INSTITUTE OF SOCIAL STUDIES
THE HAGUE THE NETHERLANDS

MILK AND SMALL FARMER DEVELOPMENT: A PORTUGUESE CASE STUDY

a Thesis presented by

Keith M. Moore
(U.S.A.)

in partial fulfilment of the requirements for obtaining the Degree of

MASTER OF SOCIAL SCIENCES

Members of the Thesis Committee:

Mr. W.J. Boelman
Prof.Dr. E.V.W. Vercruijse
Prof.Dr. P. Thoenes

The Hague, September 1978.

MILK AND SMALL FARMER DEVELOPMENT:

A PORTUGUESE CASE STUDY

by

Keith M. Moore

A Thesis written in partial fulfilment of the requirements for obtaining the Degree of Master of Social Sciences of the Institute of Social Studies, The Hague.

September 1978

ACKNOWLEDGEMENTS

This thesis has been my attempt to come to terms with the realities faced by the small farmers of Barcelos. In real life, a research publication of this nature is a complex mixture of different insights which form a writer's total experience during a given learning process. In this process I have been assisted by many individuals.

The first that I must acknowledge are my many friends in Barcelos who made the three months I spent there one of the most enlightening and enjoyable of experiences. They gave me hours and days of their time and effort, answering my endless questions, involving me in their lives, and explaining and re-explaining the details of their routine existence. Without their aid, this thesis would never have been completed.

Along with them there was one other person who deserves my most deep appreciation, my translator and research assistant, Antonio Nogueira. Who, during the long period of interviewing, worked steadily responding to my interests and helping to formulate them, from dawn until late at night. His help in bringing me to an understanding of the Portuguese experience and the language in which it is expressed has been immeasureable.

Throughout the entire research, I have had the essential assistance of my first supervisor, Wirte Boelman. The discussions we have had have helped me to formulate my ideas and find the means for their expression. His comments on methodology and presentation have been very useful. I am also very grateful to Emile Vercruijse, my second supervisor, for his comments and criticisms of my draft, which have lead to substantial improvements.

I must also thank David Baytelman and Henk Van Roosmalen for their help at various stages of this endeavor. Many other people, too numerous to name, have assisted me, both in Portugal and in the Institute of Social Studies. All of them have my gratitude.

Although many have contributed to this effort, I alone am responsible for the views expressed in this thesis.

Keith M. Moore

GLOSSARY

Administrative divisions in Portugal

Freguesia- local or parish level unit(average population for a freguesia in Barcelos was 1,000, less in rural ones).

Concelho- second or intermediate level unit.

District- highest level unit below national level.

Gremio- guild, syndicate, corporation; community; club.

Escudos: (rough approximation)

45$00 = US $ 1.00

20$00 = f 1.00

1,000$00 = 1 conto

TABLE OF CONTENTS

Introduction

In this thesis I will attempt to demonstrate that recent changes affecting the rural areas in the north of Portugal have done little to alter the prospects for the majority of small holders who constitute that rural population. As an example I have selected one concelho in Minho, that of Barcelos, as a case study. The two aspects responsible for these recent rural changes are the Revolution of 25 April 1974(political) and the rapid expansion of dairy farming(economic). The object of this study is to show that only a certain group of farmers have had and continue to have access to the resources necessary for increased farming potential and profitability.

We will enter this study on two paths, one economic and the other political, corresponding to the aforementioned changes. As we follow them, we shall see how they link together and reproduce the pre-existing situation in a new form. The rapidly expanding dairy production has been considered an important tool to dramatically improve the situation of the small holders of this region. To this end, a guaranteed price for high quality milk has accompanied the rapid expansion of milking stations, thereby increasing the cash income of producers. The Revolution of April 1974 ended nearly 50 years of dictatorship during which a program of corporatist development was implemented. In the rural areas this was embodied in the Gremios da Lavoura. This system ignored the diversity of interests of small holders, landlords, farm workers and sharecroppers, lumping them all in one association under the control of the landlords. As a result of the revolution there begins a process of interest representation. This has come about firstly, by the dismantling of the Gremios, but secondly and more importantly, by allowing divergent interests to express themselves through a variety of organizations. We will here consider two of the locally most prominent organizations in Barcelos, the Cooperativa Agricola de Barcelos(CAB) which is the reconstituted Gremio and the Liga dos Agricultores de Barcelos(Liga).

We shall begin Part I with an historical background demonstrating the dependent situation of Portugal and thereby, portuguese agri-

culture, followed by a brief description of the concelho of Barcelos. We will also consider here: the structure of land tenure and the fragmentation of holdings; a description of products and marketing mechanisms; ending with an introduction to recent rural trends. Part II will analyze the two organizations, the CAB and the Liga, describing how they have evolved, who belongs and how they function to achieve their objectives. Part III will begin by analyzing a sample population comparing rural assets, i.e. control of land and capital, with organizational membership. We will then examine the economics of milk production for these small farmers. Finally, we will see how these small farmers organize their production for cash incomes. We shall see here how the control of farming resources by a few rich farmers is tied to the CAB which provides the linkage necessary to make milk production profitable for those who were already well-off.

PART I

CHAPTER 1

HISTORICAL BACKGROUND

A first point of departure is to determine how this area has evolved within the wider context of Portuguese history. This, not only for the historical perspective, but also to determine the relationship between this existent rural society and its national context. The main point to be made here is that Portugal is a dependent country on the capitalist periphery. Since the first commercial treaty with England in 1642, Portugal has been exchanging primary products (wine and some wool) for manufactured goods (clothing) creating recurrent balance of trade deficits.

> The Anglo-Portuguese relationship which emerged from this economic arrangement was one of strong dependence by Portugal on England, although it reinforced the Braganca House /monarchy/ and the landed interests, thus the aristocracy and the Church.[1]

Both the recurrent trade deficits and reinforced landed interests prevented the development and industrialization of the portuguese economy. It is important to point out that these landed interests had little interest in the development of agriculture. They were involved in commerce and the development of the colonial empire, if economically active at all. Most of the wine production was controlled by English merchants, who wished only to acquire that product with the least possible expense. During this period Barcelos was not part of the primary wine producing region and conducted largely subsistence agriculture with any surpluses claimed by the senhorais. Earlier, it had contributed surpluses for the expansion of the Portuguese kingdom, however, this ended when the Moors were driven from the pennisula. An English traveler to the region in 1789, James Murphy, noted the decline of agriculture and the impediments for future agricultural advancement which were primarily aspects of the local fuedal structure.[2]

Changes in land tenure did not begin to occur until after the Napoleanic wars. The Portuguese king had escaped to Brazil and a

republican constitution was instituted in 1822. Civil war followed, ending in the reconsolidation of the monarchy in 1834. This was at the expense of the Church and titled properties. A decree in 1832 ended hereditary titled property and transfered property ownership to those who worked the landed. This did not substantially alter the status quo in the rural areas until further consolidated in the early 1860's. A second decree in 1834 had a more immediate impact. This decree abolished all religious orders and confiscated their land. By the elections of 1842, the constitution had been abandoned in favor of the royalist charter.

> the effect was a dictatorship resting on an oligarchy; the lower middle-class masses . . . gave place to the wealthy bourgeoisie created by the civil wars, those who had risen on the tide of ecclesiastic sequestrations and the politico-commercial dealings.[3]

Although a period of relative prosperity ensued the country continued to be plagued with balance of payments deficits. During the 1850's 45 percent of total exports was composed of wine. Although there still continued to exist large holdings in Minho during the later half of the 19th century, the majority of holdings were small and burdened with high rents. Rents consisted of two-thirds of production, primarily wine, which yielded high profits for those who commercialized it. Large families predominated in Minho and properties were further diminished in size through division upon inheritance.[4]

The Revolution of 1910 ended the monarchy and a republic was proclaimed. This did little, however, to improve the dependent economic situation of Portugal. The new republic was an unstable regime with most governments lasting less than a year. Emigration from the rural areas was substantial, not only to the cities, but also to the colonies and other countries. During this same period the Church begins a come back as an important political force.[5] By 1926, the republic had colapsed. The proclaimation of a military dictatorship brought the economic minister, Salazar to power. In 1933, Salazar had consolidated his dictatorship which was to last until the Revolution of April 1974.

The cronic balance of payments problems were relieved through a careful exploitation of the African colonies. This policy, however, did not provide for substantial investment in the development of Portugal itself and therefore could only be considered temporarily effective. Industrial investments did not become important until the 1960's and increased substantially under the Caetano government beginning in 1969. As the climate for industrial investments improved, due in part to foreign investment interests, those landed elites who had still not left the land increasingly turned to industry to offer an income. A case in point is that of Sa Caneiro, president of the current Partido Social Democratico(PSD), who was once the largest landowner in the Concelho of Barcelos and had substantial properties elsewhere. Most of his property has now been divided up and sold. The resultant industrial investments, however, have been of the capital intensive type and have not substantially increased employment opprotunities.

The lack of significant industrial employment opprotunities, the low renumeration of labor in agriculture and the economic boom in western Europe has lead to a spectacular emigration of labor, resulting for all of Portugal in a population decline from 1965 to 1973 of .1 percent.[6]

The process of division of holdings, beginning in the 19th century has continued into the present day inspite of laws instituted to maintain properties intact. The division of family holdings has increased the numbers of landowners and thereby the number of owner-operated holdings. Recently this process seems to have accelerated. Tenancy appears to be on the decrease as well(see Chapter 3).

Table 1.1 presents the active agricultural population according to professional situation(both tenants and owner-operators are classified as individual exploitants). In 1970, about 30 percent of the economically active population was involved in agricultural production in the country as a whole. The table demonstrates a substantial increase in the numbers and percentages of individual exploitants from 1950 to 1970. This is particularly marked for the District of Braga (where Barcelos is located), where individual exploitants have jumped from 20.4 percent to 44.9 percent of the active agricultural popula-

Table 1.1 Active Agricultural Population by Professional Status

	Continente	North	South	Braga
Individual exploitants				
1950	268,742 (19.1)	222,652 (22.8)	46,090 (10.6)	19,620 (20.4)
1960	275,168 (21.2)	236,076 (25.8)	39,092 (10.2)	25,622 (30.0)
1970	328,985 (36.7)	278,390 (43.8)	50,865 (20.0)	27,955 (44.9)
Patrons				
1950	136,541 (9.7)	110,335 (11.3)	26,206 (6.0)	15,042 (15.7)
1960	76,270 (5.9)	59,052 (6.5)	18,018 (4.7)	6,964 (7.2)
1970	17,100 (1.9)	12,885 (2.0)	4,215 (1.7)	975 (1.6)
Hired labor				
1950	842,019 (59.7)	500,147 (51.3)	341,872 (78.7)	39,654 (41.3)
1960	770,447 (59.4)	459,786 (50.3)	310,211 (80.9)	30,448 (35.6)
1970	444,750 (49.7)	247,440 (38.9)	191,580 (75.3)	15,310 (24.6)
Family labor				
1950	162,149 (11.5)	141,485 (14.5)	20,522 (4.7)	21,662 (22.6)
1960	174,584 (13.5)	158,328 (17.3)	15,986 (4.2)	23,254 (27.2)
1970	99,555 (11.1)	92,465 (14.6)	7,090 (2.8)	18,000 (26.3)
Other				
1950	---	---	---	---
1960	814 (0.1)	643 (0.1)	171 (0.0)	61 (0.1)
1970	4,870 (0.5)	4,290 (0.7)	580 (0.2)	470 (0.7)
Total				
1950	1,409,451 (100)	974,619 (100)	434,690 (100)	95,978 (100)
1960	1,297,283 (100)	913,885 (100)	383,478 (100)	86,349 (100)
1970	895,260 (100)	635,470 (100)	254,330 (100)	62,710 (100)

note: the numbers in parentheses are percentages

Source: Freitas, Almeida and Cabral, *Modalidades de Penetracao do Capitalismo na Agricultura*, Edtorial Presenca, Lisboa, 1976, p. 46-7.

tion, with a corresponding drop in patrons and hired labor.

Wine still persists as the primary cash crop, but, as in the past, its profitability accrues to those who commercialize it and not to the producers, except for the few who have the scale for engaging in commercial activities. This group as we will see constitutes a relatively minor part of the population. The Revolution of April 1974, with the ensuing loss of colonies, returned Portugal to its cronic balance of payments problems. The technological level of todays industry puts wine at an even greater disadvantage in terms of trade than when the first Anglo-Portuguese treaty was signed over three hundred years ago. Portuguese agriculture is thereby highly dependent upon the advancement of other sectors of the Portuguese economy.

Footnotes for Chapter 1

1. Sideri, Sandro, *Trade and Power*, Universitaire Pers Rotterdam, 1970, p. 4-5.

2. Murphy, James, *A General View of the State of Portugal*, London, 1798, p. 34-6.

3. Livermore, H.V., *A History of Portugal*, Cambridge, 1947, p. 427.

4. Evangelista, Joao, *Um Seculo de Populacao Portuguesa(1864-1960)*, Lisboa, Publicaçoes do Centro de Estudos Demograficos, 1971, p. 212-214.

5. Robinson, R.A.H., 'The Catholic Revival in Portugal: 1900-1930', *Journal of Contemporary History*, Volume 12, Number 2, April 1977.

