

December 1976

U.S. ISSN 0084-0793

LTC No. 110

THE LAND TENURE CENTER
310 King Hall
University of Wisconsin-Madison
Madison, Wisconsin 53706

LAND TENURE CENTER
Author File

THE AGRICULTURAL LADDER IN A BRAZILIAN COMMUNITY*

by

John Steele and Don Kanel**

*Based on the senior author's Ph.D. Thesis, "Tenure Processes in a Community in Minas Gerais, Brazil" (Univ. of Wis., 1968); an earlier version of this paper was presented at the Fourth World Congress for Rural Sociology, Torun, Poland, 9-13 August 1976.

**Economist, Foreign Development Division, Economic Research Service, USDA, and Professor, Department of Agricultural Economics and the Land Tenure Center, University of Wisconsin-Madison, respectively.

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

100-100000-100000
100-100000-100000
100-100000-100000
100-100000-100000

100-100000-100000
100-100000-100000

100-100000-100000

100-100000-100000

100-100000-100000
100-100000-100000
100-100000-100000
100-100000-100000

100-100000-100000
100-100000-100000
100-100000-100000
100-100000-100000

100-100000-100000
100-100000-100000
100-100000-100000
100-100000-100000

THE AGRICULTURAL LADDER IN A BRAZILIAN COMMUNITY*

by

John Steele and Don Kanel**

The concept of the agricultural tenure ladder was developed for the purpose of studying tenure processes in the agriculture of the United States.¹ The agricultural ladder visualizes the life cycle of a farmer as being made up of successive "rungs" of a ladder: unpaid family worker, hired worker, tenant, owner-operator, and landlord. During their lifetimes farmers pass through one or more of the rungs of the ladder.

This study was an attempt to find out if an agricultural ladder pattern exists in a Brazilian minifundio community. This indeed proved to be the case. In addition, we were able to distinguish differences in the agricultural ladders used by three groups of farm people: sons of larger landowners, sons of smaller landowners, and sons of landless parents.

*Based on the senior author's Ph.D. Thesis, "Tenure Processes in a Community in Minas Gerais, Brazil" (Univ. of Wis., 1968), an earlier version of this paper was presented at the Fourth World Congress for Rural Sociology, Torun, Poland, 9-13 August 1976.

**Economist, Foreign Development Division, Economic Research Service, USDA, and Professor, Department of Agricultural Economics and the Land Tenure Center, University of Wisconsin-Madison, respectively.

The authors wish to thank John W. Bennett, Peter Dorner, and Philip M. Raup for comments on an earlier draft of this paper.

1. This concept was first introduced in an article by W. J. Spillman, "The Agricultural Ladder," American Economic Review 9, Supplement no. 1 (March 1919): 29-38.

I.

The agricultural ladder is symptomatic of the processes by which a younger generation succeeds the preceding generation in the performance of farm work and in the ownership of land. Different family structures result in different ladders. For example, in an egalitarian community of landowning extended families only the ownership rung of the agricultural ladder would exist. Ownership would pass to the younger generation by inheritance. The lifetime of a member of such an extended family would be made up successively of being an immature (nonworking) child, a working child, a working adult, and a nonworking old person. These transitions in work responsibilities would involve only intra-family relations.

An agricultural ladder with several rungs would appear when the transition in responsibilities between generations took the form of inter-family relations. To make this clear, consider again a hypothetical situation of an egalitarian peasant community of nuclear families in which young people become economically independent upon reaching maturity (say at 16 to 18 years of age) and in which the aged do not become economically dependent on their children. Consider also the capital requirements of farming: a hired worker does not have to provide capital of his own, a tenant needs to own at least some equipment, and a landowner needs to own land and equipment. In such a community, different rungs of the agricultural ladder mesh the needs of two generations of farm people. A young adult with no capital would work as a hired worker for a still-active farmer of declining physical ability; a young man who has accumulated equipment and livestock would rent land from a retired farmer, and the death of parents and further accumulation of capital would make possible acquisition of ownership by

inheritance and purchase. In a community of nuclear families these working, renting, and land-purchasing transactions could occur between fathers and sons as well as between more distant relatives or between unrelated individuals.

