

LTC Paper

WHEN THE STATE SIDESTEPS LAND REFORM:
ALTERNATIVE PEASANT STRATEGIES IN TUNGURAHUA, ECUADOR

by

Nancy R. Forster



**LAND
TENURE
CENTER**

An Institute for Research and Education
on Social Structure, Rural Institutions,
Resource Use and Development

Land Tenure Center
1300 University Avenue
University of Wisconsin-Madison
Madison, Wisconsin 53706

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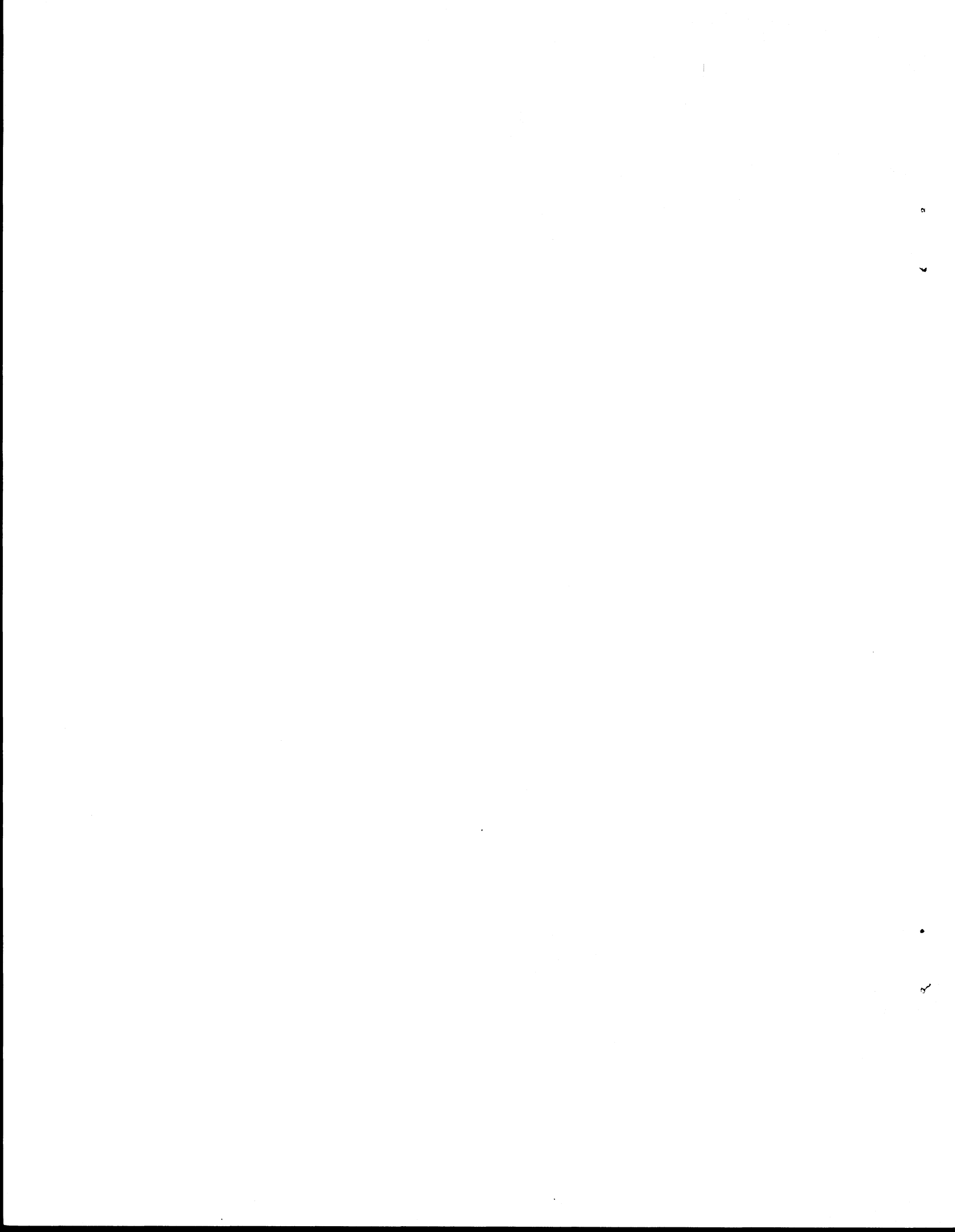
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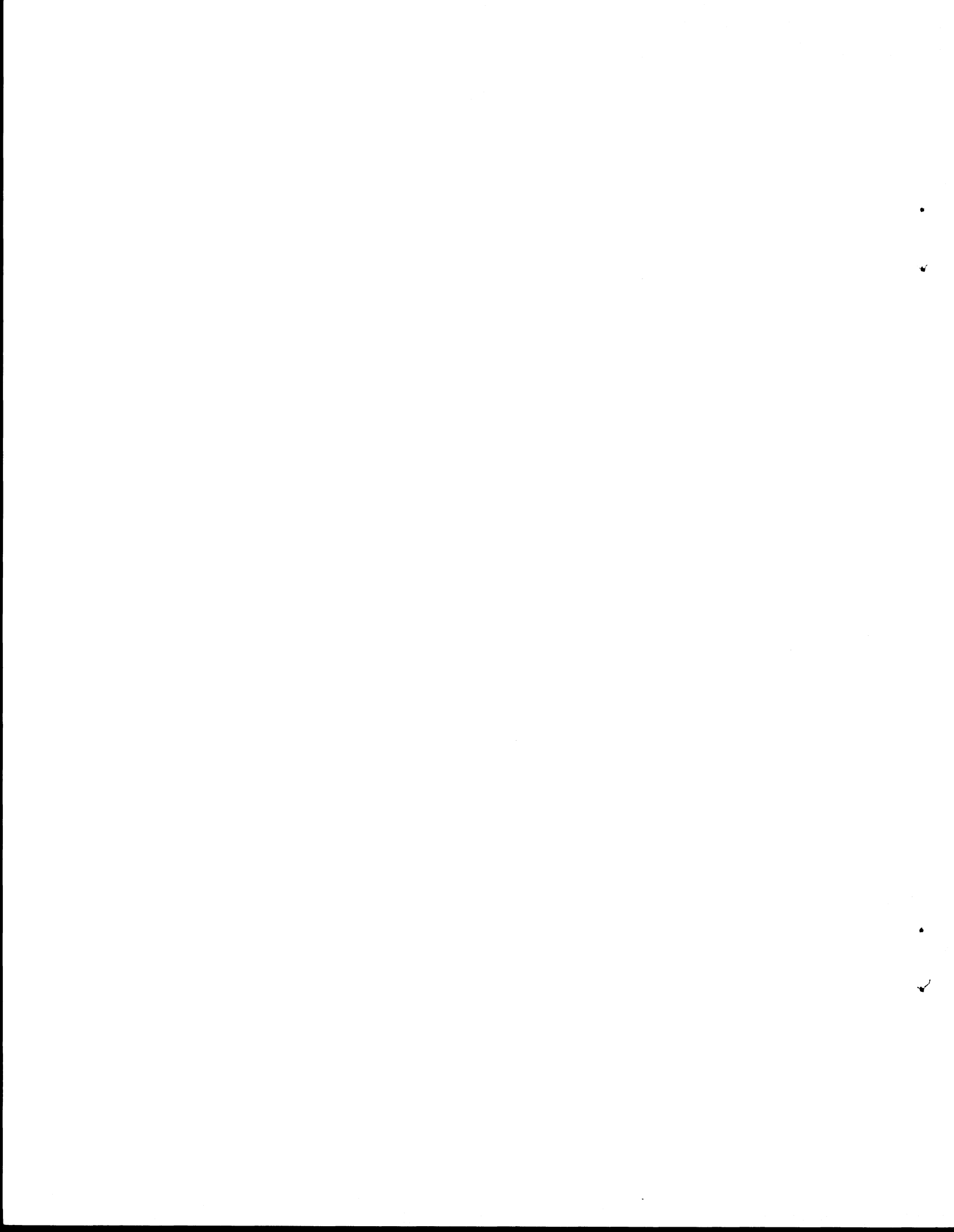
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Introduction