6. I;B.R.D., *World Bank Atlas*, Washington, D.C., 1976.

CHAPTER 2

ENVIRONMENT AND EMPLOYMENT IN RURAL BARCELOS

Let us now turn to a general description of the specific area under study. The concelho of Barcelos comprises 36,280 hectares with a population of 88,130(1970), although at the time of this survey it must have exceeded 90,000. The Cavado River cuts across the center of the concelho from east to west reaching the Atlantic Ocean ten kilometers downstream. The town of Barcelos has a population of about 10,000 and is situated by the river in the center of the concelho. Here, too, is the only bridge connecting the north and south halves of the concelho, which handles truck or bus traffic on an alternating one-way basis only. The traffic jams on the weekly market day extend for over a kilometer in either direction and last about two or three hours at a time. The surrounding area is composed of valleys and hills, where most of the population resides, climbing into forested mountains of over 400 meters in some places.

The countryside is broken into small fragments by stone walls. Above these walls, at the hight of two meters, spread the vineyards. The vineyards must be at this hight to protect them from the humidity and ground temperatures. The fragmentation is such that it is difficult to find any two hectares undivided. This situation is compounded by the contour of the land which does not allow any two hectares to be all at the same elevation. The soil, where not too rocky, tends to acidity, due to the heavy rainfall. The primary rainy season is during the winter with precipitation of about 875 millimeters(1975) and average humidity of 77 percent(1975). Yearly temperatures range from negative one to 35 degrees centigrade.

In spite of the impact of emigration, Barcelos has had a positive growth rate of .6 percent per annum from 1960 to 1970. The distribution of this population has been changing, however, and now tends to concentrate more around the town where small factories have been growing. In fact, Barcelos has been included in the planning of the

Braga-Guimaraes growth pole. A casual observation of the area gives one the impression that the majority of the population is involved in one way or another in agriculture. The statistics, however, show the industrial sector to employ more people. Textiles and ceramics are the basic products. Both seem to have grown from a substantial handicraft industry which still exists for ceramic(touristic) items. The discrepancy between the statistics and observation may partly be due to the disguised and underemployed rural population. When one sits in the town square, one can at times be surprized at the number of persons simply standing around. Also interfering in the statistics maybe the number of workers in factories who also have plots of land which they cultivate, but who do not list themselves as farmers, but as workers, as this provides them with a more secure income. Table 2.1 presents a sectoral division of the economically active population. This demonstrates that the role of agriculture in employment has declined since 1960, while that of industry has increased.

Table 2.1: Economically Active Population in Barcelos by Sectors
(percentages)

	percent of total population	Agriculture	Industry	Services
1960	--	51.5	31.7	16.7
1970	36.7	39.4	43.7	16.9

Source: *Subsidios Para o Estudo da Area do Polo de Crescimento de Braga-Guimaraes*, Commisao de Planeamento da Regiao do Norte, June 1974, p. 6.

According to the extension service, of all the farms in the district of Braga, 65 percent use only family labor. Less than 8 percent of all farms use only hired labor. There is disagreement between informants as to the duration of agricultural employment. Laborers hired for agricultural jobs are usually called 'jornaleiros' since they work on a daily basis. Only the largest farmers have the

scale of operation to employ personnel on a monthly basis, which probably corresponds to the 8 percent figure, i.e. taxable employment. The disagreement arises mostly in terms of the jornaleiros, however. A jornaleiro will probably work for more than one employer (3 days here, 1 day there and 2 days somewhere else) when possible. We found in our interviewing that this part time labor was usually provided to the small holder by women, which probably cost the farmer less than a male jornaleiro. Employment through out the year, goes one arguement, is possible because of the multiplicity of crops grown in this region. The other arguement is that even with this variety there are only certain seasons for seeding and harvesting when hired labor is most important. Few use herbicides, however, and this may provide for the part time employment of laborers during other parts of the year. It is doubtful that a male jornaleiro can maintain steady employment without a permanent job. During the rainy season employment depends on the enterprize one works for; some employers can find indoor activities, others, if well-off, can pay the laborer even though he does not work. There is a higher rate of payment during peak seasons because even the smallest holdings(land normally worked by only family members) need laborers for just one or two days or a week.

Another aspect of farm labor which further complicates the situation is that of exchanged labor. The exchange of labor is a system by which farmers form groups to bring in each others harvest or plant seeds. It appears to be a very informal system, used by neighbors. No payment is made, but, as in the case of jornaleiros, meals and wine are served. It both relieves the necessity for cash and ensures enough laborers when they are needed.

CHAPTER 3

SIZE, DISTRIBUTION AND TENURE OF LAND HOLDINGS

We shall now consider access to land and its relationship to agricultural production levels. Essentially what we will see is that farmlands are predominantly small and fragmented. As a point of departure, it should be noted that 2-3 hectares is considered by local agricultural experts to be the minimum viable family farm size, dependent, of course, upon variations is family size, soil, etc. This minimum refers to a predominantly subsistence level.

Table 3.1 Distribution by Size of Holding for the District of Braga

Size Range of Holdings (hec)	Number of Holdings	Area of Holdings (hec)	Average Size of Holdings (hec)
.05-1.0	29,750 (48.7)	9,315.60 (6.9)	.3
1.0-4.0	21,245 (34.8)	42,612.40 (31.4)	2.0
4.0-20.0	9,580 (15.7)	65,105.35 (47.9)	6.8
20.0 +	518 (0.8)	18,708.43 (13.8)	36.1
Total	61,093 (100)	135,741.78 (100)	2.2

note: the numbers in parentheses are percentages

Source: *Inquerito as Exploracoes Agricolas do Continente 1968*, Instituto Nacional de Estatisticas, Lisboa, 1971.

First let us consider the distribution and size of holdings. Table 3.1 gives us this picture for the District of Braga. Here we find that the largest group of holdings is in the range from 500 square meters to one hectare comprising 48.7 percent of the holdings and 6.9 percent of land area. These holdings are not normally viable exploitations, although some do provide the sole income

for those who farm them. We would expect, however, that most of these exploitants, as they are defined in the 1968 Agricultural Census, have other sources of income.

The second group of exploitants in the range from one to four hectares is the lowest level grouping of potentially viable family farms. With 34.8 percent of the exploitants, this group then represents the bulk of viable small holders controlling 31.4 percent of the land. The remaining two groups represent 16.5 percent of exploitants and control 61.7 percent of the land. This distribution demonstrates that only a minority of holdings have the adequate size to venture beyond a basic subsistence level, although they control the majority of the available land. It must be pointed out here that these statistics do not clarify the tenure status of these exploitants.

Although the majority of exploitants are owner-operators, there are also various forms of rented land. The chief form this takes is that of sharecropping where either a percent(usually 50) or a specified quantity of certain crops are paid to the landlord in kind. Normally maize and beans are the crops to be divided. However, there is an exception to this rule in terms of the primary cash crop--grapes for wine. Rental agreements normally apply to the ground. Anything 'in the air' i.e. vineyards, fruit trees or forest trees, is usually retained by the landlord. If the vineyard is included in the agreement, then the usual division of the crop is two-thirds for the landlord and one-third for the tenant. These forms of lease are such that renting even of the largest properties is unlikely to provide the renter with a marketable surplus.

In April 1975, a new rental law was passed determining that all rents should be fixed, written, of six years duration and payable in cash at such a level that the tenant may profit from his labor. Cash equivalents for the various crops were established and indexed, which lead in some cases to a reduction of payable rent by over 75 percent. This, however, had done little to change the sharecropping system. It has been necessary for tenants wishing this

situation to take their landlord to court. This procedure is expensive and leads to confrontations which are biased against the tenant, who although with the law on his side is in the weaker position. Today sharecropping still predominates, but there is a growing, if grudging, acceptance of the new rental system.

Not everyone either only owns or rents, some farmers combine the two forms, thus increasing their production potentials. Ownership maybe combined with either or both forms of renting. In many cases this is rented from family members who own, but do not work their land. Results from the survey have shown that it is normally the relatively larger landowners who engage in this practice.

Let us now look at how holdings are divided by tenure status. Table 3.2 presents us with an overall view of the District of Braga, for which we had a division by holding sizes, and provides us with a breakdown of the distribution of holdings by tenure status for several concelhos within the district, including Barcelos. This shows us the predominance of ownership, in terms of numbers, in all but the most urban concelho, Guimaraes, and Esposende, which is on the coast road north of Porto. The most rural concelho is that of Vila Verde, where we find the highest rate of pure ownership.

In Barcelos roughly two-thirds of holdings are owner-operated with a trend toward the increase in the number of owner-operators over the period 1954/1968.. The overall average size of holding for Barcelos in 1968 was about 2.4 hectares, divided into an average of four separate fields that may be anywhere from 100 meters to three kilometers or more apart.

Table 3.2 Percentage of Holdings by Tenure Status for the District of Braga and some Concelhos

	Own	Mixed	Rent/Sharecrop
Braga (District)			
1954	57.1	18.8	24.1
1968	62.9	16.8	20.2
	(2.2)	(2.5)	(2.0)
Guimaraes			
1954	34.8	2.3	62.9
1968	42.2	9.3	48.5
	(2.8)	(4.9)	(3.4)
Braga			
1954	36.9	10.6	52.5
1968	58.5	9.2	32.3
	(2.0)	(3.6)	(2.7)
Vila Nova Famalicao			
1954	60.0	5.6	34.4
1968	63.9	8.0	28.1
	(2.0)	(3.4)	(1.8)
Esposende			
1954	50.9	37.0	12.1
1968	45.8	36.4	17.8
	(2.3)	(1.3)	(0.3)
Barcelos			
1954	63.4	24.2	12.4
1968	67.1	21.8	11.1
	(2.5)	(2.5)	(1.9)
Vila Verde			
1954	75.5	12.6	11.9
1968	74.4	18.7	6.9
	(1.5)	(1.7)	(1.5)

note: the numbers in parentheses are the average size in hectares of holdings for each group.

Source: *Inquerito as Exploracoes Agricolas do Continente 1968* and *1954*, Institute Nacional de Estatisticas, Lisboa.

CHAPTER 4

PRODUCTION AND MARKETING

Farming on the small holdings of this region consists primarily of producing a mixture of various products which ensures the subsistence capabilities of these farmers. Potatoes are a dietary staple and are usually marketable. Maize is intercropped with beans. The maize is for bread, cattle feed or sale. Beans are sometimes sold, and are usually found with potatoes for most meals. Vegetables are planted almost entirely for direct consumption, although the rare farmer may be engaged in market gardening. Other cereals, such as rye, oats and barley, are planted, and these too, are primarily for direct consumption. The primary cash crop is grapes for wine and usually accounts for three-quarters of crops sold. Fruit trees are common, but an orchard is rare. Cattle is the other source of marketable surplus. Cattle are raised for work and slaughter, and recently milk production has become an important income source. Over the period 1971-75, there has been an overall but minor trend of taking land out of cereal production while production per hectare has risen. It could not be determined from the statistics, what this land was then used for, but we might presume that it has become permanent pasture for cattle. Table 4.1 presents the percentage contribution to marketed surplus of the various products as of 1968. The more rent increase in milk sales is not recorded.

The marketing of agricultural products in the concelho of Barcelos is primarily done through middlemen or directly, on the weekly market or at the door. The noteable exception is the marketing of milk which we will discuss in Chapter 10. The Institute of Cereals operates a national marketing board, however, the low scale of production for most farmers makes the cost of transport to the receiving stations too high. Middlemen usually intervene providing collection and transport, thereby subverting the Institute's guaranteed price.

Table 4.1 Marketed Surpluses of Agricultural Products for the Concelho of Barcelos (percentage of cash sales)

Crops		54.0
Cereals	6.7	
Wine/grapes	35.2	
Legumes and tubers	5.6	
Other	6.5	
Livestock		38.6
Meat	30.1	
Milk	6.8	
Eggs	1.4	
Wool	.3	
Forest		7.4
Total		100.0

Source: *Subsidios Para o Estudo da Area do Polo de Cresimento de Braga-Guimaraes*, Comissao de Planeamento da Regiao do Norte, June 1974.

The sale of beans, potatoes and other vegetables is completely in private hands, as is the marketing of cattle for meat, although this too, has a national marketing board for its regulation, which functions similar to the Institute of Cereals. The trade in cattle is quite important and nearly every farmer is involved to some extent, but it appears that the numerous cattle negociants, some of whom own grazing land, are the primary persons to profit. Unlike wine or milk, it is quite difficult to establish how this trade functions, since there is no control over the movement of cattle at varying stages of development. Most transactions take place at the farmgate or at the regular Thursday fair. Officially the fair is composed of 1,200 traders who sell cloth, tools, utensils and handicrafts. However, associated with this fair is an unorganized market in produce and cattle. Partly this involves direct sale by farmers, but its size and regularity lead one to believe that there are many who earn their living solely through this trade. Local informants have confirmed this belief.

The marketing of wine is also largely in private hands, although there is a wine cooperative. The usual practice is for the farmer

to make his own wine and sell this directly to the consumer at the farmgate or in bulk to a restaurant or tavern. Some, who do not wish to make more wine than they consume themselves, will sell the grapes on the vine to another farmer, usually from the coastal region. Two or three very large farmers who own substantial vineyards have formed private companies for the production, bottling and marketing of registered vinho verde. This wine, a specialty of the region, is destined for the national urban or international markets. Although this accounts for a large part of the controlled sale of vinho verde, the vast majority of wine producers are not involved. The uncontrolled and informal sale of local varieties of wine at the farmgate predominates. It is important to note that it is nearly impossible to buy wine over the counter within the concelho of Barcelos, although it is an integral part of every meal.

