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Small Farmers' Cooperatives in Brazil, 1964-1984 Reasons for Success or Failure

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SMALL FARMERS' COOPERATIVES IN BRAZIL, 1964-1984: REASONS FOR SUCCESS OR FAILURE

by

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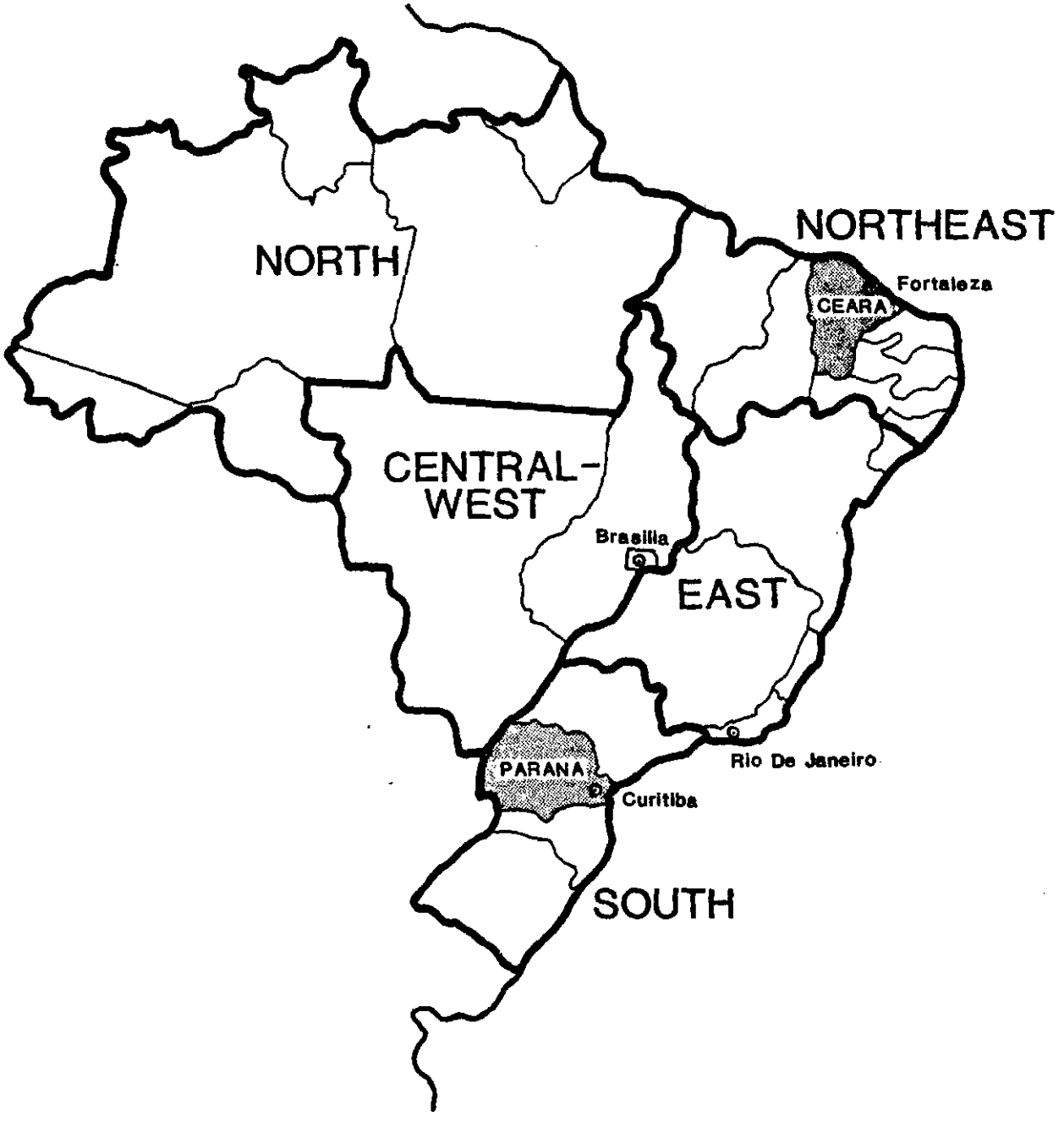
ABSTRACT

This study is concerned with cooperative business enterprises of small farmers. The topic has been chosen because peasants' association in supply and marketing cooperatives is considered an essential element in rural development. The author's field experience leads him to agree in principle with this assumption. But, as exemplified by Brazil, a variety of factors (ecological, socio-historical, legal, economic and so forth) may hinder or help the inception and survival of cooperatives.

Thus, if a government aims at integrating the small producer into the national economy as supplier and consumer (as in Brazil), measures to implement this policy must not be ad hoc but coherent, consistent, and in consonance with overall agricultural policies. It has been found that, in Brazil, ideal and real policies have not followed the same path.

The author's eight-year involvement with Brazilian producers' cooperatives has resulted in this study with equivocal conclusions which, nonetheless, have wide applicability in most developing countries.

Regions of Brazil



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CHAPTER I

INTRODUCTION

The promotion and support of cooperatives of small farmers are a main element of the rural development strategies of most developing countries. The small producer with a tendency for intensive land use as compared to the large land owner, is needed as a supplier to and customer of the national economy. However, he is unable to fulfill these functions if individually exposed to market forces.

The purpose of this thesis is to examine the reasons for the success or failure of small farmer cooperatives in a country where the juxtaposition of progress and backwardness is of great concern to its government. While success may be touted, it is rarely analyzed. Failure, however, generates much research. This thesis will give equal consideration to both success and failure.

Rationale for Choice of Topic

Brazil has been chosen for objective and subjective reasons. To the former belong the striking physical, social and economic differences between the Center/South and the North/Northeast of the country, the government's recognition of the problems these differences have caused,

and its inauguration of policies to remedy them. The main subjective reason is the author's familiarity with the country in which he has spent approximately eight years in periods of varying lengths.

Small farmers (owners, tenants, sharecroppers) have been chosen because they represent a majority of the rural population, live mostly on the subsistence level and, when this is threatened, "vote with their feet," silently or violently. This has happened in the past, and is still happening, in Brazil. Small farmers are also the key to national self- (or near self-) sufficiency in food, and potentially large customers of the manufacturing and service sectors.

The apparent limitation of this analysis does not intend, however, to make Brazil an isolated case. Rather, on a Third World scale, the lessons to be learned from Brazil have wide application for development programs elsewhere.

The concept of the small farmer is not necessarily tied to the size of the land he cultivates. The physical environment (soils, climate, water availability) and the level of technology applied to the working of the land influence whether he (or she) can only subsist or produce for the market. These factors will also affect the character of the agriculture to be chosen: for instance, food or cash crops or a mixture of both, plant or tree

crops, the possibility of single or multiple cropping or animal husbandry.

Further, the relative productivity per man and land unit depends frequently on the producer's legal relationship to the land, which, if unstable and/or exploitative, encourages migration from one rural area to another, or to a city.

In general, small farming has one aspect in common: it is labor-intensive, especially when it begins to produce for the market, thus keeping people on the land. At this point, the producer needs access to markets which are ruled by the laws of supply (for instance, pricing policies) and demand (for instance, quality standards). In order for the supply to meet the demand, the farmer needs access to inputs (including credit) and storage facilities, the latter being also important for the preservation of food and feed for post-harvest home consumption.

It has been assumed by many authors and/or field-workers that, by pooling their resources in cooperative associations, small farmers can overcome many of these problems. Cooperative associations of an economic character (enterprises) must have two goals for their justification:

(a) they must engage in sound business activities, and

(b) they must contribute to the increase in weal and wealth of their members by improving their bargaining position in the markets.[1]

If (a) is achieved without (b), we have "rich" cooperatives with "poor" members. This is the case with the cooperatives in the Northeast of Brazil, the majority of which concentrate on the marketing of cotton and are equipped with all the necessary machinery for ginning, extracting oil, and manufacturing oil cake, but are exposed to the whims of international markets for this single cash crop.

If (b) is achieved without (a), we shall have temporarily "rich" members but a "poor" cooperative, one, in fact, that will default rapidly. Thus, success of a cooperative is not reflected in the strength of its financial statement alone, but in the long-term socio-economic progress of its members, expressed usually in their business participation and in increasing numbers.

Certain factors combine to make success possible. Failure results when they do not. But, if cooperatives are a desirable mechanism for small farmers to achieve greater equity in the national economy, external assistance may be needed.

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[1] Quesnay, a French economist of the 18th century, said: "riches paysans, riche royaume," that is "rich peasants--not landlords--, rich kingdom."

Hypothesis

It is hypothesized that, in order to integrate small farmers into the national economy as suppliers and consumers, the promotion and support of supply and marketing cooperatives is a necessary ingredient of rural development. This hypothesis has three sub-hypotheses:

(1) Ecological, socio-historical, legal, and economic conditions must favor formalized cooperation.

(2) Where they do not but government wishes to promote cooperative business activities, it has to take an active part in their establishment and survival, beginning as sponsor, continuing as partner, and abiding as friend.

(3) Agricultural policies, such as import substitution, export promotion, and equitable distribution of basic food supplies must be consonant with the aim of small farmers' socio-economic development.

As the framework of this paper does not allow a review of the totality of Brazil, the States of Ceará and Paraná have been selected for this analysis. They are representative of the striking physical, social and economic differences which distinguish the Northeast from the South of the country. Therefore, whatever government guidance and support (direct or indirect) was deemed advisable in these states, started out from different assumptions and

led to different results.

Source Review

Much has been written about the cooperative movement in the West where it originated, and much about its role in rural development problems in the Third World. But while the former authors seldom address problems outside their regions, authors of the latter are interested in cooperatives generally only as one instrument in the total orchestration needed. World Bank and FAO studies and conference resolutions are already more specific in their advocacy of cooperatives for the purpose of raising the peasants' living standards through cooperative credit, marketing, and participation in land reform.

Developing countries have looked at the history, growth and accomplishments of the cooperatives in England, Germany, France and the USA and assumed that these models could serve their own development plans. But many preconditions which favored their establishment and growth in one part of the world, were and are not yet extant in another. Therefore, only by taking these conditions into consideration, can a prescription be written to remove obstacles in the path of development. Some authors have gone to great lengths to do exactly this.

Helm,[2] who worked in Africa, draws from his experience

[2]F. C. Helm, The Economics of Cooperative Enterprises (London: University of London Press, 1968).

general conclusions as to the types of persons who should not join cooperatives and as to the types of functions a cooperative should not fulfill. He also proposes a "Cooperative Development Corporation" as a transitory institution where there seems to be the need for a cooperative but pre-conditions appear to be negative.[3]

Kohls,[4] strikes much the same cautionary note as Helm. He asks and answers the following questions:

(1) Can an adequate volume be secured and maintained? The economies of large scale operations are just as important to cooperatives as to private corporations.

(2) Can adequate and reasonable financing be procured? To build an efficient plant takes capital; to build less than an efficient plant invites failure.

(3) Is efficient management available and will the association pay its price? In management as in other things, high quality demands a high price. Successful cooperatives need as high a level of managerial ability as other businesses.

(4) Is the membership prepared to meet competitive trouble? Especially in the initial stages, competitive conditions usually get worse rather than better. A new cooperative can usually expect that the rest of the business community will unite against it during the early period of its existence.

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[3]The author of this thesis has adopted and elaborated that idea in his contribution to a book published in Sao Paulo (Brazil), in 1974, with the title A Problematica Cooperativista no Desenvolvimento Economico, Fundacao Friedrich Naumann (São Paulo, 1974).

[4]Richard L. Kohls, Marketing of Agricultural Products (New York: Macmillan Co., 1967), pp. 233-234.

Anschel, Brannon, and Smith[5] solicited and collected articles from economists and sociologists on the subject of cooperative marketing in developing countries. Many of the contributors' observations, either expressed ex cathedra or gained in the field, though not made in Brazil (with one exception) are still so applicable to it that the author of this paper will have several opportunities to revert to them. The various authors agree on the need for cooperative enterprises in order to integrate the small producer into the national economy. Some of them see, however, limitations to that endeavor in the lack of general and specific education, in the inability to raise capital, and in the greater competitive flexibility of private enterprises. Those with field experience advocate, in general, some form of government support or participation so that these limitations can be reduced or overcome, while the theoretical authors have doubts regarding the desirability of intervention from above.

World Bank studies with regard to Brazil are numerous, some of a country-wide nature, some occupied with the Northeast as the problem area since the sugar boom burst in the 19th century. They do not deal with cooperatives specifically but shed a great amount of light on the problems

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[5]Kurt R. Anschel, Russell H. Brannon, and Eldon D. Smith, editors, Agricultural Cooperatives and Markets in Developing Countries (New York: Praeger Publishers, 1969).

of small farmers who, in order to become part of the national economy, need access (including credit) to input and output markets.

For instance, the Financial Systems Review deals with market policies and controls, the institutional structure, and the programs of rural credit for small and medium farmers. After discussing at length, and criticizing, subsidized credit, its distortions, misuse, and high administrative costs, the authors say that to meet the needs of small farmers

> it would seem that the most realistic, long-term prospect is some form of farmers' associations such as credit unions or cooperatives, despite the considerable effort likely to be required for their establishment.[6]

The author of this thesis was a member of a World Bank team visiting the Brazilian Northeast in 1981 for the purpose of determining which cooperatives should be included in a planned and financially assisted rural development program. His team report will be referred to in the course of this paper.

The sociological aspects of Brazil's population are treated with profundity by the American anthropologist Wagley.[7] He remarked that the class structure makes the solution of problems through voluntary or cooperative

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[6]Brazil: Financial Systems Review, A World Bank Country Study (Washington, D. C., 1984), p. 93.

[7]Charles Wagley, An Introduction to Brazil (New York: Columbia University Press, 1963).

efforts very difficult if not impossible. Hogan[8] was the field representative of the Cooperative League of USA in the Brazilian Northeast from 1962-66. He is somewhat more optimistic than Wagley but foresees a long-term process, perhaps lasting the span of a whole generation.

With regard to specific problems of cooperatives, in the Northeast or the South of Brazil, we have to turn to Brazilian authors and institutions.

Nobrega,[9] who occupied high positions in the Bank of Brazil (BB) and the Government, is deeply concerned about the direction of government policies for the agricultural sector. He has studied the credit and cooperative systems of the USA, France, Canada, and Australia. Being familiar with his own country's system and its shortcomings, he makes strong recommendations with regard to the reorganization of national policy in line with what he has observed in those other countries.

Rego,[10] a staff member of the Organization of Brazilian Cooperatives (OCB), suggests a model for the elaboration of a national policy for cooperatives and deals also at

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[8]Timothy L. Hogan, The Introduction of the Peasant to the Cooperative Movement in Northeast Brazil (Chicago: The Cooperative League of the USA, 1966).

[9]Mailson Ferreira de Nobrega, Desafios da Política Agricola (Brasilia: Gazeta Mercantil, 1985).

[10]Jose de Jesus Moraes Rego, Cooperativismo Nacional: Dimensões Políticas e Economicas, Organisação das Cooperativas Brasileiras (Brasilia, OCB, 1984).

length with two Government Programs which will be discussed in Chapter Four of this thesis.

Luz Filho[11] is often called the "Father of Brazilian Cooperatives," having directed the Cooperative Service Department of the Ministry of Agriculture from 1926 to 1961. He wrote his book after retirement and says in the final chapter:

> All our efforts to transform our archaic agrarian structure will be in vain without associations of the true cooperative mold, without transport facilities, without the reduction of tithes in favor of diversified not mono-agriculture, without general primary education, and without cooperative, professional and technical training: in other words, without the antecedents which make transformation welcome.
>
> As modern colonization cannot exist without the support of organic pillars such as credit, technology, zoning of agriculture, adequate localization with regard to propitious topographic and agrologic conditions, and without ready access to markets, without, in other words, strong infrastructural elements, the rational path to be followed is the establishment of cooperatives. . where the mesological conditions are favorable.

For statistics, the publications of the Brazilian Institute for Geography and Statistics (IBGE)[12] and of the National Bank for Cooperative Credit (BNCC)[13] have been found most helpful.

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[11]Fabio Luz Filho, As Cooperativas e os Problemas da Terra, Editora Melso S. A. (Rio de Janeiro, 1965), pp. 314-315.

[12]Instituto Nacional De Geografia e Estatísticas, Anuario Estatistico (Brasilia, 1983).

[13]Banco Nacional De Crédito Cooperativo e Organização Das Cooperativas Brasileiras, Panorama Brasileiro (Brasília, 1983).

Beyond that, recourse had to be taken to unpublished papers by cooperative leaders, their government counterparts, and/or third-party consultants. They contain mostly petitions, resolutions, and recommendations, or deal with specific regional cooperative problems, but reflect, in general, the fact that government and cooperatives are at odds with regard to their mutual role in rural development. Two of these are of major importance: The Proposal for A Cooperative Policy of the New Government,[14] authored by an OCB work-group of lawyers and economists, and the Integrated Action Plan for 1985/1986,[15] the result of collaboration between OCB, a German Foundation and the author, which was submitted to the Minister of Agriculture in March of 1985.