In the years following the Cuban Revolution and the creation of the Alliance for Progress, development planners held out considerable hope that the extreme inequality in the agrarian structure of Latin America could be mitigated through land reform. The historical record, however, can attribute only a part of the limited change in Latin America's agrarian structure directly to state-induced land reform. Apart from Cuba and Nicaragua, where far-reaching revolutions carried the reform forward, only Mexico, Bolivia, and Peru brought significant amounts of land into the peasant sector. But in the latter cases, once the land had been transferred, the state failed to nurture smallholder agriculture adequately. In most other Latin American countries, land reforms have been limited by elite opposition (or, in some cases, counterrevolution). Given agrarian reform's marginal success, it is important to go beyond its direct record to examine alternative developments which helped reduce pressures from a land-hungry peasantry.

In Ecuador, agrarian reform has played only a limited role in mitigating rural inequality. Between 1964 and 1984, no more than one-fourth of the country's peasant families received any land, either through direct reform of large holdings or through colonization (primarily land grants in the tropical lowlands).¹ Furthermore, Ecuador largely sidestepped direct reform of its great estates, since 75 percent of the land

1. The percentage of beneficiaries is overstated since I used the number of farm units from the 1974 agrarian census and 1984 data on the number of beneficiaries (MAG et al. n.d.; IERAC 1984). IERAC (1984) reports totals of 3,006,216 hectares distributed to 130,814 beneficiaries. Barsky (1984b, p. 315) and Zevallos (1985, pp. 110-12, 131), using IERAC data for 1983, report 2,994,269 hectares distributed to 126,576 households.

distributed over the 20-year period was in colonization areas (IERAC 1984).

Nonetheless, other factors were at work. Over time, new property passed into the peasant sector through the market as a portion of larger holdings was sold. Some properties of the rural elite and bourgeoisie came on the market as they were broken up through inheritance, as urban life became more socially and economically attractive, and (during the era of agrarian reform) as social and political pressures from the state and from the peasantry increased. Existing data do not quantify the amount of land in Ecuador which has been transferred via the market from large and medium estate owners to the peasantry.

Nor do national data quantify a second mode of peasant land acquisition, the conversion of common grazing land in the high-altitude páramo to agriculture.² In the 1970s, in another effort to expand peasant lands without challenging rural elites, the military government encouraged indigenous communities bordering the páramo to make this change. The Ecuadorian state also declared itself ultimate owner of the páramo, and it adjudicated titles of arable páramo (with lower risk of frost) to communities which, in turn, granted usufruct rights to individuals. By 1988, in Tungurahua province alone, twenty-eight indigenous comunas and four agrarian societies had received usufruct title to over 16,000 hectares of páramo, a significant quantity since only 23,000 hectares of hacienda land had been redistributed in that province through land reform.³ Surveys suggest that a considerable

2. The páramo is an ecological zone which begins in Ecuador at approximately 3,200 meters in altitude (the upper limits of cropping) and extends to the snow line. It has traditionally served as grazing land and supports lush grasses (in contrast to the puna in Peru and Bolivia which is much drier). The altitudinal boundary between cropland and pasture varies according to local conditions (moisture and exposure to winds) (CESA 1982, p. 6) and is influenced by long-term climatic changes.

3. The totals for Tungurahua come from a 1988 Agrarian Reform Institute (Instituto Ecuatoriano de Reforma Agraria y Colonización, IERAC) map which details adjudications of former haciendas, titling of páramo land to comunas and agrarian associations, and projected interventions in the province (available in IERAC, Ambato). National IERAC records show that by 1983, 28,000 hectares had been adjudicated in Tungurahua

portion of the páramo has been converted to agriculture, mostly under household management.

While this study reviews cases in which land reform helped create pressure for sales, it focuses primarily on peasant acquisitions in an area of Tungurahua which had virtually no reform since there were no large estates.⁴ Broad economic and social changes at work in the province, and in the nation as a whole, helped bring local land on the market. The research examines two generations of smallholders from the comuna Santa Lucía Arriba, in the parroquia (parish) of Tisaleo. The study was conducted over a period of 11 months in 1983/84 and was based on a stratified sample of comuna households which were compared with parent households. The study shows that parents extended their holdings in the short term through sharecropping and more permanently through purchases. Some households in the contemporary sample also bought land (though considerably less than their parents), but many more families gained by securing usufruct lots in the commons. The study details the effects of these two modes of land acquisition on differentiation and land distribution in the community and examines the ecological impact of agricultural expansion into the páramo.⁵

The Peasant Campaign for Land

Although Ecuador did not experience the land invasions and other forms of peasant mobilization that swept through Bolivia, Peru, and Colombia during the 1950s and 1960s, the country's peasantry did intensify its drive for land. The heightened social and political tensions

to peasant organizations, but they do not separate páramo and hacienda land (IERAC 1984).

4. IERAC made no interventions in Tisaleo other than to settle a limited number of claims by sharecroppers and, in 1979, to title páramo lands.

5. Lenin's concept of differentiation contends that small peasant farming, as it develops under capitalism, allows "an insignificant minority of small producers [to] wax rich, 'get on in the world,' turn into bourgeois, while the overwhelming majority are either utterly ruined and become wage-workers or paupers, or eternally eke out an almost proletarian existence" (Lenin 1977, p. 32).

surrounding agrarian reform, the organizing activity of advocate groups, and finally the general expansion of the Ecuadorian economy during the 1960s and 1970s helped many peasants purchase land.