Variations on the above pattern of the agricultural ladder would emerge where there was structural differentiation of the rural community or in the presence of temporal changes (population growth, migration, technical change in agriculture affecting average size of holdings, etc.). Structural differentiation of rural communities could include the coexistence and interaction of minifundia or family farms with (a) farms owned and rented out by investor landlords; (b) large commercial farms employing hired labor, permanent and/or seasonal; and (c) an upper class landed elite that hired labor and/or rented out its holdings. All of these cases would imply a longer portion of the life cycle of minifundio farmers spent in the hired work and tenancy rungs of the ladder and would probably also imply that a percentage of sons of minifundio farmers never reach the ownership rung. Also the minifundio sector could be in stable equilibrium with the rest of rural society or could be contracting or expanding.

Increased pressure of population could result in decreased average size of holdings combined with continuation of the previous agricultural ladder or could result in a higher proportion of farm people not reaching the higher rungs of the ladder (increased structural differentiation). Decrease in population pressure would have opposite effects. In addition, there could be an interaction of structural and temporal changes.

II.

The data described in this study were collected in the município of Viçosa, state of Minas Gerais, Brazil, in 1966. The município of Viçosa is part of the Zona da Mata (The Forested Zone) located about 250 miles north of Rio de Janeiro and 180 miles southeast of Belo Horizonte, the capital of the state of Minas Gerais. The city of Viçosa is also the seat of the Rural University of Minas Gerais.

The agriculture of the area is largely based on corn, usually combined with beans, and sometimes also combined with rice, coffee, and sugarcane. This was an area of expansion of coffee production in the nineteenth century. However, in recent years there has been a gradual decline in coffee production as the better land was used up and production declined on the older coffee plantings. Sugarcane is the other commercial crop grown in the area. On the sample farms, coffee and sugarcane each occupied slightly over 10 percent of the cultivated area. The most important animal products were pigs and milk, accounting, respectively, for 23 and 14 percent of the gross agricultural income of the município in 1965-66.

The sample was drawn from a portion of the município about 3.75 by 4.75 miles in size. A list of all the owners and their size of holding was prepared with the assistance of local residents. From this list a stratified random sample was drawn using three size groups (0 to 8 hectares, 8.1 to 37 hectares, and 37.1 hectares and over); thirty owners were picked, ten from each stratum. The major nonowning tenure groups were sharecroppers and permanent and temporary agricultural workers. To obtain a list of the people in these three groups the thirty sample owners were asked for the names of their sharecroppers and permanent agricultural

workers and the last three temporary agricultural workers that they hired. From these names were drawn eleven sharecroppers, and ten each of permanent and temporary workers, giving, with the owners, a total sample of sixty-one respondents.

As indicated before, the study area was characterized by minifundio farming. The largest farm in the sample had 130 hectares of which 43 were cultivated--26.4 hectares by the owner with family labor and three permanent workers and the remaining 16.6 hectares by three sharecroppers. Of all the thirty owners, fifteen farmers used twenty-six sharecroppers and eleven permanent workers (ten had sharecroppers only, two had permanent workers only, and three had both sharecroppers and permanent workers); with two exceptions these farmers owned at least 15 hectares. Eleven of the owners, on the other hand, all with under 15 hectares, had to supplement their income from owned land by sharecropping or doing permanent or temporary work for others. Only four of the farms were family farms relying only on family labor and providing full employment for that labor on their own land; these four farms ranged from a 7-hectare farm owned by a young farmer to 104 hectares farmed by an older farmer together with his six sons and sons-in-law. All of the above three categories of owners cultivated about 3 hectares per man-year.

The six tenure categories in which the total sample of sixty-one respondents was divided refer to the principal tenure status of each respondent. It was very noticeable that small owners, sharecroppers, and both kinds of agricultural workers simultaneously held several tenure positions. Thus, of the ten small owners, seven were also temporary workers and four of the latter were also sharecroppers. Of the eleven sharecroppers, seven were also temporary workers, and two additional ones were permanent workers.

Of the ten temporary workers, seven were also sharecroppers. And of the ten permanent workers, six were also sharecroppers.

III.