All tables accompanying the text have been compiled by the author for the purpose of this thesis from the sources annotated on the tables.

As no official English version of the quoted Brazilian sources has been published, quotations from them are rendered in the author's translation.

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[14] Proposta De Política Cooperativista Para o Programa Do Próximo Governo, unpublished working paper of OCB (Brasilia, 1984).

[15] Plano De Acão Integrada, Secretaria Nacional Do Cooperativisimo and OCB, limited edition for distribution (Brasilia, 1985).

This thesis is an outcome of the more than eight years which, in periods of differing lengths (the last one in early 1985), the author has spent with Brazilian cooperatives of agricultural producers.

CHAPTER II

THE INFLUENCE OF REGIONAL VARIABLES ON COOPERATIVE ENTERPRISES BY SMALL FARMERS

The variables to be examined in this chapter constitute, in the author's opinion and experience, a sequence of priorities in their influence on the success or failure of small farmer cooperatives. This idea or principle is also emphasized by a German "Manual for the Evaluation of Cooperative Self-Help Projects."[1] It stipulates that certain informations must be made available before the inception of any such project be it by a national institution or an international one called upon to assist the former. These informations should be procured in the following order:

(1) Geography, Climate, Ecology
(2) Population Density
(3) Ethnicity
(4) Cultural Criteria
(5) Socio-political Criteria
(6) Economic Criteria
(9) Land Distribution Patterns and Water Availability
(10) Consumption Patterns
(11) Infrastructure

The author has preferred to reduce this number to six. They are:

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[1] "Manual for the Evaluation of Cooperative Self-Help Projects" (Bonn: Friedrich Naumann Foundation, 1984), p. 105.

Ecological Factors
Socio-Historical Factors
Structural Factors and Production Patterns
Land Tenure and Mobility Factors
Behavioral Factors
Marketing and Supply Factors

Ecological Factors

Brazil covers an area of about 8.5 million square kilometers including waterways, and is inhabited by about 135.6 million people (projected for 1985). Of this total area, 57.6 percent (4.8875 million square kilometers) are covered by forests of various types, and 42.5 percent (3.6125 million square kilometers) are considered potentially arable. But only 491,850 square kilometers (5.8 percent) of the land area or 13.6 percent of the potentially arable area are cultivated.[2]

Of the population, 67.6 percent (91.26 million) are classified as urban dwellers; 32.4 percent (43.74 million) live on or from the land.

The ratio of cultivated land to rural population works out at slightly above one hectare per capita, but could reach about eight hectares if all land would be cultivated. Geographers divide the country usually into five regions: the North, the Northeast, the East, the Central-West, and the South. The two states selected as representative for the author's analysis are Ceará in the

[2] Anuario Estatistico, IBGE, 1983, pp. 46, 75, 78.

Northeast and Paraná in the South respectively. As these states share many characteristics with their neighbors of the same region, a short description of these two regions follows:

The Northeast covers about 11 percent of the national territory and has 29 percent of the total population. Figures for Ceará are 1.73 percent and 4.3 percent respectively (Table 1). It still has some lowlands in its northern part (an extension of the Amazon basin) which, however, narrow to a strip in its southern part. The hinterland of this strip (called the sertão) belongs topographically to the Central Highlands. The climate is tropical, and rainfall scarce (400-600 millimeters per year). It is perpetual famine country. Eighty-seven percent of the land is covered with a scrubby drought-resistant growth, called caatinga, is desert-like in appearance, and is punctuated by rocky outcrops. Where water is available, small farming and cattle raising are practiced. On the coastal strip, where soils and precipitation are more favorable to agriculture, sugar cane, cotton, tobacco, and sisal are produced. Also, the carnauba and babassu palms provide cash income through the collection of their leaves or nuts for the production of wax and oil. While sugar cane is grown on large planta-

TABLE 1

AREA AND POPULATION IN CEARÁ AND PARANÁ

	Ceará	Paraná
Area (square kilometers)	146,817	199,060
Percent of National Area	1.73	2.34
1985 Population Estimate (in millions)	5.89	8.07
Percent of National Population	4.30	5.90
1985 Urban Population Estimate (in millions)	3.16	5.00
1985 Rural Population Estimate (in millions)	2.73	3.07
Ratio of Urban to Rural Population	54:46	62:38
Persons/Hectare Ratio (ha.)	24.90	24.70
Rainfall (m/m year)	1,068.60*	1,604.40

SOURCE: Anuário Estatístico, IBGE, 1983, pp. 28, 36, 42, 75.

*Measured on the coast.

tions, usually with a central, privately owned mill, the other products are grown and/or collected by medium to small landowners, tenants, and sharecroppers. These also raise their staple crop, manioc, and perhaps some beans, vegetables, and a few fruit trees (for instance, mangos), for home consumption. Some truck gardening and milk production is undertaken in the orbit of larger towns and cities. Cooperative business activities focus on cotton and dairy products. The author has come across one cooperative which marketed manioc in tuber and/or flour form, where members grew it in excess of their domestic needs. A large, foreign-assisted and managed plantation of mango and citrus fruit trees, which encouraged its employees to raise manioc as intercrop before these trees matured, became a member of this cooperative.

The South, comprising about 7 percent of the national area, and 15.3 percent of its population, is the most important economic region of the country. Figures for Paraná are 2.34 percent and 5.9 percent respectively (Table 1). The South follows first the coastal strip/hinterland pattern of the Northeast and East, the strip even completely disappearing in certain stretches. There, the highlands form sheer escarpments, broken in a number of places by magnificent valleys and gorges, the former allowing for some agriculture. Toward the southernmost end the highlands terminate and the coastal strip broadens

out to a plain with similarities to the grass land plains (pampas) of Uruguay and Argentina. The climate is sub-tropical on the coast on account of warm water currents in the ocean. But on the plateau (about 3500 to 4000 feet high) with elevations up to 5000 feet, the climate is temperate with four distinct seasons. The soils of this region are the richest of Brazil, especially the so-called "terra rocha" belt which covers part of the State of São Paulo, the northern part of Paraná, and a pocket of the State of Mato Grosso. Rainfall is 1600 millimeters per year. Destructive spring floods do occur in unpredictable cycles, so does frost, and occasionally snow.

The South contains the two main industrial centers of the country, the cities of São Paulo in the north and of Porto Alegre in the south, with a few smaller ones in between. Therefore, the South enjoys the relatively best communication system of the nation.

Climate, soils, and employment opportunities in the South have more than any other region of Brazil, attracted the immigrants of the 19th and 20th centuries: Germans, Dutch, Italians, Poles, Japanese. Those who desired to engage in agriculture received land grants (sometimes of dubious legality). They brought with them advanced techniques of cultivation and animal husbandry, and were more often than not familiar with cooperative principles and business. Others used their skills in

industry (metal work, glass blowing, weaving), while immigrants from the Near East concentrated on commerce and banking. Coffee, sugar cane, cotton, and citrus fruits prevail in the "terra rocha" belt where winters are usually not severe. In the southern high and low lands, wheat, barley, sorghum, rice, potatoes, and soya beans are so widely cultivated that this region can be called the nation's bread basket. The immigrant farmers and their descendants raise also pigs, poultry, milk cows, and cultivate vineyards. Thus, their cooperative enterprises are either highly diversified, or an individual belongs to several specialized cooperatives.

An outstanding example of a diversified cooperative is COTIA, a cooperative federation of about 12,000 members organized into various cooperatives in the States of São Paulo and Paraná, with the head office in the city of São Paulo (and a branch office in New York). It markets fresh vegetables and fruits at the Sao Paulo Central Market, processes and exports coffee, has its own slaughterhouse, mixes the fertilizer combinations its agronomists recommend for the various crops of its members and the feed for its members' animals. It also has experimental stations and provides in-service training for its members' children. Good examples of specialized cooperatives can be found among the wine growers of the South (some store and age 10 million liters), the coffee cooperatives of São Paulo

and Paraná, and the cotton cooperatives of Ceará.

The selection of such a relatively small area of Brazil for the purpose of the author's analysis would seem justified because, on the one hand, basic data for Ceará and Paraná do not differ greatly (Table 1) but land productivity data do (Table 2).

When analyzing the yield figures according to Table 2, it is noteworthy that the per hectare production of sugar cane, typical for the coastal and near-coastal regions of Ceará with sufficient rainfall, amounts to only one-third of Paraná's. In the case of manioc, generally a tropical and sub-tropical tuber able to grow in dry sandy soils, Paraná produces about four times the yield of Ceará. For sorghum and castor beans, two vegetable products grown in both hot and moderate climates, the relationships are about 5:1. Obviously, poor soils and paucity of rain are partially responsible for these yield differences, but education, technology, and development assistance are the important other parts. (In general, unit yields are lower than in the U.S.A. and Europe.)

The Government of Brazil, concerned with the fact that 86.4 percent of potentially arable land is left uncultivated so far (much of it used as natural pasture, some of it overgrazed), plans to make 25 million hectares available for farming by 1985. This program consists of three "frontiers" with emphasis on the strategic variables of each.

TABLE 2

PRODUCTION OF SELECTED COMMODITIES FOR CEARÁ AND PARANÁ 1982 - 1983

(In Kilograms/Hectares)

	Ceará	Paraná
Cotton Perennial*	70	--
Cotton Annual	229	1,591
Rice	1,846	1,702
Sugar Cane	30,000	88,000
Beans	148	496
Tobacco	378	1,529
Castor Beans	268	1,400
Manioc	5,328	19,794
Corn	120	2,125
Soja	--	2,134
Sorghum	600	2,686
Wheat	--	1,187

SOURCE: Anuário Estatístico, IBGE, 1983, p. 419.

*1982 and 1983 were drought years. In 1984, with rainfall normal for the region, cotton production was about three times higher.

One of these frontiers is the scrubland of the Northeast, especially the State of Ceará, where soil technology is the principally needed element. Paraná is not a "frontier" in this sense for it belongs to the developed regions of the country.

That such a frontier program is directed toward the small farmer and his participation in cooperative business enterprises is attested by the involvement of the National Bank for Cooperative Credit which is partially owned by the Government and partially by the Cooperatives.

Cooperatives, by their character, are concerned with the delivery of supplies to and the marketing of products from their members. Their liberty (if any) to procure outputs from or sell inputs to outsiders is usually circumscribed by law, limited to certain percentages of their business volume, and often confined only to the fulfillment of contracts. This constraint places them in a noncompetitive position relative to the independent trader (refiner, processor) for whom the cost/benefit ratio of procurement is the only consideration. This situation is aggravated when adverse environmental conditions prevail.

While cooperative enterprises in regions favored by soils, climate, water availability, and infrastructure may be able to cope with an occasional poor harvest of its members, the environmentally disfavored ones, with mostly poor harvests, could theoretically compensate for

their shortcomings by enlarging their areas of activity and increasing the number of their members. But, in practice, the concomitant lack of infrastructure makes this difficult, if not impossible.

In their conviction that the pooling of resources in producers' cooperatives will enhance the status of small farmers in the national economy, authorities as well as individuals have too often failed to take into consideration the impact of ecological factors.

Socio-historical Factors

Wagley,[3] a social anthropologist writing in the 1960s after 20 years of research in loco, says in the preface to his book:

> In each of the small communities in which I lived and did research (and even in those I read about), I saw the force of Brazilian ecology at work. In each of them, I learned something about Brazilian institutions and behavior, such as the system of social classes and race relations, the family and the wider web of kinship, the religion, the local government, the economy, and the educational system. In all of these communities, and in large cities as well, I found a common denominator of Brazilian thought, behavior, and attitude. One cannot know a nation without knowing how its institutions are lived out within the confines of a local community.[4]

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[3]Charles Wagley, An Introduction to Brazil (New York: Columbia University Press, 1963).

[4]Ibid., p. 7.

The author of this paper, having observed Brazilian life less systematically in the course of eight years, acknowledges his indebtedness to Wagley for many of the behavioral conclusions with regard to formal cooperatives which will be drawn in this section.

The Brazilian national of today comes from mainly three stocks: the Mongoloid American Indian, the African Negro, and the European Caucasoid, to which has to be added the more recent influx of Japanese, Chinese, and Semites from the Near East. Over a period of 400 years, these stocks have interbred, first illegitimately, then legitimately. Thus, unity in diversity extends beyond the nation concept to social attitudes.

In Brazil, people are officially not distinguished by race, rather by color: white, brown, black, and yellow. In the vernacular, there are more distinctions, such as "refined whites" on the one extreme and "dyed black" on the other, with several shades in between. Yet, even the "white" part of the population, especially those from Mediterranean countries including the Portugese conquerors, was no longer of pure stock. Pure Indians, probably never more than one million when the Portuguese arrived and now reduced to about 100,000 are on the other hand still to be found since they live in protected territories, where they have preserved many of their

customs and crafts.[5]

The colonizers, called bandeirantes (flagbearers), came originally as seekers of gold and proselytizers for the Church of Rome as in other parts of South America. Until the 18th century, however, no gold was found and the Indian population to be converted was not only sparse but lived in regions (Amazonas and Mato Grosso) accessible in those early days only with great difficulties and hardships.

The immense land grants given to those who were willing to venture outside the coastal settlements were, therefore, exploited for their other natural resources (forests, soils, iron ore deposits, semi-precious gem stones).[6] For these endeavors, labor was needed. Indian men, accustomed to leaving fieldwork to their women, were poorly adapted to hard manual work. Therefore, African slaves had to be imported. These were primitive agriculturists and herders.

The fertile coastal regions of the Northeast and East were settled first, and sugar cane, imported from the Azores, became the most important product. Despite export competition from the Caribbean Islands and today's domestic competition form the state of São Paulo, sugar

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[5]IBGE population statistics give no special figure for Indians.

[6]The Portuguese language has only one word explorar for both explore and exploit.

cane plantations still cover large areas of this region. Corporate economies of scale prevail now, but originally the mills were small (engenhos vs. usinas), driven by animal or water power at the center of the plantation, and became the focus of village and small town life. The land and mill owner became the patron upon whom everything and everybody depended. Thus, an aristocratic, patriarchial, semi-feudal society was created in which the upper was expected to protect the lower class. "It was from the Northeast sugar coast that the gentleman complex entered Brazilian culture along with other aristocratic traits."[7] Later immigration (Germans, Italians, Poles, Japanese, and others) has mitigated these characteristics in the south of the country, and especially in the large cities, but even today affiliation with the "aristocrats" by the newcomers remains an integral element in their expectations and careers.

In agricultural regions of Brazil, "the local upper class is among the most important social sectors in the nation. Its members control the rural vote and economic life of the masses of rural people."[8] And, "for most of this rural lower class, economic security and social well-

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[7]Wagley, An Introduction to Brazil, p. 36.

[8]Ibid., p. 104.

being are conceived as flowing from the paternal ministrations of the local elite."[9]

The Brazilian rural community consists of the village or town nucleus and a series of tributary neighborhoods of two types: the peasant and the plantation (or ranch) type. The peasant type, the focus of interest of this paper, consists of 30 to 50 families composed of free farmers, sharecroppers, tenants, collectors of native products, farm workers on less than plantation (or ranch) size land holdings, and squatters. It is in these neighborhoods that community spirit can be found.

With the exception of some localities in the South, rural Brazilian families do not bake bread, make butter or cheese, weave, or perform most of the other household arts of European farmers. Neither do they combine fieldwork with stock-raising but for a few chickens, pigs, and perhaps one cow, all of which are allowed to wander around in search of nourishment. In general, the rural family depends on the village or town for their extracurricular necessities. They must purchase them with cash generated from crop surpluses, on credit with a merchant, or do without them. It is also not uncommon for the operator of a small farm to sell his crop or livestock surplus (if any) through the landowner or his agent. The returns are

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[9]Ibid., pp. 106-107.

applied to debts owed to the landholder, or the storekeeper who is often the agent. Such dependence creates another upper class in the nuclei (composed of traders, professionals, civil servants) and increases the social distance between neighborhood and center even more. "This class structure means that it is almost impossible to solve local problems through voluntary or cooperative agencies."[10] These general observations have less applicability in Parana than in Ceara, where the aggregation of illiteracy, poverty, and disease factors is greatest.