The wine cooperative appears to be a marketing outlet of last resort, used when market prices fall, and then primarily by landlords. It is claimed that the quality of this wine is poor. In fact, the cooperative has been waging, what appears to be, a losing battle to improve its marketing position of bottled vinho verde.[1]

Footnotes for Chapter 4

1. Interview with the president of the Adega Cooperativa de Barcelos and *Relatorio e Contas, Exercicio de 1975*, Adega Cooperativa de Barcelos.

CHAPTER 5

RECENT RURAL TRENDS

There have been two important factors influencing the evolutionary path of Portugal in the past two decades. The first has been a substantial growth of the manufacturing sector which reached an average of 9.9 percent growth per annum during the period 1968-73.[1] This works out for the period of 1960-73 to a 7.4 percent growth rate per capita.[2] The second important factor is the high rate of emigration from Portugal to Western Europe for this same period. This ranges to over 100,000 each year between 1965 and 1973 out of a population of roughly 9 million,[3] resulting in a negative 0.1 percent rate of population growth. It is clear that the substantial industrial growth was not providing the Portuguese with the employment opprotunities that the economic boom in France and Germany did. Table 5.1 demonstrates the magnitude of this exodus, including that part of the emigration to France which was uncontrolled.

Table 5.1 Portuguese Emigration 1960-1975 (including uncontrolled emigration to France)

	Total Controlled Emigration	Uncontrolled Emigration to France
1960	32,318	414
1961	33,526	1,270
1962	33,539	4,671
1963	39,519	14,451
1964	55,646	30,636
1965	89,056	27,918
1966	120,239	12,595
1967	92,502	13,778
1968	80,452	23,697
1969	70,165	83,371
1970	66,360	106,907
1971	50,400	100,797
1972	54,084	50,892
1973	79,517	40,502
1974	43,397	26,876
1975	24,811	20,107

Source: *Estatisticas Demograficas: 1975*, Instituto Nacional de Estatisticas, Lisboa.

During this same period we find that the growth rate of agriculture for the country was one percent per annum. The growth rate of agricultural production in the District of Braga may not have been so low, however, throughout this period we find that emigration from the district tended to follow the national average. Table 5.2 provides us with the example of the year 1969. This table does not include uncontrolled emigration. The important aspect to notice is that 64 percent of those emigrating were male. Many emigrants have completely left the land, although some may rent out what they still own. Some of the richer farmers have bought more farmland as a result. These changes have been incremental, however. The more important aspect is in terms of labor.

Table 5.2 Emigration from the District of Braga: 1969

	All Emigrants	To France	To Germany	Other	Returned
Male	4,071	3,008	832	231	49
Female	2,289	1,556	435	298	29
Total	6,360	4,564	1,267	529	78

Source: *Estatisticas Demograficas: 1969*, Instituto Nacional de Estatisticas, Lisboa.

There are two aspects to the changes which have occurred in the provision of farm labor. The first is that day-laborers are more and more likely to be women. The second is the massive introduction of tractors. Table 5.3 shows the substantial increase in ownership of tractors for the district of Braga and for the concelho of Barcelos. These rates of increase are substantially above the average for the nation as a whole. Although the statistics do not provide data beyond 1968 for Barcelos, I have conservatively estimated about 1,000 tractors by 1976. A government subsidy for the buying of farm machinery was instituted in 1965. However, local informants told me that it was not until about 1968 that farmers felt it was definitely worth investing in a tractor. This was largely due to the fact that male labor was becoming scarce and more expensive. The farmers also calculated that a substantial part of their investment

could be covered by renting out the tractor to neighbors. Today, everyone uses a tractor to prepare their land, although the vast majority do not own a tractor.

Table 5.3 Number of Tractors in Barcelos and the District of Braga

	District of Braga	Concelho of Barcelos	Barcelos (as a % of district)
1954	21	5	24
1968	685	267	39
1972	1,190	-	-
1976	2,815	(1,000)	(35)

note: the numbers in parentheses are my estimates

Source: *Inquerito as Exploracoes Agricolas do Continente 1968* and *1954* and *Estatisticas Agricolas: 1976*, Instituto Nacional de Estatisticas, Lisboa.

As these changes were occurring it became evident to some that other changes were necessary to make farming more profitable. A reorientation, or 'reconversion' as it was called, of farming production was necessary. In 1972, a commission was set up to study the situation and propose a plan of action to be sponsored by government assistance.[4] The study, completed before the Revolution of April 1974, set out two primary products compatible with the agricultural conditions in Minho--wine and milk. The wine, it said should be grown inland, primarily on the hillsides, and milk along the coastal regions, in the lower lying areas. It set out a method for growing vineyards which would cover more of the land, rather than the traditional method of circling fields with the vineyards above the walls. The gestation period for these new vineyards would be about eight years, meanwhile the productive capacity of the land would be limited. This is a difficult path for a small farmer who must sell a portion of his crops each year to subsist, nearly impossible for a renter. However, Barcelos is in the zone generally more appropriate for milk cattle. It has been this course which has been taken for the agricultural development of this region.

Footnotes for Chapter 5

1. *Portuguese Economic Situation*, Department of Planning, Lisboa, May 1976.

2. I.B.R.D., *World Bank Atlas*, Washington, D.C., 1976.

3. *Estatisticas Demograficas: 1975*, Instituto Nacional de Estatisticas, Lisboa.

4. Interview with engineer from the Association for the Reorganization of Agriculture.

PART II

Before going on to a more detailed economic analysis of small farming in Barcelos, we will analyze the political aspects concerning the interest expression of these small farmers. In this section we will describe the evolution of the Cooperativa Agricola de Barcelos (CAB). This begins with a description of the Gremio da Lavoura and then how the Revolution of April 1974 brought about the current status of the CAB. This will be followed by an analysis of the Liga dos Agricultores de Barcelos (Liga) which under the new conditions created by the revolution has provided an alternative means of small farmer interest expression. We will see who participates in interest expression, with what levels of involvement and to what extent the revolution has served to promote the interests of small farmers.

CHAPTER 6

COOPERATIVA AGRICOLA DE BARCELOS

In order to best describe the Cooperativa Agricola de Barcelos(CAB), it will be necessary to return to the period of Salazar's dictatorship. Since the 1933 constitution, Salazar had been constructing the institutions for a corporate state. The two primary institutions established for the rural sector were the Casas do Povo, which were to provide social services, and the Sindicatos Agricolas. The Sindicato Agricola replaced all previous trade unions and workers' associations and lumped all workers, sharecroppers and landowners into one association which would dignify their labor and represent their interests in common.[1] However, Salazar found it necessary to have an organization with further responsibilities. In 1939, he issued a decree creating the Gremios da Lavoura which would replace the Sindicatos Agricolas.

The Gremio da Lavoura de Barcelos was founded in 1940 by a lawyer, a registrar and a businessman, all from the same freguesia, all absentee landlords, all from the direction of the previous Sindicato Agricola. All landlords, farmer-owners and sharecroppers were to become members. Membership fees were mandatory for all except those who did not own any land. The General Assembly consisted of 40 members, half elected from the freguesias(when elections occurred) and half consisting of the largest farmers in the concelho. The President of the Gremio had always been a priest. Most members of the Board of Direction had been absentee landlords, usually doctors and lawyers.[2]

The Gremio functioned largely as a state agency for the commercialization of agriculture. It provided fertilizers, seeds, some machinery and credits for the purchase of inputs. Technical information and incentives for hybrid varieties were also available, but on a more limited basis. It did not actually buy produce, but rather served as an intermediary for the national marketing boards by registering producers, monitoring and controlling the production of wine, grains, etc. For these last activities it received an income from the respective marketing boards.

The demand for agricultural products during World War II promoted the expansion and consolidation of the Gremio and its services. Through the 1940's and 1950's the Gremios became a fixed part of the rural environment with substantial powers of control. During the 1960's, however, we find a rapid industrialization process beginning, combined with a massive exudos of rural population to Western Europe. The national interest in the promotion of agriculture itself declined and it appears that interest in the Gremio as an agrarian institution declined as well.

Under the Caetano regime we also find a new specialization in agricultural production which is not being controlled by the Gremio, milk. Whether as a result of this, or other factors, the sales receipts, from inputs, of the Gremio suffer an absolute decline, resulting in increasing income deficits from 1970-74. While grain production suffers a slight decline during this period, milk production more than doubles between 1972 and 1976. From this we can conclude that stores have picked up the balance of input sales and that the sales most likely have been on the increase. It should be noted here that the stores do extend short term credit for sales, and unlike the Gremio, do not charge an interest. Before the 25 April 1974, the Gremio was in decline as a financially viable institution.[3]

The year of 1974 was financially disasterous, deficits doubled and transactions declined further. By the end of the year, the books seem to have fallen into confusion. In accordance with a directive from the provisional government, a Commission for the Liquidation of the Gremio was set up on February 6, 1975 under the direction of the Regional Commision for the Liquidation of the Gremios da Lavoura de Entre Douro e Minho. It was decided that the Gremio would be transformed into a cooperative. To do this the new Cooperativa Agricola de Barcelos was merged with a milk cooperative situated in the extreme north of the concelho in the freguesia of Aldreu.

The milk cooperative in Aldreu had been part of a cooperative union, Uniao das Cooperativas dos Productores de Leite de Entre Douro e Minho, established in two concelhos along the coast some 30 years ago. The dairy itself was on the coast. The southern half of the concelho of Barcelos had been serviced directly by the milk cooperative in Povoa de Varzim, part of the original union. The current president of the CAB had been the director of the milk cooperative in Aldreu.

The CAB or Gremio continued to function during 1975 under the direction of the Commission and it was not until 26 June 1976 that the merger was officially completed. By January 1977, a considerable portion of the southern half of the concelho that had been serviced by Povoa de Varzim merged with the CAB. Some of this area, however, still delivers its milk directly through the Cooperative of Povoa de Varzim.

At this point it is useful to review the political make-up of the CAB in terms of political parties, since through them we can better understand the political interests most dominant in the CAB. Of the four main national parties, three are concerned here: the Centro Democratico Social (CDS), a right of center party associated with maintaining landlord interests; the Partido Socialista Portuguesa (PS), a socialist party associated with reform; and the Partido Communista Portuguesa (PC), a communist party associated with radical change of the agrarian structure.

The Board of Direction of the Gremio had been composed of three CDS members; the Commission was composed of one PS, one PC, one PRP (a left-wing splinter party) and three CDS; and the new Board is now composed of two CDS and one PS. It appears as though real control, based on the traditional hierarchy represented by the CDS, has not changed, although the organization has managed to adapt to the new source of rural prosperity. Regular elections, in accordance with the new statutes, have not taken place. The problem is that they are still trying to assess who actually are members, whether they should be only milk producers or all producers.

Membership currently appears open to all who farm within the concelho of Barcelos. According to the CAB, there are 3,500 members. This figure corresponds to the number of milk producers. Since it is no longer necessary to pay an annual membership fee, nor is it mandatory to be a member, most farmers have not registered and do not know whether they are members or not. Recruitment is non-existent. Those who claim membership tend to be more commercialized farmers. It is currently not necessary to be a member to sell milk or have access to the other services of the cooperative.

As a member of the Union of Cooperatives that owns the dairy, the CAB send its delegates to union meetings monthly. Participation in this union, however, has not yet stopped the increasing deficits. One observer attributes these deficits to too large a staff, but these deficits might also be maintained by the problems of transition and the increased investments in milking stations, which substantially improve the collection of milk. With a total staff of 12, it runs a store, an outlet for processed milk, and an office for registration, information collection and dissemination and other clerical functions. The collection and processing of milk is operationally controlled by the dairy directly, as is the payment of producers.

In a sense it is difficult to determine what the exact objectives of the CAB are. Of course it is relatively recently reorganized and confusion within itself maybe part of the problem. It has yet to explain itself to farmers which it claims as members. However, it does have some clear functions which we may associate with intended objectives.

In one sense it is a conduit for government objectives, since it is the lowest level office which receives and implements Ministry of Agriculture directives. These are primarily to increase production and stimulate farm investment. It also serves the function of registering, monitoring and otherwise controlling the quality of production for the various marketing boards. Explicitly, in this case, that means providing fertilizers, pesticides, hybrid seeds, high quality milk cattle, credit, and information, as well as building and servicing milk stations and coordinating technical services. The focus of the organization is on

increasing agricultural output, primarily milk, and thereby on those producers who can most easily do so. This seems to imply a preference for the biggest farmers.

Since the political make-up of the Board of Direction has changed little since the days of the Gremio, it is difficult to perceive a new direction in the ideological basis of the CAB. Although non-farming landlords are no longer members, their party, CDS, still holds a majority on the Board. Because it is the agricultural cooperative of Barcelos, there is the tendency to lump all agricultural interests in one basket. Since it does not attempt to articulate interests of farmers, but simply provide them with services, this may not be a problem. The question still remains, however, whether the services provided are appropriate for all farmers.

Footnotes for Chapter 6

1. de Figueiredo, Antonio, *Portugal: Fifty Years of Dictatorship*, Penguin, London, 1975, p. 66-69.