The tenure history (agricultural ladder) of the sixty-one respondents proved to be a complex matter. Analysis of the data indicated that tenure status at the time of survey was not an important distinguishing characteristic because tenure status was related to age and the age of respondents varied widely. Most of the information presented below describes the tenure status of the respondents at various stages of their life cycle and the tenure status of the respondents' fathers and fathers-in-law. The information about the fathers (and fathers-in-law) was used to divide respondents into three groups: sons of larger landowners, sons of smaller landowners, and sons of nonowners; the agricultural ladder information was measured separately for each of these three groups.

Table 1 gives the reader information about the relation between tenure status of the respondents at time of survey and landownership by their fathers and fathers-in-law. With one exception the fourteen sons of nonowners were sharecroppers or hired workers. With three exceptions the sons of larger owners were themselves owners, though with wide variability in the size of their holdings. Of the sons of smaller owners, eight were themselves owners, while fifteen were sharecroppers or workers. As later tables will indicate, sharecropping and hired work tend to be transitional steps on the way to ownership for the sons of owners. Also ownership of land is acquired in a series of successive transactions (Table 6), so that younger respondents are likely to increase the size of their holding in the future.

Table 1
 Ownership of Land by Father and Father-in-Law and
 Principal Occupational-Tenure Status of 61 Respondents,
 Viçosa, Minas Gerais, Brazil, 1966

Principal Occupational-Tenure Status of Respondents	Number of Respondents Who Were Sons of:			Total
	Larger Owners ^a	Smaller Owners ^a	Nonowners	
Large owners 37.1 ha. and over	10	0	0	10
Medium owners 8.1-37.0 ha.	7	2	1	10
Small owners 0.1-8.0 ha.	4	6	0	10
Sharecroppers	1	6	4	11
Permanent agricultural workers	2	2	6	10
Temporary agricultural workers	0	7	3	10
All respondents	24	23	14	61

^aBased on average size of the holdings of the father and father-in-law; for unmarried respondents, father's size of holding was used. A holding of 27 hectares in the preceding generation was the dividing line between sons of larger and sons of smaller owners.

The data in Tables 2 through 5 are subclassified by the three categories of sons of larger owners, of smaller owners, and of nonowners. Tables 2 and 3 give the tenure history of these three groups at specified ages of the respondents (at 10, 20, 30, 40, 50, and 60 years of age). Table 4 compares the tenure status of respondents at marriage or age 30 with their tenure status at time of survey. And Table 5 separates younger and older respondents (since older respondents had longer time to progress along the tenure ladder) and compares the amount of land they owned to land owned by their fathers and fathers-in-law.

The tenure history of the respondents was classified into the following tenure categories:

- O -- Owners
- F₁ -- Helping at home, working for wages, or cultivating land (with or without giving a share of the crops as rent) of parents, grandparents, brother, sister, father-in-law, mother-in-law, brother-in-law, or sister-in-law
- F₂ -- The same as F₁ except for uncles, aunts, cousins, and other relatives
- S -- Sharecroppers for unrelated landowners
- W_p -- Permanent agricultural workers for unrelated landowners
- W_t -- Temporary agricultural workers for unrelated landowners
- N -- Nonfarm workers

The F₁ and F₂ categories were used to combine together all tenure relations between the respondent and members of his family because in some cases it was difficult to distinguish between tenure arrangements (for example, between a young man helping at home who was given occasional cash for his needs from a young man working for his father for a definite wage). In other cases family arrangements had no equivalents in the usual tenure relations between nonrelatives (for example, allowing someone to use family land with no payment in cash, in kind, or in labor service). Also, where the respondent had several simultaneous tenure arrangements with family members it was more difficult to determine which of them was a principal arrangement, in contrast to relations among nonrelatives where this was usually much clearer.

