japanese farmers were less mobile than any of the others. However, Japanese farmers lived for a shorter period of time at their present residence. This may result in weaker attachment of Japanese farmers to traditional norms of client-patron economic and social relations.¹ Patron-client relations characteristically develop over a long period of time. The patron will exchange favors through political or prestige positions with his "clients." The latter in return may vote for the patron or his chosen candidate, buy from other "clients" of the patron, and accept the patron's judgment (in general) in social, political or economic matters. The possibility that Japanese farmers may be less involved in such behavior is reinforced by the earlier discussion in this chapter indicating the lower voter participation rate among Japanese farmers.

Family Size.

Two components were considered when comparing family size among the four ethnic groups: number of children (Variable 13.) and number of dependents other than children (Variable 14.).

As indicated in Table 6 there were significant differences among the four ethnic groups concerning both variables.

Italian farmers had a significantly larger number of children than Brazilian farmers.

Japanese farmers had a significantly larger number of dependents,

¹As suggested by Dr. Condido Procopio F. de Camargo in an interview with the author.

other than children, than the Brazilian and Italian farmers.

It is not possible to draw conclusions concerning the difference in number of children among ethnic groups. The fact that Italian farmers had a significantly larger number of children than Brazilians may be due to the age difference between parents in each ethnic group. As discussed earlier, Italian farmers were found to be significantly older than Brazilian farmers.

The larger number of dependents among Japanese farmers may be due to the "formation" of families by incorporating relatives to fulfill the immigration regulations requiring the presence of at least three economically active members in each family.

Wives' Ages

Wives were found to be on the average four and one half years younger than their husbands. This interval did not vary significantly among ethnic groups.

Wives' Education (Variable 15)

As indicated in Table 22 , there were significant differences in educational level among wives of the various ethnic groups. There were proportionately more wives of Italian farmers with no education than among wives of Sirio-Lebanese farmers. Among the wives who had 11 to 15 years of schooling, there were proportionately more Sirio-Lebanese wives than Italian or Japanese. These facts reflect the relatively higher educational level of Sirio-Lebanese wives, and lower educational level of Italian wives.

Table 22. Educational levels of wives of farmers by ethnic groups.

	Brazilian	Italian	Japanese	Sirio-Lebanese	Total
No education	15 (8.7)*	28 (34.1)	6 (11.3)	0 (0)	49
1-5 years	101 (58.4)	48 (56.5)	40 (75.5)	0 (40.0)	195
6-10 years	15 (8.7)	4 (4.9)	5 (9.4)	3 (20.0)	27
11-15 years	35 (20.2)	2 (2.4)	2 (3.8)	6 (40.0)	45
University level	7 (4.0)	0 (0)	0 (0)	0 (0)	7
	173 (100.0)	82 (100.0)	53 (100.0)	15 (100.0)	323

$\chi^2 = 63.99$ $p < .05$

*percentages

The higher educational level of Sirio-Lebanese wives may be related to the urban orientation of their families. Among Italians, wives may have lower educational levels as a result of their participation at an early age in family labor. In addition, Italian wives were older than wives of the other ethnic groups. Therefore, their lower educational level may also be due to less emphasis on education at the time when they went to school or to the more limited availability of educational facilities at the time they were of school age.

Children's Educational Levels (Variables 16, through 22.)

Children of the various ethnic background families were grouped into two year span age groups, i.e., 7-8, 9-10, 11-12, 13-14, 15-16, 17-18, and 19-20 years old. Since there were few children of Sirio-Lebanese parents, they were not included in the analysis. As indicated in Table 21, except for the age group 17-18, there were no significant differences in mean number of years of formal education among the three ethnic groups. In the age group 17-18, the mean number of years of schooling among Japanese children was significantly higher than among Italian children. This reinforces the findings in the review of the literature which indicated the high emphasis placed on education as a means of social mobility among the Japanese.

Propensity to have Business Relations With Relatives (Variable 23)

Farmers in the four groups were compared with regard to their preferences toward having economic relations with relatives and strangers. A Likert-type scale was constructed measuring preference to deal with

relatives in economic relations. The scale included eight items. Answers to the questions were coded from one to three. Responses indicating preference for strangers over relatives were coded as one, undecided or neutral responses were classified as two, and preference for relatives was classified as three. Cleaver's internal consistency test was performed (Cleaver, 1968). As a result, four of the items were selected for inclusion in the scale. These items corresponded to the following questions:

1. "Is it better to do business with relatives or with strangers?"
2. "Is it true that the less you deal with relatives the better?"
3. "Are relations with relatives good as long as they don't involve money matters?"
4. "Do strangers pay their debts better than relatives?"

An analysis of variance was performed to test for significance of differences in mean scale scores among the four groups. As indicated in Table 6, there were significant differences in mean scores on the scale by ethnic group. Brazilians had significantly higher mean scores than the Italians or Sirio-Lebanese.

These data indicate that Brazilians have a higher propensity to deal with relatives in economic relations. These differences may be due to the fact that the other three groups being immigrants have fewer relatives with whom they can possibly have economic relations. The results may also reflect a cultural differences among the four ethnic groups in choice of partners in economic relations.

Work Ethic

A series of questions was asked to measure farmers' attitudes toward

work. Responses to questions concerning individual versus cooperative work are initially tested.

As shown in Table 21 (Variable 24.) there were significant differences in responses to the question "In order to be successful, should one be concerned with others."

A significantly higher proportion of Japanese than Brazilian farmers responded positively indicating their preference for concern with others.

In addition, there were significant differences among ethnic groups in response to the question, "Is the best road to success to work individually without help from others?" (Variable 25.) A significantly larger proportion of Italian than Brazilian farmers responded positively.

However, there no significant differences among ethnic groups in response to the question, "Is it better to do without something rather than ask a favor?" (Variable 26.).

The above results do not indicate very definite trends among ethnic groups. In general, it can be concluded that Japanese and Sirio-Lebanese farmers are attitudinally more inclined toward cooperative work than Brazilian or Italian farmers.

Another series of five questions was asked to measure the attitudinal position of the farmers toward hard work and extent of dependence on luck or providence.

These five questions were:

1. "In some places they say that if the farmer is successful it is because of God's wish. Do you agree?" (Variable 27.)
2. "These same people say that even if you work very hard you cannot change your situation. Do you agree?" (Variable 28.)

"Do you think success in agriculture is more a matter of luck or hard work?" (Variable 29.)

"Do you establish for yourself difficult plans and try to achieve them?" (Variable 30.)

"Do you often do things just to prove to yourself that you can do them?" (Variable 31.)

There were no significant differences in responses among ethnic groups with regard to the first, third, fourth, and fifth questions. Significant differences were found among ethnic groups in response to the second question. Proportionately more Brazilians than Italians disagreed that even if one works hard he cannot change his situation through hard work.

This difference may be due to the lower educational level or the older ages of the Italian farmers. Other variables which may affect these differences are land ownership and type of farm exploitation. As indicated earlier in this chapter, there were more small size farm owners among Italians than among the other ethnic groups. In addition, Italian farmers were found to specialize in sugarcane production. Sugarcane prices, more than other agricultural products, are subject to changes which are out of the farmer's control. Through unstructured conversations with farmers a strong feeling of alienation from and hostility toward factory owners could be discerned among the sugarcane growers. In general, these farmers felt that they had very little control over prices, mode of payment for products and the granting of quotas for the area to be planted. A number of respondents indicated that their economic situations were heavily dependent upon the sugar

processing factory owners and the Sugar and Alcohol Institute. Such feelings, in addition to age and educational level, may have effected the feeling of helplessness among Italian farmers.

Knowledge about Fertilizers

In the section concerning the results of the economic variables it was found that Japanese farmers spent significantly more than the three other groups on fertilizers.

A series of five questions was asked of the larger sample of farmers with regard to their knowledge about fertilizers. Two of these questions did not show any power of discrimination within any of the four groups. The other two questions were more specific and were therefore tested for significance of differences in responses among the four ethnic groups.

There were no significant differences among the four ethnic groups in their level of knowledge to the following question: "What do the numbers on the fertilizer bag indicate?" (Variable 32.)

Twenty to 34 percent of the farmers did not know what the numbers indicated.