Thus, cooperative enterprises in Ceará are even today ruled by "patrons," although recent measures at "democratization" must be acknowledged. These "patrons" are either large landlords, actual producers or absentee, or influential local people with some land. (To be a member of a producers' cooperative, one has to own or work land.) On the other hand, in Paraná, the "primos inter pares" influence the business activities of the enterprise, owing to their generally greater awareness of agronomic and economic conditions. This holds especially true where the settlers enjoy close religious bonds (Mennonites) or ethnic-cultural character (Japanese, Germans, Dutch, Italians) and formed tightly knit colonies. In other, more scattered regions of settlements, remnants of the

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[10] Ibid., p. 156.

semi-feudal "patron" system can still be found: a powerful politician landowner with an old Portuguese name, who promises privileges for votes and who has promoted a cooperative enterprise and will be deferred to in decision-making. He may also be the owner of a coffee processing plant or sugar mill with whom a cooperative may find it more economic to contract for the refinement of its members' product than to embark on the construction of its own facility. In sum, the hierarchical and patriarchical relationships in the rural areas of Brazil, more so in Ceará than in Paraná, distort the possible participation of the small producer in a market economy. Assuming that the rent or crop share is stipulated at 25 percent, and that the yield per ha of cotton is 70 kg, then the cultivator of 10 ha has 525 kg to sell and the landlord receives 175 kg. Assume further that the landlord has 200 ha leased or rented. This will give him a total of 3,500 kg of cotton for sale. (He may even receive more than 25 percent because the tenant/sharecropper is in debt to him for inputs or other assistance.) Thus, the landlord becomes the largest individual supplier of cotton in this group of 21 potential members of a cotton processing and marketing cooperative, and his voice will be dominant even though he has only one vote like each of the others. If not indebted to the cooperative, he may even threaten to sell his cotton to a third party while the small farmer/member

who is indebted, cannot afford to do so without prejudicing his cooperative. The "social" patron has become also the "economic" patron of the cooperative.

Hogan, who worked in the promotion of small farmer cooperatives in the Northeast from 1962-1966, summarizes the obstacles he encountered as follows:[11]

> The peasant is bound by a social and economic structure which abhors change and encourages its own perpetuation.
>
> The peasant's condition is even more difficult from the point of view of the economic planner because the peasant regards with suspicion and distrust any person or idea foreign to the confines of his physical world.
>
> The threat of paternalism to the cooperative movement is obvious. Too many rural cooperatives have become the personal monopolies of a few strong men because of the peasants' voluntary submission to their authority.
>
> It is very rare that the peasant, on his own initiative, will be attracted to cooperatives. He scarcely knows what his own problems are let alone how a cooperative can solve them.
>
> It is impossible to cover the full variety of difficulties to be encountered in working with the peasants. Suffice it to say that his social development at no point is spontaneous. He must be constantly motivated and directed.
>
> If the peasant is to be actively and meaningfully involved in his own development process, he must be allowed to move at his own pace.

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[11] Timothy L. Hogan, The Introduction of the Peasant to the Cooperative Movement, A Report on the Cooperative League in Northeast Brazil, The Cooperative League of the USA (Chicago, Illinois, 1966), pp. 3-6, 34.

> Programs to this end will be possible only if the expected scale of achievement is adapted to his level; if he is given time to grow with his program within the limits of his capability; if he is addressed in his own language; and if he is treated as an equal by his advisors and technicians.

Even though the "patron/serf" mentality was, according to Wagley, diffused all over Brazil, it did not create the same obstacles in the South as it did in the Northeast. There, the Portuguese names of previous presidents of cooperatives and/or civil servants of government or parastatal organizations for the stimulation of cooperatives, are gradually replaced by names which prove the bearers to be of German, Japanese, Italian, or Polish descent.

Structural Factors and Production Patterns

Size of holding, legal relationship to the land cultivated, type of crops planted and for what purpose (home consumption, market, or both) will influence the interest a farmer may have in belonging to a cooperative, and determine this cooperative's business activities and volume.

Tables 3 and 4 compare the national distribution of cultivated land by size of holdings and the legal relationship of the cultivator to the land. Tables 5 and 6 do the same for the states of Ceara and Parana. The relative differences between nation and statewide figures are due to the greater population density along the East coast and its hinterlands as compared to the open spaces of the

TABLE 3

FARM SIZES IN BRAZIL

1980

	No. of Holdings		Area Cultivated	
	N(X1000)	Percent	Hectares (X1000)	Percent
Less than 10 ha	4,798	78.0	12,321	25.0
10-100 ha	1,264	20.7	20,103	40.8
101-1000 ha	78	1.3	13,187	26.8
Over 1000 ha	1	-	3,574	7.4
	6,141	100.0	49,185	100.0

SOURCE: Anuário Estatístico, IBGE, 1983, p. 366.

TABLE 4

RURAL TENANCY IN BRAZIL

1980

	No. of Holdings		Area Cultivated	
	N(1000)	Percent	Hectares X(1000)	Percent
Owners	4,096	67.1	39,093	79.7
Tenants	623	10.1	4,297	8.7
Sharecroppers	387	6.3	2,315	4.5
Squatters	1,018	16.5	3,254	6.6
No Declaration	17	-	226	0.5
	6,141	100.0	49,185	100.0

SOURCE: Anuário Estatístico, IBGE, 1983, p. 366.

TABLE 5

CEARÁ

FARM SIZES AND TENANCY IN CEARÁ

No. of Farm Holdings: 245,878	Area Cultivated: 11,743,270 hectares	
	Number	Area
Under 10 ha	48.0 percent	3.9 percent
10-100 ha	42.5	29.0
101-1000 ha	9.1	46.5
Over 1000 ha	0.4	20.6
	100.0	100.0
Owners	70.6	91.0
Tenants	10.6	3.0
Sharecroppers	7.2	2.0
Squatters	11.6	4.0
	100.0	100.0

SOURCE: Censo Agropecuário 1980/Ceará, IBGE, 1981, pp. 2-3.

TABLE 6

PARANÁ

FARM SIZE AND TENANCY IN PARANÁ

No. of Farm Holdings: 454,103	Area Cultivated: 16,380,332 hectares	
	Number	Area
Under 10 ha	47.4 percent	6.7 percent
10-100 ha	47.4	35.7
101-1000 ha	4.9	34.6
Over 1000 ha	0.3	23.0
	100.0	100.0
Owners	67.0	89.0
Tenants	10.0	4.3
Sharecroppers	14.0	3.9
Squatters	9.0	2.8
	100.0	100.0

SOURCE: Censo Agropecuário 1980/Paraná, IBGE, 1981, pp. 2-3.

North and West.

Although Tables 5 and 6 do not show significant divergences in ownership and land distribution, differences begin to appear when one looks at the cooperative picture.

In Ceará, 65,457 farmers (26.6 percent of total) were aggregated in 48 cooperatives according to a survey for 1982, while these figures for Paraná were 145,211 and 62 respectively.[19] A 1983 survey for Paraná lists 162,964 members (37 percent) in 62 cooperatives.[20] Noteworthy is the rapid growth of cooperative membership in Paraná within one year, and the fact that it increased by 60 percent between 1980 and 1983. Also noteworthy is the fact that one-quarter of the members cultivated less than 10 ha, two-thirds from 10 to 100 ha, and 9 percent over 100 ha. For the small farmer in Paraná, buying and selling through cooperatives appears to be attractive. This is documented in a limited study (see Table 7).

Four sub-districts were studied. The sampling consisted of 142 members of cooperatives and 113 non-members. Income percentages refer to total farm incomes of 255 farmers.

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[19] Panorama Brasileiro 1982 (OCB, Brasilia, 1983), p. 9.

[20] Banco De Dados Cooperativista, Vol. 8, Empresa Brasileira De Assistência Técnica e Extensão Rural (Embrater) (Curitiba, 1983), p. 5.

TABLE 7

FARM SIZES AND INCOMES AMONG MEMBERS AND NON-MEMBERS OF COOPERATIVES IN THE IGUASSÚ PROJECT OF PARANÁ

1976

	DISTRIBUTION OF SAMPLE			
	Members		Non-Members	
	No.	Percent	No.	Percent
5-25 hectares	68	48	97	80
25-75 hectares	48	34	22	20
75-150 hectares	14	10	-	-
Over 150 hectares	12	8	-	-
	142	100	113	100

	INCOME SHARE RECEIVED	
	MEMBERS	NON-MEMBERS
5 to 25 hectares	(48 percent) 60 percent	(80 percent) 40 percent
25 to 75 hectares	(34 percent) 58 percent	(20 percent) 42 percent

SOURCE: Coopertécnico, Vol. I, Brasilia, 1976, p. 258.

Similar studies have not been made for Ceará. Nevertheless, the weak cooperative structure in Ceará as against the strong performance in Paraná is well demonstrated in Tables 8, 9, and 10. The monetary figures in these tables have, however, little meaning as they cannot be reduced to "real" Cruzeiros (CR$) for two reasons: (a) the rampant inflation since the 1950s with the adjustments to the US$ in brief periods (recently every ten days or so), and (b) the "monetary correction indices" permitted for use by the GOB have not been applied by all cooperatives at the same time and are very complex. In relative terms the differences between the tables are nevertheless significant: in Paraná, when measured against Ceará, 2.2 times the members of producers' cooperatives put up about 20 times the capital and required reserves, and conducted about 36 times the business with their cooperatives. Breaking down the business volume will reveal some subtler elements of this dichotomy.

It should be noted that cooperative law requires the establishment of legal and educational reserve funds to be created from the operational surplus of a cooperative before returns can be paid in cash to, or credited to the accounts of, its members. Therefore, these funds usually amount to many times the capital account.

Per producer input in Ceará amounted to 27,500 CR$ to achieve an output of about 133,000 CR$ (1:5 ratio),

TABLE 8

COOPERATIVE ASSETS IN CEARÁ AND PARANÁ

1982

	Ceará	Paraná
Active Cooperatives	48	62
Members	65,457	145,211
Capital Subscribed	543,000	12,000,000 CR$
Capital Paid Up	486,000	11,200,000 CR$
Reserve Funds	2,500,000	47,000,000 CR$
Fixed Assets	4,200,000	78,500,000 CR$
Business Volume	11,000,000,000	395,000,000,000 CR$

SOURCE: Panorama Brasilero, OCB, 1983, pp. 9-10.

TABLE 9

COMPOSITION OF BUSINESS VOLUME COMPARED

1982

	Ceará			Paraná		
	CR$		%	CR$		%
Supplies	1,800	million	16	68,000	million	17.0
Marketing	8,700	"	80	293,000	"	74.0
Services	20	"	-	5,500	"	1.5
Other	480	"	4	28,500	"	7.5
	11,000	million	100	395,000	million	100

SOURCE: Panorama Brasileiro, OCB, 1983, p. 10.

TABLE 10

PARTICIPATION OF COMMODITIES IN MARKETING OF COOPERATIVES

(In Percent of CR$ Volume)

1982

	Paraná	Ceará
Cotton	10	73
Coffee	11	-
Sugarcane	1	5
Rice	1	7
Beans	6	1
Vegetables/Fruits	1	3
Corn	11	-
Soya	35	-
Wheat	13	-
Other (Dairy Products, Nuts, etc.)	11	11
	100	100

SOURCE: Panorama Brasileiro, OCB, 1983, pp. 12-14.

while in Paraná the relation is 453,000 CR$ to 1,950,000 CR$ (1:4.3 ratio). This difference is not significant. But the difference in services rendered is because less is spent, actually and proportionately, where more would be needed. (Foregoing figures assume that a member buys all his supplies from and markets all his products through the cooperative.)

In order to relate these CR$ figures to the US$, it is possible only to take end-of-the-calendar-year exchange rates and to point out the rate of inflation from one year to another. Thus, at the beginning of 1982, one US$ equalled CR$ 127.50, but at year-end one US$ equalled CR$ 252, and on December 31, 1983, one US$ reached CR$ 982. At these rates, CR$ 395,000 million in Paraná equate with approximately US$ 1,560 million, and CR$ 11,000 million in Ceará with approximately US$ 41 million. Therefore, the average farmer conducted business with his cooperative at slightly over US$ 10,000 in Paraná, and at under US$ 700 in Ceará.

The "indexed unit of account" (MVR), which is used for determining the level of production credit a farmer can receive, is based on his gross receipts of the previous year. As of December 31, 1983, such an MVR equalled US$ 30.50. As farmers up to 200 MVR are classified as "mini-farmers" and from 200 to 600 MVR as "small farmers," the average cooperative member in Ceará belongs to the

"mini" and the one in Paraná to the "small" farmer class.

It can be inferred from Table 10 that the Ceará farmer produces food crops (except rice) only for himself, or, if he has any surplus, it is marketed on a small scale in neighboring towns, perhaps even bartered. On the other hand, 79 percent of the Paraná farmers' production is marketable consumer goods.

The prevalence of a monoculture in Ceará makes the producers of cotton dependent on the world market price of this commodity, while wheat and coffee are government-controlled items and soya beans (or its derivatives) have become a much sought-after export product. (In fact, so much so that the cooperative farmers of Paraná have their own port terminal for shipping out such quantities as are not needed for national use.) These items, coffee added, constitute 70 percent of Paraná's crops.

From the fixed assets point of view, Ceará cooperatives appear to be under-capitalized because cotton must be processed in the region of harvest in order to become marketable thus demanding large investments for ginning and oil extraction equipment. Cereals and pulses, on the other hand, need only proper silo storage (with climate control and conveyors) to be processed for food and feed at industrial points of destination, national or foreign. Even local feed requirements are in general better served when the husband-man buys back the finished and enriched product.

The earlier mentioned Cooperative Federation COTIA in São Paulo (with members in Paraná) is such a case in point.

Land Tenure and Mobility Factors

This section will draw, aside from the author's own observations and experiences, on the papers of Wolf Ladejinski.[21] His work focused mainly on Asia, but his emphatic treatment of land tenure problems in Asia is as valid for South America as it is for that other continent. A selection of his papers has been published by the World Bank.

Any land reform program assumes that present land distribution does not serve the optimal use of the land by those who own it.

The National Institute for Colonization and Agrarian Reform (INCRA) has therefore been established for two purposes: (a) internal colonization on government land, and (b) purchase and parcellation of large estates where feasible and advisable, as well as recombination of mini-plots into economically viable holdings.

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[21] Ladejinski worked for the U.S. Department of Agriculture from 1935 to 1945, then for General MacArthur in Japan, for the Ford Foundation in New Delhi, and finally for the World Bank until 1975. He published 142 papers on the subject of Land Reform.

Two main considerations arise immediately:

(1) What is the minimum size of land a small farmer needs for the crops he can grow?

(2) What is the maximum size of land the ex-landlord should be permitted to keep, if he does not want to sell out completely?

Depending on ecological conditions, and the type of agriculture most suited for a region, there may be actually very little land that can be redistributed so that both the old and the new owners can contribute to a market economy. As a general rule, a freeholder may be able to support a family on 10 to 15 ha of intensively worked land. However, the farm of 25 ha (equivalent ot the customary land grant) is more common in colonies. Where land is of moderate fertility, farms of 100 to 200 ha may be required to support a family. The colony size is typical for Paraná (and has been tried in the Amazonas and Mato Grosso), where soils are fertile. In the larger part of Ceará this size is insufficient due to low soil fertility.

There are also the squatters to be taken into account. When they occupy government land, it is a question of recognition of a "fait accompli" by giving them title to the land. This happens when and where squatters are attracted to land bordering new highways which was typical for Paraná, when the so-called "Coffee Road" was built. (In some cases, though, it took the bureaucracy

more than 20 years to bestow such titles.) When they occupy privately owned land, the landlords often endure them, and even try to extract rent from them. Where this is not the case, the squatters have sporadically been driven out by hired thugs.

Ladejinski says:

> To the non-Communist world, agrarian reform involves such issues as who owns or does not own land, how it is used, who gets what out of the land, the productivity of the land, the rate of economic development, and additionally, social status and political power.[22]

Why is reform necessary? To quote from the same paper:

> An exploitative system of tenancy prevails in most countries of the developing world. Rack renting and insecurity of tenure are its hallmarks. . .The farmers have been obliged to pay exorbitant rentals because the compelling need for any kind of employment depresses wages and raises rents. Nor is their contract of tenancy which is supposed to ensure security of tenure for the tenant for a specified period, often worth the paper it is written on. In most cases, the contracts are oral. But whether written or oral, they can be abrogated at the whim of the landlord. The incentive to improve the land and produce more does not exist, nor is there a place for creative technology on a wide scale. To the extent that these conditions preclude a measure of equalization of opportunities, they stifle progressive impulses and tend to underwrite stagnation in agriculture.[23]

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[22]Wolf Ladejinski, "Land Reform" in Agrarian Reform as Unfinished Business, Selected Papers, A World Bank Publication, edited by Louis J. Walinsky (New York: Oxford University Press, 1977), p. 356.

[23]Ibid., p. 355.

Brazilian production credit institutions have traditionally stipulated that when making a loan to a sharecropper, the landlord's share should not exceed 25 percent of the crop. Even so, the author has come across cases where this 25 percent was agreed upon by all three parties, but the landlord then threatened, for instance, to withhold irrigation water if he would not receive 35 percent.