The agricultural ladders of the three groups--sons of larger owners, sons of smaller owners, and sons of nonowners--are presented in Tables 2 and 3 by indicating the tenure status of respondents at ten-year intervals from age 10 to age 60. Both tables need to be looked at together; Table 2

Table 2
Principal Occupational-Tenure Status at Ages Indicated
by Ownership Status of the Preceding Generation,
61 Respondents, Viçosa, Minas Gerais, Brazil, 1966

Ownership in Preceding Generation	Age	Occupational-Tenure of Respondents at Stated Ages									
		O %	F ₁ %	F ₂ %	S %	W _P %	W _t %	N %	Total % ^a	No.	
Mean Size of Father's and Father-in-Law's Holding	27.1 ha. and over	10		91.6			4.2	4.2	100.0	24	
		20	12.5	79.2				8.3	100.0	24	
		30	45.8	50.0				4.2	100.0	24	
		40	73.9	26.1					100.0	23	
		50	90.9	9.1					100.0	11	
		60	(7)							7	
		60									
	0.1-27.0 ha.	10		47.8	4.3		34.8	13.0	100.0	23	
		20		34.8	8.7	4.3	39.1	13.0	100.0	23	
		30	19.0	9.5	19.0	4.8	19.0	23.8	4.8	100.0	21
		40	29.4	5.9	11.8	5.9	17.6	23.5	5.9	100.0	17
		50	41.6	8.3		16.7	8.3	25.0		100.0	12
		60	(3)			(1)		(1)			5
		60									
	Nonowner	10		14.3			35.7	50.0	100.0	14	
		20		16.7			41.7	33.3	8.3	100.0	12
		30			10.0	20.0	30.0	10.0	30.0	100.0	10
		40				30.0	30.0	30.0	10.0	100.0	10
		50				(1)	(1)	(1)	(1)		4
		60	(1)				(1)	(1)			3
		60									
	All	10		57.4	1.6		23.0	18.0	100.0	61	
		20	5.1	49.2	3.4	1.7	23.7	15.2	1.7	100.0	59
		30	27.3	25.4	9.1	5.5	12.7	10.9	9.1	100.0	55
40		44.0	14.0	4.0	8.0	12.0	14.0	4.0	100.0	50	
50		55.6	7.4		11.1	7.4	14.8	3.7	100.0	27	
60		73.4			6.7	6.7	13.3		100.0	15	
60											

^a Percentages in individual columns may not add to 100 percent due to rounding.

Table 3

All Occupational-Tenure Positions Held at Ages Indicated by Ownership Status of the Preceding Generation, 61 Respondents, Viçosa, Minas Gerais, Brazil, 1966

Ownership in Preceding Generation	Occupational-Tenure of Respondents at Stated Ages									
	Age	O %	F ₁ %	F ₂ %	E %	W _o %	W _t %	N %	Total % No.	
Mean Size of Father's and Father-in-Law's Holding	27.1 ha. and over	10		95.8			8.3	8.3		112.4 24
		20	12.5	95.8			4.2	16.6	4.2	133.3 24
		30	45.8	70.8		4.2		16.6	12.5	149.9 24
		40	73.9	43.5	4.4	4.4		21.8	8.7	156.7 23
		50	90.9	9.1		9.1		9.1	9.1	127.3 11
		60	(7)					(1)		7
Mean Size of Father's and Father-in-Law's Holding	0.1-27.0 ha.	10		52.2	4.3		34.8	21.8	4.3	117.4 23
		20	4.3	39.1	8.7	26.1	43.5	17.4	4.3	143.4 23
		30	28.6	33.3	23.8	28.6	28.6	38.1	14.3	195.3 21
		40	52.9	23.5	17.6	41.2	23.5	64.8	11.8	235.3 17
		50	66.7	16.6	16.6	50.0	8.3	83.3	8.3	250.0 12
		60	(4)			(4)	(1)	(3)	(1)	5
Mean Size of Father's and Father-in-Law's Holding	Nonowner	10		28.6			42.8	50.0		121.4 14
		20		33.3		25.0	50.0	33.3	8.3	149.9 12
		30		10.0	10.0	40.0	40.0	20.0	30.0	150.0 10
		40		10.0	10.0	70.0	50.0	40.0	10.0	190.0 10
		50				(3)	(2)	(1)	(1)	4
		60	(1)			(2)	(1)	(1)		3
Mean Size of Father's and Father-in-Law's Holding	ALL	10		64.0	1.6		26.2	22.9	1.6	116.3 61
		20	6.8	61.0	3.4	15.3	28.8	20.4	5.1	140.8 59
		30	30.9	45.4	10.9	20.0	18.2	25.4	16.4	167.2 55
		40	52.0	30.0	10.0	30.0	18.0	40.0	10.0	190.0 50
		50	66.7	11.1	7.4	37.0	11.1	44.4	11.1	188.8 27
		60	80.0			40.0	13.3	33.3	6.7	173.3 15