In order to ascertain the further knowledge of the farmers about fertilizer they were asked about the meaning of "3" in a 3-15-15 series of ingredient indices on a fertilizer bag (Variable 33.).

Significant differences were found among ethnic groups with regard to responses to this question (indicated in Table 23). A significantly larger proportion of Japanese than Brazilian and Italian farmers knew the meaning of the "3". In turn, a significantly larger proportion of Brazilians than Italians knew the meaning of the "3."

Table 23. Knowledge about fertilizer composition among farmers in four ethnic groups, Sao Paulo

	Brazilians	Italians	Japanese	Sirio-Lebanese	Total
Knows ¹	45 (24.86) ²	9 (10.23)	28 (51.85)	4 (25.00)	86 (25.37)
Does Not Know	136 (75.14)	79 (89.77)	26 (48.15)	12 (75.00)	253 (74.63)
Total	181 (100.00)	88 (100.00)	54 (100.00)	16 (100.00)	339 (100.00)

$\chi^2 = 30.68$ $p < .001$

¹Knows the meaning of "3" in the 3-15-15 numbers on a fertilizer bag.

²Percentages.

Use of Institutional Credit

Farmers in the four ethnic groups were asked whether they used a bank when borrowing. Table 24 presents the responses of the various groups to this question. Significant differences were found among ethnic groups with regard to use of banks for credit. A significantly higher proportion of Japanese farmers used banks than did Brazilians or Italians. There were no significant differences in proportions among Japanese and Sirio-Lebanese farmers with regard to their propensity to borrow from a bank.

It is interesting to note that Japanese farmers had significantly higher interest expenses at the farm level and per unit of land than Italians or Brazilians.

Farmers were further asked, if they did not use a bank, about their sources of credit. However, in view of the very few farmers who did not use a bank it was not possible to analyze their responses.

Table 24. Propensity to Use Banks When Borrowing Among Four Ethnic Groups in Sao Paulo, Brazil

	Brazilians	Italians	Japanese	Sirio-Lebanese
Use a Bank	143 (82)*	60 (66)	50 (93)	13 (87)
Don't Use a Bank	31 (18)	31 (34)	4 (7)	2 (13)
Total	174 (100)	91 (100)	54 (100)	15 (100)

$\chi^2 = 17.28, P < .01$

*Percentages

Summary and Conclusions

Analyses of individual characteristics by ethnic background indicated the existence of significant differences.

Various pairs of ethnic groups were found to be significantly different from each other concerning such variables as age, education, occupation and residence, political awareness, and levels of political participation.

The Sirio-Lebanese farmers in general showed urban characteristics in occupation, residence, and membership in associations. Italians were generally older, less educated and participated less in political processes. Japanese farmers in general were young, less mobile, and had low levels of political participation. Brazilian farmers were also young but more highly educated and higher in geographic mobility and political participation.

The four ethnic groups were compared in relation to family variables for exploratory purposes. Differences were found in number of dependents, number of children, educational levels of children and of wives. Such differences may be due to differences in age, educational level, and income. Conclusive implications of these variables on economic variables are also not possible in the context of the present research.

Significant differences were found among ethnic groups in attitudes toward business relations with relatives, attitudes toward work, and knowledge about fertilizers. Brazilian farmers were in general more inclined to have business relations with relatives. Although definite trends in attitudes toward cooperative work could not be drawn, Japanese and Brazilian farmers did show higher propensity to work cooperatively than the Italians or Sirio-Lebanese.

Japanese farmers had significantly more specific information about fertilizers. As previously shown, the Japanese also spent significantly more than other groups on fertilizers per unit of land. These results suggest significant levels of association between knowledge and use of fertilizers.

It is necessary to interpret the possible interactions between some sociological and economic results. Italian farmers were found to be older than Brazilians, Japanese, and Sirio-Lebanese. Japanese farmers spent significantly more than Italians and Brazilians on fertilizers and interest expenses. Japanese farmers knew more precisely information about fertilizers. Brazilian and Japanese farmers were proportionately more inclined toward cooperation. Significantly higher proportions of Japanese farmers used banks when borrowing than among Italians or Brazilians.

Italian farmers being older may have already formed a given level of capital accumulation. Japanese farmers may be in the process of capital formation and therefore may require higher interest expenses for fixed farm capital. While total value of fixed capital (per farm or per unit of land) was not significantly different among ethnic groups, Japanese farmers had higher values of fixed capital.

An alternative explanation for the higher interest expenses among Japanese farmers may be due to their higher fertilizer expenses. However, this possibility is not very likely since interest on variable costs such as fertilizers is almost non-existent in Brazil.

Another alternative is that Italian and Brazilian farmers, using bank credit less than Japanese farmers may not have reported interest expenses paid to private sources.

A final possible alternative is that Italian and Brazilian farmers may not borrow as much as the Japanese. That is, that the willingness to incur debt varies by ethnic groups. If this is the case it is possible to distinguish between two types of farmers: one type that uses institutional sources of credit for capital accumulation and another that uses private sources or their own sources for reinvestment in agriculture. Japanese farmers would be in the first type while Italians and Brazilians would be representative of the second type. Unfortunately, the attitude of various farmers towards alternative methods of financing was not examined in this study. Data were also not collected that would allow an accurate comparison of the extent to which equity, commercial credit and private credit were utilized in financing the businesses of the different ethnic groups. These would be fruitful areas for further examination.

Overall, results of the economic and sociological tests justify further research studying statistically the correlation between economic and sociological variables by ethnic group or controlling for ethnic background.

Chapter VII

SUMMARY AND CONCLUSIONS

This chapter will summarize the results of the comparative analyses of economic and sociological variables by ethnic background.

While the basic purpose of the present study is not applied in nature, conclusions of interest for policy formulation will be drawn based upon the findings.

Finally, suggestions will be made for further areas of research related to the topic of this study.

Review of the historical background of the four ethnic groups, and the theoretical frameworks suggested the possibility of economic and sociological differences.

This study was exploratory in nature. Four ethnic groups in the State of Sao Paulo were studied: Brazilians, Italians, Japanese, and Sirio-Lebanese. A relatively large number of variables was studied in relation to ethnic background. Comparisons were made on economic data at the farm level and per unit of land for production, fixed capital, and farm expenses. Similarly, ethnic groups were compared concerning sociological aspects including individual characteristics, family characteristics, and attitudinal and knowledge questions.

Analysis of the data indicated significant economic and sociological differences to exist among ethnic groups.

Limiting the analysis to annual crop farmers, two major findings were the highly significant differences among ethnic groups in fertilizer and interest expenses per unit of land. Japanese farmers were found to spend significantly more than the Brazilians and the Italians on these items. Concomittantly, differences were found in crop value per unit of land operated at a marginal level of significance (.07), suggesting higher crop values per unit of land among Japanese farmers. However, returns per unit of labor were not significant.

The sociological comparisons indicated highly significant differences among ethnic groups in individual and family characteristics. In addition, farmers in the four ethnic groups were significantly different in their attitudes toward economic relations with relatives, attitudes toward work, and knowledge about fertilizers. With regard to the latter aspect, Japanese farmers knew more about fertilizers than any other group at a very highly significant level. Interpreting this fact in the context of the previous economic analysis of fertilizer use, a significant correlation between knowledge and use of fertilizers might be postulated.

Limitations of the Study

The present study had some methodological limitations.

In the economic analyses it was necessary to control for farm type in order to use comparable data. This reduced the sample size and the number of ethnic groups. The smaller sample size and unequal variance in turn reduced the discriminatory power of the analysis of variance tests. While noticeable differences in means could be observed in a number of tests, the analyses of variance did not indicate

significant differences at the .05 level. In view of their small number, the Sirio-Lebanese farmers could not be included in the economic analyses.

Another methodological problem in the economic analyses was the static nature of the data. Comparisons on production, fixed capital and expenses were made for a given year. The atmospheric conditions influencing farming in the area probably had an effect on total gross output and crop value. Since returns from the use of fertilizers depend on such factors as timing and amount of rainfall, differences in total gross output and crop value may have been affected. Average production data, over a period of three to five years, might have avoided this limitation.

Concerning both the economic and sociological analyses a methodological limitation may have resulted if the various ethnic groups understood and therefore responded differently to the questions.