2. Interview with Dr. Carlos Costa. He is currently completing a study of the Gremios da Lavoura.

3. Interview with Dr. Carlos Costa.

CHAPTER 7

LIGA DOS AGRICULTORES DE BARCELOS

Before 25 April 1974, little had been done to touch the isolation or promote the interest expression of the small farmers around Barcelos. Social control was exerted through the village priest and opposition was not easily tolerated. Barcelos is quite near the Bishopric of Braga, the ecclesiastical vanguard of the old regime. In this sense, the priest who presided over the Gremio had more power over what took place in rural Barcelos than would normally be expected of such a position. After 25 April, there was little immediate change in the situation. At the national level changes were occurring rapidly, as the provisional government began to dismantle the structures of the old regime. Change is fostered from outside in the form of the Commission for the Liquidation of the Gremios. At a meeting held on 1 March 1975, with some 500 farmers participating, it was decided in principle that the commission would establish a new cooperative in place of the Gremio and that an interest organization for farmers would also be promoted.

Events moved slowly in Barcelos and it was left to national events to further stimulate local developments. The first interest group to be officially established was the national level Confederacao dos Agricultores Portugueses (CAP). This was established in the south of the country by ex-latifundia owners after the counter-coup which toppled the radical Armed Forces Movement on 25 November 1975. Their objective was to regain the land taken over by the workers' collectives. To this end they rallied the support of northern farmers. The political affiliations of this group were with the CDS, whose source of voting strength lay in the northern rural areas. In the District of Braga, CAP consisted of landlords and farmers who had made agricultural investments before 25 April and had strong ties to the Gremios. Nearly the entire leadership has had extensive agricultural training in a situation where technical assistance is not available to the vast majority of farmers. In the District of Braga there were about 500 members at its peak, but since local initiatives were not allowed, the Braga organization remained relatively dormant, at least within the public view. Maintaining the status

quo was the chief objective. It was left to other groups to stimulate changes in the rural environment.

The issue around which a more small farmer-oriented rural organization could be founded was provided by the new rent law passed by the provisional assembly on 15 April 1975. The new law required that all rental agreements be fixed, written, of six years duration and payable in cash, at such a level that the tenant may profit from his labor. This law superceded the rent laws of the early 1940's which did not provide more than one year's security of tenure and accepted oral agreements on a sharecropping basis. Some 30 percent of the farmers in the concelho of Barcelos could be affected. However, landlords, represented by CAP, were not prepared to change their habits and few rental agreements were arranged according to the law. This gave rise, in early 1976, to the Movimento dos Agricultores Rendeiros do Norte(MARN) in order to promote the implementation of the new tenancy law.

MARN is a regionally-based tenants union with some 1500 members at its peak in 1976-77. It had three primary functions: (1) to act as a lobbying group in the Ministry of Agriculture; (2) to aid tenants in the more than 1000 cases which have gone to the courts; and (3) to promote local meetings to discuss and resolve tenancy problems. It also had as a goal the formation of local-level organizations to promote the interests of all small farmers, not just renters, where local problems could be addressed directly by those concerned.[2] As a result of the strength of the tenancy issue, interest on the part of small farmers developed and local-level organizations were formed. However, as we have seen, change has come slowly to northern Portugal and it was not until 11 February 1977 that the Liga dos Pequenos e Medios Agricultores de Barcelos was officially registered. The first and current president was the member of the Commission for the Liquidation of the Gremio who was interested in forming an interest organization for farmers.

The Liga is a voluntary association designed to serve the class interests of small and medium sized farmers, be they renters or small proprietors. It is not to be considered as a cooperative which is an economic association, although it may promote cooperative ventures. The objectives of the Liga are as follows:

- defend renters, guarantee stability and the legitimate interests of cultivators;
- fight for fixed prices for produce which are to be known before planting;
- fight for the supply of inputs on favorable terms;
- create and aid economic associations, like various types of cooperatives;
- fight politically for improvements in credit facilities, taxes and agricultural insurance;
- make sure that state technical assistance is appropriate for members;
- improve the living standards of associates to levels similar to other sectors;
- work actively with other associations to benefit members; and
- promote the union of associations at levels up to the national level.[3]

In order to achieve these and other objectives specifically in the interests of small farmers, the Liga, through its members, attempts to identify those problems which its members have. Weekly meetings are used for this and for the dissemination of information to improve the knowledge and capacities of the membership. Following this, discussions take place, but more importantly, being an officially recognized organization, the leadership can bring to the attention of the relevant authorities the specific problems as they arise, placing pressure and demands upon the authorities to conform to the needs of the small farmers. When legal aid is needed they can help to provide an appropriate and inexpensive lawyer. When claims of malfeasance are made they can promote the investigation of these matters for the membership.[4]

The ideology of the Liga is based on a class conception of society. In a society with political liberty it is necessary that those who have a similar position in the production process should unite in order to defend and improve their livelihood. Within the rural sector are various interests, those who dominate the small farmer are the rich landlord, the intermediary, the industrialist who makes and sells fertilizers and animal rations, the money lenders, and the state bureaucracy. It is in order to defend their own interests that the

small farmers must unite to fight these personages. The Liga is an organization of those who actually work the land, as a trade union in a factory is an organization of those who actually make the product. Those who dominate the small farmer are actually living a parasitic existence based on the fruits of the small farmer's labor. It is this group which controls all the other organizations in the rural sector, hence the need for the Liga and the unity of interest between the renter and the small owners.[5]

Membership in the Liga is open to all who work the land whether as a renter or an owner. Membership is not possible for either an agricultural laborer (jornaleiro), who does not work land for himself, or a landowner, who does not work his land but has it rented out or hires full time labor. A farmer who works his land and hires labor is eligible for membership. Recruitment has been low, with 59 members to date. It appears that membership has not changed since the initial enrollment period. Another aspect of recruitment is that it is open to women, which is quite important since many times it is the woman who is responsible for the family farm. Women, in fact, have become members.

Although membership is explicitly open to members of all political parties, it has suffered from the label 'communista'. The rural areas of Barcelos are governed by either the traditional leadership, now embodied in the CDS, or the more recent petit-bourgeois party of the PSD. Both of these parties are anti-communist. Members of the Liga have tended to be of a leftist persuassion, conforming to its fundamental ideological precept, that of being a class organization. On the other hand, one might expect a greater enrollment since most small farmers do realize their exploitation by the other sectors. The objectives of the Liga do not conform to the stereotypic communist objectives. They rather refer to the improvement of the existing conditions and the application of the laws in a just manner (i.e. the tenancy law). Nevertheless, membership is low.

The primary form of participation for Liga members is attendance at meetings, which are held on the weekly market day in the town of Barcelos. Other forms of participation include promotional activities,

like distributing literature, attendance and promotional support for other larger scale meetings, buying fertilizer in common, election of leadership, and publishing a monthly newspaper. Members are encouraged to participate as their time allows. It is recognized that the intensive type of farming done by these small farmers and the relative isolation in which they live may preclude a great amount of time spent on Liga activities. Much of the correspondence and paperwork is taken care of by the president, however, there seems to be a core group of approximately 10 members who have a regular attendance at meetings and take care of certain tasks as they arise.

The participation that the organization has engendered has lead to a widening of the members perspectives as to how events occur and what actual possibilities are open to them. Except for the few who regularly attend meetings, however, active participation has not been an important factor. In this sense, the organization has served primarily as a conduit for information. As an example, the first issue of the Liga newspaper included three articles on livestock care, and one each on milk collection, potatoes and social security. However, it is in terms of moral and technical support for renters in securing reasonable cash rents and security of tenure that we find the most important reasons to join the Liga.

The buying of fertilizer in common was attempted informally, although a purchasing credit was provided in this case by the Liga. Few members were involved, and it appears to have been a test for the founding of a cooperative. It seems to have catalyzed little interest, however, since they could not procure the fertilizers at prices cheaper than the local stores.

The Liga has become a permanent feature in the rural scene in the concelho of Barcelos. It has begun the process of interest formulation for the small farmers of the area, although in terms of actual membership it has had little impact. As everywhere in Portugal after the 25 April information and ideas are being discussed and new rights demanded. The Liga has contributed to this dialog. On the 25 February 1978, the Liga joined with some 200 organizations representing small farmers from all over the north of Portugal to form the Confederaçao Nacional dos Agricultores. Several members have won their right to a reasonable cash

rent and security of tenure, others are still fighting.

Although substantial gains have been made in the area of renters rights, the other objectives of the Liga are yet to be achieved. With a clear voice the Liga is presenting crucial issues which affect all small farmers, especially in terms of livestock care and milk production, but it has yet to fully motivate the small farmers in their class interests.

Footnotes for Chapter 7

1. Interview with Member of Board of Direction of Braga Chapter of CAP, March 1977.
2. Interview with Representative of Braga MARN Chapter.
3. *A Liga é o Sindicato Agricultor*, Porto, June, 1977, paraphrased from original Portuguese.
4. *ibid.*
5. *ibid.*

CHAPTER 8

SUMMARY OF THE INTEREST FORMULATION ORGANIZATIONS

We have seen here how the events following 25 April 1974 have lead to a new formulation of farming interests. This has taken two forms: the Gremio was modified through an adjustment policy which has allowed it to increase control over farm production(the inclusion of milk); and the Liga was established to promote the class interests of small farmers, although its entrance upon the scene was dependent upon the tenancy issue.

What appears to have happened is that those who profited under the conditions of the old regime have managed to take advantage of the revolutionary situation to enhance their position without structural changes occurring. An innovation in production mix was establishing itself(milk). Substantial investments were necessary to ensure profitability, not only at the farm level in terms of high quality milk cattle, but at the collection level in terms of milking stations. The richer farmers could buy milk cattle, but it was necessary to revitalize the ex-Gremio in order to subsidize the expansion of milking stations.

This economic link to the political structure has ensured stability social control and prosperity for the richest farmers. Renters have also had an opprotunity to enhance their position, but like the majority of small holders they are not capable of the necessary investments in milk cattle to benefit in more than a minimal way from the situation, nor do they have control of the marketing apparatus since elections are yet to be held.

In Part III we will see how production is organized at the farm level for these different groups demonstrating economically how these political changes have reinforced the dominant position of the richer farmers.

PART III

CHAPTER 9

ORGANIZATIONAL MEMBERSHIP AND RURAL ASSETS

To demonstrate the relationships between farming and organizational membership in the region of Barcelos a representative sample was taken. Two typical areas were chosen, one relatively flat, but dry and the other wetter with considerable slope. Twenty from each type of area were selected. We could expect a large number of these respondents to be members of the CAB. However, it was necessary to preselect 15 Liga respondents from their membership list, focusing on the same areas as the rest of the sample, since we could not expect to find them in significant numbers through any random method. This sample yields a cross section of 55 small farmers. Interviews were arranged by priests or other local inhabitants and carried out over a three week period in February, a relatively quiet month for farming in this region. The interviews with liga members were arranged by the liga members themselves. They lasted about 1½ hours each and were conducted on the farm of the respondent.

From this sample we can draw a generalized picture of what a small farmer in this region looks like. He is probably 50 years old, living in a family of 6 (including himself) of which 3 work on the farm and 1 works off. His farm is about 3½ hectares and 26% of his crops are sold for cash. Compared with the statistics for the concelho the number of hectares might appear quite high, however, these statistics define an exploitant as any one with 500 square meters or more. This size is not usually considered by the farmers as an exploitation and has either been converted to housing for returned emigrants or simply used as a rural home for an urban worker. As we shall see later, the average size of property owned by the farmers in this sample is much lower.

In this first simple overview, I have divided the sample by organizational membership (Table 9.1), Note should be made here that one of the Liga members is also a CAB member since membership is not exclusive. I have therefore calculated him in both the Liga and CAB columns, in this and other similar tables. It should also

be pointed out that the CAB members did not come in the proportions that one might have expected from the size of membership described by the CAB staff (this has been discussed earlier). What we see from this table are the basic similarities of age, family size and number, who work on the farm. The differences begin to appear with farm size where the average farm size of CAB members doubles that of non-members, although the difference between non-members and liga members follows that of family size. A substantial difference occurs, however, when we consider % of crops sold and the number who work off-farm. It appears that CAB members are more involved in cash crop production and need less off-farm employment than the other two groups.

Table 9.1 Overall View of Sample

	All (55)	C.A.B. (15)	Non-members (26)	Liga (15)
Age	50.5 (27-72)	50.0 (29-66)	50.6 (27-72)	50.7 (38-72)
Family size (living on farm)	6.3 (2-13)	6.5 (3-12)	5.8 (2-11)	6.8 (2-13)
Size of farm	3.6 (.1-25.0)	5.6 (.8-25.0)	2.8 (.3-9.7)	3.1 (.1-9.5)
% crops sold	26.6 (0-80)	40.2 (0-80)	23.7 (0-71)	19.7 (0-59)
No. work on farm	3.6 (1-7)	3.9 (2-6)	3.5 (1-7)	3.6 (1-6)
No. work off farm	1.1 (0-5)	0.7 (0-5)	1.2 (0-5)	1.1 (0-4)

note: the numbers in parentheses show the range

To illustrate why these differences appear, especially with reference to percentage of crops sold, we need only take a look at Table 9.2 where the three groups are divided by security of tenure. Following the pattern of percent of crops sold we find that CAB members own more land than non-members, and non-members own more land than liga members. The same pattern is true for those with mixed (own/rent or own/sharecrop) properties.