indicates the principal occupational-tenure status at each age, while Table 3 indicates all occupational-tenure categories held at the same time. The data of these tables show the percentage of all respondents who held the indicated tenure category at the indicated age. Where the total number of respondents drops below ten, percentages are not shown; instead, the number in parentheses indicates how many people there were in each tenure category.

The simplest agricultural ladder is shown by the sons of larger owners. With very few exceptions (two each at ages 10 and 20, one at age 30) the respondents start in an intra-family arrangement (F_1) and shift from that to being owners. Almost half are already owners by age 30, three-quarters are by age 40, and all are by age 60. Table 3 adds relatively little information for this group. It basically shows that a small number of these respondents also were temporary workers and did nonfarm work.

The sons of smaller owners show the most complex agricultural ladder. In this case Table 3 shows more marked patterns than Table 2. This group holds more tenure categories simultaneously than either of the other two groups, averaging about 2.5 tenure arrangements per respondent at ages 40, 50, and 60. A substantial number of them move from intra-family arrangements (F_1) to ownership, but the percentages in each of these two categories are lower for sons of smaller owners than for sons of larger owners. The respective percentages of owners for sons of larger and smaller owners are 74 and 53 percent at age 40, and 91 and 67 percent at age 50.

After intra-family arrangements, the next most frequent tenure category for young sons of smaller owners is that of permanent agricultural labor. Then as they get older their participation in this category decreases while their participation in temporary agricultural work and in share-cropping increases.

Table 4

Present Ownership Status of 57 Respondents^a by Average Size of Holdings in the Preceding Generation and Respondents' Principal Occupational-Tenure Status at Marriage or Age 30, Viçosa, Minas Gerais, Brazil, 1966

Average Size of Holding in Preceding Generation	Occupational-Tenure Status of Respondents			
	At Marriage or Age 30		Present (No.)	
	Status	No.	Nonowner	Owner
Larger owners 27.1 ha. and over	Owners	4	0	4
	Working for fathers	12	2	10
	Working for in-laws	6	0	6
	Working for other relatives	1	1	0
	Working for nonrelatives	0	0	0
	Nonfarm	1	0	1
	TOTAL	(24)	(3)	(21)
Smaller owners 0.1-27.0 ha.	Owners	1	0	1
	Working for fathers	4	0	4
	Working for in-laws	0	0	0
	Working for other relatives	3	3	0
	Working for nonrelatives	12	10	2
	Nonfarm	2	1	1
	TOTAL	(22)	(14)	(8) ^b
Nonowners	Owners	0	0	0
	Working for fathers	0	0	0
	Working for in-laws	0	0	0
	Working for other relatives	1	1	0
	Working for nonrelatives	8	8	0
	Nonfarm	2	1	1
TOTAL	(11)	(10)	(1)	
All	Owners	5	0	5
	Working for fathers	16	2	14
	Working for in-laws	6	0	6
	Working for other relatives	5	5	0
	Working for nonrelatives	20	18	2
	Nonfarm	5	2	3
TOTAL	(57)	(27)	(30) ^b	

^aFour were excluded who were unmarried and under 30 years of age at time of interview. Three of these were sons of nonowners and one was a son of a smaller owner.

^bThree additional respondents acquired ownership but not as the principal source of income; these are included among nonowners.

The case of the sons of smaller owners suggests that those who begin with intra-family arrangements tend to acquire ownership later, while those who begin working for nonrelatives tend not to reach ownership. Partial support for this suggestion will be presented below.

As young men, the sons of nonowners start out as either permanent or temporary workers. The highest tenure status they seem to reach is that of sharecropper, which becomes the most frequent category from age 40 onwards (in Table 3). Only one member of this group became a landowner, and that only at age 60. This particular respondent earned the money to purchase land by operating a village store.