Interviewing for the sociological research took place about one year after the economic survey. This time lapse may have led to some extent to "maturation" differences in response. However, since the data collected on each occasion were of different natures, this limitation is of minor importance.

A final general limitation of the study lies in its exploratory nature. A large number of independent variables were used. Correlational analyses between independent variables controlling for ethnic background and with larger samples would probably lead to some interesting results.

Theoretical Implications

Three major theoretical schools of thought were reviewed in Chapter II: social psychological approach, human ecology, and conflict theory.

These theoretical frameworks suggested possible differences in areas of economic and sociological behavior among ethnic groups, and propose reasons for these differences. They were not of a nature to generate specific deductive hypotheses.

The empirical analyses provided evidence to the expected socio-economic differences among ethnic groups. Despite the limitations of the data, significant economic differences were found among ethnic groups. Similarly, a number of significant sociological differences were observed among ethnic groups. Furthermore, concomittant differences among ethnic groups in sociological variables, whenever related economic variables, were found to be significant. For instance, significant differences were found to be significant. For instance, significant differences were found in fertilizer and interest expenses among ethnic groups. Concomittantly, significant differences were found among ethnic groups in their responses to questions related to each of these variable, knowledge about fertilizers and propensity to borrow from banks. Therefore, the empirical evidence suggests, in addition to economic and sociological differences among ethnic groups, a possible correlation between economic and sociological behavior. However, the empirical tests did not provide any indication about the mechanisms through which such differences occur.

The empirical tests also suggest support for further investigation of more specific aspects of the theoretical frameworks. For instance, mechanization could be assumed as an indicator of a conflict situation in which one group attempts to avoid hired labor from another group. It can be then hypothesized that the group with the significantly higher level of mechanization is in conflict with the others.

Policy Implications

Some of the findings of the present research may have policy implications of relevance for agricultural development in the State of Sao Paulo and Brazil.

Specialization by farm type was found among the four ethnic groups.

In agricultural extension work it is necessary to understand the cultural background of the farmers. Extension personnel working in an area with a heavy concentration of an ethnic group should therefore, understand its cultural system. It may therefore be necessary to familiarize extension personnel with the sub-cultural characteristics of various ethnic groups living in their geographical area. For instance, it would be recommended for extension personnel working in the municipios of PONTAL and Sertaozinho to know the cultural background of Italian farmers.

At the national level, agricultural policies directed at the regulation of amounts of crops to be produced, price policies, and marketing policies, may affect certain ethnic groups more or less favorably than others. For instance, regulations on meat prices at the national level will affect Japanese farmers very slightly and indirectly. However, such a policy will affect Brazilian farmers directly. Similarly, price policies and quota allocations of sugarcane will affect Italian farmers more directly than either the Sirio-Lebanese or Japanese farmers. Lack of awareness of such effects on the part of policy formulating agencies could, in the long run, result intentionally or inadvertently in economic discrimination

against (and possible alienation of) some ethnic groups. Given the official governmental goal of national integration such possible errors may reduce, instead of reinforcing, national solidarity.

Use of modern inputs in agricultural production in Brazil is at present strongly encouraged by governmental policy. This is expressed by the government's granting of favorable credit terms to farmers for agricultural inputs such as fertilizers. Fertilizer use is an economically risky decision when uncertain atmospheric conditions prevail. In addition there is limited understanding of the methods and timing of application and composition of fertilizers. While not formally tested, a number of farmers conveyed to the author and the interviewers their lack of trust of fertilizer marketing agencies. However, their lack of understanding about fertilizer composition limits their possibilities of being able to judge the quality of fertilizers. It has been demonstrated that the group who knew most about fertilizer composition (the Japanese) also used significantly larger amounts than the others.

It can therefore be highly recommended that an intensive program of information dissemination about fertilizers be implemented by the State or Federal government. This should include information about the composition, methods of application, and timing of application, and amount to be applied, of fertilizers by type of crop and by region. It was the subjective impression of the author through conversation, that there is a felt need on the part of the farmers for information about fertilizer use. Such an information program would have to be based on proven experiments testing the technical

and economic aspects of fertilizer use.

Further economic investigation is necessary in order to draw conclusions about the significantly high interest expenses of Japanese farmers. The implications of higher interest expenses may be more rapid rate of capital formation in terms of fixed capital. Another possible implication is higher expenditures on operating capital. This possibility is less likely since very low interest rates are applied in Brazil for such operating expenses as fertilizers. It is recommended the relationship of interest expenses to rate of fixed capital accumulation be examined. Such a study could lead to significant conclusions about the rate of economic growth of the various ethnic groups.

In cases where the government seeks to introduce new crops it may be helpful to introduce them through a given ethnic group specializing in related types of crops. Success in the introduction of a new crop depends largely on the results during the first few years. Introduction through an ethnic group specialized in similar crops would improve the chances of success of the new crop.

A Final Note

This study provided empirical evidence to the theoretical frameworks suggesting economic and sociological differences among ethnic groups. More specific topics of investigation within the general area of ethnic studies in Brazil are likely to lead to the more specific formulation of economic and sociological behavioral differences among ethnic groups.

A better understanding of different and common characteristics among ethnic groups could lead to appropriate policies at the national level in reinforcing national solidarity.

APPENDICES

APPENDIX A

Population of the State of Sao Paulo, by Year and Nationality

Year	Total	Portuguese	Spaniards	Germans	Japanese	Russian	Others	To the State of Sao Paulo
1872	1,790						1,790	
73								
74								
75								
76	658			342			320	
77	909						909	
78	875						826	
79	1,088						1,088	25
80	2,699			1,261			799	700
81	3,412			723			1,689	25
82								
83								
84								
85								
86	2,191		189				1,100	
87	606	101		307			277	25
88	396						396	
89	309	141					248	
90	269	207		62				80
91	555	159		39			35	
92	568	55		351			188	
93	694						694	
94								
95	2,304			304				
96	435						435	15
97	2,836	65		1,506			767	165
98	25						25	
99	40						40	55
00	207			647			1,129	
01	4433	1500		69			3967	15
02	2,555			25			1,350	15
03	6993	1,100		1,100			470	15
04	18,495	1,100		505			10,416	15
05	11,795	2,500		55			1,437	25
06	1,005	2,500		1,872			2,960	625
07	4,517	2,500		600			3,265	300
08	15,811	4,000		1,000			6,859	125
09	15,111	1,100		1,100			7,007	120
10	15,111	1,100		1,100			6,112	100
11	15,111	1,100		1,100			4,332	25
12	15,111	1,100		1,100			4,202	185
13	15,111	1,100		1,100			2,855	100
14	15,111	1,100		1,100			2,072	

Continued

Immigrants to São Paulo, Brazil, by Year and Nationality (Continued)