While there is evidence in the Ecuadorian literature of peasants buying land in the nineteenth and early twentieth centuries (Salomon 1973; Arcos and Marchán 1978; Archetti and Stolen 1981), most studies document more recent peasant land purchases, dating from the 1950s and increasing during the 1960s and 1970s. A study by Rosero Garcés (1982) of the northern highland communities of San Pablo del Lago (in Ibarra province, one of the principal areas of hacendado-initiated dairy modernization) demonstrates the effects of peasant pressure. Seeking to purchase tranquillity in the countryside, landlords turned over many huasipungo plots to their resident laborers prior to the agrarian reform.⁶ Neighboring comunas were not satisfied, however, because that settlement denied them access to the hacienda-controlled páramo, a part of which they claimed on the basis of a 1751 allotment (repartimiento) by the Spanish crown (Rosero Garcés 1982, p. 68). Unsuccessful litigation to reclaim the community lands dated from the early part of the century.

In the late 1960s, the community of Gualaví, with the aid of two advocacy groups (Federación Ecuatoriana de Indios and Misión Andina), invaded the area's most vulnerable estate, the absentee-owned Hacienda Cusín. Its American proprietor sold the comuna 144 hectares at only 5 sucres per hectare (a price equal to a day's wage for highland rural workers at that time), hoping to "end all further land claims" (Rosero Garcés 1982, p. 100).⁷ Quite the contrary, the settlement seemed to

6. Until the 1964 Agrarian Reform Law, some Ecuadorian haciendas maintained such semifeudal labor relations as huasipungo (peasants are allotted plots of land within the hacienda in exchange for a set amount of labor), allowing the huasipungueros' extended family, the arrimados or apegados, to live on the hacienda in exchange for labor, and yanapa or ayuda (peasants outside the hacienda are allowed access to estate resources such as pasture, water, and firewood in exchange for labor).

7. A 1958-60 survey by the Junta Nacional de Planificación y Coordinación Económica found the average rural day wage was 6 sucres in the sierra in that period while it was twice that on the coast (Penaherrera de Costales and Costales Samaniego 1964, p. 565).

whet land-hungry peasants' appetites. In 1970, members of two Gualaví cooperatives bought an additional 160 hectares of the Cusín. Comuneros outside the cooperatives were promptly denied access to fuel and hay, initiating a new phase in the land struggle pitting peasant against peasant under rules of the free market. Peasants who failed to benefit from the land sales continued to defend communitarian values through the courts, arguing that páramo sales were illegal since, according to the colonial title, the land belonged to the entire community (Rosero Garcés 1982, pp. 102-03).

Rosero Garcés (1982, p. 91) emphasizes that prior differentiation within the community, largely due to uneven success in urban employment, resulted in unequal access to the cooperatives and, in turn, to hacienda lands. The poorest comuneros could not even afford the cooperatives' entrance fees, much less buy land. Thus, the pace of differentiation quickened (Rosero Garcés 1982, p. 107).

In a high-altitude zone in the central sierra (Cotopaxi province), a study of three communities bordering a hacienda formerly owned by the Roman Catholic Church shows how the threat of agrarian reform enabled peasants to acquire land. Yet, Martínez (1983, p. 112-78) emphasizes that the benefits were inequitably spread. To avoid IERAC's intervention, the Church initially divided the large hacienda between two dioceses, which later divested themselves of the rural properties. In 1971, the Diocese of Ambato handed over the 1,100-hectare Hacienda Cotopilalo to the Ecuadorian Center for Agricultural Services (Central Ecuatoriana de Servicios Agrícolas, CESA), a Church-based, community-organizing group, which formed a livestock cooperative incorporating many ex-huasipungueros and arrimados. After a few years, members of the cooperative arranged to buy the hacienda gradually with their earnings. As peasants gained decision-making power in the cooperative, livestock activities contracted and household-based agriculture, especially market-oriented potato production, expanded (Martínez 1983, pp. 141-42). In addition, by 1980, one-fourth of the cooperative's members had also independently purchased 193 hectares outside of Cotopilalo (Martínez 1983, p. 140, fn).

Developments in the Diocese of Latacunga's legacy, the 1,665-hectare Hacienda Rasuyacu, were less favorable for the peasantry. In 1969,

the diocese sold the estate to its former mayordomo, a man of peasant origins who had also sharecropped and rented hacienda land. The new owner reestablished semifeudal ties with the ex-huasipungueros, exchanging access to páramo pasture for one day's labor per week. Martínez argues that the hacendado's monopsonistic control of labor and his virtual monopoly over land in the area (he subsequently bought three additional haciendas) were detrimental to peasant welfare, diminishing the possibility of a "via campesina." Yet, even under these circumstances, between 1972 and 1979, some ex-huasipungueros purchased a total of 239 hectares of the hacienda Rasuyacu, albeit mostly páramo (Martínez 1983, pp. 122-23).

Peasants in the community of Pilacumbi benefited least from the breakup of the Church estate, since they had been linked to the hacienda only through yanapa. Even though some peasants had accumulated capital through earnings from migration, hacienda property was not available to them for purchase. Consequently, 42 percent of the household heads worked five days per week off-farm. Other families had migrated into a nearby tropical colonization zone (Martínez 1983, p. 132).

In another high-altitude area, above the Machachi Valley dairy lands in Pinchincha, Archetti and Stolen (1981) found a strong trend toward repeasantization of landless workers as a result of agrarian reform. Their survey of seventy landowning peasants indicated that only 5 percent had inherited their holdings while the remainder had purchased their plots. Prior to buying land, 76 percent of the sample had been salaried rural workers, as were 60 percent of their fathers for the entirety of their lives (Archetti and Stolen 1981, p. 314). Between 1966 and 1976, 70 percent of the land had been purchased, mostly by peasant cooperatives organized for the purpose of securing IERAC support to pressure landlords to sell property. Cooperative members subsequently secured individual titles to the land and dissolved the collective organizations (Archetti and Stolen 1981, p. 315).

Studies in Carchi, the country's northernmost province, indicate that the historic decline of that region's great estates fostered peasant land acquisition (Barsky 1984a; Lehmann 1986). The breakup of latifundia in Carchi began as early as the 1930s but was greatly accelerated

in the 1960s and 1970s by the threat of agrarian reform (Lehmann 1986, p. 8). Barsky's San Gabriel parish survey of fifty smallholders who had purchased land showed that 66 percent of the sample respondents' parents were landed. Yet, only 10 percent of the 422 hectares owned by the respondents had been inherited while 71 percent had been purchased on the open market and an additional 14 percent had come from buying lots previously held in insecure tenancy, mostly in huasipungaje. Peasants began to acquire land on the open market in the 1930s, but 87 percent of the land was purchased after 1955, with the largest percentage (27 percent) obtained between 1975 and 1979 (Barsky 1984a, pp. 71-77).