From comments made by respondents the following impression was obtained of the circumstances under which young men who have no opportunity within the family start out as permanent workers and later become sharecroppers. For example, a boy or young man (a son of a small owner or non-owner) may start out working as a permanent agricultural worker for a landowner. A very common job for a young boy is candiando boi (literally, leading the oxen). Later he moves up to other jobs. At the time of marriage the permanent agricultural worker usually thinks he needs more income than just the salary he is receiving and asks for a house and a plot of land to cultivate on shares. Up to this point, he may have been living with his parents or with the landowner. If the permanent agricultural worker has been a good one and the landowner wants to keep him he will give him some land to cultivate on shares. On the other hand, if no land to cultivate is received from the landowner-employer the permanent agricultural worker is likely to look elsewhere for land to cultivate on shares and/or for temporary agricultural work.

Table 5

Mean and Median Sizes of Ownership of Fathers and Fathers-in-Law and of 60 Respondents^a by Two Age Groups, Viçosa, Minas Gerais, Brazil, 1966

Age of Respondents	Father and Father-in-Law					Respondents					
	Ownership Status	Hectares Owned		Total No.	Those Who Own		Hectares Owned by Respondents				
		Mean	Median		No.	No.	%	All Respondents		Those Who Own	
								Mean	Median	Mean	Median
48 Years and Under	Larger ^c	85.9	59.6	12	9	75.0	22.9	9.4	30.5	14.4	
	Smaller ^d	8.2	3.4	10	3	30.0	0.5	0	1.8	2.4	
	Nonowner	0	0	9	0	0	0	0	0	0	
	All	35.9	13.9	31	12	38.7	9.0	0	23.3	9.4	
49 Years and Over	Larger ^c	126.6	86.8	12	12	100.0	66.7	74.4	66.7	74.4	
	Smaller ^d	7.6	4.6	12	8	66.7	3.1	1.0	4.6	2.3	
	Nonowner	0	0	5	1 ^b	20.0	3.1	0	15.4	15.4	
	All	55.5	12.0	29	21	72.5	29.3	4.8	40.5	15.4	
All Ages	Larger ^c	106.2	86.0	24	21	87.5	44.7	29.2	51.1	37.0	
	Smaller ^d	7.9	4.6	22	11	50.0	1.9	0.1	3.8	2.4	
	Nonowner	0	0	14	1	7.1	1.1	0	15.4	15.4	
	All	45.4	13.0	60	33	55.0	18.8	1.0	34.3	9.6	

^aOne excluded who was a son of a smaller owner and who was raised by a larger owner.

^bOperated a village store with brothers. They purchased land with savings from store.

^c27.1 hectares and over.

^d0.1-27.0 hectares.

Table 4 attempts to document the importance of intra-family arrangements as a path to landownership. The presence of intra-family or other arrangements is indicated at marriage or age 30, whichever comes earlier. The importance of intra-family arrangements for attaining ownership is clearly indicated. This is shown when all respondents are divided into three categories on the basis of the tenure status they held at marriage or age 30: five were already owners and remained such at the time of the survey, twenty-two were working for fathers or fathers-in-law, and twenty of these became owners, while the remaining thirty were working for other relatives, for nonrelatives, or in nonfarm work, and of these only five became owners.²

Among the twenty-nine older respondents (49 years of age and over), twenty-one had become landowners; among the thirty-one younger respondents only twelve had become landowners. Attainment of ownership is a function of age among the sons of both larger and smaller owners. Thus in the case of sons of larger farmers, all the older respondents attained ownership (twelve out of twelve), while among younger respondents only nine out of twelve were owners. In the case of sons of smaller farmers, among older respondents eight out of twelve attained ownership, while among younger respondents only three out of ten did so.

The extent of subdivision in the course of one generation is best measured by comparing the older respondents with their fathers and fathers-in-law. This is on the assumption that the older respondents have nearly

2. The data are not fully comparable to Tables 2 and 3 for several reasons. Working for fathers or fathers-in-law is a narrower definition of intra-family arrangements than the F₁ category of Tables 2 and 3. Also, the present tenure status of Table 4 includes younger respondents, some of whom will attain ownership at a later age.

completed the process of land acquisition. The average holding of all the twenty-nine older respondents (owners and nonowners combined) is 29.3 hectares; by contrast, the average holding of their fathers and fathers-in-law was 55.5 hectares, approximately twice as large. Thus average size of farm was approximately cut in half.