Year	Total	Portuguese	Italians	Spaniards	Germans	Japanese	Russians	Others	To the State of São Paulo
1910	86,755	30,857	14,163	20,843	3,902	948	2,462	13,576	39,486
11	133,575	47,493	22,914	27,141	4,251	28	14,013	17,735	61,508
12	177,887	77,730	31,755	35,492	5,737	2,909	9,193	16,245	98,640
13	190,333	76,701	39,880	41,064	8,004	7,122	8,251	18,305	116,640
14	79,242	27,035	15,542	18,945	2,811	3,675	2,958	7,366	46,624
15	30,333	15,318	5,779	5,895	69	65	640	2,667	15,614
16	31,245	11,981	5,340	10,306	664	165	616	2,473	17,011
17	30,277	6,817	5,475	11,113	0	3,899	644	2,125	23,407
18	19,791	7,281	1,046	4,225	0	5,599	181	756	11,447
19	36,017	17,068	7,731	9,667	466	3,022	330	3,283	16,205
20	69,042	33,387	13,005	9,136	4,120	1,013	245	10,640	32,028
21	58,477	19,981	10,779	9,523	7,915	840	1,526	7,912	32,678
22	65,000	28,677	11,777	8,869	5,038	1,225	279	9,697	31,281
23	84,339	47,569	19,839	10,140	8,254	895	777	16,778	45,340
24	96,087	53,767	13,844	38	12,168	2,673	559	26,303	56,085
25	82,347	27,308	9,546	10,067	7,175	6,330	756	26,870	37,129
26	118,687	65,791	19,777	8,892	7,774	8,407	751	42,194	76,796
27	97,074	51,236	12,487	9,070	4,878	9,084	616	30,603	61,607
28	78,128	33,882	4,011	1,436	4,228	11,169	823	18,097	40,847
29	96,186	56,879	5,385	4,563	4,351	16,648	839	25,616	53,362
30	62,600	18,740	4,253	3,215	4,180	14,076	2,699	15,444	30,924
31	27,400	8,156	2,914	1,789	2,621	5,632	370	5,991	16,216
32	31,406	8,499	7,755	1,441	2,135	11,675	461	4,981	17,421
33	36,057	10,695	1,920	1,693	2,150	14,494	79	5,020	31,630
34	46,021	8,332	2,507	1,129	3,629	11,930	114	7,886	30,777
35	29,008	9,327	2,177	1,106	2,425	9,611	29	4,862	21,731
36	12,700	6,606	662	655	1,226	3,266	19	2,779	14,534
37	34,600	11,417	2,500	1,100	4,642	4,557	57	9,913	12,581
38	19,460	7,635	1,800	60	2,448	2,514	19	4,890	8,349
39	27,668	13,170	3,094	74	1,975	1,415	2	2,979	12,307
40	18,440	7,137	1,000	80	1,157	1,768	17	3,457	8,474
41	9,015	5,779	50	17	484	588	23	1,921	3,811
42	2,335	1,317	0	0	0	0	0	1,059	1,317
43	1,308	740	0	0	0	0	0	1,150	740
44	1,594	619	0	0	0	0	20	1,121	76
45	3,168	1,613	501	0	2	0	7	1,476	171
46	13,019	7,360	355	265	174	0	28	5,227	3,190
47	18,700	8,101	653	653	561	0	18	5,315	8,101
48	21,568	11,331	1,000	950	2,005	0	144	9,764	11,226
49	23,800	11,800	1,352	1,157	2,198	0	36	6,352	11,800
50	38,000	18,000	1,000	1,800	1,000	10	0	6,845	18,000
51	6,000	3,000	1,000	0	850	0	0	1,200	3,000
52	85,000	42,000	2,000	14,800	2,000	0	0	12,605	128,012
53	80,200	35,000	1,500	1,000	2,000	0	0	12,801	80,200
54	12,000	6,000	1,000	1,000	1,952	0	0	1,249	12,000

Year	Total	Spam 20080	100000 Spam	Spam 20080	Spam 20080	Spam 20080	Spam 20080	Spam 20080	Total Spam 20080
55	55 166	21 264	8 945	16 738	1 122	4 051	2	5 044	
56	44 806	16 803	6 069	7 921	844	4 912		8 257	
57	53 613	19 471	7 197	7 680	952	6 147	8	12 166	160 51
58	49 839	21 928	4 819	5 768	825	6 886	2	6 913	
59	44 520	17 345	4 233	6 712	890	5 123		5 217	
60	40 507	13 105	3 431	7 662	842	46		7 21	
61	43 589	15 819	2 493	9 813	703	6 824		7 937	
62	31 138	13 713	1 900	3 968	651	3 257		6 649	
63	23 859	11 585	867	2 330	601	2 124		6 246	
Total	3 545 214	1 274 738	1 623 839	1 640	259 413	347 844		933 940	

Source: Suzuki, T., 1969: 284-287.

APPENDIX B

CAPITAL FORMATION PROJECT

GENERAL QUESTIONNAIRE
English Translation

(For Farmers and General Population)

ESALQ - Ohio State University

Piracicaba, S.P.

1972

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I. GENERAL INFORMATION

1. Interviewee's occupation:
2. Occupation of interviewee's father:
3. Where do you work, here in this municipio, or in another locality?
4. If you work elsewhere, where? (locality)*

*Name of farm and district

Name: _____ Sex: _____ Age: _____ Date of Birth: _____
 Place of Birth: _____

Head of family

Wife

Children

1

2

3

4

5

Other dependents

1

2

3

Civil status: **Indicate last year completed
 1 - Single
 2 - Married
 3 - Widowed
 4 - Divorced
 5 - Separated
 6 - Other (specify)

Religion: 1 - Catholic, 2 - Protestant, 3 - Spiritist, 4 - No Religion, 5 - Other (specify)
 **Do not include holidays, Sundays and other rest days.
 (Year with depressed days)
 (1 - Full-time, 2 - Part-time, 3 - Other)
 Place where he works:
 1 - Same place as above
 2 - Another place, same municipio
 3 - Another place, outside municipio

6. If Married:

- _____ Civil marriage only
_____ Religious marriage only
_____ Civil and religious marriage

7. If married:

How long have you been married?

8. If married more than once, how many times?

9. If not married, how long have you lived with this woman?

10. Where do you send your children to primary school?
(Mention locality, district, city)

11. Where do you send your children to secondary school?
(Mention locality, district, city)

12. Of what nationality background do you consider yourself?

13. Of what nationality background does your wife consider herself?

14. Where were you born?

15. If you were born abroad, when did you come to Brazil? (year)

16. Where was your wife born?

17. If she was born abroad when did she come to Brazil? (year)

18. What language do you speak, besides Portuguese?

If so, do you speak it at home?

19. Do you write to friends and relatives abroad?

If so, where?

20. If you had money to travel to another country, where would you like to go?

21. With regard to your father:

What is his nationality?

22. Country where he was born:

23. What was his religious affiliation before his marriage?

24. What was his religious affiliation after he got married?

25. With regard to your mother:

What is her nationality?

26. Country where she was born:

27. What was her religious affiliation before her marriage?

28. What was her religious affiliation after she got married?

29. With regard to your father-in-law:

What is his nationality?

30. Country where he was born:
31. What was his religious affiliation before his marriage?
32. What was his religious affiliation after he got married?
33. With regard to your mother-in-law:
What is her nationality?
34. Country where she was born:
35. What was her religious affiliation before her marriage?
36. What was her religious affiliation after she got married?

II. RELIGIOUS INFORMATION

1. Did you change your religious affiliation after your marriage?
Yes _____ No _____
2. If so, what was your religious affiliation before your marriage?
3. What was your wife's religious affiliation before her marriage?
4. How often do you go to church?
 1. _____ Weekly
 2. _____ Monthly
 3. _____ On holidays
 4. _____ Never
5. How often does your family go to church?
 1. _____ Weekly
 2. _____ Monthly
 3. _____ On holidays
 4. _____ Never
6. How important are the religions here to help resolve the problems of the municipio?
 1. _____ Very important
 2. _____ Moderately important
 3. _____ Not very important
 4. _____ Not important at all
7. How do the churches here work together for religious purposes?
 1. _____ Very well
 2. _____ Moderately well
 3. _____ Not very well
 4. _____ Badly
8. How do the churches here work together for charity purposes?
 1. _____ Very well
 2. _____ Moderately well
 3. _____ Not very well.
 4. _____ Badly
9. What church does your family usually go to? (Mention locality also)
10. Who, in your opinion, are the most influential religious leaders here?
Name (and surname) - Address - Reasons for choice
 - 1.
 - 2.
 - 3.

III. RURAL ACHIEVEMENT ORIENTATION

Agree Undecided DisagreeActivism

1. Making plans only brings unhappiness because the plans are hard to fulfill.
2. It doesn't make much difference if the people elect one or another candidate for nothing will change.
3. With things as they are today, an intelligent person ought to think only about the present without worrying about what is going to happen tomorrow.
4. We Brazilians dream of important things, but in reality we understand very little about modern technology.
5. It is important to make plans for one's life and not just accept what comes.

Trust

6. It is not good to let your relatives know everything about your life for they might take advantage of you.
7. Most people will repay your kindness with ingratitude.
8. Most people are fair and do not try to get away with something.
9. People help persons who have helped them not so much because it is right, but for interest.
10. You can only trust people whom you know well.
11. The job should come first even if it means sacrificing time from recreation.

12. The best way to judge a man is by his success in his occupation.
13. The most important qualities of a real man are determination and driving ambition.
14. The most important thing for a parent to do is to help his children get further ahead in the world than he did.

Integration with relatives

15. When looking for a job, a person ought to find a position in a place located near his parents even if that means losing a good opportunity elsewhere.
16. When you are in trouble, you can only expect help from your family.
17. If you have the chance to hire an assistant in your work, it is always better to hire a relative than a stranger.