The Carchi studies found that, far from the pernicious relationship common in South Asia, sharecropping in northern Ecuador was a common means of capital accumulation. In Barsky's sample, 82 percent had entered at some time into such an arrangement (Barsky 1984, p. 86). Lehmann (1986, pp. 10-15) maintains that sharecropping relationships in Carchi tended to be relatively egalitarian and served to minimize risk for both parties as they participated in the relatively volatile commercial potato market. Sharecropping enabled producers to invest scarce capital in production rather than tying it up in land (Barsky 1984a, p. 83). Only after accumulating a certain amount of savings did peasants seek the greater security of landownership.

The expansion of potato production in Carchi, despite its requirements for high investment in agrochemical inputs (fertilizers and pesticides), offered many peasants a vehicle for economic progress. Barsky found that in the 1960s, small units (less than 20 hectares) produced 45 percent of San Gabriel's potatoes. By 1974, their contribution had risen to 76 percent (Barsky 1984a, p. 66). This increase was partly due to expansion of the area planted in potatoes but was primarily attributable to intensification of capital (agrochemical) and labor inputs.

This brief summary of peasant land purchases indicates that paralleling the more obvious capitalization of the sierra's large holdings, there has been a transformation of peasant agriculture. The latter has been aided both directly and indirectly by agrarian reform and, in some areas, supported by the organizing efforts of advocate

groups. In addition, it appears that there has also been an independent peasant response to the expanding national economy, for in recent decades there has been a heightened peasant drive for land and peasant market participation has grown. During a period when national potato production was increasing from an annual average of 100,000 metric tons in the 1950s to 500,000 metric tons in the 1970s, the peasant share of that production was also growing (Barsky 1984a, p. 59). Nationally, the portion produced on units less than 20 hectares rose from less than 40 percent in 1954 to 60 percent in 1974. During the same period, the share of potatoes produced on units over 50 hectares dropped from 52 percent to 31 percent (Barsky 1984a, p. 60). Potato output was growing in both the large and small farm sectors, but the latter was expanding production at a faster rate, primarily through intensification.

Almost all the studies reviewed here emphasize that economic change in recent decades has increased differentiation within peasant communities. While they concede that some peasants have purchased land, most argue that the majority did not benefit from the economic boom of the 1970s and that peasant economies are in a state of disintegration. Much of the research pointing to the state of crisis among rural smallholders uses rates of migration and off-farm employment as indicators. Yet, it cannot be assumed that these phenomena always reflect peasant impoverishment. Commander and Peek (1986) argue that for minifundistas in Ecuador, diversified employment during the period of high economic growth in the 1970s, and especially migration to construction work, contributed to the survival and consolidation of the small-farm sector. For the period of economic expansion, they find the rate of increase in the proportion of landless households slowed and the number of small farms expanded (Commander and Peak 1986, pp. 79, 93).

Santa Lucía Arriba: The Ecological and Structural Context

The peasant comuna Santa Lucía Arriba is located in the highest agricultural zone (approximately 3,000 to 3,500 meters above sea level) in the Ambato basin. Throughout the valley floor (at approximately 2,500 meters), intensive fruit cultivation predominates (primarily

apples, pears, and blackberries). With increasing altitude, cropping conditions change in an ecological continuum; temperatures grow cooler and rainfall intensifies. Fruit production is combined with more traditional crops, such as maize, beans, and peas, to roughly 3,000 meters. Above that altitude, the ecological context for this study, pasture and cool-weather crops such as potatoes, Andean tubers, broad beans (habas), onions, and garlic prevail. The páramo, the traditional communal grazing land, extends in Tisaleo parish roughly between 3,200 meters to the snow line of the extinct volcano, Carihuayrazo, at 4,900 meters, though little agro-livestock activity is possible at the highest altitudes.

The 1974 agrarian census showed that minuscule parcels, often classified as "sub-family holdings," predominated in Tungurahua and even more so in Tisaleo. In 1974, nearly two-thirds of the farm units in the parish were less than 1 hectare and over four-fifths were less than 2 hectares. The census showed that farm units of less than 5 hectares (96 percent of the total) subsisted on only 11 percent of Tisaleo's land area. Yet, this extreme pressure on the land was not the result of latifundistas' monopoly over resources. In 1974, private units with more than 5 hectares comprised less than 5 percent of all holdings and controlled only 8 percent of the area. The overwhelming majority (80 percent) of the land in the parroquia is páramo, which until recently was preserved as communal grazing land for all contiguous comunas in Tisaleo.⁸ The preponderance of communal land in Tisaleo distinguishes it from Cantón Ambato and from the province as a whole, in which only 42 and 26 percent, respectively, of the total land is under community control and haciendas are somewhat more prevalent.⁹

8. It is important to distinguish whether the largest holdings are under hacienda or community control. Although such data are available in Ecuador's 1974 agricultural census (INEC 1979), presentations generally do not separate the two categories. Failure to do so in Peru led to an overestimation of the amount of land available for agrarian reform.

9. In the province, 38 percent of the land is in private holdings over 50 hectares. At the other end of the spectrum, 53 percent of the holdings is less than 1 hectare and 93 percent is less than 5 hectares.

The household units in Santa Lucía were almost entirely minifundia (less than 5 hectares). In addition, a number of holdings larger than 5 hectares and a small number of "haciendas" of 20-40 hectares were dispersed throughout the area. Counting only land owned, 19 percent of the sample was totally landless while 61 percent owned less than 1 hectare; 9 percent owned between 1 and 2 hectares and 11 percent had between 2 and 5.6 hectares. With the addition of páramo usufruct lots, the total land available for cultivation in the community had more than doubled by 1984, and distribution, though still skewed, had become somewhat more equitable.

Smallholder Survival: Land Acquisition and its Effect on Differentiation

Marxist-Leninist theory predicts that with the onset of capitalism, the smallholding peasantry is destined to disappear into the urban proletariat, unable to compete with larger, capitalized farms. Updating the model, neo-Marxian analysis contends that because of the incomplete, dependent nature of Latin American capitalism, marginalized peasants cannot be fully absorbed into the work force. Therefore, these peasants cling to their minuscule holdings and work as part-time wage laborers in a semiproletarianized condition, with neither outside employment nor the land alone being able to support them (de Janvry 1981).