Ladejinski discusses also optimal minimum and maximum holdings, as well as compensation of large landlords short of confiscation, but his examples are taken from Asia and not applicable to Brazil.

Once again, it must be emphasized that these conditions are preponderant where, historically, large land grants to individuals were the policy of the colonial power and survived independence. Where European and Asian immigration took place, especially in the South, most of the immigrants settled on government land. Those who did not entered into patron relationships with the landlords in the same manner as in the Northeast.

What is pertinent to this thesis is, however, that the tenure problem of tenants, sharecroppers, and squatters results in migration from land to land, or from land to cities. Where ecological conditions are favorable, exploitation of the landless by the landlord will simply lead the former to pull up his stakes and try another one of the latter in the same or different region of the country.

Where ecological conditions are precarious or unfavorable, the trek is generally to either building and construction sites in the region (even to coastal sugar cane or cacao plantations of the Northeast) or to the cities, plantations and ranches of the South. (When the new capital Brasilia was under construction, hundreds of thousands of these migrants went to seek work there. This city, originally designed to hold 300,000 people, has now over one million inhabitants in the Federal District.) "The landless peasants (who almost universally seek a patron relationship) are but loosely attached to the soil. The lack of land, the periodic droughts, and the general poverty of the region keep forcing Brazilians out of the Northeast."[24]

Yet, when the first reports of rainfall in the Northeast arrive, many of them return, because "they did not form an urban proletariat in the European sense . . . but were peasants living in a city."[25]

The fluctuations of the small farmer population in the Northeast are endemic for reasons of poverty and epidemic when drought strikes. The establishment, survival, and growth of cooperative enterprises depend, however, on steady, possibly increasing membership, as well as an increasing weal of the producers. This has been demonstrated negatively for Ceará and positively for Paraná.

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[24]Wagley, An Introduction to Brazil, p. 110.

[25]Ibid., p. 115.

Behavioral Factors

Cooperatives are private enterprises with, generally, economic motives. Nevertheless, as Abrahamsen points out:

> We would be less than realistic if we did not agree that such considerations as religious beliefs, cultural patterns, and the prevailing value system of developing countries significantly influenced the objectives that are established by cooperatives.[26]

Although the author will focus on the economic objectives, all others have a strong impact on the success or failure of cooperative enterprises.

In economic terms, a cooperative is "an extension of conventional neoclassical firm, price, and resource allocation theory."[27] But the cooperative movement is also "essentially idealistic in seeking a common good. It is a specific form of felt need."[28]

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[26]Martin A. Abrahamsen, "Strategies and Programs for Introducing Cooperatives in Underdeveloped Areas," in Agricultural Cooperatives and Markets in Developing Countries, eds., Anschel, Brannon, and Smith (New York: Frederick A. Praeger Publishers, 1969), p. 228.

[27]Eldon D. Smith, "Adapting Cooperatives and quasi-Cooperatives to Market Structures and Conditions of Less Developed Areas: A Summary Economic View," in Agricultural Cooperatives and Markets in Developing Countries, eds., Anschel, Brannon, and Smith (New York: Praeger Publishers, 1969), p. 358.

[28]Henry F. Dobyns, "Sociological and Anthropolitical Approaches to Engineering Successful Economic Organizations," in Agricultural Cooperatives and Markets in Developing Countries, eds., Anschel, Brannon, and Smith (New York: Praeger Publishers, 1969), p. 169.

> Cooperatives require individuality, a conscious self-respect for fellow members. Only a member with self-respect can be expected to guard the common interest and possess confidence in his ability to accomplish goals. The economic cooperative movement fosters democratic government because it requires personal action in conducting the enterprise by discussion and agreement.[29]

The economic innovation is from subsistence to commercial agriculture. This change "also affects values in other spheres of behavior, including the division of labor and family relations."[30] Cooperation is a reciprocal process. In a cooperative enterprise, however, no direct reciprocity takes place among members. They must work together for achieving success, but their efforts are non-reciprocal.

It has been pointed out earlier that a spirit of reciprocal cooperation may prevail in small communities living under like physical and socio-historical conditions which, in turn, cause them to share the same values and beliefs. Such like-mindedness can, nevertheless, be found also in larger communities when they are closely knit by ethnicity (for instance, Japanese) or religion (for example, Mennonites).

It must be noted here that certain agricultural products have quasi-monopsonists: for instance, milk may

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[29]Ibid., p. 179.

[30]Ibid., p. 165.

have to be pasteurized before it is allowed to enter the market, cotton needs to be ginned, coffee beans to be sorted and graded. The average single farmer cannot afford a plant of his own and, therefore, must sell to a privately owned industry or help to establish a cooperative for processing purposes. (If this is not feasible, he could join a bargaining cooperative as a defense mechanism. They are uncommon in Brazil and not the subject of this paper.)

For a small farmer a cooperative enterprise represents already "economies of scale" without regard to whether his cooperative can carry this predicate in a competitive market. It is an extension of his "business" with the difference that decisions about the disposal of his product are no longer made by him but by a majority of his peers. He also did not have overhead costs, and if he had, he did not calculate them as such. As a member of a cooperative, he is confronted with the cost of product assembly, storage, transportation, and administration which, it is hoped, will be overcompensated by "economies of scale." Thus, like any other firm, a cooperative needs capital which is too expensive to borrow especially in the early stages and must come from among the members. The prospective member of a cooperative, acquainted with the risks of nature, has now to become acquainted with the risks of a human enterprise. A complete change of mentality and behavior is required.

As any other firm, a cooperative will seek to maximize profits (it is not a non-profit organization as is so often claimed by some idealists) for the totality of its members, but cannot maximize the returns of these profits in cash to its members because capital has to be accumulated for growth in volume and expansion of services.

Such accumulation will be credited to the members' accounts in proportion to their patronage, and limited returns on investment are one of the principal tenets of cooperative philosophy. (For capital reserve funds, see Table 8 on page 40.)

All this means that the individual producer may have to forego a short-term gain for long-term privileges. If he cannot afford or is unwilling to do so, he should not be admitted or weeded out after his failure to cooperate. Self-respect and respect for his peers are necessary conditions for a cooperative enterprise.

Under adverse ecological conditions, under traditional dependence on a "patron" and under certain tenure relations, this respect is not likely to flourish.

Marketing and Supply Factors

In a cooperative, the members determine the volume with which the enterprise can operate. As day-to-day management of a cooperative is not in the hands of members (or, should not be), circular interaction between management and members is a key element of success. Without an

intelligent forecast of members' needs for inputs and of the anticipated output, management cannot negotiate in sellers' and buyers' markets with a view to maximizing profits. Such a forecast can, however, only be based on the members' commitments which, in turn, will be determined by what they expect from the cooperative's performance. As Hardie puts it:

> The difference between the two types of concern (that is, cooperatives and non-cooperatives) appears in the procurement of raw products. The private concern will buy raw material up to the unit which costs as much as it returns; a quantity that equates the material's value of marginal product to its price. A cooperative will return the highest attainable average revenue product to the members, given their raw product deliveries, and the members will increase or decrease the quantity supplied on the basis of what return they receive.[31]

If such returns are viewed as receipts for supplies, then there would be a zero return on the members' investment. If they are to be "limited" returns on investment, it is likely that the price received by members for the supply of their raw product is below the market. In fact, government-imposed regulations for the creation of legal and other reserve funds which remain indivisible until a cooperative about to be dissolved has paid all its debts, may diminish the possible return a member can receive, in cash or credit, to a point where only the most astute

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[31] Ian W. Hardie, "Cooperative Theory and Market Implications: A Selected Review," in Anschel, Brannon and Smith, p. 50.

management can overcome the danger that members will not fulfill their commitments.

According to Buse and Helmberger, management is confronted with four inefficiencies:

(1) Production inefficiencies

(2) Inefficiencies in scale

(3) Inefficiencies in pricing; and

(4) Supoptimal vertical integration.[32]

These authors emphasize that priority should be given to price inefficiencies because they are the easiest to manipulate by the authorities who are interested in development. Also,

> Market news information, direct economic incentives through price stabilization programs, crop insurance, etc., can bring large payoffs very quickly. These are all types of activities essential to development but difficult for private enterprise to provide.[33]

Improved pricing will stimulate more production by intension (that is greater unit productivity) rather than extension of cultivable land.

As imperfections affect all firms operating in the agricultural market, the question arises whether cooperatives have or can achieve a position of comparative advantage.

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[32]Reuben C. Buse and Peter G. Helmberger, "Potential and Feasibility of Cooperatives as Instruments of Market Reform," in Anschel, Brannon and Smith, p. 201.

[33]Ibid., p. 205.

Buse and Helmberger maintain that as purely economic institutions, cooperatives would appear to have serious limitations in fostering economic development. But,

> . . . by giving the traditional farmer some experience in self-determination, it can also help him to develop a spirit of independence and self-reliance, a characteristic that does not come naturally to people who have been reared in the traditionally all-embracing paternal or tribal system where submission to authority is voluntary and unquestioning.[34]

A cooperative is a defense mechanism against abuses in the marketplace. But does the peasant understand the causes of his disadvantaged position and how a cooperative enterprise could help to overcome it? The economic need for supply and marketing activities requires large amounts of capital. Small farmers have neither much to contribute initially, nor are they informed or educated enough to comprehend the need for capital:

> It is under this argument that government organizations provide assistance to local cooperatives, usually in the form of loans which they expect to be repaid. There are serious limits to this type of government financing. The very reason that the local cooperative may not have been able to acquire sufficient funds for its operation may also be the explanation as to why it does not succeed, for instance, not enough members or scale of operation to provide the desired services at cost. Under improper conditions, government loans would amount to outright subsidies to firms unable to stand the test of the marketplace.[35]

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[34] Ibid., p. 208.

[35] Ibid., p. 210.

Buse and Helmberger grant an exception to this observation where an agricultural extension program is to be undertaken by a cooperative. "There is no reason why profit-seeking firms should seek to educate peasants in new techniques and methods of farming."[36] This statement seems to exclude cooperatives from profit-seeking firms (which they are, like any others, only with a twist) and is incorrect at least in this author's observations in Brazil. The producers of fertilizers and insect- or pest-controlling chemicals have often made up for the deficiencies of the government's extension services through their well-trained salesmen. These made peasants aware of their needs and demonstrated the applications of the products they sold. The only reservation this author has expressed occasionally in the field was with regard to possible over-sells of highly concentrated compounds: farmers do not understand or follow instructions exactly and become likely to suffer damages to themselves and/or their crops. (Too low concentration, though being good business for the seller, has also to be opposed.)

In the process of marketing raw or refined products of the members, cooperatives will pay their members usually in installments. The last installment, commonly decided upon in the general assembly after a business year has been closed and is reported on may be the only one which

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[36] Ibid., p. 210.

will show whether or not the cooperative enterprise was successful in its aim of buying inputs at lower and selling outputs at higher prices than other firms (or their agents). On the other hand, these other buyers offer customarily a "full" price immediately after harvest (minus any indebtedness the producer may have incurred during the season). In the case of non-perishable goods, this "full" price is a discounted future price and the farmer, if he accepts it, foregoes possible profits, but also avoids possible losses. Yet he has lost his influence on the transaction while, in the cooperative, he co-determines the marketing policy.

Cooperatives are not supposed to speculate in the market, rather to achieve the best possible average price of a season. This may be possible especially when the cooperative acts as an agent between the producer/members and a third party (traders, processors, government) by assuring the latter of a quantity which will enable it to use its firm at optimal capacity. In the final analysis, though, it is the producer who is asked to speculate on the astuteness of his cooperative manager.

Abrahamson does not agree with Buse and Helmberger (and neither does the author). He says:

> On balance, however, I believe that government encouragement is all to the good. To me, it is an encouraging sign that government leaders are willing to take steps to encourage cooperatives and that they do recognize the potential contributions these enterprises can make to citizens' well-being as their country develops. It is not realistic to expect illiterate people to take the initiative in organizing cooperatives to meet their needs.[37]

Helm issues a general caveat with regard to which persons and functions are not suitable for the establishment of a cooperative:

Persons:

(a) Their economic independence is restricted by law or subordination to another economic activity in which the society intends to operate so that a delegation of the particular economic function is impossible.

(b) They are unable to make even a minimum financial contribution. Cooperatives are in no way welfare institutions to support the poor, but are self-help organizations.

(c) They already occupy a strong market position. Cooperation among successful enterpreneurs would tend to create a cartel-like organization. A precondition of cooperation is a relative weakness in the market position in comparison with the relevant market partners, though not necessarily in comparison with other economic subjects, that is cooperation is not confined to the poorer classes.

(d) They are still living on the subsistence level, because at this stage the economic unit has no significant relation to markets in which a cooperative society could act as intermediary.

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[37] Abrahamson, "Strategies and Programs for Introducing Cooperatives in Underdeveloped Areas," in Anschel, Brannon, and Smith, p. 229.

(e) They are strongly egotistic or individualistic and therefore defy on principle any form of subordination and discipline.

Functions: When the cooperative would

(a) only fulfill a temporary need of the members and as such offer no permanent basis for a business venture;

(b) be of interest to only a limited number of people insufficient to guarantee an economic minimum size;

(c) require capital investments above the capacity of the average prospective member; economic activities with a high capital intensity are therefore difficult to organize on the cooperative level.[38]

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[38] F. C. Helm, The Economics of Cooperative Enterprises (London: University of London Press, 1968), pp. 20-21.

CHAPTER III

THE PLACE OF SMALL FARMERS AND THEIR COOPERATIVES IN THE SOCIO-ECONOMIC POLICIES OF THE GOVERNMENT OF BRAZIL

The author spent the months of January and February 1985 in Brazil in order to assist that country's public and private institutions concerned with cooperatives in the formulation of an action plan for the furtherance of cooperative business enterprises. There have been many such plans "from the top down" over the years, but they did not get off the ground or sputtered to a premature halt owing to political and/or financial problems. In order to avoid a similar outcome, four regional meetings with cooperative leaders were arranged, and more than one hundred participated. They were asked to list, individually and separately, their main concerns which were then displayed for the group, and priorities assigned to them by vote. After selection of the five main, commonly encountered problems in each of the four regions, five workgroups were formed to analyze the reasons and to offer possible solutions for these problems. These were again tabulated, and the participants asked to vote which type of institution they thought would be most apt to realize the desired solutions. The collection and schematization of these contri-

butions by the practitioners of cooperative business became the new "Action Plan," submitted to the GOB in March 1985.[1] What surprised the organizers of this undertaking was that the weak cooperatives, especially those of the Northeast, pleaded for more self-reliance, blaming their weakness on too much government interference, while the strong cooperatives of the South desired strong government measures in the fields of taxation, interest rates, minimum price policies, etc., in which they felt being discriminated against so that they could not consummate their full potentials.

According to Helm, government can take one of four attitudes with regard to cooperatives:

(a) Cooperatives are just one other form of private enterprise; they obey the same laws as all other businesses.

(b) Cooperative development should be encouraged by providing some basic facilities, assistance, and incentives through measures in fiscal (tax exemption), economic (subsidized inputs), and agricultural (extension) policy. Government will, however, refrain from taking control or interfering in the management of the cooperative societies, leaving initiatives and responsibilities with them.

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[1] Plano de Ação Integrada (Brasilia: Secretaria Nacional do Cooperativismo e Organização das Cooperativas Brasileiras (1985).

(c) Cooperative development must be promoted, organized, and controlled. Special departments in the relevant ministries, or specialized parastatal autonomous agencies, are created. The powers usually assumed extend to registration, auditing, training and education, disciplining, and eventual liquidation.

(d) Cooperatives must not only be promoted, supported, and controlled but also established and operated by government, at least until a point of possible emancipation has been reached. Under the guise of guidance, this often results in self-perpetuating administrations of cooperatives by government officials.

Helm then says:

> In broad terms it can be stated that one or other of the first two policies has been adapted by countries with a competitive market economy in which cooperatives have been formed more or less spontaneously and have already reached a fairly sophisticated level of operation. The latter two policies are common in countries where the economy is centrally planned and fixed targets have been allocated to the cooperative sector; in countries where the cooperative sector is thought to be an important, or even the main vehicle of economic development; or in countries where the cooperative movement is still at a formative stage.[2]

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[2]F. C. Helm, The Economics of Cooperative Enterprises (London: University of London Press, 1968), p. 109.

Brazil belongs to those countries which have considered cooperatives to be important institutions for the development of the rural sector. Its general development was belatedly recognized as essential for the health of the national economy in terms of reciprocal supplier/customer relationships between the various sectors, as well as of earning foreign exchange. Brazil also has a dual economy, a highly developed one in the south and an underdeveloped one 3000 km to the north.

Planned development means encouragement of certain and discouragement of other practices and activities, in other words taking a hand in the operation of the markets for goods, labor, and capital.