Table 9.2 Organizational Membership by Land Tenure (in percentages)

	All (55)	C.A.B. (15)	Non-members (26)	Liga (15)
Own	45 (25)	60 (9)	54 (14)	20 (3)
Mixed	13 (7)	20 (3)	12 (3)	7 (1)
Rent	20 (11)	7 (1)	19 (5)	33 (5)
Sharecrop	22 (12)	13 (2)	15 (4)	40 (6)

note: the numbers in parentheses show the number of cases

Rural Assets Index

Before delineating the influence of milk production on this farming population I will present an index of rural assets, thereby ranking each farmer by his economic capacity to produce agricultural goods. This will allow us to relate organizational membership with rural assets. The index is composed of three indicators: hectares of woods owned (wealth and security), hectares of farmland owned (land), and machinery (capital).*

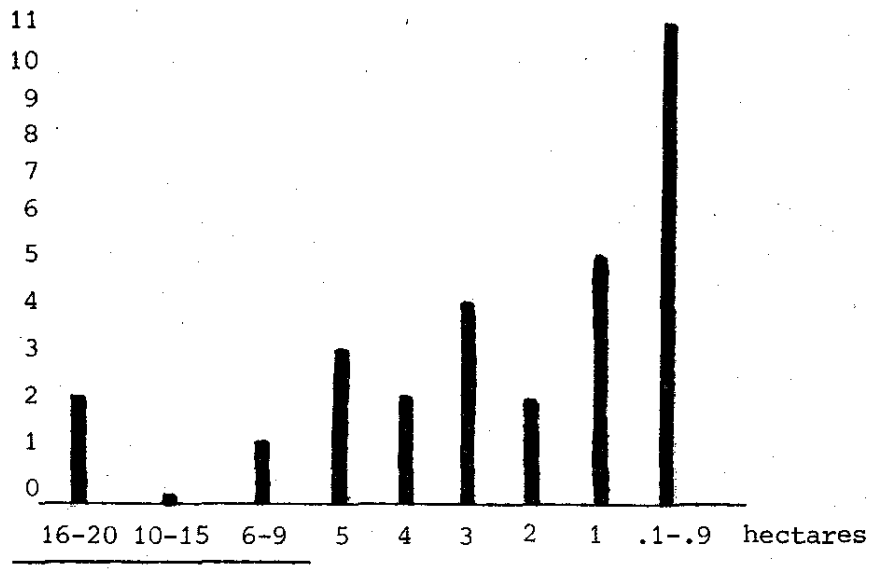
The first indicator, hectares of woods owned, is included for two reasons. First, it could be considered an indicator of hereditary prestige and power. Nearly all of the forest surrounding

*Labor is not included in this index because the information necessary to compose a reliable indicator is difficult to collect. There are two forms of labor, hired and exchanged. Exchanged labor is difficult to quantify because it is seldom clear what and how much is actually being exchanged. Hired labor has been quantified, but without including exchanged labor it would not be a relevant indicator of rural assets. Suffice it to say that there is considerable debate over the agricultural labor market between different local sources. Farmers are generally of the opinion that labor is too expensive and insufficient in numbers. Normally labor is only hired in large quantities at harvest season and these laborers are almost entirely women, usually from other rural areas or farms without sufficient agricultural potential. Family labor also obscures the issue. A detailed study of the labor market would be an interesting and useful project, but not absolutely necessary for our objectives here.

these farming communities was common land used for fire wood, construction, and the grazing of animals. Over the past one hundred years, however, the juntas de freguesia, have divided up this land for individual ownership and exploitation. It was usual for those most powerful at that time to acquire the majority of this land, either through direct expropriation or through indirect means, usually the repayment of outstanding debts. Second, it is an important source of security. It provides free fire wood, forage, and when necessary is a quick source of cash, through the sale of trees for lumber. Many farmers have mentioned this crucial aspect. This indicator is separate from farmland, considered next, because of its different nature and usage. In the farmers' own minds it is considered separately and requires the interviewer to ask about it specifically, rather than include it in the concept of land, although some farmers have cleared and levelled it for farm land, an expensive operation. Looking at Graph 9.1 we see that 30 farmers own some woods for an average of 3.4 hectares.

Hectares of farmland owned is the second indicator. This indicator is largely self-explanatory, however, there has been no control for quality of farmland. This factor I was not able to establish, but it appears in general that size and quality coincide. Also included in this indicator is the land upon which the farmer's house is built, if he owns it.

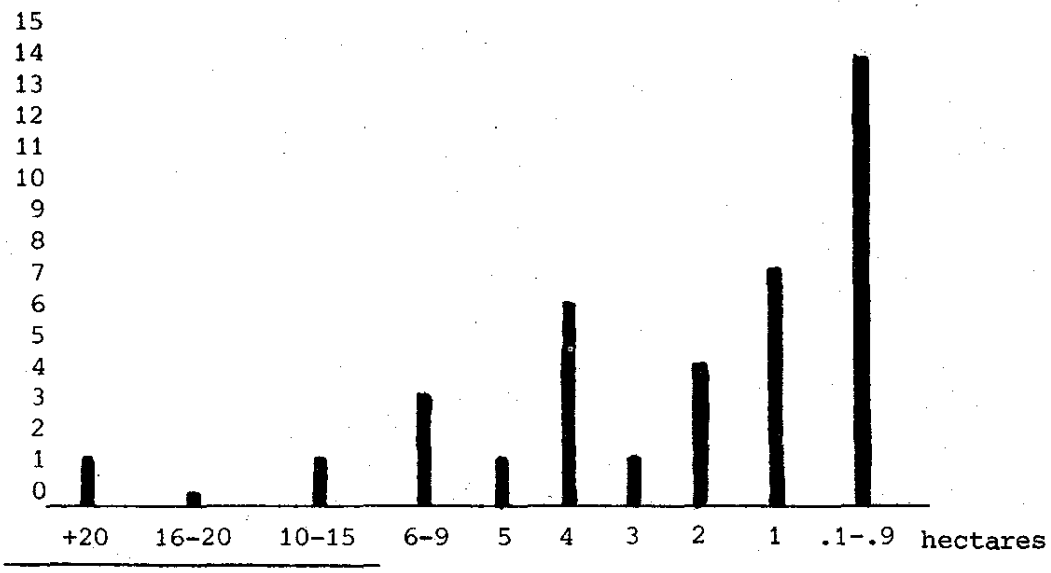
Graph 9.1 Number of Respondents by Hectares of Woods Owned



note: 25 do not own woods

Looking at Graph 9.2 we see the distribution of farmland for the 36 farmers who own farmland. The average for those who own farmland is 3.3 hectares. Comparing this last figure with farm size (See Table 9.1), of 3.6 hectares, it is necessary to realize that a substantial part of the difference is due to land rented or sharecropped from absentee landlords, in many cases emigrants to western Europe or South America. It is also interesting to point out here that various local agronomists figure that between 2-3 hectares, depending on soil, etc., is the minimum viable family farm.

Graph 9.2 Number of Respondents by Hectares of Farmland Owned

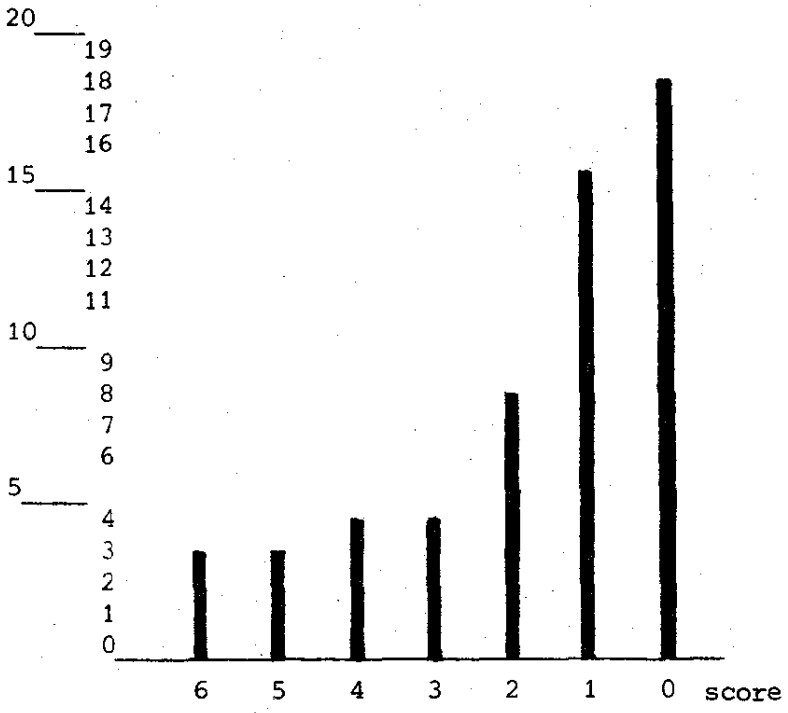


note: 19 do not own farmland

A scaled-score of machinery owned is the third indicator. This is an indicator of capital, graded by investment size and technological level. It is composed of three parts: tractor (large scale investment); sprayer/seeder (small scale investment); and pumps (small scale investments). The tractor is used by every respondent, however, only 14 own tractors. The scoring for this part is 2 for an owned tractor and 0 for none. Sprayer/seeder is scored by ownership of either or both mechanical sprayer or seeder, 2 for both, 1 for only one mechanical tool, and 0 for neither being mechanical. The ownership of pumps for irrigation and household use is scored

as follows: 2 is four or more pumps, 1 is one to three pumps, and 0 is no pumps. A totalling of these scores for each respondent gives a distribution of scores as shown in Graph 9.3. The overall average is 1.7.

Graph 9.3 Number of Respondents by Score for Machinery Owned



Having established the indicators for the rural assets index, we will now turn to the strength or relationship between them. Table 9.3 presents the correlation coefficients. They are all strongly positive, the weakest being between woods and machinery with only a 39% explanation of variance between the two indicators. This is probably due to some farmers having other sources of wealth which is not shown by woods or as in some cases, the woods are owned by the farmer's father.

Table 9.3 Correlations between Rural Assets Index Indicators

	Woods	Farmland	Machinery
Woods		.777 (60)	.628 (39)
Farmland	.777 (60)		.709 (50)
Machinery	.628 (39)	.709 (50)	

In order to finalize the index, each of the indicators was standardized according to a Z-score (see Appendix). This gave each indicator relatively equivalent weight, although woods and farmland give an implicit double weight to the land variable. These standardized scores are then added together for each respondent and this then gives us a total raw score. To more clearly see the variation in scores these were then re-standardized and are presented in Table 9.4. This was not the only attempt at creating an index, however it appeared to be the simplest and most consistent attempt. In the other attempts a similar ranking occurred, especially at the top.

Table 9.4 Rank Order of Rural Assets Index (re-standardized scores)

Group 1	Group 2 (cont.)	Group 3 (cont.)	Group 4 (cont.)
4.80	.16	-.38	-.73
2.99	.10	-.39	-.73
1.66	.10	-.41	-.73
1.41	.04	-.42	-.73
1.36	.02	-.48	-.73
1.15		-.50	-.73
	Group 3	-.50	-.73
Group 2	-.04	-.50	-.73
.99	-.10	-.52	-.73
.84	-.16	-.52	-.73
.78	-.18		-.73
.78	-.22	Group 4	-.73
.69	-.25	-.68	-.73
.42	-.31	-.68	
.27	-.32	-.69	
.22	-.36	-.70	

To more easily distinguish the types of farming conducted at different levels of rural assets, the index was divided into four groups. The first group was that consisting of six respondents who scored higher than one standard deviation from the mean. The second group consists of 13 respondents who scored between zero and one positive standard deviation. The third group consists of 19 respondents who scored between zero and a negative .53 standard deviations. A division was made at this point because of the substantial jump in scores between -.52 and -.68 found nowhere else at this end of the scale, and since there were no respondents with a score less than one negative standard deviation. This last group is the most closely packed, with 17 respondents.

In conclusion, let us consider what the relationship is between rural assets and organizational membership. In Table 9.5 the sample is divided by rural assets groupings and organizational membership. CAB members are spread across rural assets groups 1, 2, and 3, however, they compose the largest part of Group 1. Non-members are concentrated in Group 3, but extent into all groups. Liga members are concentrated in Group 4. Although there is not an absolute distinction between organizational membership in terms of rural assets, it is clear the CAB members are higher than non-members, and non-members are, in turn, higher than Liga members. We see then that there is a definite economic bias in organizational membership, even though membership is open in both organizations to all small farmers. Keeping this in mind, let us see how milk production actually fits into the economic activities of small farmers.

Table 9.5 Organizational Membership by Rural Assets Groupings

	All	Group 1	Group 2	Group 3	Group 4
CAB	15	4	6	5	0
Liga	15	1	0	3	11
Non-members	26	2	7	11	6
Total	55	6	13	19	17

CHAPTER 10

THE ORGANIZATION OF MILK PRODUCTION

Barcelos has been on the edge of a milk producing area for over twenty years. During this period the dairy cooperative in Povoa de Varzim had been processing milk just twenty kilometers from the town of Barcelos. In fact, once started it did not take long for Barcelos to become the highest milk producing concelho in the nation. Production of milk leapt from 9,800,000 litres in 1972 to 21,700,000 litres in 1976, more than double.[1] In 1977 23,530,000 litres were produced.[2]

Two important factors have contributed to this rapid expansion of milk production. The first is that many farmers along the western borders of the concelho had been selling milk to the cooperative for some time preceeding the recent expansion. The other is that there has been during the period 1972-76 a substantial increase in the numbers of milking stations to collect and preserve milk. This latter is probably the most important aspect. Today there are 141 milking stations and 66 milking posts. Although the rapid expansion occurred during 1972-76, it appears that some farmers were already prepared for the change.