IV. - HEALTH AND LEVEL OF LIVING

1. How do you consider your health?

_____ Good
_____ fair
_____ poor

2. How many times, in 1971, did you consult a "benzedor"?

3. How many times, in 1971, did you consult a doctor?

4. How many days, in 1971, did you miss work because of health problems?

5. How many days, in 1971, did you miss work because of family health problems?

6. Where does your family go to the doctor most frequently?

(Mention locality or localities)

7. Standard Scale of Level of Living

I T E M S	Score (1 or 0)
1. Electricity (one or more bulbs per room)	_____
2. Refrigerator	_____
3. Blender	_____
4. Electric iron	_____
5. Floor polisher	_____
6. Electric shower	_____
7. Radio (any type)	_____
8. Television set	_____
9. Sewing machine (pedal or electric)	_____
10. General condition of the house	_____
11. Storage room	_____
12. Number of persons per bed	_____
13. Upholstered living room furniture	_____
14. Dresser	_____
15. Buffet	_____
16. Bureau (chest)	_____
17. Drapes	_____
18. Spring mattress	_____
19. Clock (wall)	_____
20. Running water	_____
21. Bathroom with shower or bath tub	_____
22. W.C. with running water	_____
23. Small cement tank for washing clothes (tanque de lavar roupa)	_____
24. Water filter	_____
25. Manual floor polisher	_____
26. Gas stove	_____
27. Pressure pot	_____
28. Meat grinder	_____
29. Strainer (colandar)	_____
30. Cake pan	_____
31. Cork screw	_____
32. Pot (3 or more)	_____
33. Cauldron (2 or more)	_____
34. Dessert set (6 or more)	_____
35. Dinner set	_____
36. Tea set	_____
37. Coffee set	_____
38. Table knives (6 or more)	_____
39. Water pitcher	_____
40. Motor vehicle	_____
41. Animal drawn vehicle	_____

(*) 1 = Has
2 = Does not have

V. ALIENATION SCALE

	Agree	Undecided	Disagree	
I	_____	_____	_____	1. Sometimes you feel all alone in the world.
P				2. You worry about the future facing your children.
I				3. You don't get invited out by friends as often as you'd really like.
I				4. Most people today seldom feel lonely.
P				5. Sometimes you have the feeling that other people are using you.
N				6. People's ideas change so much that you wonder if we'll ever have anything to depend on.
P				7. It is frightening to be responsible for the education (development) of a child today.
I				8. It is always easy to find real friends.
N				9. Each person should decide for himself what is right and what is wrong.
I				10. One can always find friends if he shows himself friendly.
N				11. You have often wondered if life is worth living.
I				12. The world in which we live is basically a friendly place.
P				13. There are so many decisions that have to be made today that sometimes you could just give up.
N				14. You can't believe in anything today.
I				15. There are few people today who you can trust.
N				16. With so many religions today, one doesn't really know which to believe.
P				17. In this place you feel that are not at all important.
I				18. People are just naturally friendly and helpful.
P				19. The future looks very uncertain.
I				20. You don't visit your friends as often as you'd like to.

VI. FAMILY SOLIDARITY

1. Do you contribute money for the support of other relatives besides your wife and children?
a. Yes _____ b. No _____
2. If so, how many relatives?
3. If so, what is their relationship with your family?
4. Is your farm managed (operated) only by you or also by some relative of yours, or do some of your relatives own a part of your farm?
5. Do you do business with close relatives?
6. Is it better to do business with relatives or with strangers?
7. Business is business and anything goes
8. Have your relatives or strangers ever given or loaned you money?
9. If you had to borrow money from anybody, who would you borrow from, a relative or a stranger?
10. If you had some savings and had to choose between buying a piece of land or loaning it to a cousin (or any other close relative), what would you do?
11. Is it true that the less you deal with relatives the better?
a. Yes _____ b. No _____
12. Relationships with relatives are alright as long as they do not involve money issues.
a. Yes _____ b. No _____
13. Strangers pay their debts better than relatives?
a. Yes _____ b. No _____
14. List three things that could increase the happiness of your family:
 - 1.
 - 2.
 - 3.

VII. AGRICULTURAL TRADITIONS

1. What should be done to keep the dog near the house?
2. In what moon do you usually plant?
3. Who usually comes to "benzer" your crops?
4. What part of the dog's ear does one cut to avoid that it go crazy
5. When the cattle has ticks or larvas in the skin whom do you call to "benzê-lo"?
6. Who "benze" your children against "quebranto" (illness supposed to be caused by the influence of an evil eye)
7. What do you do when your animals have "stomachache"?
8. Does the "Saci-Pererê" usually attack animals around here?

_____ Yes
 _____ No
 _____ I don't believe

9. Name your three best friends

First and Last Name

Nationality

- 1.
- 2.
- 3.

10. Scientists are good only for laboratory work.

11. With so many new ideas about farming, the farmers are forgetting what they learned with their parents and grandparents.

Yes _____
 No _____

If so, do you think this is good or bad?

Good _____
 Bad _____

11. Where do you go when you have any legal problems (for example for registration of land titles, registration of children, wedding, lawsuit, etc.) (Name, district, city)

12. If any important decision for the improvement of this place is to be made, what persons would you contact? (Name and address)

13. Are you a member of any association? (Club, religious association, cooperative, union, etc.)

Yes _____ No _____

14. If so, list names:

15. Do you participate in any of the associations previously mentioned?

_____ Frequently _____ rarely
 _____ occasionally _____ never

16. Which association here has arranged more things for this place?

17. When you want to discuss your personal problems, whom do you contact?

1 _____ friend 6 _____ regional agronomist
 2 _____ professor 5 _____ your parents
 3 _____ priest or protestant minister 6 _____ another person

18. If you were to choose three persons here for administrative positions to help the progress of the region, who would you choose?

Name and address Reasons for your choice

1.

2.

3.

LX. COMMUNITY SOLIDARITY INDEX

Agree Undecided Disagree

- | | |
|----|---|
| EB | 1. A small group of people here keep most of the money that is earned here. |
| FR | 2. Too many young people get into sex difficulties |
| CS | 3. The community tries to help its young people along |
| FR | 4. Folks are unconcerned about what their children do as long as they keep out of trouble |
| CH | 5. The churches are a constructive factor for better community life |
| LG | 6. The mayor and councilmen run the town to suit themselves. |
| CS | 7. You feel that you belong here. |
| SC | 8. Many young people in the community do not finish primary school. |
| EB | 9. The people here are not generous |
| EB | 10. To be important here, a person has to have a lot of money |
| EB | 11. The people as a whole mind their own business |
| FR | 12. Most families here go to church on Sundays. |
| CH | 13. Every church wants to be the biggest and the most impressive |
| LG | 14. A small group of persons controls the town |
| SC | 15. Most of the students here learn to read and write well. |
| IR | 16. Real friends are hard to find in this community |
| SC | 17. Our schools do a poor job of preparing young people for life |
| LG | 18. Local concerns deal fairly and squarely with everyone |
| CS | 19. The community is peaceful and orderly |
| IR | 20. A lot of people here think they are better than you |
| FR | 21. Families here keep their children under control |
| CH | 22. The different churches here cooperate well with one another. |

- CS 23. Some people here "get by with murder" while others take the rap for any little misdeed
- IR 24. Almost everyone is polite and courteous to you
- SC 25. Our schools do a good job of preparing students for higher education.
- LR 26. The people here generally criticize each other
- IR 27. The people here demonstrate that they have common sense.
- CS 28. People won't work together to get things done for the community
- FR 29. Parents teach their children to respect other people's rights and property.
- CH 30. Most of our church people forget the meaning of the word brotherhood when they get out of church
- CS 31. This community lacks real leaders.
- IR 32. People give you a bad name if you insist on being different.
- IR 33. People here try to take advantage of each other
- LG 34. Local concerns expect their help to live on low wages
- CS 35. You are out of luck here if you happen to be of a different nationality
- CS 36. No one seems to care much how the community looks
- FR 37. If their children keep out of the way, parents are satisfied to let them do whatever they want to do
- CH 38. Most of our churchgoers do not practice what they preach
- LG 39. The town council gets very little done.