Faced with the spontaneity of the cooperative movement in the South and Southeast and perceiving the need to foster such a movement in other parts of the country, the GOB decided in favor of the attitude described under "c." (In a small number of INCRA's colonization cooperatives, attitude "d" has prevailed.) Yet in the absence of a free market economy, spontaneity may fade and promotion be in vain without a coherent government policy of incentives for the strengthening of the cooperative movement. To date, one and a quarter million farmers out of about five million economically active farm establishments belong to producers' cooperatives and participate in the country's production of primary goods with these approximate percen-

tages in the year 1983:

Wheat	88.19%
Soya Beans	64.10%
Barley	48.70%
Dairy Products	43.94%
Sorghum	32.36%
Cotton	27.80%
Beans	21.32%
Corn	19.95%
Rice	13.29%[3]

To these must be added: coffee, cacao, nuts, and sugar cane for alcohol, as well as some minor regional specialties such as jute and pepper. The foregoing figures appear to be fairly impressive but are less so when one considers that the greatest contribution to them is made by the south, especially Parana. In fact, the wheat handled through cooperatives in 1983 represents close to 50 percent of national consumption. Government support price policies with the intent of import substitution had, in the 1970s, raised this share to about 75 percent. The reduction in share is due to erratic price support policies on the one hand and increased consumption owing to control of retail prices on an unrealistically low level plus population increase on the other hand.

Professionally managed cooperatives are aware and make use of government support measures. So may be the ones run by elites, but their awareness is likely to be used by and for themselves. And the non-organized peasant may not be aware of these measures at all. As an example,

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[3] Relatorio Anual 1983, OCB (Brasilia, 1984), p. 19.

a World Bank study[4] states that the available lines of credit amounted to an estimated 170 (for different regions, different projects, etc.), and that the Bank of Brazil listed 58 of the principal ones in its annual report. Reference to other such complexities will be made in the following sectors.

Thus, the integration of the small farmer into the national economy as the basic goal of rural development is likely to be best accomplished through his joining a professionally managed cooperative or his insisting that the cooperative he belongs to be professionally managed.

A coherent agrarian policy of a government has many parameters, tangible as well as intangible ones. In fact, a proposal for a government policy for cooperatives[5] was submitted to the new government by an OCB work group and lists 25 spheres of needed government assistance. Those pertinent to this thesis will be examined more closely in the following pages.

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[4] Brazil, Financial Systems Review: A World Bank Country Study (Washington, D.C., 1984), p. 45.

[5] Proposta de Política Cooperativista Para o Programma do Próximo Governo, OCB, unpublished paper.

Legal and Institutional Framework

There are, at present, five autonomous bodies and one GOB department involved in the cooperative system of Brazil. For our purposes we can disregard the National Housing Bank which controls Housing Cooperatives. The four others are: the National Cooperative Council (CNC), which is the normative body for all cooperatives and in which both government and the cooperatives are represented; the Central Bank (BACEN), which controls credit cooperatives; the National Bank for Cooperative Credit (BNCC), in which the cooperatives were once majority stockholders but lost this status owing to the inflation of 30 years which forced the government to provide the necessary capital the cooperatives could no longer raise; and the Organization of Brazilian Cooperatives (OCB), which represents the cooperative system as a special class of business enterprises. The GOB department is the National Secretariat for Cooperatives (SENACOOP) in the Ministry of Agriculture, created in the month of October, 1984 as successor to INCRA and charged with stimulating, registering, supervising, auditing, disciplining, and liquidating the cooperatives under its jurisdiction.

This profusion of institutions is codified in Law No. 5764 of 12/16/71, and amended on 3/31/82. Its text runs to 118 chapters, from explaining government policy to prescribing what records a cooperative must keep, from stipulating the composition of the CNC to the duties and tenure

of elected cooperative officials, from defining what a cooperative is to the membership dues it has to pay to the OCB.

The official reason for this hedge around the cooperatives has been the need to protect the small farmer from possible abuses by landlords. But that was also the paternalistic reason for earlier legislative endeavors. The real reason for such a restrictive law must be inputed to the distrust which the military government of 20 years had in democratic institutions such as cooperatives. This is not to say that the internal democratic practices of cooperative philosophy were forbidden by legislation. On the contrary they were imbedded in it but subordinated to external autocratic needs. It is, therefore, no wonder that after the election of 1/15/85 which brought civilian rule back, the new government was swamped with petitions and suggestions for reforms in all walks of life, including the cooperative movement.

In recognition that any government of a country which has been accustomed to cooperative legislation (contrary to the USA[6] but reflecting European tradition) is not likely to abandon this stance altogether, a proposal for a new law was formulated and submitted by a work group of lawyers of the OCB. Instead of simply recommending, however, that cooperatives be authorized to function like

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[6]Except for the Kapper-Volstead Act.

other enterprises, licensed by their local authorities, registered with their Chambers of Commerce, audited by Certified Public Accountants, and subject to the civil and criminal codes of law but encouraged in the manner of attitude (b), the proposed law follows article by article the old one, only redefining the role of government in favor of being rather a patron than a supreme authority by giving the societies greater latitude in decision making. Thus, the proposed law is still an outgrowth of paternalistic mentality which permits its dependents at best controlled liberties.

The detailed and rigid formality of such a legislation may be comprehensible to, even considered desirable by, the rural elite. It is not understood, or misunderstood, and certainly unappreciated by the individualistic, and more often than not illiterate, peasant majority for whom cooperation was a voluntary spontaneous act in calamities. (Less formal farmers' associations of, for instance, the Taiwan type, are not permitted.)

There is no problem for a cooperative in attracting producer/members as long as it offers better services than a landlord or middleman. But will the client understand that the cooperative is his business and participate in decision making? In the less developed Northeast, attendance at annual general assemblies ranges from below ten to twenty-five percent and the eventual quorum acquiesces

usually in the decisions and slates of officers of the outgoing administration. Even in the South, despite greater economic awareness and up to seventy-five percent participation in the annual general assemblies, atavistic attitudes toward authority had to be overcome.

Certain measures, not expressly forbidden by law, for loosening this paternalistic grip and involving greater numbers of members in the policies of their cooperative (proxy voting under certain conditions, itinerant urns, voting for individuals rather than slates, disallowing elected officers to serve as paid executives) have been successfully tried in Paraná (and other southern states) while in Ceará (and other northeastern states) the elites have resisted their introduction. In fact, when a democratization program was proposed in Ceará aimed at the formation of community cells with elected spokesmen, the larger landowner members threatened initially to withdraw their cotton from the cooperatives and sell it to independent ginneries. After a World-Bank-assisted rural development program made such a reform one of its pre-conditions in 1981,[7] opposition appears to have waned. Enabling rather than constraining legislation would be one of the parameters for governmental support.

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[7] Timothy Finan and Henry H. Gerber, Relatório Apresentado Para a Organização das Cooperativas do Estado de Ceará (OCEC) (Fortaleza, 1981), p. 16.

Other institutions collaborating with the cooperatives are: the Extension Services (EMBRATER), the Agricultural Research Services (EMPRAPA), regional para-statal development banks and agencies, the Company for Production Financing (CFP), and the Institute for Colonization and Agrarian Reform (INCRA) already referred to. There are also Departments for the Assistance to Cooperatives (DACs) in every one of the 22 states of the Federation's Secretariats for Agriculture.[8]

Consequently, there is a wealth of support offered and information acquired at considerable cost, but without coordination (see Table 11). By nature, studies and research undertaken are "post factum" and, under the conditions of uncontrolled inflation, of little value because they are already outdated when evaluated and published. Similarly, attempts at forecasting production cost and market prices suffer from the same malaise. The result, apart from multiplication, is often contradiction aggravated by the unpredictability of government policy preferences from one year to another and/or by the possible speed of accommodation to creditor-imposed austerity measures.

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[8]This listing represents the permanent institutions only. There have been, are, and likely will be temporary government programs in which the cooperatives' participation is favored.

TABLE 11

PUBLIC AND PRIVATE AGENCIES INVOLVED IN OVERLAPPING ACTIVITIES IN 1985

	Data Banks	Studies and Research	Technical Assistance/ Training	Inspec-tions Audits	Business Analysis	Credits	Legal Aspects	Economic Analysis
OCB	X	X	X	X	X		X	X
SENACOOP		X		X			X	
EMBRATER	X	X	X					
BANK OF BRAZIL	X			X	X	X		
BNCC	X	X	X	X	X	X		
CFP		X				X		X
DAC's		X	X	X			X	
OTHERS*	X	X	X		X			X

*Universities, Foundations, Research Institutions

Compiled by author.

Nevertheless, considering the participation of cooperated farmers in the production of primary goods and that their majority consists of small and medium ones, streamlining of dependable information within given possibilities, becomes a very important parameter of government support for cooperatives. The much closer collaboration of some of the above-named agencies and the greater competence of their personnel have in Paraná, as compared to Ceará, not only provided more reliable statistics but also contributed to more knowledgeable management.

Economic and Financial Climates

The parameters of government support in this section can be divided into three main groups:

(1) Parity The "Proposal for a Government Policy for Cooperatives" deals with parity under the headings of (a) input policies, (b) marketing policies, and (c) minimum price policies.

(a) With regard to input policies, the cooperatives request the government to:

(i) establish programs for better farm management to be promoted through them. (Better farm management includes the use of organic

waste as fertilizer and source of energy, Taiwan style.); and

(ii) assist in the construction of regional facilities for fertilizer and feed manufacture so as to take account of regional needs and to enable the cooperatives to sell at prices the regional farmer can afford to pay.

(b) With regard to marketing policies, the cooperatives request:

(i) that in order to enhance adequate supplies of food in the whole nation, government should create "regulatory stocks" of the principal commodities;

(ii) that government should change from a sectorial to a national policy in the simulation or discouragement of production. (Stimulation or discouragement of production includes climatic zoning so

that the farmer knows what to plant where and when, as well as soil use zoning with regard to ecological factors and conservation techniques.)

(iii) that government should abandon its quotas and tariffs on selected exports so that trade becomes free and competitive;

(iv) that government should no longer engage in import and export activities but leave those to free enterprise; and

(v) that government in all its import and export policies consider at all times both the producers' and the consumers' interests.

(c) With regard to minimum prices it is suggested that

(i) they must relate to production cost and not to the purchasing power of the consumer;

(ii) representatives of the co-operatives become involved

in the decision-making on minimum prices instead of these being imposed by political desirabilities.

(2) Credit Lending for production cost, marketing, and investment in equipment (credit for the purchase of land was reserved for land reform projects) has been dominated by Government Banks (see Table 12).

The low participation by Credit Cooperatives (and Savings Banks) is due, as will be discussed presently, to barriers set up by the GOB. Table 13 demonstrates the number of contracts and their value nationwide and for the states of Ceará and Paraná. Various observations can be made with regard to this Table:

(1) As many farmers contract for more than one loan during a season, less than 40 percent of the about 5 million farm establishments have access to or avail themselves of credit.

TABLE 12

INSTITUTIONAL CREDIT CONTRACTS IN BRAZIL

1981 AND 1982

	1981		1982	
	Contracts	Value	Contracts	Value
Government Banks	80.65	77.65	75.60	72.75
Private Banks	17.23	20.75	21.66	25.65
Credit Cooperatives	1.22	0.88	1.14	0.76
Savings Banks	0.90	0.72	1.60	0.84
	100.00	100.00	100.00	100.00

SOURCE: Anuário Estatístico, IBGE, 1983.

TABLE 13

NUMBER AND VALUE OF CREDIT CONTRACTS BY PURPOSE AND INSTITUTION, IN THE YEAR 1982, NATIONWIDE AND FOR CEARÁ AND PARANÁ WITH THEIR PERCENTAGE PARTICIPATION IN THE NATIONAL TOTAL

a = All Credit Institutions b = Bank of Brazil only

Purpose		BRAZIL		CEARÁ				PARANÁ			
		No. Contracts	Million CR$	Number	Percent	Million CR$	Percent	Number	Percent	Million CR$	Percent
Production Cost	(a)	1,650,891	1,731,652	NOT AVAILABLE				NOT AVAILABLE			
Production Cost	(b)	1,213,478	1,122,808	53,299	4.4	16,335	1.5	165,958	14.0	206,491	18.4
Investment	(a)	317,806	243,345	NOT AVAILABLE				NOT AVAILABLE			
Investment	(b)	248,964	161,768	7,690	3.0	4,091	2.5	36,582	14.7	19,933	12.3
Marketing	(a)	87,012	555,201	NOT AVAILABLE				NOT AVAILABLE			
Marketing	(b)	51,155	359,836	1,829	3.6	18,590	5.2	7,941	15.6	82,617	23.0
Total	(a)	2,055,709	2,530,198	74,751	3.6	49,573	2.0	306,730	15.0	453,687	18.0
Total	(b)	1,513,597	1,644,412	62,818	4.2	39,016	2.4	210,481	14.0	309,041	19.0

SOURCE: Anuário Estatístico, IBGE, 1983, pp. 391, 909, 910

(2) The extension of credit tends to favor the lesser risks (Paraná against Ceará) which is natural from a business but not defensible from a development point of view.

(3) A smaller percentage of farmers in Ceará (3.6 percent) borrows less per production unit (2.0 percent) than their colleagues in Paraná (15 and 18 percent respectively).

(4) There is no proven relationship between the numbers of cooperated farmers and of borrowers in either Ceará or Paraná. But if there were, the diversion of production credit to other purposes which a World Bank study[9] estimates at between 20 and 30 percent, could probably be avoided, or at least greatly minimized, as the cooperatives would issue the credit in kind instead of money and do have some though not absolute control over

[9] Brazil Financial Systems Review, p. 49.

> the output realized with the input credits. The same study quotes the Conjuntura Economíca Review of agriculture in 1978 as reporting the disbursement of US $, 250 million against fictitious fertilizer invoices.[10]

The most perturbing aspect of agricultural credit is, however, its shrinkage in real terms. This shrinkage is also confirmed by the World Bank[11] according to which funds disbursed for agriculture by the National Bank System for Economic and Social Development (BNDES) decreased by 30 percent from 1978 to 1982 in real terms. And the authors of the "Proposal"[12] report that production credit by the Company for Production Financing (CFP) though rising nominally by about 50 percent from 1982 to 1983, actually shrunk by about 60 percent owing to over 200 percent inflation.

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[10] Ibid., p. 50.

[11] Ibid., p. 118.

[12] Proposta de Política Cooperativista Para a Próximo Governo (Brasília: Organização das Cooperatovas Brasileiras, 1984), p. 5.

As inflation is an ongoing process but statistics are available only at the end of a period, the foregoing figures are all "hindsight" figures. But they are important for this thesis as they prove the justification of the OCB's work group's suggestions regarding more coherent policies in the field of agricultural credit.

Specifically, the "Proposal" makes the following points:

(1) The farmer needs certainty with regard to the availability of credit so as to be able to plan his cultivation for the next season.

(2) The availability of credit must correspond to the needs of the farmer and/or the production goals of the government.

(3) Injection of resources to promote agro-industries.

(4) Parity between input cost and output prices.

(5) Crop insurance schemes of prior years have become rural credit insurance to the profit of the lender and the detriment of the

TABLE 14

AGRICULTURE CREDIT VOLUME DEVELOPMENT IN CR$ AND US$

1978 - 1982

Year	Credit Vol. (in Mil. CR$)	Exchange Rate	Credit Vol. (in Mil. US$)
1978 (all agencies)			15-16,000 est.
1980 (all agencies)	699,118	65.25	10,700
1981 (all agencies)	1,337,899	127.50	10,500
1982 (all agencies)	2,530,198	252.50	10,020

SOURCE: Brazil: Financial Systems Review, 1984, p. 49 and Anuário Estatístico, IBGE, 1983, p. 391.

producer; the original finality has to be reinstituted.

(6) Credit cooperatives should be able to function like rural banks so that savings stay in the area for local financing instead of being syphoned off to the urban-industrial sectors.[13]

Point 6 has to be commented on as an an integral part of this thesis. The Central Bank which is the normative and controlling body of credit cooperatives prohibits them to pay more than 8 percent per year interest on savings accounts which cannot be indexed in line with inflation. Thus, rural savings (if any) do indeed finance non-rural sectors by finding their way into commercial banks, which index the balances periodically and pay some interest depending on terms. Although the official reason for not allowing credit cooperatives to be competitive with banks is the formers' lack of professional management, it is

[13]Ibid., pp. 6, 7.

more likely to be the resistance of the Bank of Brazil, the main agent for government funds which, in its outposts, even administers GOB minimum price policies, and does not want serious competition.

Nobrega, an economist,who worked for the Bank of Brazil and the GOB in high positions comes to the following conclusions regarding credit cooperatives:

(a) Before bank reform, these cooperatives behaved like uncontrolled banks, and a controlling group used the savings of the members for their own investments and speculations.

(b) During the past 20 years (after bank reform), cooperative savings and loan associations made an appearance, but many failed owing to non-participation of members in the destinies of these associations, so that they were

gobbled up by other institutions or changed their character.