Let us consider what the production of milk entails for a small farmer. The plan for "reconversion" envisaged a trade-off between the specialization in milk production and that in wine production. In traditional farming, the grapes are grown around the fields, leaving the fields open for crops and pasture. For many reasons, the farmers see no need for this to be changed. To remove the walls that surround the fields would lead to erosion, questionable property boundaries, and remove a source of income and consumed product. The fragmentation of properties ensures that this system exists. Even the farmers with the biggest contiguous properties see no need for removing this valuable source of income. In short, farmers have not seen a trade-off between wine and milk production, but have seen milk production in addition to wine production.

The trade-off in production is more likely to come in terms of whether or not the former sells his corn, uses it for animal feed or simply maintains his land in permanent pasture. Corn, however, is not sufficient for feeding milk cattle. Whether corn is sold or used for feed, it is necessary to purchase processed animal feed. This, then, becomes a cash requirement for the maintenance of a producing cow. This cash requirement is substantially higher than that for the production of wine or corn, and purchases are required throughout the year, rather than on a seasonal basis. In terms of labor, the production of milk does not normally need more labor beyond what the family can provide on a daily basis.

The increased need for routine cash outlays and some reconsideration of cropping pattern are important determinants for the small farmer, but more important than these is the need for high quality dairy cattle. The traditional cattle do produce milk, in large quantities if not worked too hard pulling carts (they no longer pull plows), but they do not consistently produce the high fat content necessary for Grade "A" milk. The small farmer, in order to really participate in milk production for the market, must buy milk cattle, usually Friesians. These cows produce a higher quality milk and tend to consume less food than the traditional variety for the same quantity of production. For a small farmer this is a considerable expenditure, amounting to a little less than an average yearly farm family's cash income. A tractor, in comparison, would cost over three times this. To venture into milk production, for a small farmer, is to expose himself much more to the cash economy in a situation where in the 1960's 85% of production was for self-sufficiency.

There is an alternative, loans are available for expanding milk production. They are soft loans given by the bank and ensured by the Ministry of Agriculture. In order to receive a loan a farmer must first be inspected by the Extension service to see that he has the ability to improve his farm with reference to milk production. If he passes the inspection he may receive a loan within a month, unless it is for over 800,000.00 escudos (44,000.00 guilders) in which case it must be authorized by the Secretary of State for

Agriculture which takes about three months. The hitch is that the Extension service is substantially undermanned, and many farmers have never seen an extension officer. One renter with 7 hectares has been waiting for over a year for his inspection. It is suspected that only the larger farmers who are owners, actually have access to these loans. It is interesting to point out that some of the largest cattle farms are owned by returned emigrants. Not all returned emigrants have made such investments, some merely adapt to the normal subsistence level in mixed farming, relying upon their savings for cash needs. Probably this is largely determined by the amount of land that they can acquire. This phenomena, though, does lead one to believe that it may be easier to acquire the needed investment capital abroad than within the existing rural environment.

One method for minimizing the investment necessary to become a substantial cash farmer was suggested by the Association for the Reorganization of Agriculture (now de-funct), group farming. Group farming is essentially another name for a production cooperative in which property is owned individually, with production rationalized through the sharing of resources. Profits would be divided according to the contributions (both labor and material) of each member on a yearly basis. There are few cases in which this has actually occurred. Those cases which have occurred, according to several informants, have usually ended within a year or two with one member claiming that another is taking advantage of him. There is little economic or social motivation for group farming to become an important feature of agricultural production in this region in the near future. One suspects that the diversity of inequalities between neighbours is a major restricting factor. This leaves each individual farmer to fend for himself, depending upon the resources he can bring to bear on his farming activities.

It would appear that an average small farmer would have substantial difficulties entering the field of milk production as a specialization. The production of milk has always been a part of the mixed farming system. The traditional cattle, used for work and meat, provided milk as well. This milk was consumed, sold or

exchanged with neighbours. Most farmers have adapted to the new collection system, although some still engage in the petty trade of milk. Only a very few have become specialized producers with more than 2 or 3 producing cows. However, the dairymen believe that the expansion of milk production in this region will transform small farming into a more profitable business.

To this end the diary through the cooperative (CAB) has been building milking stations at the rate of 10-15 per year since 1972. Some farmers have even constructed their own, although the majority are owned by the CAB. Milking stations are necessary because they guarantee the purity of the milk. The cows are brought in to the station morning and evening, where they are machine milked and the milk piped directly into a refrigerated tank. Samples are taken every other day, but the milk is only graded every two weeks by the dairy inspectors. This grading determines the price each producer will receive. Grade "A" milk has at least a 2.9% fat content and is free of bacteria. Grade "B" milk has a 2.8% fat content or less and is relatively free of bacteria. Only Grade "A" milk may be sold for direct consumption. Grade "B" milk is for butter and cheese. There is also a Grade "C" milk, which is of the lowest quality acceptable, however, this was abolished for a period after the Revolution of April 1974 and is now reinstituted. The price for Grade "A" milk begins at 8.35 escudos per litre and increases by .05 escudos for every .1% of fat content above 2.9%. Grade "B" milk begins at 6.5 escudos per litre and decreases .05 escudos for every .1% drop in fat content. However, the dairy is guaranteeing at least 8.35 escudos for all milk collected at CAB milking stations, regardless of fat content. This is not the case for those who have access only to a milk post. In this case each producer is paid according to the grade the milk receives on the biweekly basis. It is interesting that it is legal for the milk post to sell milk directly to consumers, but not for the milking stations. The consumer price is fixed at 9.5 escudos per litre, however, if there is such a local market it is usually filled by the local farmers selling directly for 10 escudos per litre.

There is much discussion on the issues of milking stations, posts and Grade "C" milk. Currently there is a tremendous advantage for those who live in the area of milking stations. Milking stations are labor saving for the farmer since he doesn't have to milk the cow himself. Even a farmer with poor cows will receive the guaranteed minimum price for his milk or better depending on the quality of milk produced by his neighbours, if he has access to a milking station. This situation is being remedied by the increasing numbers of milking stations. However, the placement of milking stations is not always on the basis of need. We found one farmer, an ex-emigrant, who had built his own milking station and was maintaining this service for his neighbours in conjunction with the dairy. The CAB had then decided to build a milking station on one of his neighbours' property. Two milking stations in the same locality when there is a scarcity in other areas does not appear to be a rational distribution of resources. The other issue of Grade "C" milk appears to many poorer farmers to be a method to obtain lower quality milk for butter and cheese at a very low price. Grade "C" milk is probably the most common quality of milk involved in the petty trade of milk in those areas where milking stations are not available.

Although there are some 3,500-4,000 milk producers in Barcelos, 65% of all local farmers according to CAB, it does not appear that the benefits are proportionally distributed. Those who have been profitable cash crop farmers with investment capital available, may enhance their position, but the majority, who are primarily subsistence farmers, have little opportunity to improve their situation. In the following chapter we will look at the sample population and test whether these propositions are true at the individual farm level.

CHAPTER 11

SMALL FARMER PRODUCTION COMPOSITION

In this chapter we will analyze which small farmers are entering the various areas of production for cash (milk, wine, livestock); with what levels of production; and how they organize that production.

Milk Production

This sample produces an average total of 4,927 litres of Grade "A" milk per week, as determined by the Cooperative Union grading/pricing practices (see Chapter 10). Sixty-four percent (35) of the respondents actually contribute to this production for sale, although the bulk of this production is provided by a relatively few farmers. Forty-five percent of those that do not produce Grade "A" milk are Liga members and fifty-three percent of those in the lowest rural assets grouping do not produce Grade "A" milk. For those that do produce it, the average is 141 litres per week.

The farmers most involved in milk production are the CAB members, 87% of whom produce milk, as compared to 40% of Liga members and 65% of non-members. Although less than half of the Liga members produce milk, those that do, appear to produce at relatively equivalent levels to the non-members (see Table 11.1). Table 11.2 constructs the ratio of percent of total production over the percent of those who produce for each group. This ratio demonstrates that the small number of CAB members (37%) who actually produce milk, control 59% of total production, more than double the production of each of the other two groups. We can see the relevance of considering the CAB as a milk cooperative, but it leaves the question open as to why other producers are not members.

Considering that organizational membership or non-membership is not the only way to control for variance in a population, I will present this same format of analysis based on the rural assets groupings as described in the previous section.

Table 11.1 Milk Production by Organizational Membership

	Number of Respondents	Total Production (litres)	Overall Average (litres)	Overall median (litres)	Members who produce "A" milk	Members who produce a % of group	Average of those who produce
All	55	4927	90	67	35	64	141
CAB	15	2884	192	140	13	87	222
Liga	15	570	38	0	6	40	95
Non-members	26	1678	65	56	17	65	99

Table 11.2 Concentration of Milk Production by Organizational Membership

	% of total production	% of those who produce	Ratio of % total production over % of who produce
CAB	59	37	1.6
Liga	12	17	.7
Non-members	34	49	.7

As might have been expected we find that Group 1, with the highest level of rural assets produces more milk than any other group, and that overall average production, as well as the number who produce as a percent of group size decreases with the rural assets level of the groupings. (See Table 11.3) An interesting phenomenon is seen when the average production for those who produce milk is considered by group. Group 1 has by far the highest average production with 337 litres. However, the average for Group 3, 118 litres, is higher than the average for Group 2, 98 litres. Group 4, with less than half producing milk, has an average of 80 litres.

Table 11.3 Milk Production by Rural Assets Groupings

	Number of Cases	Total Production (litres)	Overall Average (litres)	Overall Median (litres)	Number who produce milk A	Number who produce a % of group	Averages of those who produce
All	55	4927	90	67	35	64	141
Group 1	6	2020	337	243	6	100	337
Group 2	13	975	75	70	10	77	98
Group 3	19	1296	68	62	11	58	118
Group 4	17	636	37	0	8	47	80

Table 11.4 constructs the same ratio as Table 11.2 (above). This ratio shows that Group 1 triples the production of Groups 2 and 3 and quadriples that of Group 4. This again shows how a small number of farmers (17%) at the very top are by far out-producing other farmers with control over 41% of total production.

Table 11.4 Concentration of Milk Production by Rural Assets Groupings

	% of total production	% of those who produce	Ratio of % total production over % of who produce
Group 1	41	17	2.4
Group 2	20	29	.7
Group 3	26	31	.8
Group 4	13	23	.6

What we see here conclusively demonstrates that Grade "A" milk production is the domain of the richest farmers, who, through their control of the CAB, are consolidating their position, enhanced by the guaranteed price. The relative level of production of Group 2 suggests that the investments in high quality cattle are either too much for them to make or not so profitable compared to the levels of production they can attain with a different resource distribution. We would expect that Group 3's higher rate of milk production is due then, to a concentration of resources on milk production.

Wine Production

In the case of wine production, the sample produced 143.8 thousand litres for sale this past year (1977). Fifty-six percent of the respondents were involved, although as with the case of milk production, we shall see that this production, too, is concentrated in a few farmers. It must be remembered that wine production, the traditioanl cash crop, is controlled almost entirely by land-owners.

The average litres of wine sold was 2.6 thousand, however, the median was only 500 litres. The price of wine varies, according to quality, between 8-12 escudos per litre. In rare cases, it is sometimes more.

As with milk, the production of wine is predominantly in the hands of CAB members, 80% of whom produce wine for sale, compared to 54% for non-members and 40% for liga members. In terms of average litres sold, the CAB members more than quadriple the production of non-members, and the liga production barely exceeds the overall median. (See Table 11.5).

Table 11.5 Wine Production by Organizational Membership
(all litres in thousands)

	No. of Cases	Litres wine sold	Average litres wine sold	Median	No. who sell wine	No. as % of group	Average of those who sell
All	55	143.8	2.6	.5	31	56	4.6
CAB	15	98.0	6.5	4.0	12	80	8.2
Liga	15	11.0	.7	0.0	6	40	1.8
Non-members	26	39.8	1.5	.3	14	54	2.8

Table 11.6 constructs a concentration ratio of percent of total production over percent of those who produce wine for sale. In this ratio, we see an even wider disparity between CAB members production and that of the other two groups, than we found for milk production. CAB members, consisting of 39% of the population of wine sellers, control 68% of the production.

Table 11.6 Concentration of Wine Production by Organizational Membership

	% of total sales	% of sellers	Ratio sales/sellers
CAB	68	39	1.7
Liga	8	19	.4
Non-members	28	45	.6

We will continue this analysis by turning to Table 11.7 where the sample is divided by rural assets groupings. What is seen here overwhelmingly demonstrates the relationship between rural assets and ability to produce large quantities of wine. The average and median of litres of wine sold descends quickly from Group 1 through Group 4, even when one considers the average for only those who produce.

Table 11.7 Wine Production by Rural Assets Groupings
(all litres in thousands)

	No. of Cases	Litres wine sold Total	Average litres wine sold	Median	No. who sell wine	No. as % of group	Average of those who sell
All	55	143.8	2.6	.5	31	56	4.6
Group 1	6	83.3	13.9	6.6	6	100	13.9
Group 2	13	34.2	2.6	2.9	10	77	3.4
Group 3	19	21.4	1.1	.3	11	58	1.9
Group 4	17	4.9	.3	0.0	4	24	1.2

Table 11.8 provides our concentration ratio showing how the top rural assets grouping, consisting of 19% of the sellers, controls 58% of the market. Wine production is clearly in the hands of the richest farmers.