Evidence from the Ecuadorian literature and from Santa Lucía suggests that the long-term survival of the peasantry has depended not only on subsistence from wage employment or a small-farm plot but also on an expansion of smallholdings through land purchases. Historical evidence from Tungurahua suggests that even in the early decades of this century, land markets were active; property sales in Cantón Ambato (recorded since 1891) reached their highest levels in the 1940s and 1950s.¹⁰

10. Yearly land transactions in Cantón Ambato's Property Registry averaged: 1891-94, 1,805; 1912-19, 2,406; 1920-29, 2,519; 1930-39, 3,347; 1940-49, 6,145; 1950-59, 4,988; 1960-69, 4,141; 1970-79, 3,209; 1980-87, 3,837. The number of transactions reached a peak in the 1940s, declined slightly in the 1950s, and continued to drop until the 1980s, when they experienced a slight increase. A small percentage of the transactions are transfers of inheritance rather than sales.

Tungurahua's landed elite and (toward mid-century) its bourgeoisie often lived in Ambato, the provincial capital, and used either managers or sharecroppers to cultivate their holdings, especially if they were located nearby. Over time, a portion of absentee heirs sold parcels to maintain their urban lifestyle, to invest in more productive undertakings, or simply to rid themselves of their excessively fragmented inheritances. Sharecroppers often received early notice when owners decided to sell and could increase their holdings if they had savings in that moment of opportunity.

This study examines, within the context of Lenin's theory of differentiation, the land purchases of two generations of smallholders in Santa Lucía. Its findings are based on interviews, on oral histories, and on a survey of a 20 percent sample of comuna households selected randomly from a list stratified by key informants according to land available (including land owned, rented, sharecropped, and in usufruct). The current generation is compared to the parent generation, which was not separately stratified. There is an obvious methodological problem in comparing a sample of household respondents, who are in various stages of their life cycles, with their parents, who have terminated or nearly terminated their productive lives. I have tried to control for this problem, though imperfectly, by separating the present-generation sample at age 35, a point when many comuneros began to inherit and buy land. The sample over age 35 is further stratified into four groups (according to land available) for the tabular analysis in this study.¹¹ The comparison of the two generations (unless otherwise indicated) includes only household heads age 35 or more and their parents.

11. The strata were constructed according to breaking points in sample members' available land and include: high = 2.8 to 6.5 hectares; medium high = 1.7 to 2.4 hectares; medium low = 0.7 to 1.6 hectares; low = 0.04 to 0.6 hectare. Separating the sample at age 35 minimizes age differences among the four groups. Comuneros over 35 years of age had an average age of 53. The average ages of the four groups in the sample are: high, 53; medium high, 47; medium low, 50; low, 63. Comuneros under 35 years of age had an average age of 29.

Land Purchases of the Parents

During the first half of this century (the productive years of the parents' generation), peasant purchases in Santa Lucía were fairly common. Only 15 percent of all parents were landless, and those with land averaged 1.6 hectares. In that generation, 69 percent of the property was acquired through purchase, and 64 percent of the families bought land. Informants confirmed that it was relatively easy to buy property in that era, and there is evidence that some landowners preferred to sell to the peasantry. One local hacendado recounted how in his bachelor days in the 1940s, he had to pay a gambling debt. Deciding to sell 15.5 hectares, he received an offer of 11,000 sucres from one of the area's leading landowners. Yet, following the advice of a friend, he gained more by selling parcels of 0.5 to 3 cuadras (0.35 to 2 hectares) to neighboring smallholders and hacienda workers.

By mid-century, more land came on the market as the provincial bourgeoisie responded to the dynamic national economy and moved to Ambato, Quito, and the coast. Between 1950 and 1962, the population of Tisaleo parish declined by 19 percent in part because of peasant out-migration and in part due to an exodus of the rural bourgeoisie (Hoffmeyer n.d., pp. 8-9).

Economic opportunity in the first half of the century permitted upward mobility for the Santa Lucía peasantry and fostered the emergence of a new community "elite." The top five smallholders of the present generation had parents who began their productive years in the early part of the century with little or no land (only one inherited 0.09 hectare). Using a combination of strategies, including sharecropping, animal sales, commerce (buying and selling crops), and even day labor, four of the parents bought between 5.2 and 8.5 hectares each.

A Comparison of Two Generations

The parents' success in buying land in the first part of the century allowed them to give their children an inheritance almost equal to their own. Table 1 shows that those sampled (at the time of the study) had inherited an average of 0.52 hectare while their parents had

TABLE 1

Sources of Private Land for the Current Generation and their Parents^a

STRATUM	CURRENT GENERATION							PARENTS						
	No. of Cases	Inheritance (ha)	(%)	Purchases (ha)	(%)	Total (ha)	(%)	No. of Cases	Inheritance (ha)	(%)	Purchases (ha)	(%)	Total (ha)	(%)
High	10	1.18	(46)	1.37	(54)	2.55	(100)	19	0.90	(31)	2.02	(69)	2.92	(100)
Medium high	11	0.31	(46)	0.36	(54)	0.67	(100)	20	0.44	(31)	1.00	(69)	1.44	(100)
Medium low	9	0.34	(72)	0.13	(28)	0.47	(100)	15	0.63	(43)	0.85	(57)	1.48	(100)
Low	11	0.27	(99)	0.004	(1)	0.27	(100)	15	0.12	(13)	0.79	(87)	0.91	(100)
Total \geq age 35	41	0.52	(53)	0.46	(47)	0.98	(100)	69 ^b	0.54	(31)	1.20	(69)	1.74	(100)
Total < age 35	12	0.05	(77)	0.015	(23)	0.065	(100)	22	0.54	(43)	0.71	(59)	1.25	(100)
Total cases	53							91						

a. Comunero households the heads of which are 35 years of age or more are stratified according to land available and are compared with their parents' households (which are not independently stratified).

b. No data were available for 6 cases.

TABLE 2
Economic Mobility of the Current Generation^a

STRATUM	NO. OF CASES	MORE LAND THAN PARENTS (%)	LESS LAND THAN PARENTS (%)	NO CHANGE /LANDED (%)	NO CHANGE /LANDLESS (%)
High	20	55	35	10	0
Medium high	20	50	45	5	0
Medium low	16	31	63	0	6
Low	17	41	35	12	12
Total \geq age 35	73 ^b	45	44	7	4
Total < age 35	22	5	85	5	5
Total cases	95				

a. The table compares individual comuneros (not households) with their parents.

b. No data were available for 3 cases.

received 0.54 hectare. Nonetheless, the current generation had fallen behind their parents in buying land. At the time of the study, they averaged only 0.46 hectare of purchased land compared to their parents' 1.20 hectares. This trend may be a result of the dramatic rise of land prices in recent years (owing to population increases and growing demand by commercial onion growers). The availability of páramo lots since the late 1970s (discussed later) may also have decreased pressure to seek land through the market for the current generation.