The division of one farm of the previous generation into two farms in the present generation is considerably less subdivision than would have occurred if all the children of the previous generation remained in farming.

We were able to study in detail the transfer of one farm between generations. This was a 418-hectare farm owned by a family with fifteen children. Only six of the children retained ownership of a total of 202 hectares, while 216 hectares were sold to nine nonrelatives. One child retained his full inheritance of 27 hectares; two children retained part and sold part of their inheritance, now owning 11 and 16 hectares; three children retained their full inheritance, and purchased portions from coheirs and now own 38, 52, and 59 hectares.

The acquisition of landownership is a complex process involving not only inheritance but also purchase from coheirs, other relatives, and nonrelatives. At least some of these purchases imply out-migration by other children of farm families. Land is also acquired not once but in a series of transactions. The record for the sample shows that forty respondents who now own or have owned land used 144 separate transactions to acquire 1,692 hectares. Of this land 35 percent was inherited, another 21 percent purchased from coheirs and other relatives, and the remaining 44 percent purchased from nonrelatives.

Table 6
Land Acquisition by 40 Respondents, Viçosa, Minas Gerais, Brazil, 1966

	No. of Transactions	Hectares	Percent of All Land Acquired
Inheritance	62	588.3	34.8
Purchased from coheirs	39	219.0	12.9
Purchased from other relatives	9	142.9	8.4
Purchased from nonrelatives	34	742.2	43.9
Total	144	1,692.3	100.0

IV.

The data collected in the survey describe only partly the agricultural ladder patterns at work in the study community.³

The transfer of land between generations is a prolonged and complex process, not of simple subdivision but of inheritance and partial reconsolidation. Forty respondents who purchased land did so in 144 transactions over a period of time involving inheritance, purchase from relatives and from nonrelatives.

The increased pressure of population shows up in the 50 percent decrease in the size of farms between the generation of fathers and fathers-in-law and the older respondents in this study.⁴

3. The type of data available cannot show the full pattern of the agricultural ladder since they do not include the sons who do not remain in agriculture of the study areas, and since some of the respondents are interviewed early in their careers.

4. It may not be correct to conclude that the decrease in size of farm is due to population pressure alone and that it implies an equivalent decrease in income of rural families. Smaller farms might have resulted from increased productivity per hectare, in which case the proper interpretation

The community studied is a differentiated minifundio community. The sons of nonowners remain nonowners but tend to progress from worker to sharecropper status. The sons of larger owners all attain ownership after starting earlier in life in intra-family arrangements. But even the older sons of larger farmers acquire farm units equal to only half the size of those owned by the previous generation.

The sons of smaller owners show most clearly that increased pressure of population keeps them from attaining the levels achieved by their fathers and fathers-in-law. Not all of them attain ownership and a very high proportion of them combines ownership with sharecropping or temporary agricultural labor.

At the same time the intergenerational transactions show the kind of flexibility that--given lower population increases and greater out-migration opportunities--can generate increases in size of farms where now a decrease is occurring. The consequences in size of farms are a net balance between subdivision by inheritance and reconsolidation by purchase. At present, subdivision exceeds reconsolidation; with properly changed external circumstances the balance would be reversed.

Finally, we have the impression that this study is generalizable to other independent minifundio communities in Latin America.⁵ It does not

would be that such productivity increases allowed the study area to absorb an increase in the agricultural labor force. Depending on the magnitudes of the increase in productivity per hectare and the increase in labor force per hectare, the productivity and income per worker might have decreased or increased. Similarly, the decrease in size of farm might be partially due to a decrease in the average labor force per family.

5. These results are probably generalizable to any peasant community in which a land market exists. At the discussion of this paper at the World Congress for Rural Sociology, Peter von Blanckenburg, Institut für Sozialökonomie der Agrarentwicklung der Technischen Universität, Berlin, raised the

represent situations in which minifundia interact with large commercial farms, plantations, or haciendas.

interesting question of what results one would find in peasant communities in which land sales are very rare such as in India.