(c) The main handicap for the success of credit cooperatives (and that applies to most cooperatives) is that non-professional members act as professional executives in contradistinction to the USA and Europe. No law or by-law requires the employment of professional managers.

(d) The scarcity of professionals does not favor the overall promotion of credit cooperatives as a solution to agricultural credit at this time or in the short term despite the existence of favorable conditions in some regions (the South).

(e) But, even given the experiences and constraints, the movement should not be killed

and buried, rather, with proper guidance and control be prepared for becoming "the definitive credit system."[14]

(3) Taxation With regard to taxation, the economists of the OCB work group maintain that one of the reasons for the unnecessarily low level of food production (with its consequent need for food imports) is the high tax burden imposed on the circulation of merchandise (ICM). This type of sales tax is pegged at 17 percent, that is 17 bags of cereals or 17 head of cattle out of every hundred go to the national treasury. This levy is augmented by obligatory contributions to funds which correspond to our Social Security and Medicare for farmers. The ICM is collected by inspectors along the highways and railroads, based on the invoices accompanying the loads. Even though it is not the small farmer who

[14]Mailson Ferreira da Nobrega, Desafios da Politica Agricola (Brasilia: Gazeta Mercantil, 1985), pp. 165-166.

passes that inspector but the truck of his cooperative or of the middleman he sold his goods to, he yet pays the ICM in the end because he receives a lower return on his product while the consumer is protected by retail price controls. Minimum price policies were inaugurated to protect the producer but protect today the consumer.

Yet, it is not so much the levy as such as it is its height and enforcement practices which are criticized. It has become rather the rule than the exception for private entrepreneurs to under-invoice in quantity and price for the inspectors (who, more often than not, are bribable), a practice cooperatives cannot adopt because, being audited by government, they cannot keep two sets of books. An example: when the author visited Paraná in February 1985, the Dairy Cooperatives of that state had just submitted an affidavit to the State Secretary of Finance proving that they, though having a market share

of only about 30 percent, paid over 80 percent of the ICM collected by the state on dairy products. (Such examples could be multiplied.)

Government measures toward assuring greater fairness could be twofold: better selection and payment of inspectors and/or a change to Value Added Tax where every step is too small to be worth the risk of fraud perpetration.

Educational and Technical Measures

This parameter could be subdivided into formal education, training in skills including administrative ones, and agricultural extension, but all three overlap on various levels.

With regard to formal education, it is simply in the interest of cooperative leaders that there is enough literacy among members so that they can read and understand their contractual privileges and obligations and begin to take an interest in the activities of their associations. Although no recent statistics differentiate literacy by region or states, it can be said that it is lower in the Northeast than in the South, and in either, lower in the countryside than in the cities, because there are less schools per thousand inhabitants in the former, less

attendance owing to greater incidence of sickness, earlier dropouts, etc. School cooperatives (handicraft for public sale, horticulture for the market, small school supplies) are quite widespread but mainly urban-centered. There are no courses in cooperative principles in secondary schools, and there is only one university (the Federal University of Viçosa, MG) which has a program for the education of future cooperative managers and officers.

With regard to skill training, there have been many attempts by the GOB to provide the types of training needed for a modern rural society: agricultural colleges, vocational schools, and apprenticeship programs. There were even at one time ten farm schools financed by INCRA which accepted secondary school dropouts for combined agricultural and formal education. All schools had 80 ha land, and each of the 40 students was assigned two ha. The student could choose what to cultivate among suitable crops for the region and whether to work his plot alone or combine his with those of others for "economies of scale." The theoretical and practical curriculum lasted two years. All formal training in the three R's was related to agriculture. The products grown were pooled for cooperative marketing with the school kitchen being the first buyer and the balance going to the local market.[15] Insufficient

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[15]Henry H. Gerber, "Education of the Small Farmer in Less Developed Countries," unpublished paper submitted to the Department for Agricultural Education, University of Maryland (Beltsville, MD., 1971), pp. 6-8.

funding and incompetent teachers ended this, in the author's opinion valuable, project prematurely.

Two other INCRA programs were more successful for a longer period of time but also petered out eventually:

(1) A Plan for Technical Assistance to Cooperatives (PLANATE) which offered ccoperatives who wished to employ professional management but did not have the means to do so, to help in the selection and payment of appropriate personnel, salary support to be on a declining basis over a period of three or four years.

(2) A Plan to Standardize and Streamline Bookkeeping, Accounting and Auditing Procedures (PLANCOOP), purporting not only to facilitate government control and/or creditor evaluation, but also to simplify presentation of annual business reports to the General Assemblies. (The author, during his stay in Brazil from 1965-1973 had an opportunity to assist in the formulation of both plans.)

INCRA, more and more concentrating on colonization and agrarian reform which are implied in its acronym, let its charge of assistance to cooperatives slide with the result that plan (1) died and plan (2) was never enforced. Since, as earlier mentioned, SENACOOP has taken over INCRA's role in the cooperative movement, a revival in

some form of these programs and plans is likely to happen as it is an element of the Proposal, as well as of the Action Plan.

Parallel to INCRA but continuing to do so, the OCB, funded by levies from the cooperatives and occasional government grants, conducts seminars and workshops for the personnel of cooperatives; publishes statistics, economic analysis by its own staff, and educational material to be used at farmers' meetings; and sponsors study visits to foreign countries, as well as obtains consulting services from foreign countries (USA, Federal Republic of Germany).

Nevertheless, all these efforts do not reach the grass roots as the Proposal points out, which means the subsistence farmer who needs management know-how and cooperative awareness. The cooperatives should be able to cultivate the latter by providing the services (credit, inputs, marketing) at more favorable terms than the landlord or middleman.

But the former has to be provided by the Extension Services. According to their own publication[16] they reach only 1,300,000 peasants, which is less than 30 percent of all farm establishments, and that with 9-10,000 field and station workers. These are assisted by 8,000 local leaders

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[16]Empresa Brasileira de Assistencia Técnica e Extensão Rural (EMBRATER), Series of Selected Readings, Vol. 13, p. 34.

each of whom advises 20 families. It is always easier to make the most of favorable conditions, even to assure a positive cost/benefit ratio, than to make the best of adverse conditions. The density of extension agents is, therefore, greater in the South and Southeast than in other parts of the nation. (Living conditions and communications play also a part.) The government has a choice between expanding the extension services or enabling the cooperatives in less developed regions to employ agents on their own payroll. In Parana many already do have their own experiment station, thus disseminating constantly new technologies to their members and attracting new ones.

Infrastructural Conditions

The small homesteader, tenant farmer, or sharecropper is usually not the one whose land the modern highway (or all-weather road) passes, except in the case of squatters who like to occupy vacant land along the roads while being built and after their completion. Thus, the demand for government support centers first on easy access to markets, schools, and health services. The damage difficult accessability does, is not limited to the vehicles. It is also heavy in the loss or spoilage of goods transported by them on the dirt roads made impassable for days by one day of heavy rainfall. Further, school attendance suffers, health problems may become uncurable and the

dissemination of farm management knowledge untimely.

During the past 20 years, the GOB has carried out, and continues working on a vast highway construction program which appears to have more a strategic than an economic orientation: it connects, or will connect, all state capitals with the federal (consequently, has also some interstate links), and ports to mines, energy sources, and industrial centers by feeder roads. The dearth of waterways (the Amazon and São Francisco rivers are the only ones with a navigable west-east flow to the Atlantic Ocean) and of railways (a neglect of emperor Dom Pedro the Second in the 19th century) makes, however, all-season byways a precondition for development once the small peasants in outlying districts have graduated to market supply status. Given such a development as desirable, government initiatives may also be needed to prepare these goods for and bring them to the consumer. The Food and Agriculture Organization (FAO) of the United Nations recommends in a study:

> (In addition to construction of major central wholesale markets), facilities for handling and storage should be installed at the main convergence or assembly points adjacent to production areas. Such points should become eventually important centers of storage, processing, grading, packing, and packaging. This will relieve the central wholesale market of some of these functions and to that extent avoid additional demands for space in or near the main population centers. The primary convergence or assembly points now

> used for the initial phases of marketing agricultural commodities represent natural locations for establishing supply and marketing cooperatives to serve the producers of the various production areas. We recommend efforts to assist cooperatives toward this end.[17]

The next paragraph discusses the functions of a multipurpose cooperative and makes recommendations for cooperative marketing.

But the storage chain begins at the farm and ends at the urban market or retailer. Once again, Ceará and Paraná can serve as examples for less and more development.

In Ceará, the 245,578 farm establishments have about 18,000 storage facilities of varying quality, that is one in fourteen, while in Paraná 454,103 farm establishments have 234,000 such installations, or one in two. Table 15 gives their distribution by farm size.

The one percent figure for Ceará explains itself when one considers that the large estates are either cultivating sugar cane which has to be processed immediately after cutting or are tree plantations the nuts or leaves of which go, without prior storage, to oil and wax extraction plants. In Paraná, the 6.3 and 0.4 figures represent either cattle ranches, or coffee plantations with their own drying and grading installations.

Other observations can be made regarding Ceará. Tenants, sharecroppers, and squatters who cultivate together

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[17] Marketing, A Dynamic Force in Agricultural Development, FAO (Rome, 1970), p. 55.

TABLE 15

STORAGE FACILITIES BY FARM SIZE IN CEARÁ AND PARANÁ

	Ceará	Paraná
	%	%
to 10 hectares	19	33.2
10 to 100 hectares	55	60.1
101 to 1000 hectares	25	6.3
Over 1000 hectares	1	0.4
	100	100.0

SOURCE: Anuário Estatístico, IBGE, 1983, pp. 380-383.

29.4 percent of the land have constructed only 12.5 percent of the storage facilities. Further, the fact that the 48 percent of farmers who cultivate less than 10 ha have only 19 percent of storage facilities can be ascribed to two facts: (1) most plant some cotton as cash crop and cotton does not need on-farm storage, and (2) they do not produce grains, tubers or other food crops beyond their domestic consumption. But even such a quantity needs proper storage, otherwise, it will not carry the family from one season to another. Or, if there was enough produced to absorb losses through poor storage, a marketable surplus could have been obtained through good storage practices.

This problem of wastage and spoilage is too often minimized by authorities and cooperative leaders. A study undertaken by Michigan State University[18] with regard to the construction of a modern central market in the capital of the state of Pernambuco (south of Ceará, but still in the Northeast) found that at that time an average of 11 percent of fruits and vegetables spoiled completely in the hands of wholesalers, and another 16 percent spoiled enough so that it was saleable only at reduced prices. At half the sales price for these, income would be reduced to 81 percent of the original value. Corresponding figures for cereals were 3.1 and 8 percent. This study did not

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[18] Marketing Processes in the Recife Area, Michigan State University, 1968, p. 27.

take into account the spoilage and wastage on the road from producer to consumer, which has been estimated by the FAO to reach 20 percent for cereals and 30 percent for perishables. And none of these studies has considered or calculated the losses occurring in the fields or on the trees owing to rodents and insects. (A USAID rodent campaign study in South Korea came up with six rats for every human being. No such studies for Brazil have come to the author's attention.)

Any actions in the field of better management of agricultural commodities emanating from or supported by government are likely to be much less costly and risky than the promotion of intensified agriculture with new technologies, especially in view of the lack of knowledge and experience in underdeveloped regions on the one hand, and the scarcity and maldistribution of extension agents on the other. The Brazilian economist Souza is said to have observed that it is not mechanization of agriculture which drives people to the cities, but that migration to the cities forces the introduction of mechanization even where its use is still uneconomic. The role cooperatives can play in storage construction, rodent and insect campaigns, and the leasing of cooperative-owned equipment to members is the one of intermediate between micro- and macro-economics.

Another parameter of infrastructural support is irrigation. Nobrega says: "There is no doubt any longer that the definitive solution for the semi-arid regions of the Northeast is large scale irrigation."[19] Actually, a special agency named National Department for Works Against Droughts (DNOCS), exists since 75 years. It is funded, since 1945, with three percent of the National Budget Revenue. By 1982 it had, however, constructed only 272 public dams with 12 billion liter capacity and 610 smaller private ones with 1.2 million liter capacity. During its lifetime, the agency irrigated 25,000 ha.[20]

In the year 1983, the last year of the last five-year drought, the GOB spent ten times the annual budget of DNOCS (that is, approximately US$ 400 million) to give employment to small farmers and agricultural workers who fled the land.[21]

Nobrega admits that this expenditure was necessary in order to avoid a social crisis of large proportion with undesirable political undertones. He would have preferred that the government had not waited until the last moment, but spent the money in increments for irrigation projects

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[19]Mailson Ferreira da Nobrega, Desafios da Política Agrícola (Brasilia: Gazeta Mercantil, 1985), p. 124.

[20]Ibid., p. 128.

[21]Ibid., p. 131.

the need for which and their cost had long been known. He quotes the following estimate of outlays needed over a period of five years as calculated by the national extension and research services in Table 16. The investment portion is only slightly higher than what the GOB is paying to DNOCS over a period of five years. As for the credit portion, its channeling through cooperatives is likely to minimize diversion and the high default rates which often accompany direct government loans.

Agrarian Reform

Warriner came to the conclusion:

> In spite of the truly frightful land wastage in Brazilian farming, it is difficult to advocate land reform as a way of improving it, at any rate in the sense of distribution of land in small holdings, even accompanied by credit-and-extension, because no such institutional change could be successful unless it were tied in with a broad policy for agricultural development. This would involve decisions on the method of bringing unused land into cultivation through taxation; general principles of price policy in relation to coffee vs. other crops; on the reduction of the costs of fertilizer and machinery. The anti-agricultural attitude is pervasive at all levels, and is not going to change quickly.[22]

She claims that her studies in various countries have shown

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[22]Doreen Warriner, Land Reform in Principle and Practice (Oxford: Clarendon Press, 1969), p. 284.

TABLE 16

COST OF IRRIGATING THE NORTHEAST OVER A PERIOD OF FIVE YEARS (1984-1989) IN MILLION US$

Non-recoverable Investments:		218.6
Engineering	192.7	
Agricultural Extension	16.5	
Agricultural Research	9.4	
Recoverable Credit:		459.7
for investments by beneficiaries	166.0	
for production cost	293.7	
Total		678.3

SOURCE: Nobrega, Desafios da Política Agrícola, 1985, p. 133.

> adverse effects of the existing structures in depressing incentives, reducing farm incomes, restricting investment and the expansion of cultivation; but they do not suggest that agrarian reform necessarily produces a mor productive land system. Clearly the primary effect of reform on development must lie in its effects on production.[23]

According to Kutcher and Scandizzo, who have made a special study of the Northeast, such a primary effect is obtainable. They start with INCRA's module which is defined as sufficient in size and capital endowment to employ fully four adults, yield each of them a net annual income equal to the minimum wage (US$ 600 in 1985) and a return of 15 percent on the capital invested.[24]

For the sertão, the larger part of Ceará (and of its neighboring state Piauí), the module size calculated by INCRA amounts to 31.3 ha. Thus, instead of 11,221 estates on 7.59 million ha, the result of complete reform would be 242,492 small farms.

Although the authors prove that INCRA's aim was too optimistic, remarkable increases in output and employment would yet result. These facts would fulfill Warriner's precondition (see Table 17).

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[23] Ibid., p. 375.

[24] Gary P. Kutcher and Pasquale L. Scandizzo, The Agricultural Economy of Northeast Brazil (Baltimore: John Hopkins University Press, 1981), p. 199.

TABLE 17

POTENTIAL EFFECT OF LAND REFORM ON
GROSS FARM OUTPUT AND LABOR USE

(In 1000 CR$)

	Estates	Modules	Percent
Gross Output (constant CR$)	634,510	1,193,790	+88
Labor Use (man years)	150,700	290,999	+93

SOURCE: Kutcher and Scandizzo, The Agricultural Economy of Northeast Brazil, 1981, p. 204.

The authors come to the conclusion that the Northeast's role in the next decades would be to increase traditional foodstuff production for the supply of rural and urban markets, to continue present levels of export crops, and to increase livestock production through more intensive pasture management. They summarize the economics of land reform for Northeast Brazil as follows:

> Four percent of landowners own more than 50 percent of land in agricultural properties; only one out of four agriculturally dependent families owns the land it works. The smallest farms employ twenty-five times more labor per hectare on their land than do the largest farms and obtain vastly higher production levels. The smaller farms (less than 50 ha) though only 10 percent of the agricultural land, produce over 25 percent of the region's sugar, cotton, and rice and 40 percent of the beans, corn, and manioc. Yet, 2 million agriculturally dependent families own no land at all while an area of land the size of France is un- or underutilized.[25]

Not addressed by these authors were two aspects which concerned Warriner, especially when comparing the Northeast (Ceará) with the South (Paraná):

(1) The increase in traditional food production may lead to soil exhaustion unless modern technologies are introduced and adopted.