X. GEOGRAPHICAL MOBILITY

1. Places where you have lived:

LOCALITY		CATEGORY					Arrived	Left	Type of Work	Reason(s) for Leaving
County	District	State	City	Village	Farm	Settle	Year	Year		

Do you plan to move to another place in the foreseeable future?

Yes _____ No _____

When (year) _____ Where? (City, county, state)

3. If the Government gave you good new land for planting, any place you wished, would you go there?

4. If you could be born again, would you like to be ^{what you are at present?} what you are at present?

5. Do you have relatives or friends who live in another city?
 _____ Yes _____ No
6. If so, indicate:
 Relationship: _____ City (County, State): _____
7. If so, how many times a year do you visit them, or write to them?
 Write: Times/year Visit: Times/year
 Yes _____ _____ Yes _____ _____
 No _____ _____ No _____ _____
8. How many times a year do you go to the city?
 City: _____ No. times/year _____
9. Where does your family usually go shopping?
 (City, county, state)
10. Where does your family usually go for entertainment (movies, dances, parties, etc.)
 (City, county, state)
11. Did you vote in the last elections?
 Yes _____ No _____
12. What is the name of the mayor?
13. Who represents the mayor in the town council?
14. Does he ask you about the problems discussed in the Council before decisions
 are made?
15. What is the name of the Minister of Agriculture or the Secretary of Agriculture?
16. How many times a year do you leave the State of São Paulo
 _____ times
17. When you leave the State of São Paulo, where do you go?
18. Have you ever been abroad?
 Yes _____ No _____
19. If so, where were you?

VI - RATING OF COMMUNITY SERVICES

	<u>Satisfied</u>	<u>Regular</u>	<u>Unsatisfied</u>	<u>Does not exist</u>
Electric services				
Water services				
Health services				
Churches				
Schools				
Rescue squads				
Shopping facilities				
sewer system				
Funeral services				
Recreational facilities				
Community leadership				
Mail services				
Roads and streets				
Appearance of the community				
Fire protection				
Parking facilities				
Hospital				
Maternity care				
Child care stations				

XII. - ADOPTION

1. Why do you use fertilizer?
2. Are all fertilizers basically the same, that is, equally effective?
3. What do the numbers on the fertilizer bag indicate?
4. What is the meaning of the number 3 in the formula 3-15-15?
5. Will you use, this year, the same fertilizer that you used last year?
Yes _____ No _____ If not, why are you going to change?

(If the answer is: "Because they contain more", ask: "Contain more what?")
6. Why do some fertilizers cost more than others, even when bought from the same dealer?
7. In your opinion, what are the major problems related to the acquisition of the following products? (There are no problems, high prices, too much delay, they are non-existent, etc = possible answers)
 - a. Purchase of inputs:
 - Fertilizer:
 - Lime:
 - Seeds and defensives:
 - Gasoline, oil, etc.
 - Mineral salt, etc. for the cattle:
 - Machinery:
 - Repair of machines and parts:
 - b. Sale of products:
 - Cotton:
 - Rice:
 - Coffee:
 - Sugar cane:
 - Beans:

Corn:

Cattle and swine:

Dairy products, meat, eggs and other animal products:

c. Processing of products:

d. Transportation:

Inputs:

Products:

8.a. Do you normally obtain the amount of credit that you need?

Yes _____ No _____

If not, why not?

b. What type of credit is most difficult to obtain? What is the easiest?

Operational:

Purchase of machines and equipment:

Purchase of land:

Livestock:

Improvements:

c. Is it easier to obtain agricultural credit now than it was five years ago?

_____ Yes _____ No. In your opinion, what is the reason for this?

d. What banks are the most important for the agricultural sector in this municipio?

1)

2)

3)

4)

9. What are the most important sources of agricultural information for the farmers of this municipio?
- 1)
 - 2)
 - 3)
 - 4)
10. What type of information do you get before trying a new agricultural practice?
11. Scientific information on new ideas and new agricultural practices do not get to us.
12. With whom do you discuss the success or failure of a new agricultural practice after you have tried it?
13. What type of information does the Casa da Agricultura provide you and in what form is this information given?
14. What were your two major crops last year? (1970/71)
- 1)
 - 2)
- 15) What was the price per unit for each of the two major crops (mention unit (kilo or arroba (15 kilos))
- 1)
 - 2)
- 16) When you make a loan to buy fertilizer, do you use a bank?
- Yes _____ No _____
- a. If you don't borrow from the bank, who do you borrow from?
 - b. Why do you use this source of a loan instead of a bank?

17. Of the 9 items mentioned below, which do you consider the most important to increase production, per "alqueire"? _____
 And the least important? _____

- | | |
|-----------------------------|-------------------------|
| a. Fungicide | f. Chemical fertilizers |
| b. Improved seed | g. Organic fertilizers |
| c. Lime | h. Herbicides |
| d. Insecticide | i. Mechanization |
| e. Ant-killer (insecticide) | |

18. Of the eight items mentioned below, which do you consider the most important for the farmer to operate his own farm with maximum profit? _____ And the least important? _____

- | | |
|------------------------|---|
| a. Years of experience | e. being a member of agricultural organizations |
| b. Level of education | f. Access to agricultural information |
| c. Insurance | g. Use of credit |
| d. Farm records | h. Soil analysis |

19. How would you rank the items below, in order of importance, as sources of agricultural information for the farmer? ?

No Source of Information

Newspapers
 Private firm technicians
 Radio
 Bank employees
 Demonstration fields and experiment stations
 Meetings and exhibits
 Agronomist of the Casa da Lavoura
 Farm magazines
 Cooperative technicians
 Television
 Agricultural publications

XIII. VALUES IN RELATION TO WORK

1. If you won 100,000 cruzeiros in the sports lottery, how would you spend them?

2. There is a region where farmers plant two major crops: wheat and flowers to make perfume. The wheat in this region gives continuous profit, however the profit is small. The production of flowers does not always go well, but when it does, the profit is enormous. What would you plant if you were a farmer in that region?

3. What positions would you like your sons to occupy? Why?

What do you think your sons will actually be? Why?

4. What positions would you like your daughters to occupy? Why?

What do you think your daughters will actually be? Why?

5. In another country, many times the farmers spend their savings and make loans to have a wedding party for their children. Such persons are respected by their friends and enjoy high prestige. Other farmers spend very little, and their friends consider them "tight fisted". These farmers prefer to buy more land and machinery.

What do you think about these two types of farmers?

Why?

6. Two 12-year old boys stopped doing their work in the corn field. They were discussing how to produce the same amount of corn with fewer hours of work.
1. The father of one of the boys said: "It's a good idea to think about that. Tell me what you think we should do to improve our corn production."
 2. The father of the other boy said: "The way we produce corn is the best of all. Discussions on how to change are a waste of time and does not help anything".
- In your opinion, who is right?

7. Is it possible for a farmer to save money?
8. Why should a farmer save money?
9. To be successful, should you worry about others?
10. Are the best farmers those who use new practices before their neighbors?
11. In some places they say that a farmer is successful when God wants it that way. What do you think?
12. These same persons say that even if you work a lot, you cannot change your situation. What do you think?
13. Do you think that success in farming is more a question of luck than of hard work?
14. Is working on a farm better than working in an office? Why?
15. Who is more important for Brazil - the farmer or the office clerk?
16. Do you make difficult plans for yourself and then try to carry them out?
17. Many times do you do things only to prove to yourself that you can do them?
18. Do you work like a slave in everything you are engaged in until you are satisfied with the results?
19. What are the three principal qualities you want your children to have?
20. Is it better to do without something than ask a favor of someone?
21. Is the best road to success working individually without the help of others?
22. Should you respect an older person, no matter what type of person he is?

XIV. Ethnic Origin

Indicate the locality (state or country) where your grandparents and your wife's grandparents were born:

<u>Husband (interviewee)</u>	<u>Wife</u>
Paternal side	Paternal side
grandfather _____	grandfather _____
grandmother _____	grandmother _____
Maternal side	Maternal side
grandfather _____	grandfather _____
grandmother _____	grandmother _____

INTERVIEWER EVALUATION

Size of Population at Place of Residence

- 1 _____ Farm
 2 _____ Non-farm rural area
 3 _____ Village, less than 500 inhabitants
 4 _____ City, 501 to 5,000 inhabitants
 5 _____ " 5,001 to 10,000 "
 6 _____ " 10,001 to 50,000 "
 7 _____ " 50,001 or more "

B. Race

White _____
 Yellow _____
 Negro _____

9. Income

Salary: Cr\$ _____
 Other income: _____
 Receives only minimum salary _____

10. Only for interviewers

What is your evaluation of the interviewee?