Table 11.8 Concentration of Wine Production by Rural Assets Groupings

	% of total sales	% of sellers	Ratio sales/sellers
Group 1	58	19	3.1
Group 2	24	32	.8
Group 3	15	36	.4
Group 4	3	13	.2

Livestock Production

Turning to the production of livestock, we find an area where all farmers are involved. This is an area of production where poorer farmers might participate more profitably, and it is the case that some do. Since within the parameters of this study it was not possible to measure the turnover of livestock in terms of weight or age, I have used net income from livestock sales as the indicator of the production. It should be pointed out that a liga member, found in Group 4 of our rural assets index, is primarily a cattle negociant. His net income from livestock sales accounts for almost a quarter of the total net income for the entire sample, which is 1,128.4 contos (thousand escudos).

The farmers most involved in livestock sales are those from the Liga, followed closely by the CAB. Table 11.9 shows the average and median net sales. The Liga members average is nearly quadriple that of non-members, however, when the median is considered we find that it is barely higher than the non-members and almost doubled by the CAB members, signifying the effect of the cattle negociant. In this case, however, it is important to note that the CAB members do not rank so high as in the case of milk and wine.

Table 11.9 Livestock Production by Organizational Membership
(all sales in thousand escudos)

	No. of Cases	Net Sales	Average Net sales	Median
All	55	1128.4	20.5	10.8
CAB	15	432.8	28.9	19.5
Liga	15	495.8	33.1	10.5
Non-members	26	216.8	8.3	9.7

Table 11.10 gives us the ratio of net sales to sellers. The CAB and Liga members have three and four times, respectively, the net sales of non-members. Although the sales of livestock are not predominantly in the hands of the CAB members, they still have market influence even in this field.

Table 11.10 Concentration of Livestock Production by Organizational Membership

	% total net sales	% of sellers	Ratio sales/sellers
CAB	38	27	1.4
Liga	44	27	1.6
Non-members	19	47	.4

When considering livestock sales in terms of the rural assets groupings, we find that Group 4 sales double that of Group 1 and that the sales of Group 2 is doubled by the sales of Group 3, at a lower level. However, when average sales are considered, Group 1 exceeds Group 4. Taken in terms of the ratio in Table 11.12 we see that Groups 1 and 4 far exceed the sales of Groups 2 and 3. Group 3 is higher than Group 2. Although this is a marginal difference, it appears that this helps to demonstrate that livestock sales are very important for poorer farmers.

Table 11.11 Livestock Production by Rural Assets Groupings (all sales in thousand escudos)

	No. of cases	Net Sales	Average net sales	Median
All	55	1128.4	20.5	10.8
Group 1	6	276.7	46.1	29.0
Group 2	13	93.9	7.2	5.7
Group 3	19	196.9	10.4	10.8
Group 4	17	560.9	33.0	10.0

Table 11.12 Concentration of Livestock Production by Rural Assets Groupings

	% Total net sales	% of sellers	Ratio sales/sellers
Group 1	24	11	2.2
Group 2	8	24	.3
Group 3	17	34	.5
Group 4	50	31	1.6

Summary

The preceding section has shown us who is involved with what production at what levels. We have seen that the primary products of milk, wine and livestock are not products in which a farmer will specialize in one to the exclusion of the others. They are interrelated and complementary, as exemplified by the CAB and Group 1 of the rural assets index. However, the ability to excel in all three is highly dependent upon rural assets.

Wine is the product most closely associated with rural assets. With the introduction of milk production, some of the poorer farmers have been able to increase their marketable surplus in conjunction with their livestock sales. The marketed surplus of the region, however, is still dominated by the richest farmers. There is a question in regard to the poorer farmers, whether they can use livestock sales to improve their position.

Let us look at Table 11.13 on net farm income distribution for this population. From this table we see that livestock sales do not contribute enough to the poorer farmers to improve their relative position to the richer. The ratios at the end of the table demonstrate that the richest group more than triples that of the group closest to them.

Table 11.13 Net Farm Income by Organizational Membership and Rural Assets Groupings (income in thousand escudos)

	No. of Cases	Total net farm income in contos	Average net farm income in contos	Group net income as % of total	No. in group as % of sample	Ratio
All	55	3,359.8	61.1			
Group 1	6	1,225.6	204.3	36	11	3.3
Group 2	13	761.5	58.6	23	24	1.0
Group 3	15	814.1	42.8	24	35	.7
Group 4	17	558.6	32.9	17	31	.5
CAB	15	1,863.0	124.2	55	27	2.0
Liga	15	542.3	36.2	16	27	.6
Non-members	26	1,072.9	41.3	32	47	.7

Admittedly it is difficult to arrive at definite conclusions from this type of analysis, but it does provide us with more insight into what these farmers do to maximize their cash incomes. Three points seem to be quite clear: (1) the richest farmers, predominantly within the CAB are profitably concentrating on milk A production in conjunction with livestock sales while still controlling the wine market; (2) milk does not appear to be considered so profitable for middle-sized farmers, except when resources are such that a concentration of them may be the only way to secure a profitable cash income; (3) although the Liga and the group of poorer farmers are attempting to take advantage of the milk A/livestock opportunities, their poorer position probably precludes the majority from concentrating enough resources on high quality milk cattle to raise themselves up.

Conclusion

In light of this study we can see that little has been improved for the small farmers of Barcelos. They still remain dependent upon the richest farmers' interests, as represented by the CAB, and their economic dependence has probably increased.

Some changes have been made in terms of cash crop production. During the 1960's, interest in agricultural production in this region appeared minimal. Wine and meat provided the primary source of cash income on the small fragmented holdings and many left the area in search of other employment. The richer farmers produced wine and dealt in cattle. The poorer farmers could only profitably deal in cattle. Milk had been simply an adjunct to the production of livestock. Today this has changed. The new product of milk has been introduced and has increased the profitability of livestock for the richer farmers. Now, the richer farmers can produce three basic cash products, while the poorer are still left with livestock.

In terms of improvements in interest representation the CAB has done little more than to adapt to the needs of the richest farmers, which it had already served as the Gremio. The Liga, however, has provided an alternative for the interest promotion of small farmers. Improvements in tenants rights have been made and these do ameliorate some of the problems of the poorest farmers. Although one wonders if these improvements can be sustained given the present political climate in Portugal.

The changes resulting from the Revolution of the 25th April 1974 have affected this rural population. The form has been changed, but not the content. Political democracy has been achieved, but this matters little if the small farmer does not have the economic power to take advantage of that freedom.

APPENDICES

APPENDIX A

RURAL ASSETS INDEX

The rural assets index was designed as a system to differentiate and stratify the sample. The point of this exercise was to demonstrate that although almost all small farmers in this region live in relatively miserable conditions, there is a substantial differentiation within this group. The results of this differentiation have been demonstrated in the text.

Several attempts were made in this endeavor. In all attempts the three indicators used in the present rural assets index, hectares of woods owned, hectares of farmland owned, and machinery were included. These other attempts lead to some differences in distribution at the lower end of the index, but little at the top. Other indicators attempted were: level of schooling; status (car ownership, landlord status, and full or part time farmer); percent of wine crop sold; and net non-family labor used. Of these four indicators, level of schooling and status had very low correlation coefficients in relation to the three primary indicators. Status proved difficult to quantify and so was immediately thrown out. Level of schooling seemed to demonstrate little since none of the sample had gone beyond completion of primary schooling. In fact, it appeared to have much more to do with attitudes than potentials. The percent of wine sold correlated strongly with the primary indicators, but on reflection seemed to be highly dependent on the ownership of farmland. Net non-family farm labor used, as described in the text was simply impossible to adequately quantify given the data I had.

Two methods were attempted in formulating the index. An ordinal ranking by indicators was tried, but it was abandoned because it was felt that it did not fully draw out the actual differences within each set of indicators. The method finally chosen for the index was that of standardization based on Z-scores. This method drew out the relative differences within each indicator and allowed us to see immediately the relative position of a respondent with reference to the mean. An equal weight for each indicator was assumed and the standardized scores were added for the total raw score. A re-standardization allowed us to see more clearly the relative distribution of scores presented in the text.

The decision to divide the final scores into groups was based first on the necessity to segregate the extremes. Since this left quite a large group in the middle whose own extremes represented very different levels, this group was divided at the mean. This decision is supported by the results found in Chapter 11 and Appendix B.

The equation for standardizing the indicators and the index is as follows:

$$\frac{X_i - \bar{X}}{s} = Z \text{ (the standardized score for } X_i).$$

X_i = individual raw score(standardized score)

$\bar{X}$ = mean of raw scores (standardized scores)

s = standard deviation of raw scores (standardized score)

APPENDIX B

PRODUCTION RELATIONSHIPS: A TENTATIVE STUDY

In this Appendix I will attempt to explain about how these small farmers organize their production through the use of correlation diagrams. This analysis must be qualified as being rather tentative, dependent as it is upon linear correlations and small numbers of cases. Nevertheless, I hope to find it suggestive of what actually occurs at the farm level for our different groupings. I shall present graphic representations of correlation matrixes. In this way we may see patterns which will help us to better understand what the farming process consists of, and how we may enhance our previous conclusions.

The indicators included in these patterns are: (1) litres of Grade "A" milk produced for sale, averaged over the past year; (2) mandays of hired labor over the past year; (3) useage of exchanged labor (coded: 2 for exclusively exchanged labor, 1 for mixed exchanged and hired labor, and 0 for none); (3) percent of crops sold for the past year; (5) net income from livestock sales; (6) the score for the rural assets index. The correlations found in the patterns are graded by strength, denoted by the thickness of line, and by direction, denoted by color.

Looking at the overall pattern in Figure B-1, we find that the indicator with the strongest correlation is between milk A and the score for the rural assets index, thereby confirming our belief that it is necessary to have substantial rural assets in order to produce large quantities of Grade "A" milk. At the same time it does not appear so important in regard to the sale of crops. The other correlations with any particular strength are those between hired labor and milk A and between hired labor and rural assets. The capacity to hire labor is probably dependent upon rural assets. It is interesting to note that exchanged labor is the weakest explainer in this pattern, although it does come up positive in relation to crops sold.

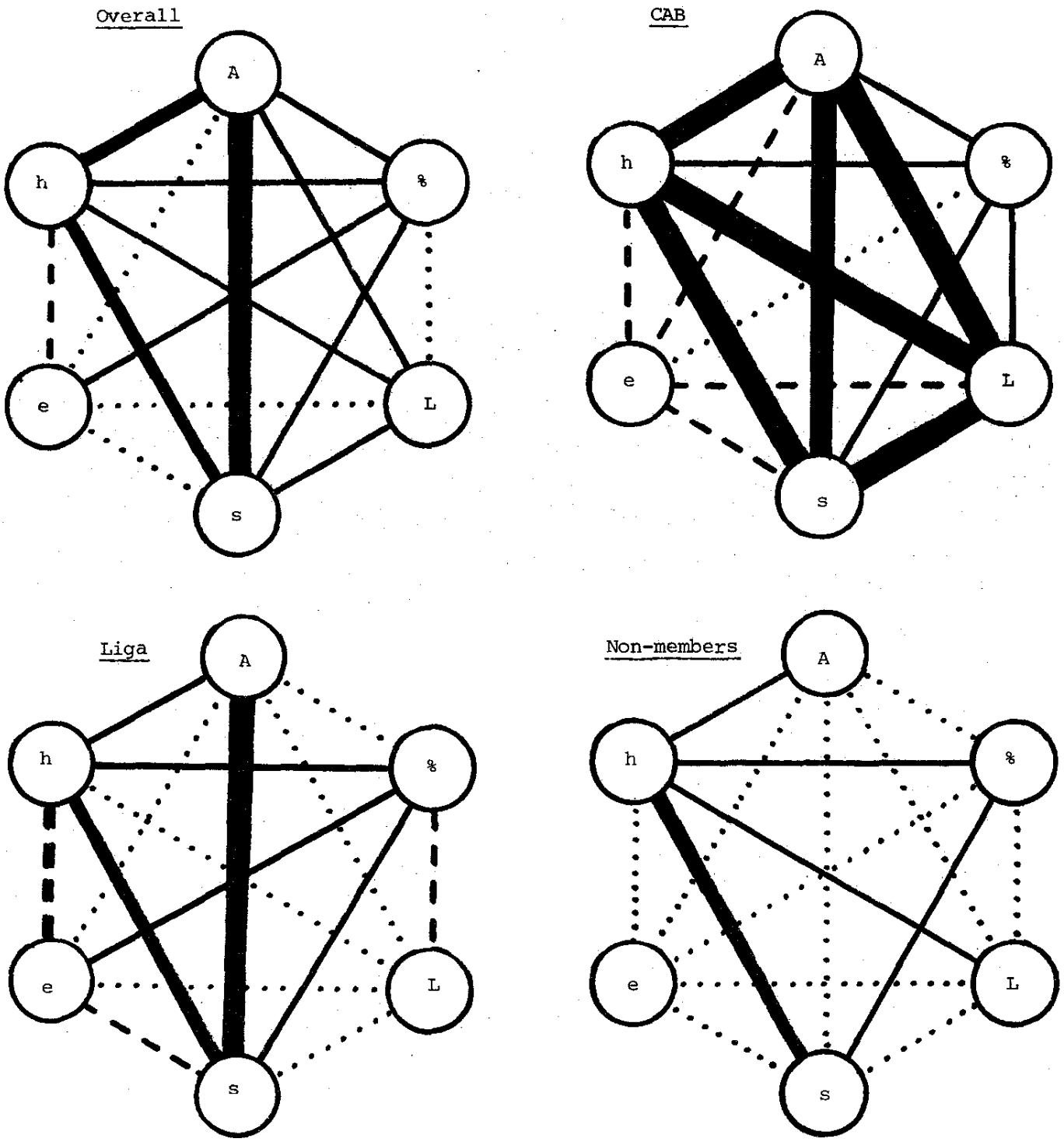
Turning to the CAB members, we find the same general pattern as the overall pattern, but it is stronger, with the relationships

Figure B-1 Production Patterns: Overall and by Organizational Membership

A = Milk A (litres)
h = hired labor (mandays)
% = percent of crops sold
e = exchange of labor
s = score (rural assets)
L = Livestock

Code for correlation strength

R >.706
.707 > R >.446
.447 > R >.223
.224 > R >-.224
-.223 > R >-.447
-.446 > R >-.707



between hired labor and livestock interlocking with the milk A-rural assets axis. The percent of crops sold does not show a substantial change thereby signifying that the milk/livestock functions are more important to the richest farmers. It appears that exchanged labor is not so important for farmers in this group.