Despite the drop in the amount of land purchased over two generations, the portion of comuneros buying land remained constant. Among each generation under discussion, 61 percent had acquired land through the market. Table 2 represents a stricter measure of mobility, since it examines whether individuals surpassed or fell behind their own parents in property owned. The data indicate that there is no strong tendency in either direction. Of the group of respondents over 35 years of age, 45 percent had more land than their parents, 44 percent had less land, and 11 percent had an equal amount. The rate of landlessness (owning no land rather than having no access to land) for the two generations is nearly identical. Of all households in the total sample (including those whose heads were below age 35), 19 percent were landless, compared to 15 percent of the parent households.

The Dynamics of Differentiation

The preceding analysis suggests that the level of commercialization of Santa Lucía's smallholder economy did not cause severe dislocations. Quite to the contrary, because affordable pieces of land were periodically available for purchase, especially for the parents, commercialization facilitated the survival of the community. In support of Leninist theory, evidence from Santa Lucía shows that when larger amounts of land were available through the market, as in the parents' era, differentiation was greater. The standard deviation for land owned by parents was 2.1, compared to 1.0 for the current generation. Yet, contrary to Leninist theory (at least in this minifundio setting), differentiation did not inexorably increase over time. Nor is there evidence from this study that wealthier households inevitably got

richer. There was no significant tendency in either generation under study for those with larger inheritances to buy more land than those with less. Regression analysis for each generation showed no significant relationship between the size of inheritance and the quantity of land purchased on the market.¹² Further evidence indicates that forces were at work to block accumulation of property by offspring of the most prosperous comunero families. Table 2 shows that 45 percent of the sample respondents were upwardly mobile compared to their parents. Additional analysis demonstrates, however, that downward mobility was more common among descendants of the richest parents. The top 20 percent of the parents (N = 15) had between 3.5 and 8.5 hectares (average 5.8 hectares).¹³ Among the children of the most prosperous group, however, 87 percent had less property than their parents (varying between 0.6 and 5.6 hectares, with an average of 1.8 hectares).

These findings, while in part supporting Leninist theory, also offer fundamental challenges to it, at least as the model applies to minifundistas. The study confirms the process of differentiation within a single generation. In addition, it shows that the degree of differentiation is higher when greater amounts of land are available through

12. The parents inherited an average of 0.54 hectare (median = 0.18, range = 3.5, standard deviation = 0.81) and purchased an average of 1.1 hectares (median = 0.17 hectare, range = 9.2, standard deviation = 1.9). The two independent variables, inheritance and purchases, explain all the difference (16 percent and 84 percent, respectively) in private holdings (significant at less than a .01 level of probability). But, the least squares regression of inheritance on purchases, $Y = 1.02 + .12X$ (s.e.b. = .25), with a 95 percent confidence interval of -.37 to .63, is not significant.

The current generation inherited an average of 0.41 hectare (median = 0.13, range = 3.0, standard deviation = 0.61). This group purchased an average of 0.37 hectare (median = 0.07, range = 4.6, standard deviation = 0.81). The independent variables together explain almost all the difference in private holdings of the second generation ($p < .01$), with each independent variable explaining more or less equal portions. The least squares regression of inheritance on purchases yields the equation $Y = .28 + .21X$ (s.e.b. = .18) with a 95 percent confidence interval of -.15 to .58, which is not significant.

13. This comparison includes only parents of current generation household heads over 35 years of age.

the market. Yet, it also suggests that a permanent or increasing differentiation of specific family lines over generations does not occur at a significant rate. Thus, at the same time that there is upward mobility of some poorer peasants in each generation, there is also downward mobility of some wealthier smallholders' heirs. The latter is not surprising, given such factors as the Andean tradition of equal partition of inheritance and the tremendous effort expended by minifundio families to purchase land. The first half of the equation, however, that some peasants with little or no inheritance significantly improve their relative standing with purchases, has stirred interest in the literature only relatively recently.

It may be that a certain level of differentiation in each generation plays an important role in the maintenance and survival of a minifundio community. In each group under study in Santa Lucía, some households accumulating capital bought land from the declining rural elite or bourgeoisie.¹⁴ In this way, large properties were progressively broken up, and new land (which was rarely sold again to outsiders) was brought into the community. In subsequent sales, comuneros with lower purchasing power could afford the smaller lots. A permanent differentiation did not develop, thereby impeding the emergence of a "farmer" class. The community of Santa Lucía subsisted in a state of dynamic equilibrium.

14. Some land went directly from descendants of the colonial elite to the peasantry while some passed from elites through the local bourgeoisie to the peasantry. In 1891, comuneros of the grandparents' generation bought land from Tomás López Naranjo, and parents bought from Joaquin E. Arias at the end of the 1920s and early 1930s; both were descendants of the colonial elite. After losing a suit brought by the community (to redress hacendado expansion into the communal páramo), Arias ceded 43.7 hectares to the comuna of Tisaleo (Ambato Registro de Propiedades 1979, #1541). Shortly thereafter, he sold the remainder of his lands in Santa Lucía in 23 small and medium sales (between 50 and 1,200 sucres) and in one final sale of the hacienda core in 1939, for 9,000 sucres, to Juan Paredes Alvarez of Tisaleo and Cristobal Andaluz Cordova of Picaigua, petty landowners who divided the purchase (Ambato Registro de Propiedades 1939, #3259). In the 1950s and 1960s, at least part of the hacienda core was also sold to smallholders.

The Revolution in Land Use in the Páramo

Historically, the páramo provided indigenous communities and Spaniards with natural pasture for grazing sheep. Periodically, hacendados in Tisaleo encroached on the páramo and, on at least two occasions (in 1883 and 1927), attempted to expand potato production into the communal grazing land where rich, virgin soils gave several years of high yields. On both occasions, indigenous communities bordering the commons were able to halt the expansion (ultimately through legal action) and defend their traditional use of the land. Nonetheless, informants in Santa Lucía said there was also interest among comuneros as early as the 1920s in cropping the páramo.

By the early 1970s, the Rodríguez Lara military government was actively encouraging such a move. Ministry of Agriculture representatives periodically visited Santa Lucía to press for "more productive land use." However, powerful comuneros accumulating capital from grazing livestock opposed the change. Some villagers pastured herds of up to 200 sheep in the páramo as late as the 1960s. Cultivating a part of the area would mean that livestock owners would be liable for their animals' damage to crops.

In 1973, under protection of police sent by the governor to avert expected violence, a small contingent from the "farmer" interest group in Santa Lucía broke the páramo sod to plant trees. Two years later, the most powerful members of the opposition grazing group united with farmers in order to crop communally. In the first year, although the entrance fee for the production cooperative was just 10 sucres, only a small group of relatively better-off comuneros joined in the back-breaking work of opening the thick sod with hoes. Poorer peasants, dependent on their day wage, could not wait for the semiannual returns from potato production, nor could they afford the cash assessments for inputs. Other comuneros remained outside the association arguing that because the páramo technically belonged to the state, it might appropriate crops grown there.