Excellent Good Regular Poor

Cooperation _____

Accuracy of data _____

Gave complete information _____

What problems did you have during the interview, if any _____

Duration of interview: _____ hours

BIBLIOGRAPHY

- Albuquerque, E.A., 1971. "Transformacoes Gerais na Sociedade Japonesa e Imigracao para o Brasil" in O Japones em Sao Paulo e no Brasil Sao Paulo: Centro de Estudos Nipo-Brasileiros.
- Ando, Z. and K. Wakisaka, 1971. "Sinopse Historica da Imigraeco Japonesa no Brasil." in O Japones em Sao Paulo e no Brasil Sao Paulo: Centro de Estudos Nipo-Brasileiros.
- Baer, G., 1964. Population and Society in the Arab East, London: Routledge and Kegan Paul.
- Barth, F., 1956. "Ecologic Relationships of Ethnic Groups in Swat, North Pakistan" American Anthropologist, Vol. 58, No. 6 (Dec.), 1079-1089.
- Bernard, J., 1950. "Where is the Modern Sociology of Conflict?" American Journal of Sociology, Vol. LVI, No. 1, (July), 11-16.
- Bernardes, N., 1961. "Caracteristicas Gerais da Agricultura Brasileira em Meadas do Seculo XX" Revista Brasileira de Geografia, Ano XXIII, No. 2 (Abril-Junho), 363-420.
- Cardoso, R.C.L., 1963. "O Agricultor e o Profissional Liberal Entre os Japoneses no Brasil" Revista de Antropologia, Vol. 11, Nos. 1-2 (Junho e Dezembro), 53-60.
- _____, 1972. "Estrutura Familiar e Mobilidade Social" "Doutoramento" Thesis, Department of Social Sciences, University of Sao Paulo.
- Carver, T.N., 1908. "The Basis of Social Conflict" American Journal of Sociology, Vol. XIII, No. 5, (March), 628-637.
- Chase, A.U., 1972. "Factors Associated with the Use of Modern Agricultural Inputs in Eight Municipios of the State of Sao Paulo, Brazil, 1970-1972." Unpublished M.S Thesis, Department of Agricultural Economics and Rural Sociology, The Ohio State University.
- Cleaver, P.T., 1968. "Internal Consistency Item Analysis Residue," Data Center, College of Administrative Science, The Ohio State University, Unpublished.

- Coleman, J.S., Community Conflict, New York: The Free Press, no date.
- Coon, C.S., 1951. Caravan, the Story of the Middle East, New York: Holt.
- Coser, L., 1956. The Functions of Social Conflict, New York: The Free Press.
- _____, 1967. Continuities in the Study of Social Conflict, New York: The Free Press.
- Crissiuma, E.F., 1935. "Concentracao Japonesa em Sao Paulo" Geografia, Ano I, No. 1, 110-114.
- Dahrendorf, R., 1959. Class and Class Conflict in Industrial Society Stanford, California: Stanford University Press.
- Dean, W., 1966. "The Planter as Entrepreneur: the Case of Sao Paulo" The Hispanic American Historical Review, Vol. 46, No. 2 (May), 138-152.
- Duarte, J.C., 1971. "Aspectos da Distribuicao da Renda no Brasil em 1970", Universidade de Sao Paulo (ESALQ), Unpublished M.S. thesis.
- Durham, E.R., 1966. Assimilacao e Mobilidade, Sao Paulo: Instituto de Estudos Brasileiros.
- Engel-Frisch, G., 1943. "Some Neglected Temporal Aspects of Human Ecology" Social Forces, Vol. 22, No. 1 (Oct.), 43-47.
- Fujii, Y. and T.L. Smith, 1959. The Acculturation of the Japanese Immigrants in Brazil, Gainesville: University of Florida Press.
- Fundacao Getulio Vargas, 1971. "Estatisticas Basicas, Contas Nacionais do Brasil, Atualizacao" Conjuntura Economica, Vol. 25, No. 9 (September).
- Furtado, C., 1968. The Economic Growth of Brazil, Berkeley: University of California Press.
- Gans, H., 1962. The Urban Villagers: Group and Class in the Life of Italian-Americans, New York: The Free Press of Glencoe.
- Gauthier, H.L., 1968. "Transportation and the Growth of the Sao Paulo Economy" Journal of Regional Science, Vol. 8, No. 1, 77-94.
- Gayet, G., 1957. "Les Libanais et les Syziens dans l'Quest African" in Ethnic and Cultural Pluralism in Intertropical Communities, International Institute of Differing Civilizations (ed.), Brussels: 161-172.

- Glass, G.V. and J.C. Stanley, 1970. Statistical Methods in Education and Psychology, Englewood Cliffs, N.J.: Prentice-Hall.
- Goldberg, M.M., 1941. "A Qualification of the Marginal Man Theory" American Sociological Review, Vol. 6, No. 1, (February), 52-58.
- Golovensky, D.I., 1952. "The Marginal Man Concept. An Analysis and Critique," Social Forces, Vol. 30, No. 3 (March), 333-339.
- Gonzaga, A.G., 1942. "Contribuicao Para o Estudo das Imigracoes no Brasil" Revista de Imigracao e Colonizacao, Ano III, No. (Abril), 89-98.
- Graham, D.H., "Foreign Migration and the Question of Labor Supply in the Early Economic Growth of Brazil," Unpublished paper, no date.
- Graham, R., 1966. "Causes for the Abolition of Negro Slavery in Brazil: An Interpretive Essay", The Hispanic American Historical Review, Vol. 46, No. 2 (May), 123-137.
- _____, 1968. Britain and the Onset of Modernization in Brazil 1850-1914, Cambridge, Great Britain: The University Press.
- Green, A.W., 1947. "A Re-Examination of the Marginal Man Concept" Social Forces, Vol. 26, No. 2 (Dec.), 167-171.
- Guerrero, S., 1973. "Level of Agricultural Technology as Associated with Some Selective Structural and Individual Variables in a Brazilian Situation." Unpublished Ph.D. Dissertation, Department of Agricultural Economics and Rural Sociology, The Ohio State University.
- Hall, M.M., 1969. The Origins of Mass Immigration in Brazil, 1871-1914, unpublished Ph.D. dissertation, Faculty of Political Science, Columbia University.
- Harris, M., 1959. "Caste, Class, and Minority" Social Forces, Vol. 37, No. 3 (March), 248-254.
- Hawley, A.H., 1944. "Ecology and Human Ecology" Social Forces, Vol. 22, No. 4 (May), 398-405.
- Hawley, A.H. and J.H. Steward, 1968. "Ecology" in International Encyclopedia of Social Sciences, Vol. 4, New York: The Macmillan Company and The Free Press: 328-344.
- Hitti, P.K., 1961. The Near East in History, New York: D. Van Nostrand Company, Inc.
- Hutchinson, B., 1956. "Origem Socio-Economica dos Estudantes Universitarios de Sao Paulo" Educao e Ciencias Sociais, Ano 1, Vol. 1, No. 3, (Dezembro), 91-107.