The liga pattern most closely resembles that of the overall pattern, especially with reference to rural assets and milk A. Hired labor in this case is also somewhat dependent on rural assets, but is not associated with milk production so strongly. It is inversely proportional to exchanged labor which also has no special relationship to milk production. Exchanged labor for this group appears to have some relationship to crops sold. It is likely that in this group there is some trade off between crops sold and milk production, although many consume their entire crop production or use it to pay their rents. The inverse relationship between crops sold and livestock sales suggests that livestock is a more important source of cash, especially since it is not included in share-cropping agreements and does not involve the same level of investment as high quality milk cattle.

The pattern for the non-members diverges sharply from the previous patterns studied. In the first place, there appears to be no relationship between rural assets and milk A. The strongest relationship is that between hired labor and rural assets. Hired labor in fact, is the greatest explainer throughout the pattern. The concentration of production for sale in this group would appear to be in crops, such as wine, as opposed to milk or livestock. To better understand what is happening in this group we must look to the rural assets groupings, especially Groups 2 and 3 where the non-members predominate.

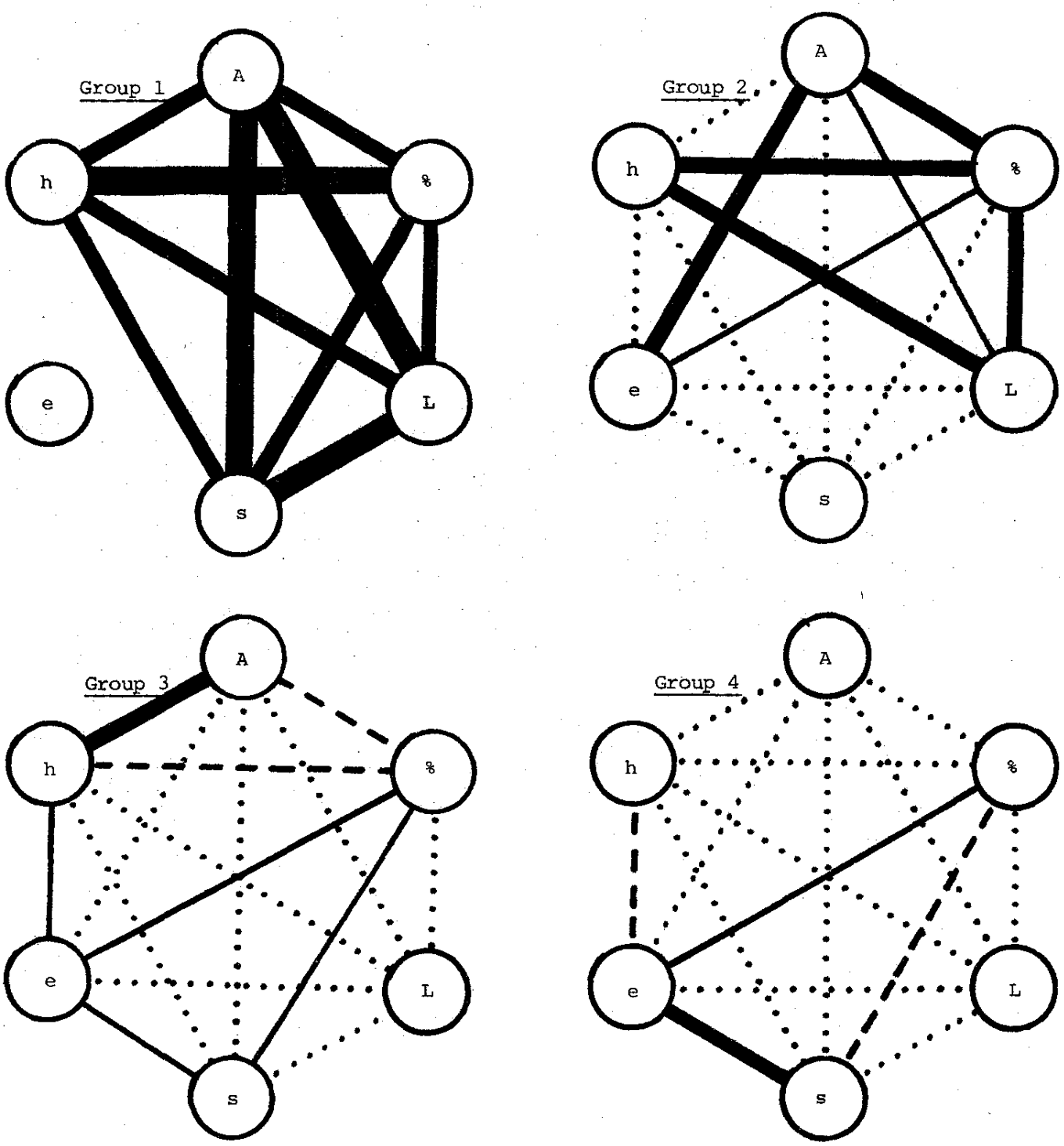
Following our format of analysis we now turn to figure B-2 where a graphic layout of the correlation patterns is presented for the rural assets groupings. Looking at the pattern for Group 1 we find what might be considered the pattern expected from "modern" farmers anywhere in the world. As with the overall pattern, one of the strongest relationships is that between milk and rural

Figure B-2 Production Patterns by Rural Assets Groupings

A = Milk A (litros)
h = hired labor (mandays)
% = percent of crops sold
e = exchange of labor
s = score (rural assets)
L = Livestock

Code for correlation strength

R > .706
.707 > R > .446
.447 > R > .223
.224 > R >-.224
-.223 > R >-.447
-.446 > R >-.707



assets. LIvestock sales, too, have a strong relationship with rural assets and milk A, suggesting again that the ownership of cattle is doubly profitable for the richest farmers. The last strong relationship is between hired labor and crops sold. None of these farmers use exchanged labor. The association of hired labor to milk may be weaker than that of hired labor to crops sold because of the less labor-intensive production of milk compared with crops.

The consistency of the patterns changes substantially, however, when we consider Groups 2, 3, and 4. There appears to be no relationship in these groups between milk A and rural assets. It may not be relevant to consider rural assets within rural assets groupings as an explainer, but it has been left in, with interesting results in Group 4. It appears that milk A is not relevant to this group, however, the ability to exchange labor increases with rural assets, although it does not necessarily increase the ability to sell crops.

Not only are the patterns of Groups 2 and 3 divergent from all other patterns but they differ from each other as well. In Group 2 we find that there is a strong relationship between milk A and crops sold. In fact, crops sold is the strongest explainer. What is interesting is that within this group exchanged labor is positively correlated with milk production, probably meaning that these farmers who produce milk A are doing so without using their cash resources to hire labor.

Hired labor is more related to crops sold, whereas for Group 3 the strongest relationship is between hired labor and milk production. At both of these levels of rural assets, it appears that there is a trade off between milk A and crops sold. In this sense it appears that those who specialize in milk production do so by not fully developing their other resources as suggested by Group 3. On the other hand, farmers usually found at the rural assets level of Group 2 are not in a process of specialization or concentration of resources, but maintaining the traditional system of mixed farming.

BIBLIOGRAPHY

Adega Cooperativa de Barcelos, *Relatorio e Contas* : 1975, 1974, 1973. Imprensa Social, Porto.

A Terra (newspaper), *A Liga e o Sindicato de Agricultor*, Cadernos da Terra, Porto, 1977.

--------, *Manuel do Rendeiro*, Cadernos da Terra, Porto, 1976.

Banco Fomento Nacional, *Estructura e Crescimento Economico do Distrito de Braga*, Lisboa, 1974.

Baytelman, David, 'The Agricultural Sector in Portugal', draft, 1977.

Berger, Suzanne, *Peasants against Politics*, Harvard University Press, 1974.

Carter, Ian, 'Social Differentiation in the Aberdeenshire Peasantry 1696-1870', in *Journal of Peasant Studies*, Vol. 5, No. 1, October, 1977.

Cutileiro, Jose, *A Portuguese Rural Society*, Oxford, Clarendon Press, 1971.

Departamento Central de Planeamento, *Portuguese Economic Situation*, Lisboa, 1976.

Evangelista, Joao, *Um Seculo de Populacao Portuguesa (1864-1960)*, Publicoes do Centro de Estudos Demograficos, 1971, INE, Lisboa.

Faye, Jean Pierre (ed.), *Portugal: The Revolution in the Labyrinth*, Spokesman Books, Nottingham, 1976.

Ferreira Mendes, Jose Luis, *Regional Planning for Balanced Social and Economic Development: A Portuguese Case Study*, Ph.D. dissertation, Wageningen, 1974.

de Figueiredo, Antonio, *Portugal: Fifty Years of Dictatorship*, Penguin Books, London, 1975.

Francis, A.D., *The Methuens and Portugal 1691-1708*, Cambridge, 1966.

Franklin, S. Harvey, *Rural Societies*, Macmillan, London, 1971.

----------, 'The Worker Peasant in Europe' in *Peasants and Peasant Societies*, ed. Teodor Shanin, Penguin, 1971.

de Freitas, Eduardo, J. Ferreira de Almeida and M. Villaverde Cabral, *Modalidades de Penetracao do Capitalismo na Agricultura 1950-70*, Editorial Presenca, Lisboa, 1976.

Galeski, Boguslaw, 'Sociological Problems of the Occupation of Farmers' in *Peasants and Peasant Societies*, ed. Teodor Shanin, Penguin, 1971.

Gaspar, Jorge, and Nuno Vitorino, *As Eleicoes de 25 de Abril*, Livros Horizonte, Lisboa, 1976.

Hinderink, Jan and Mubeccel B. Kiray, *Social Stratification as an Obstacle to Development: A Study of Four Turkish Villages*, Praeger Publishers, New York, 1970.

Institute Nacional de Estatisticas (INE), *Inquerito as Exploracoes do Continente* 1954 and 1968, Lisboa.

-------, *Estatisticas Agricolas*, 1972, 1973, 1974, 1975, and 1976, Lisboa.

-------, *Anuario Estatisticos*, 1975 and 1968, Lisboa.

-------, *Estatisticas Demograficas*, 1975, Lisboa.

Livermore, H.V., *A History of Portugal*, University Press, Cambridge, 1947.

Mailer, Phil, *Portugal: The Impossible Revolution*, Solidarity, London, 1977.

Maxwell, Kenneth R., *Conflicts and Conspiracies: Brazil and Portugal 1750-1808*, University Press, Cambridge, 1973.

Monteiro Alves, Antonio, *O Mercado do Vinho em Portugal: analise econometrica*, Fundacao Calouste Gulbenkian, Lisboa, 1965.

Novais, Rios, *Divino Salvador do Campo*, Companhia Editora do Minho, Barcelos, 1951.

Oliveira Marquez, A.H., *History of Portugal*, Volume 1, Columbia, New York, 1972.

Robinson, R.A.H., 'The Catholic Revival in Portugal: 1900-1930', in *Journal of Contemporary History*, Volume 12, No. 2, April 1977.

Rural Development Participants, 'Fieldtrip Report: Portugal', ISS, The Hague, 1977.

Rutledge, Ian, 'Land Reform and the Portuguese Revolution' in *The Journal of Peasant Studies*, Vol 5, No. 1, October, 1977.

Sergio, Antonio, *Breve Interpretacao da Historia de Portugal*, Livraria sa da Costa Editora, Lisboa, 1972.

Sideri, S., *Trade and Power*, Universitaire Pers Rotterdam, 1970.

da Silva, Alarcao, and Lopes Cardoso, *A Regiao o oeste da Serra dos Candeiros*, Fundacao Calouste Gulbenkian, Lisboa , 1971.

da Silva Lourenco, Joaquim, and Nono Siqueira de Carvalho, *Participacao dos Associados na Gestao de Cooperativas Agricolas*, Fundacao Calouste Gulbenkian, Lisboa , 1974.

Silverman, S. 'Agricultural Organization, Social Structure and Values in Italy: Amoral Familism Reconsidered', in *American Anthropologist*, Volume 70, 1968.

Warner, W. Keith, and Wm. D. Hetterman, 'The Benefit-Participation Contingency in Voluntary Organizations', in *Rural Sociology*, Vol. 32, June, 1967.

Wolf, Eric, *Peasants*, Prentice-Hall, Inc., New Jersey, 1966.