In 1979, following the lead of neighboring cooperatives, the association in Santa Lucía subdivided its first lots for private usufruct.

Needless to say, comuneros outside the cooperative who had traditionally used the páramo vigorously protested the move. Only a part of the opposition group, however, was permitted into the association; membership was restricted to residents of Santa Lucía Arriba. IERAC officially drew up community boundaries, terminating access to the páramo for noncontiguous comunas.

The transformation in páramo land use created immediate, and somewhat contradictory, effects. Environmentally, the impact of the páramo's conversion to agriculture has been decidedly negative, yet the increase in the supply of available land in Santa Lucía has eased maldistribution and improved the levels of living for at least part of the poor. Change occurred rapidly after 1979, when the government divided 1,968 hectares of Tisaleo's communal land among four communities, thereby continuing its hasty conversion to agriculture. By early 1983, approximately 40 percent of the adjudicated páramo was being cropped. Of that land, some 16 percent was managed collectively while 84 percent was under private control (Hoffmeyer n.d., p. 36). At the end of 1984, counting only the increase in private usufruct lots in Santa Lucía, 50 percent of the páramo was under cultivation. The cropped area in Santa Lucía expanded again in 1987, when another 0.4 hectare was allotted to each cooperative member.

This rapid transformation occurred not only because of land shortages but also because of comuneros' view of the change in the páramo's legal status. From the early decades of the century, the community had counted on the state as an ally against hacendado encroachments and had established its legal right to the páramo through colonial documents issued by the Spanish crown. Now, the Ecuadorian state claimed ultimate control. Since the community had also received collective title to the páramo, it appears that peasant confidence should have been restored. Yet comuneros mistrusted the seemingly capricious state and contended that the best way to secure their legal claim was to cultivate the commons (thereby removing it from the danger of expropriation under provisions of the agrarian reform laws).¹⁵ Adding to

15. In provisions directed against inefficient latifundistas, the agrarian reform laws permit expropriation of lands which have been

Santa Lucía's pressures were the law suits from competing communities which had been denied access to the páramo through IERAC's boundary settlement.

The environmental effects of this revolution in land use have already been substantial. Páramo slopes are steep and, by 1984, erosion was making hilltops infertile. Because smallholders' available land had increased so rapidly, the pool of family and hired labor in the community was inadequate. Use of tractors had become common for plowing, and the state subsidized machines and equipment for community use. Yet, on steep slopes, tractors cannot plow along the contour but must work up and down, thereby pulling more valuable topsoil from the hilltops. Overuse of heavy machinery on Tungurahua's relatively young volcanic soil was causing further problems of soil compaction and loss of soil structure. Finally, the watershed for the whole region may be affected by the wholesale conversion of natural pasture to cropland. The lower-altitude fruit-growing area in the Ambato basin is almost totally dependent on irrigation water coming from rainfall percolating through the "sponge" of thick páramo vegetation. With the destruction of the natural páramo ecology, water runoff is becoming more rapid, jeopardizing the steady supply of water for irrigation. By 1983/84, only shortly after the agricultural conversion of the páramo had begun, there were already silting problems in the irrigation canals and

uncultivated for three years. Communal lands under cooperative exploitation (supervised by IERAC) are exempted by the law (Barsky 1984b, pp. 156-61), yet the notion that cropping confirms ownership has nonetheless propelled the clearing of the páramo. This concept has also been applied in other settings, with equally negative environmental effects. Colonists in the eastern tropical forests, to establish their claims, must clear a large portion of their land (most of which would be better left forested). In the lowlands, the government should eliminate legal requirements for excessive clearing. In the highlands, the state should quickly create incentives to protect and reclaim the páramo since its fragile ecology can reestablish itself only very slowly (due to cold temperatures and limited sunlight). Efforts by CESA (with Danish and Swiss support) to replant overgrazed páramo with native species in five areas of the country (including parroquia Pilahuin in Tungurahua) have been very successful (Brandbyge and Holm Nielsen 1987). Limited agricultural use of páramo lands most apt for cropping could still be permitted in areas under great population pressure.

flooding in lower altitude areas. A follow-up visit to the community in 1988, however, indicated developments which might slow this negative trend. Several factors--the loss of natural soil fertility after continuous cropping, the increase in pests (especially the gusano blanco, which attacks potatoes), and the rapid rise in chemical input prices brought by President León Febres Cordero's economic politics--have caused comuneros to switch their commercial production away from potatoes to livestock. In 1988, many of the páramo lots were planted in pasture, which will decrease soil erosion. Yet, the relatively shallow roots of the pasture grasses cannot serve nearly as well as natural páramo to regulate the area's watershed.

While the ecological ramifications of the páramo transformation have been decidedly negative, it has significantly boosted the land available in the community. The allotments between 1979 and 1984 for private usufruct more than doubled the minifundio land base. By obtaining just three usufruct lots, households of the current generation more than compensated for their lack of purchases. With a mean of 1.72 hectares of land available (through páramo usufruct, inheritance, purchases, rental, and sharecropping), they surpassed the 1.62-hectare average holding of the parents.¹⁶

The páramo lots also provided some redress for inequality in the community's agrarian structure. Comparing inequality in ownership versus access to land, Table 3 shows that while the portion of the land available to the poorest had declined from 7 to 4 percent with the addition of the páramo, the shares of the other groups had become more equal. Although 19 percent of the sample owned 62 percent of the area, its share dropped to 46 percent when all available land was considered. The middle groups, constituting 58 percent of the sample, owned 31 percent of the land but increased their share to 50 percent of all land available.

16. A fourth lot (0.5 hectare) was allotted to cooperative members in December 1983 (but is not included in the analysis because it was not yet cleared at the time of the study), and a fifth lot (0.4 hectare) was given in 1987. The generational comparison does not include parents' sharecropped land, which was hard to quantify since it varied throughout the life cycle.

TABLE 3
Agrarian Structure, Santa Lucía Arriba:
Comparison of Inequality with and without Páramo

STRATUM	% OWNERS	% AREA OWNED	% TOTAL AREA AVAILABLE ^a
High	19	62	46
Medium high	24	19	26
Medium low	34	12	24
Low	23	7	4
Total	100	100	100
	N = 53	N = 41.0 ha	N = 90.6 ha

a. Includes páramo in usufruct, total land owned, and a small portion of land rented and sharecropped in and out.