(2) Who is going to introduce them? Who to finance their adoption? How is increased production going to reach the rural and urban markets?

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[25] Ibid., p. 218.

In early sections of this chapter the scarcity and mal-distribution of extension agents has been alluded to already. Creating about 230,000 new farmer/owners in the Northeast would require not less than 2,000 new field agents.

The cost of establishing a module in the sertão is, according to Kutcher and Scandizzo, US$ 4817.[26] They say that INCRA had, in 1976, at its disposal double the amount necessary for creating the potential total of 790,000 module farms in the Northeast. But INCRA, for strategic reasons, had other tasks to fulfill besides the Northeast, for instance settling the regions bordering the Transamazon Highway or opening up the Mato Grosso. Furthermore, the above figure includes on-farm investments and animals, but not the cost of extension, credit, and administrative services. Owing to the dwindling resources allotted to the institutions providing these services, they would not be able to cope with a rapid land distribution system.

Above all, though socio-political reasoning may argue in favor of such a rapid "land-to-the-tiller" program, economic considerations will prefer gradual integrated planning. Without it, chaos, further deterioration of the land, of food supplies, of employment opportunities, and of living standards will ensue.

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[26] Ibid., p. 207.

Before closing this chapter, brief mention must be made of the suggestions contained in the Proposal of the OCB work group. As there is not much to propose for a State like Parana, the following points are aimed at the Northeast (and similar areas):

(a) To end the land monopoly of a small percentage of owners, creating access to land for the small producer, so that he can be emancipated from commercial and financial exploitation to an increase in income and to the enjoyment of the fruits of his labor.

(b) To make use of the idle land on large estates as well as of that which is still unoccupied.

(c) To reduce the number of non-viable mini-farms.

(d) To establish a coherent and consistent colonization program.

(e) To make the land adjacent to government-financed dams and weirs accessible to larger numbers of farmers through making it a public domain for renting and/or right-of-ways.[27]

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[27] Proposta, p. 18.

CHAPTER IV

COMPARISON OF THE GOVERNMENT OF BRAZIL'S COMMITMENTS WITH EXISTING PROGRAMS AND THEIR IMPLEMENTATION

After having examined the place small farmers and their cooperatives occupy in Brazil's socioeconomic policies, attentions now turn to a comparison between the government's commitment, its programs, and their actual implementation.

Commitments

Brazil has been officially committed to the promotion and support of cooperatives since the beginning of this century. A succession of laws regulating cooperative activities culminated in Law No. 5764 of December 16, 1971. The first and second articles spell out this commitment:

(1) All initiatives with regard to the cooperative system, whether originating in the public or private sector will, when recognized as being in the public interest, be part and parcel of the National Policy for Cooperatives.

(2) The attributes of the Federal Government in the coordination and stimulation of the cooperative movement will be exercised in the manner prescribed by this law or the norms which will develop in the course of its application.

> Paragraph One. Actions by the public sector will be undertaken principally in the field of technical assistance, financial incentives, and special credits considered necessary for the creation, development, and integration of cooperative entities.

The GOB is also officially committed to Agrarian Reform. Law No. 4505 of November 30, 1964 clarifies this goal in Article One:

> Paragraph One. As agrarian reform should be considered the totality of measures which envisage a better land distribution through modification of ownership and land use patterns, so as to attend to the principles of social justice and to the increase of productivity.

The ensuing need for resettlement of farmers, also called colonization, is defined in Article Four as "the official or private activity which is destined to foment better land use through either family or cooperative farming." As this law was promulgated by the military dictatorship which had just assumed power in order to avoid further swings to the left by the ousted civilian government, cooperative farming must not be taken to mean collective farming. Rather, the law's aim appears to promote cooperative efforts by individual farmers beginning with planting patterns and culminating in a cooperative business enterprise.

Programs

After establishing these legal bases and a national policy of promoting cooperatives, the federal government created several special cooperative programs: The National Cooperative Program (PRONACOOP), and Socio-Economic Research of Producers' Cooperatives and of Agricultural Production (PESQUISA), were both conceived in 1976. Apart from these, there are regional programs, especially for the Northeast, which affect cooperatives.

The program PESQUISA had three objectives:

(1) Qualitative and quantitative diagnosis of the situation of the producers' cooperatives and of agricultural production, including the cooperatives of fishermen and of rural electrification.

(2) Identification and description of the problems and impediments in the development of agricultural cooperatives.

(3) Formulation of suggestions for the development of cooperatives, to the point of including operational programs.[1]

The program PRONACOOP had the following objectives:

General:

(1) Elevate and maintain the criteria for entrepreneurial improvement of the cooperatives.

(2) Elevate and maintain the criteria for the participation of the cooperatives in the national economy.

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[1]Jose de Jesus Moraes Rego, Cooperativismo Nacional: Dimensões Políticas e Económicas. Brasília: Organização das Cooperativas Brasileiras (Brasilia, 1984), p. 42.

(3) Improve the cooperative mechanisms with regard to the social aspects of membership participation in economic benefits.

Special:

(1) Elevate and maintain high percentages of participation in production and marketing.

(2) Elevate and maintain high levels of technology use in the agricultural production of cooperative members.

(3) Increase the number of cooperatives which are technically equipped to compete in the market with regard to the cost of services offered and to product prices.

(4) Increase the number of technicians, professionals, and leaders who can support the continuous growth of the cooperatives.

(5) Make the coopertive system more rational with regard to zoning, physical expansion and territory, integration, and use of human, material, and financial resources.

(6) Increase the availability of financial resources for the cooperative system by facilitating credit to cooperatives through the appropriate financial institutions.

(7) Refine the methodology of diffusion of cooperative principles with a view on increasing membership, greater participation, and improving the public image.[2]

The coordination of PESQUISA with PRONACOOP led to seven action programs, listed and described by Rego,[3] of which the most noteworthy is the "Elaboration of a Typology for the Brazilian Cooperatives," funded in August, 1977, with about US$ 60,000 to be spent for this purpose within a period of six months. Unfortunately, one year after its

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[2]Ibid., p. 41.

[3]Ibid., pp. 44-50.

inception nothing had been done about it. The scope of this program appears to be unrealistic in terms of its financial reserves, as well as available manpower resources. Its objectives are to:

(a) "Promote the administrative organization of 2,300 cooperatives." The INCRA Plan for Technical Assistance for Cooperatives (PLANATE) had died by the time the new program was conceived. For example, the amount of US$ 60,000 would have paid only the salaries of ten managers for one year.

(b) "Promote the accounting organization of 2,300 cooperatives." The INCRA Plan for Standardized Cooperative Accounting (PLANCOOP) was never made legally enforceable.

(c) "Realize fifty market studies for the cooperatives." None were ever undertaken by the federal government, but some were financed and carried out by the OCB.

(d) "Realize thirty zoning studies for the cooperatives." This has to do with viability, see, therefore, under (e).

(e) "Elaborate 800 viability projects for the cooperatives." None of these projects have been sponsored by the GOB. The streamlining projects for cooperative businesses in Paraná and the neighboring State of Santa Catarina had their origin in the collaboration of para-statal and private organizations. They are good examples of what the government had apparently in mind.

Still, behind the recognition of the need for such programs is the tacit admission that the majority of cooperatives (there were slightly over 3,000 registered in 1983) is not functioning well either for the benefit of its members or in the avowed interest of the State.

Therefore, it is difficult to understand how Daughters, a Director of the Cooperative League of the USA (CLUSA)

after visiting Brazil in 1967 on behalf of a cooperative assistance program of the Agency for International Development, could have come to believe:

> that the special circumstances of Brazil appear to be especially conducive to the quick establishment of large numbers of rural cooperatives. The need for large numbers of cooperatives is critical. No other program is designed to achieve rapid and large scale agrarian reform, and the social and political consequences which could transpire in Brazil in the absence of a successful program toward that objective could be disastrous.[4]

But what happened to such programs as existed?

Implementation

(1) Ceará:

Two regional programs and their impact on small farmers are discussed by a World Bank Study:[5] (a) Development Program for Integrated Areas in the Northeast (POLONORDESTE), inaugurated in 1974, (b) Special Support Program for Development of Northeast Semi-Arid Regions (SERTANEJO), created in 1976. They could be called sub-programs of the National Integration Program (PIN) of 1970.

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[4]Donald L. Daughters, Programming for Cooperative Development in Latin America (Brazil), paper for limited distribution (Chicago, CLUSA, 1967), p. 34.

[5]Brazil: Interim Assessment of Rural Development Programs for the Northeast, A World Bank Country Study (Washington, D.C., The World Bank, 1983).

(a) Under POLONORDESTE, Ceará had eight integrated rural development projects (PRDI's) which included public investments in roads, electricity, storage facilities, technical and extension assistance, support for cooperatives, land regularization and distribution, and even funds for advance purchases of crops. But funds spent were lower and disbursed slower than projected, then declined steadily. This was partially compensated for by foreign borrowing. Reference was already made to a World Bank evaluation mission in which the author participated, in 1981.

The study concludes that the Program, in its first five years, assisted 37 percent of the originally targeted 100,000 farmers, and 21 percent of the 65,000 members of producers' cooperatives. The greatest program achievement was in road and school construction and the distribution of electricity. The least progress was made in land titling. The extension services had done a fair job in bringing a limited number of farmers into the formal credit system, but marketing of food crops remained weak

due to the fact the cooperatives are geared to cotton marketing. Regionally, only two to three percent of the three million agriculturists have benefitted from the project at a cost of US$ 7,000 per family.[7]

(b) While the POLONORDESTE is regional, the SERTANEJO is directed at the sertão, a desert-like, flat topography which constitutes the major part of Ceará and some parts of its neighboring states. The aim of this program is to make agriculture more drought-resistant and to promote development in the interest of greater stability and efficiency in rural activities. This program revolves around nuclei which were mentioned in Chapter II (Socio-Historic Variables) as possible foci of renewed cooperative participation efforts. And indeed, for marketing and other services, cooperatives are considered to be the appropriate instrument. So far, however, credit supervised by the extension services and the construction of small reservoirs, dams, and wells on the land of those producers who have received this credit has remained the principal support activity.

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[7] Ibid., pp. 55-66.

The net result for Ceará is: only one out of four cooperatives has an agronomist and only one in six a veterinarian on the BS level. When the author visited Ceará in 1981, only six of the 31 cooperatives inspected had professional management. This must be compared with Paraná where, without direct federal assistance programs, all cooperatives have professional management teams, and where the average cooperative has five agronomists and two veterinarians on the BS level. Thus, to whatever Government Extension Services exist, the Ceará cooperatives add only one agronomist to every 5,000 cooperated farmers, while the equivalent figure for Paraná would be 500.[8]

The authors of the study are quite critical of the discrepancy between targets and achievements of this program. The authors found that small holders with less than 100 ha rperesent 94 percent of the land owners, but only 56 percent of the project's beneficiaries and landless producers

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[8]Panorama Brasileiro 1982, Brasilia, OCB, 1983, p. 18.

(tenants, sharecroppers, squatters) have not been included at all. As in POLONORDESTE, funds spent are well below allocations: 60 percent in 1980, 50 percent in 1981.[9] In view of the uncontrolled inflation, whatever has not been spent when made available, will pay for much less a year hence. This situation is further proof that detailed planning and coherent execution possibilities lag far behind the GOB's manifest recognition and appreciation of the existing problems. Due to this dichotomy, per capita income in the Northeast has remained at 40 percent of the national average, that is at about US$ 800 and US$ 2,000 respectively.[10] This is hardly an encouraging starting point for diversified cooperative enterprises, but does not preclude the success of specialized cooperatives such as the cotton cooperatives of Ceará. They have become typical for "rich" cooperatives with poor members. This analysis suggests also that the body cooperative of Ceará (and most of

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[9]Ibid., pp. 77-81.

[10]Ibid., "Summary and Conclusions," no page number.

the Northeast) does not by itself have the immunity needed to conquer ecological, socio-historical, and economic diseases. It does need injections from government on a consistent and coherent, not erratic, basis. Otherwise, what Warriner calls the "dis-economy of Brazil"[11] will continue and prevent balanced development (see Table 18).

(2) Paraná:

For this southern state, there are no programs of direct government involvement like the ones in Ceará, and there is no need for them. Paraná is no longer a "frontier" state today as it was in the 18th and 19th century. In order to understand the situation, we have to trace development back to the beginning of the 20th century, when settlers arrived from three sources:

(a) Coffee planters from the State of São Paulo extended their cultivations on the "terra rocha" into the north of Paraná, and the British Government, in return for other favors received, developed the infrastructure of this region. This development was thoroughly planned and assisted farmers with diverse ethnic backgrounds.

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[11] Doreen Warriner, Land Reform in Principle and Practice (Oxford: Clarendon Press, 1969), p. 268.

TABLE 18

COOPERATIVE DEVELOPMENT IN CEARÁ

1979 - 1983

	1979/80	1981	1982	1983
Number of Cooperatives	42	52	48	52
Number of Members	52,695	61,837	65,457	64,876
Capital Paid Up (in million US$)	2.40	2.05	1.93	0.88
Business Volume (in million US$)	45.0	?*	44.0	45.0

SOURCES: Cooperativismo em Números, Secretaria da Agricultura, State of Ceará, Fortaleza, 1981, pp. 17, 20, 27, 30.

Panorama Brasileira 1981, OCB, Brasilia, 1982, p. 12.

Panorama Brasileira 1982, OCB, Brasilia, 1983, pp. 9, 10.

Panorama Brasileira 1983, OCB, Brasilia, 1985, pp. 13, 14.

*The volume figure for 1981 has been omitted because as given in CR$, it would be five times higher than the preceding year and about equal to the succeeding year, and in US$ be about double that of those years. This is, however, unlikely as 1981 was also a drought year and the prices for cotton which represents three-quarters of cooperative business did not fluctuate that wildly.

(b) German, Dutch, Polish, and Russian immigrants (later on, also a group of Koreans) settled the central plateau, buying the land from private owners or receiving land grants from the government.

(c) Third and fourth generation Germans and Italians arrived from the two states to the south of Paraná, Santa Catarina and Rio Grande do Sul, driven away by the hereditary partition into mini-farms of the land their forefathers had cultivated.

While three farm sizes (small, medium, large) were allotted to the settlers in the North in accordance with the type of agriculture to be undertaken (from truck farming to cattle raising), groups (b) and (c) started normally with the standard 25 hectares for new settlers.

In contrast to the peasants of Ceará and the Northeast, all groups came with agricultural know-how, some tools and equipment, some animals, some money, and most of them had experiences in cooperative business enterprises, albeit not always good ones. They established a few well-functioning coffee, dairy, and mate[12] cooperatives and a larger number of small local ones which had difficulties surviving, and often did not. Mainly, however, they found virgin land

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[12] Mate is tea from the leaves of a tree and very popular in Brazil, Argentina, Uruguay, and Paraguay. It used to have an excellent export market.

of medium to good quality. A turning point came in the year 1970.

The practice of double cropping of wheat (winter) and soya (summer) increased steadily. For wheat, the only buyer was the Bank of Brazil (BB) on behalf of the government. For soya, both domestic and international markets had grown. For wheat, large, modern storage facilities were needed, especially since the BB preferred to deal with cooperatives rather than individuals for its purchases and temporary storage. These facilities had to be in strategic locations. For this reason, INCRA, the Extension Services, and the Department for Assistance to Cooperatives (DAC) of the Secretariat of Agriculture, assisted by a committee of cooperative leaders, established a project for streamlining the State's cooperative structure. This pilot was in the southwest of the state, where the arrivals from the south were predominant, and was successful enough to be followed by others, one in the north and another in the southeast. These projects eliminated old and created new cooperatives, but the eventual net result was a reduction from 98 cooperatives in 1973 to 62 today. To compensate for the disbanding of some, and where it was considered economically advantageous, branches or trading posts of the remaining cooperatives were established.

At the end of the year 1983, the 62 cooperatives were organized in three Federations in accordance with the three

project zones, and had 162,964 members or 37 percent of all farmers in the state. Twenty-seven percent of these cultivate less than 10 ha, 27 percent from 11 to 20 ha, 24 percent from 21 to 50 ha, 13 percent from 51 to 100 ha, and 9 percent over 100 ha. These farmer cooperatives contributed 34 percent to the state's total production in 1983, which comprised 79 percent of the state's wheat, followed by 57 percent for soya, 50.6 percent for cotton, 47 percent for barley, 40 percent for coffee, 37 percent for beans, 32 percent for milk and dairy products, and 31 percent for corn. Rice, potatoes, sugar cane (for alcohol production), hogs and poultry each contributed less than 30 percent to the state's production. Storage capacity is also 34 percent of the state's total.[13] (See Tables 19, 20, 21, and 22)

The most remarkable characteristic, in contrast to Ceará, is the variety of commodities, many of which can also be grown in the Northeast, that is marketed by the cooperatives. This has been made possible not only through the close collaboration between cooperative administrators and the extension service officers, but also by the fact that in consideration of the latter's personnel shortage, the 62 cooperatives employ 391 agronomists and 114 veterinarians on their own. They have also 164 education

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[13]Gescur Clovis de Bortoli, Histórico do Cooperativismo Paranaense, Vol. 3., Empresa Brasileira de Extensão Rural E Assistência Técnica (Curitiba, 1984), p. 38.