- Ianni, O., 1972. "Capitalismo, Escravidão e Trabalho Livre" in Comunidade e Sociedade no Brasil, F. Fernandes (ed.) São Paulo: Companhia Editora Nacional.
- Instituto Brasileiro de Geografia e Estatística (IBGE) - Conselho Nacional de Estatística, 1960. Anuário Estatístico do Brasil - 1960, Parada de Lucas, Rio de Janeiro: Serviço Gráfico do IBGE.
- Kennedy, J.J. An Intuitive Approach to the Design and Analysis of Educational Efficiency, To be published, no date.
- Kerckhoff, A.C. and T.C. McCormick, 1955. "Marginal Status and Marginal Personality" Social Forces, Vol. 34, No. 1 (Oct.), 48-55.
- Lindgren, E.J., 1938. "An Example of Culture Contact Without Conflict" American Anthropologist, Vol. 40, No. 4, (October-December), 605-621.
- McKenzie, R.D., 1924. "The Ecological Approach to the Study of the Human Community" American Journal of Sociology, Vol. 30, No. 3, 287-301.
- _____, 1925. "The Scope of Human Ecology" in Publications of the American Sociological Society, Vol. 20, 141-154.
- Marasculio, L.A., 1971. Statistical Methods to Behavioral Science Research, New York: McGraw-Hill Book Co.
- Medina, C.A. "Sertãozinho e Jardinópolis, São Paulo" Unpublished paper, no date.
- Meyer, R.L., et al., 1971. "Aspectos Econômicos da Agricultura Na Região de Ribeirão Preto, Ano Agrícola 1969/70" Piracicaba: Universidade de São Paulo (ESALQ). Mimeographed.
- Michael, D.C., 1972. "Factors Associated with Innovative Adoption Among Selected Farmers in Southern Brazil," Unpublished Ph.D. Dissertation, Department of Agricultural Economics and Rural Sociology, The Ohio State University.
- Ministerio do Planejamento e Coordenação Geral Fundação IBGE, 1970. Informações Básicas, Unpublished data.
- _____, 1971a. Anuário Estatístico do Brasil, 1971, IBGE: Rio de Janeiro.
- _____, 1971b. Sinopse Preliminar do Censo Demográfico. VIII Recenseamento Geral - 1970, São Paulo, Fundação IBGE; Rio de Janeiro.

- Miyazaki, N. and M. Ono, 1958. "O Aviamento na Amazonia" Sociologia, Vol. XX, No. 3 (Agosto), 366-396.
- Monbeig, P., 1952. Pionniers et Planteurs de Sao Paulo, Paris: Librairie Armand Colin.
- "Movimento Imigratorio em 1954", 1955. Revista de Imigracao e Colonizacao, Ano XIV-XVI, 66-68.
- Mussolini, G., 1946. "O Cerco Flutuante: Uma Rede de Pesca Japonesa que Teve a Ilha de Sao Sebastiao Como Centro de Defusao no Brasil" Sociologia, Vol. VIII, No. 3, 172-183.
- Myrdal, G., 1968. Asian Drama. An Inquiry Into the Poverty of Nations, New York: Pantheon.
- Nieburg, H.L., 1963. "Uses of Violence" Journal of Conflict Resolution, Vol. VII, No. 1, 43-54.
- Nobre, E.R., P.F.C. Araujo, and C.T. Piza, 1971. "A Colonia Japonesa na Producao e Produtividade na Agricultural Paulista" in O Japones em Sao Paulo e no Brasil, Sao Paulo: Centro de Estudos Nipo-Brasileiros: 156-157.
- Oberschall, A., 1973. Social Conflict and Social Movements, Englewood Cliffs, N.J.: Prentice-Hall.
- Odum, H.A., 1931. "Presidential Address: Folk and Regional Conflict as a Field of Sociological Study" in Social Conflict, Papers Presented at the Twenty-Fifth Annual Meeting of the American Sociological Society, Chicago: The University of Chicago Press.
- Park, R.E., 1928. "Human Migration and the Marginal Man" American Journal of Sociology, Vol. 33, (May), 881-893.
- _____, 1931. "Personality and Cultural Conflict" in Social Conflict, Papers Presented at the Twentieth-Fifth Annual Meeting of the American Sociological Society, Chicago: The University of Chicago Press.
- _____, 1936. "Human Ecology" American Journal of Sociology, Vol. 42, No. 1 (July), 1-15.
- _____, 1950. Race and Culture, Glencoe, Illinois: The Free Press.
- Park, R.E., E.W. Burgess, and R.D. McKenzie, 1925. The City, Chicago: The University of Chicago Press.
- Petersen, W., 1971. Japanese Americans. Oppression and Success, New York: Random House.

- Prado, C., Jr., 1935. "Distribuicao da Propriedade Fundiaria Rural no Estado de Sao Paulo" Geografia, Ano 1, No. 1, 52-68.
- _____, 1944. "Problemas de Poroamento e a Pequena Propriedade" Boletim Geografico, Ano 1, No. 12 (Marco), 17-31.
- _____, 1971. The Colonial Background of Modern Brazil, Berkeley: University of California Press.
- Protro, E.T., 1961. Child Rearing in the Lebanon, Carbridge: Harvard University Press.
- Quinn, J.A., 1939. "The Nature of Human Ecology-Re-Examination and Re-Definition" Social Forces, Vol. 18, No. 2 (December), 161-168.
- _____, 1940. "Human Ecology and Interactional Ecology" American Sociological Review, Vol. 5, No. 5 (October), 713-722.
- _____, 1940. "The Burgess Zonal Hypothesis and its Critics" American Sociological Review, Vol. 5, No. 2 (April), 210-218.
- Rios, J.A., 1958. "Aspectos Politicos da Assimilacao do Italians no Brasil" Sociologia, Vol. XX, No. 3 (Agosto), 295-339.
- _____, 1971. "The Growth of Cities and Urban Development" in Modern Brazil, J. Saunders (ed.) Gainesville, Florida: University of Florida Press: 269-288.
- Rycroft, W.S. and M.M. Clemmer, 1963. A Study of Urbanization in Latin America, New York: The United Presbyterian Church in the U.S.A.
- Saito, H., 1961. O Japones no Brasil, Sao Paulo: Editora "Sociologia e Politica".
- Schmidt, C.B., 1943. "Systems of Land Tenure in Sao Paulo" Rural Sociology, Vol. 8, No. 3 (September), 242-247.
- Simmel, G., 1955. Conflict and the Web of Group Affiliations, Translated by K. Wolff and R. Bendix, New York: The Free Press.
- Simpson, G., 1937. Conflict and Community. A Study in Social Theory, New York: T.S. Simpson.
- Stein, S.J., 1957. Vassouras. A Brazilian Coffee Country, 1850-1900. Cambridge, Mass.: Harvard University Press.
- Stern, L.W., 1971. "Antitrust Implications of a Sociological Interpretation of Competition, Conflict, and Cooperation in the Marketplace." The Antitrust Bulletin, (Fall).

- Stonequist, E.V., 1935. "The Problem of the Marginal Man" American Journal of Sociology, Vol. 41, No. 1, (July), 1-12.
- _____, 1961. The Marginal Man, New York: Russell and Russell, Inc.
- Suzuki, T., 1969. The Japanese Immigrant in Brazil, Tokyo: University of Tokyo Press.
- Tannous, A.L., 1942. "Emigration, A Force of Social Change in an Arab Village," Rural Sociology, Vol. 7, No. 1 (March), 62-74.
- Theodorson, G.A. (editor), 1961. Studies in Human Ecology, New York: Harper and Row.
- United Nations Economic and Social Office in Beirut, 1970. Studies on Selected Development Problems in Various Countries in the Middle East, 1970, New York: United Nations.
- United States Department of the Army, 1964. U.S. Army Area Handbook for Brazil, Washington, D.C.: U.S. Government Printing Office.
- Wagley, C., and M. Harris, 1958. Minorities in the New World, New York: Columbia University Press.
- Weber, M., 1947. The Theory of Social and Economic Organization, Glencoe Ill: The Free Press.
- Wessel, K.L. and W. Nelson, 1971. "Methodology and General Data Description: Farm Level Capital Formation in Sao Paulo, Brazil," Studies in Agriculture and Technology, Economics and Sociology Occasional Paper No. 47, Department of Agricultural Economics and Rural Sociology. The Ohio State University, Columbus.
- Wiendl, M.T.L.B., 1972. Caracteristicas da Mao-de-Obra Brasileira em 1970, Universidade de Sao Paulo (ESALQ), Serie Pesquisa No. 15, Mimeographed.
- William, R.M., Jr., The Reduction of Intergroup Tensions, New York: Social Science Research Council, no date.
- Wirth, L., 1945. "Human Ecology" American Journal of Sociology, Vol. 50, No. 6 (May), 483-488.
- Young, J.M., 1967. The Brazilian Revolution of 1930 and the Aftermath, New Brunswick, N.J.: Rutgers University Press.
- Zinnes, D.A., 1962. "Hostility in International Decision-Making" Journal of Conflict Resolution, Vol. VI, No. 3, 236-243.