TABLE 4
Socioeconomic Characteristics of Santa Lucía, by Land Available

LAND AVAIL- ABLE (ha)	N	MEAN AGE	WIDOWED OR SINGLE (%)	FEMALE (%)	WORKERS IN HOUSEHOLD ^a (x)	HOUSEHOLDS DEPENDENT ON DAY WAGE ^b (%)	% HOUSEHOLDS WITH PARAMO
2-6.5	17	49	18	12	4.2	6	100
1-2	19	41	21	21	2.8	11	100
0-1	17	54	65	35	2.3	70	29
Total	53	48	34	23	3.1	28	78

a. Number of workers adjusted according to age (see fn. 17, p. 23).

b. Defined as households with 50 percent or more of total family income derived from day wages.

An important segment of the community was passed over in this initiative to increase land in a minifundio community. Table 4, stratifying the sample into three groups by land available, shows that, as of 1983/84, 78 percent of the community, but only 29 percent of the lowest stratum, had joined the cooperative exploiting the páramo. Since poverty for this generation of comuneros is perpetuated by remaining outside the cooperative, it is important to determine what kept some families from joining. The land-poor households' very high dependence on day wages leaves little time for agriculture and for mandatory work on collective projects. Table 4 shows that 70 percent of the poor derived more than half their total family income from day wages. Furthermore, there is little chance that the land-poor group can join the cooperative in the future. At the time of the study, the 30,000-sucres entrance fee effectively excluded most day laborers. With an average age of 54, the lowest stratum was the oldest of the three groups and therefore least likely to generate capital through migration or artisan activities. Equally important, however, is the fact that many in the land-poor group were missing the family support system so important for peasant survival and advancement. Table 4 shows that Santa Lucía's poorest households had, on average, only 2.3 adult family workers (a further impediment to generating capital), compared to an average of 4.2 workers for the top stratum.¹⁷ In addition, 65 percent in that category had a widowed, divorced, or single household head, and 35 percent was headed by females.

Nonetheless, it is important to emphasize that the project has also brought some improvements for the poor. Comuneros from landless or near-landless households who had managed to join the production co-op

17. The number of adult workers is a calculation based on all household members' labor contributions. Using research from Java and Nepal on children and elderly people's contributions to productive labor, I classified children aged 15 and above as adults, while children aged 6 to 14 and adults over age 50 were counted as fractions [children aged 6 to 8 = 0.3; 9 to 11 = 0.5; 12 to 14 = 0.7; adults over age 50 = 0.85 (Nag et al. 1978)]. These fractions generally conform to my own observations in Santa Lucía. Differences in the contributions of males and females have been eliminated here.

insisted they were eating better, their children were sick less, and they had more to sell in the market. Furthermore, there were other important side effects. A labor shortage had developed because of the sudden increase in available land and the growing labor demands on households in the cooperative due to collective labor requirements. As a result, local wages had been pushed up, improving incomes for comuneros outside the cooperative. Finally, the overall prosperity of the village had improved. Profits from collective production and collective labor had both been invested in building community infrastructure (including a school, community meetinghouse, clinic, and chapel) which benefited all villagers.

Conclusions

Ecuador has not had a meaningful land reform, yet there is ample evidence that its peasantry has maintained a determined campaign for land through the courts and in the marketplace. Although powerful landlords managed to avert state land reform at minimal cost to themselves, peasant pressure on their estates did not cease. Sometimes with the help of outside organizers, but often with only their lawyers and their earnings, smallholders have chipped away at large holdings and brought land into their own domain. Migration has often provided the capital for such purchases. Because most peasant land acquisition has taken place under rules of the free market, inequalities have developed which the state has only minimally eased.

This research offers a straightforward challenge to both Marxist and "developmentalist" contentions that minifundio holdings are not economically viable and are in a state of constant deterioration. The data presented here confirm that many of Santa Lucía's smallholders were able to purchase enough land to maintain their minifundio status over the generations under study. The study also brings an additional dimension to the Leninist theory of peasant differentiation. Within each of the two generations studied, some new peasant entrepreneurs emerged at the same time that some heirs of wealthier smallholders slipped in status. This discrete pattern could be characterized as

"single-generation" differentiation. Within both groups, the parents and their offspring, differentiation developed with varying intensity (according to the amount of land available on the market), but the rankings (according to landownership) arising in one generation were not sustained to a significant degree into the next. Finally, it is important to keep in mind that a small percentage of the sample was unaffected by the dynamics of differentiation and remained in chronic poverty for both generations studied. *Comuneros* trapped in poverty were almost completely dependent on day wages and tended to seek security through patron-client relationships. They were the least likely to have migrated to the coast or to have acquired artisan skills.

Obviously, national and regional economic conditions influence whether the peasantry can maintain itself on *minifundio* plots and can purchase land to pass on to heirs. To accomplish this, the terms of trade must be favorable enough for food producers to earn an adequate living, and there must be land available for peasants to purchase. In Ecuador, the growing dynamism of the national economy from the late 1940s led to a sustained demand for food. The growth of the national economy and the absence of substantial state subsidies for large-scale, capital-intensive agriculture (until the 1970s' petroleum boom) also encouraged property sales by *Tungurahua's* elite and provincial bourgeoisie. Since agricultural profits were relatively low, those groups turned to urban occupations. The most entrepreneurial *minifundistas* in each generation were able to capture some of the land being sold and bring it into the peasant sphere. An additional inducement for the peasantry's persistence in farming has been Ecuador's limited industrial development. Compared to many other Latin American countries, Ecuador's rural areas have not experienced a massive, permanent peasant exodus to the cities. Historians will judge whether Ecuador's slower pace of development in fact provided greater long-term stability.

Although this study shows that a significant number of peasant households were able to generate a surplus for land purchases, the free market has not provided consistent benefits. When larger amounts of land came on the market (with the exodus of the rural bourgeoisie and sales of fragmented inheritances), many *minifundistas* were able to

improve their relative status. Yet, when land markets became tight in recent decades, even peasants with savings were blocked. Without some change, either spontaneous or induced, the market is unlikely to provide enough land for the peasantry in the future. Furthermore, the free market has not adequately sustained the poorest of the poor. The state initiative to bring páramo land under peasant cultivation made a significant contribution to improving land distribution in Santa Lucía. A large portion of the community gained access to the páramo, the benefits were fairly widespread, and the project must be judged a qualified economic success. The one-fifth of the community which did not get páramo land could get access only to "trickle-down" benefits (higher day wages stemming from a labor shortage in the community, improved education, health care, and infrastructure), many of which derived from the collective projects.

Unfortunately, the economic benefits of the project appear to have very high environmental costs. Whether long-term gains from the agricultural transformation on the páramo can be sustained will depend on a continuation of favorable climatic conditions and on how much ecological abuse this fragile environment can tolerate. Sustained damage to the soil structure and increased erosion could greatly reduce economic gains. Substantial destruction of the páramo's capacity to provide irrigation water for the watershed area could threaten agriculture in the whole Ambato basin. It remains to be seen whether the state's policy of sidestepping land reform will carry serious consequences for future generations of Ecuadorians.

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