TABLE 19

COOPERATIVE DEVELOPMENT IN PARANÁ

SELECTED YEARS 1971 - 1983

	1971	1972	1981	1982	1983
Number of Cooperative	80[a]	72[b]	62	62	62
Number of Members	55,921[c]	62,887[c]	126,309	145,211	162,964
Capital Paid Up in Million US$	6.9	7.9	38.7	44.4	55.3
Business Volume in Million US$	37.9	61.4	1,334[d]	1,567	1,090[d]

SOURCES: Sinopse do Cooperativismo na Parana, INCRA, Curitiba, 1973, pp. 11, 16, 30, 48.

Panorama Brasileiro, 1981, OCB, Brasilia, 1982, p. 12.

Panorama Brasileiro, 1982, OCB, Brasilia, 1983, pp. 9, 10.

Panorama Brasileiro, 1983, OCB, Brasilia, 1985, pp. 13, 14.

[a]93 cooperatives were registered, but 13 were inactive.

[b]98 cooperatives were registered, but 26 were inactive.

[c]Only 69 percent of members were active.

[d]This leap in business volume is mainly due to the increased role of soja beans during the 1970's, see Table 20.

[e]1983 was a flood year.

TABLE 20

SOYA BEAN DEVELOPMENT IN PARANÁ

	1972	1975	1978	1979	1980
Area Harvested (in 1000 Hectares)	453	1,632	2,349	2,340	2,411
Yield (kilogram per hectare)	1,471[a]	1,698[a]	1,225[a]	1,709[b]	2,240[b]
Total Output (in 1000 MT)	666.4	2,771	2,678	3,999	5,401
Producer Prices in US$ Per MT	93.90	148.90	183.20	190.20	Not Available
Export Prices Obtained in US$ Per MT	133	222	257	285	274
Relative Quantity Exported in Percent of Production:					
Beans[a]	32.2	33.7	6.8	Not Available	
Cake[a]	43.6	31.7	55.7	Not Available	
Oil[a]	0.0	2.7	5.0	Not Available	

[a]National averages

[b]Parana averages

SOURCES: Brazil, A Review of Agricultural Policies, A World Bank Study (Washington, D.C., The World Bank, 1982), pp. 81, 85, 89, 90, 159.

Anuário Estatístico, IBGE, 1983, p. 411.

TABLE 21

PARTICIPATION OF COOPERATIVES IN PARANA'S PRODUCTION OF SELECTED COMMODITIES
1976 and 1982

	1976	1982
Soya	33.2%	57.0%
Wheat	66.7	79.0
Corn	2.5	31.0
Cotton	7.1	50.6
Beans	0.5	37.0
Rice	5.6	17.0
Coffee	10.8	40.0
Dairy Products	54.1	32.0

SOURCE: G. V. Kaick, Cooperativismo Agropecuário Paranaense (Curitiba, OCEPAR, 1983), p. 64.

TABLE 22

FARM SIZE AND COOPERATIVE MEMBERSHIP
IN PARANÁ
AS PERCENTAGE OF TOTAL HOLDINGS

	1976	1982
0-10 hectares	4.7	18.2
11-50 hectares	16.7	38.7
51-100 hectares	53.1	76.1
Over 100 hectares	48.2	55.1

SOURCE: G. V. Kaick, Cooperativismo Agropecuário Paranaense (Curitiba, OCEPAR, 1983), p. 59.

committee and 35 daily radio programs. Such progressive management is made possible by 62 Board of Directors, 79 percent of whose members are small and medium farmers.[14] For all practical purposes, there is no paternalism of the Ceará type.

The body cooperative of Paraná, and that applies to most of the Central/South, was healthier to begin with than in the rest of the country, and had acquired a high degree of active immunity, that is the ability to fight diseases from within the system. Inflation is, however, a general disease and hits especially hard the agricultural production sector be it in Ceará or Paraná.

Rampant inflation is like an epidemic for which no body is prepared and against which no vaccination is readily available. Its decapitalizing effect on cooperatives and farmers alike makes the need for working capital through credit greater than under normal conditions. In order to control this increased, and still increasing, demand, the Central Bank (BACEN) introduced indices for "monetary correction plus interest" on December 7, 1979. During the months of December 1980, 1981, and 1982, after approximately 100 percent inflation each year, new resolutions with new indices were published. By June 9, 1983, the index for rural credit reached 85 percent of fully Indexed Treasury Bonds (ORTN)

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[14] G. V. Kaick, Cooperativismo Agropecuário Paranaense (Curitiba, OCEPAR, 1983), p. 37-38.

plus three percent annual interest. At the same time production credit was limited to 90 percent of need for small farmers, 60 percent for medium, and 40 percent for large ones.[15] This was, and still is, subsidized credit, but according to the World Bank Study previously quoted, only 20 to 25 percent of farmers, who produced from 30 to 50 percent of the national output, received such credit.[16] In the regional distribution of credit, Paraná fared better than Ceará: 73 percent of the gross value of agricultural production have been borrowed against crops in Paraná while only 34 percent has been borrowed in Ceará.[17] It appears that such credit went mainly to medium and large farmers because they had better security to offer and the administrative cost per loan is relatively lower. Even the credit diversion referred to earlier must probably be laid at the doorstep of medium to large farmers, because small farmers would use for their livelihood what they can obtain on favorable terms. This situation has been aggravated by two other measures taken by the BACEN. First, it discontinued loans to cooperative members for paying up or increasing their share capital. Second, it cut into the supply business

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[15] Ibid., pp. 39-41.

[16] Brazil: Financial Systems Review, p. 64.

[17] Ibid., p. 55.

of the cooperatives by allowing members to establish lines of credit with BACEN loans at independent industrial and commercial facilities, thus decoupling the cooperatives' traditional input/output chain.

The authors of the above quoted study close with these observations:

> Farmers not receiving subsidized credit share not only in the general disadvantages of agriculture but also in the cost of the measures that are supposed to offset them. They have received no compensating subsidies while the price of land has increased out of proportion to what can be earned from it; while the protection of local industry affects the price, quality, and range of inputs available to them; and while they suffer the full effects of inflation. Inflation, which is itself fuelled by subsidized lending, increases the working capital requirements of agriculture more than most other sectors because of the seasonal nature of production. Thus, farmers without subsidized credit are either obliged to do without inputs they would otherwise buy, or to borrow from other sources where interest rates have been forced up by attempts to apply restrictive monetary policies. Moreover, they are placed at a competitive disadvantage to the extent that credit does succeed in increasing productivity.[18]

Obviously, these remarks apply to all farmers and their cooperatives, but they become more pertinent in Paraná than in Ceará. Both Paraná and Rio Grande de Sul together accounted for 52 percent of the country's wheat consumption through cooperative enterprises in 1971, but

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[18] Ibid., p. 66.

only 26 percent in 1984.[19] Paraná was once an exporter of corn; today, Brazil has to import corn.

The financial crisis experienced by farmers and their cooperatives in Paraná, however, has not depressed their enterpreneurial spirit. What they cannot achieve through horizontal expansion of production volumes, they try to achieve through vertical integration by installing or taking over extractive industries (alcohol from sugar cane, powdered milk, soya bean oil and cake). In fact, concurrently with the author's recent visit to Paraná, the dairy cooperatives accepted the services of two specialists from the US dairy industry, which were paid by a US Volunteer Organization, resulting in practical advice for better use of by-products and in a nascent working relationship between Paraná's and dairy cooperatives in the United States.

Federal programs in Brazil and the degree of their implementations have influenced cooperative development positively, as well as negatively, depending on the regions involved and on the consistence or inconsistence of policies for these regions. To quote one assessment:

> . . . a useful dichotomy can be drawn between: (1) a subset of crops--primarily grains and crops entering significantly into international trade--which have been heavily favored by credit subsidies and other public policies; and (2)

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[19]The Future of Wheat, OCB-CFP, memorandum of February 6, 1985; copy in author's possession.

> the remaining crops--typically, non-traded domestic food crops--whose lack of government support and low-price elasticities of demand are reflected in a distinctly lower level of technology and poor growth performance. These latter crops, including most importantly black beans and manioc, are grown by large numbers of widely scattered small farmers and form an important part of the diets of the urban and rural low-income groups. The favored farmers of the first category, in contrast, are concentrated in the South and Southeast of Brazil, are well organized, served by a well developed and integrated infrastructure, and are supported by both private and public specialized institutions.[20]

Table 23 is a synopsis of cooperative development in Ceará and Paraná.

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[20] Brazil: A Review of Agricultural Policies (Washington, D.C.: World Bank, 1983), p. 113.

TABLE 23

COOPERATIVE DEVELOPMENT IN CEARÁ AND PARANÁ
1981 to 1983

	CEARA			PARANA		
	1981	1982	1983	1981	1982	1983
Number of Active Cooperatives	52	48	52	62	62	62
Number of Members	61,837	65,457	64,876	126,309	145,211	162,964
Capital Paid Up in Million US$	2.05	1.93	0.88	38.7	44.4	55.3
Business Volume in Million US$	83[a]	44	45	1,334	1,567	1,090[b]
Employment:						
Professional Managers		6			128	
Professional Accountants		2			70	
Bookkeepers		51			679	
Agronomists		14	12		337	391
Veterinarians		9	8		89	114

SOURCES: Panorama Brasileiro, OCB, 1981, p. 12.

Panorama Brasileiro, OCB, 1982, pp. 9, 10, 78.

Panorama Brasileiro, OCB, 1983, pp. 13, 14, 18.

[a]This figure is questionable for the same reason that it was omitted from Table 18.

[b]1983 was a flood year.

CHAPTER V

SUMMARY AND CONCLUSIONS

This study has addressed the association of small scale land owners, tenants, sharecroppers, and squatters in cooperative business enterprises in two states of Brazil, and an explanation for their relative successes or failures. Such formalized and legitimized cooperation contributes to the development of rural sectors and the transition from subsistence conditions to producing for the market, thus intergrating the small scale producer into the national economy as supplier and consumer. This is a common aim and strategy of governments of developing countries, and Brazil is no exception.

In pursuing this goal, structural variables of ecological, socio-historical, legal and economic nature may be encountered which will help or hinder the establishment and growth of cooperative enterprises. These variables have been analyzed in Chapter II. Where their matrix is favorable as in the South of Brazil, and especially in Paraná, cooperatives present a socio-economic potential which must not be stymied by undue interference. Where the matrix is unfavorable, as in the Northeast and especially in Ceará, the challenge is to change it as far as humanly

possible. Even self-help needs a primer. A "bootstrap operation" cannot work where there are no boots to begin with. The Brazilian government has accepted the challenge and committed human and material resources to it as assumed in Sub-hypothesis One. Implementation, however, has been erratic and the cooperative system of Ceará is, in consequence, ailing while that of Paraná has become a model of achievement for the whole country.

Chapters III and IV have demonstrated that the promotion-partner-friend sequence of Sub-hypothesis Two has not been practiced in that order. Promotion and legal enablement are extant, partnership is limited to the BNCC, and friendship is questionable in view of the fact that overall agricultural policies often are not compatible with the promotion and support of cooperatives, as demanded in Sub-hypothesis Three.

Altogether, the tendency has been to create, for the purpose of fulfilling numerical goals, organizations (cooperatives as well as cooperative-supporting agencies) with insufficient manpower and material support rather than to stress quality in a lesser number.

Even Daughters in his Program developed at the instigation of and as policy basis for the U.S. Agency for International Development (AID) says:

> It should be sufficient that the soil be reasonably good, that rainfall, river and/or underground water resources adequate, and that there are no health hazards.
>
> It should not be considered a prerequisite to the establishment of a rural cooperative that there first be a thorough analysis of each of the factors that will affect the success of the undertaking. The establishment of no cooperative should be delayed pending the completion of detailed studies or plans for the purpose of determining what can be produced and/or how the product can best be distributed or marketed.[1]

This sweeping statement is diametrically opposed to everything this author believes in, has experienced, and has been trying to prove in this thesis. Cooperatives are not an end to be achieved by whatever means. They can be a means to achieve an end.

If migration to the cities is to be discouraged through better land use with increased labor needs, and resettlement on unused or underused land to be encouraged by land reform and colonization projects, long-term efforts by government must be made so that as many as feasible of the variables discussed in Chapter II can combine in favor of cooperative enterprises. Such efforts include: diminished dependence on rainfall through the construction of accessible dams and wells; availability of seeds, fertilizers, and chemicals appropriate to the crops which can be grown successfully; access to the markets for these

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[1] Donald L. Daughters, Programming for Cooperative Development in Latin America (Brazil), paper for limited distribution (Chicago: CLUSA, 1967), p. 36.

crops without undue loss in transit; in general, provision of those services landlords supplied previously, but in a more equitable manner than before.

No peasant, especially when settled in an unfamiliar environment, can attain the ambiance for successful farming by his individual efforts, or even in a cooperative group, without guidance and material support. But once the ambiance has been created for him or them, a cooperative, the officers and staff of which have been educated and trained to its task, is likely to be the best instrument for continued growth, improvement of living standards, the transition from subsistence to market farming, even from a rural semi-feudal to a democratic society. Agricultural policies of the Brazilian government have, in the past decades, been formulated in a largely ad hoc fashion.

They responded to immediate short-run supply problems, internally as well as externally, instead of motivating well balanced agricultural production.

> In the process, there has grown up over time a complex and ever changing myriad of specialized government agencies, semi-autonomous institutions and enterprises to administer a vast number of programs involving an even greater array of specific market intervention with frequent changes in both mode and direction.[2]

It must be noted that massive credit subsidies and tax incentives were introduced to compensate agriculture for the discrimination suffered when import substitution

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[2]Brazil: A Review of Agricultural Policies (Washington, World Bank, 1983), p. 122.

industrialization reigned supreme.

> The benefits of these programs, however, have been highly concentrated among producers of few crops, principally the major grains and export crops.[3]

The same source sums up as follows:

> The result of this concentration is a clearly perceived duality in the long-term performance and current productivity of Brazilian agriculture which is not necessarily related to underlying comparative advantages and has had negative consequences for the distribution of income among households and among regions.[4]

Although not directly concerned with cooperatives, these observations pinpoint, nevertheless, clearly why small farmers and their cooperatives have, under adverse conditions, such difficulties of establishment and survival, and why even successful cooperatives find themselves frequently frustrated in economic and financial aspects.

The watchword of this thesis has been integration on two levels: the micro- and the macro-level. On the micro-level:

(a) Integration of the small farmer into the national economy as supplier and consumer by graduating from subsistence to market production.

(b) Integration of the graduate farmers into cooperative enterprises.

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[3] Ibid.

[4] Ibid.

On the macro-level:

(a) Integration of the cooperatively organized farmer into market competition by direct government assistance where needed, and, at least, by non-discrimination where not needed.

(b) Coordination of agricultural and industrial development policies in order to facilitate the vertical integration of cooperative business, requiring a change from the national sector approach (for instance, the fertilizer industry) to a regional sector approach (for instance, employment creation in loco).

It is apparently easier to integrate lifeless parts into an electronic circuit than live ones into a human one. In either case, the best ideas for integration need, nevertheless, an integrable design.

APPENDICES

GLOSSARY OF ACRONYMS

BACEN	Central Bank
BB	Bank of Brazil
BNCC	National Bank for Cooperative Credit
BNDES	National Bank System for Economic and Social Development
CFP	Company for Production Financing
CLUSA	Cooperative League of the United States of America
CNC	National Cooperative Council
DAC	Department for Assistance to Cooperatives
EMBRATER	Brazilian Enterprise for Rural Technical Assistance and Extension Services
FAO	Food and Agriculture Organization of the United Nations
GOB	Government of Brazil
IBGE	Brazilian Institute for Geography and Statistics
INCRA	Institute for Colonization and Agrarian Reform
OCB	Organization of Brazilian Cooperatives
OCEC	Organization of Ceara Cooperatives
OCEPAR	Organization of Parana Cooperatives
SENACOOP	National Secretariat for Cooperatives

CURRENCY EQUIVALENTS CRUZEIRO/US$

AT END OF PERIOD

1970	4.93
1971	5.62
1972	6.20
1973	6.20
1974	7.42
1975	9.05
1976	12.31
1977	16.00
1978	20.85
1979	42.43
1980	65.33
1981	127.50
1982	252.00
1983	981.50
1984	3,120.00
1985 (June)	5,950.00

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