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A REVIEW OF AGRARIAN REFORM AND DEVELOPMENT IN COLOMBIA

Herman Felstehausen*

I. Summary of Current Development Debate

Colombian leaders have tried for thirty-five years to legislate an agrarian reform. Albert Hirschman has labeled the process "reformmongering."¹ But judgments about the effectiveness of legal steps for transforming Colombia's rural economic and political structures vary greatly depending on one's perspective and economic position in the society. National leaders often speak about new political and economic progress. Peasants and workers hasten to point out that the gaps between rich and poor appear to be widening, unemployment is high, there is a shortage of land for the next generation of farmers, and industrialization is not keeping pace with population growth.²

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¹Albert O. Hirschman, Journeys Toward Progress (New York: The Twentieth Century Fund, 1963).

²For economic arguments, see especially the report to the U.S. Senate, Committee on Foreign Relations, "Colombia: A Case History of U.S. Aid together with a Report of the Comptroller General," in Survey of the Alliance for Progress, Document No. 91-17, 91st Cong., 1st sess. (1969), pp. 659-865. The concepts of political control and unity of the National Front are well-developed in Robert H. Dix, Colombia: The Political Dimensions of Change (New Haven: Yale University Press, 1967).

Analysis of Colombian styled reformmongering suggests that the main effects have been to unify and strengthen the national political machinery but not necessarily to broaden the distribution of economic benefits to workers and peasants.³ Much of the rhetoric initially proclaiming the success of agrarian reform in Colombia--especially that about Law 135 of 1961--has turned out to be a commentary on the quality of the legislation rather than a report on reform accomplishments.

This paper, in contrast with many previous analyses, will attempt to avoid a repetition of agrarian reform plans and aspirations. Instead, the paper will concentrate first on the historical factors leading up to the enactment of a comprehensive agrarian law and then will provide an account, as far as possible, of actual program achievements to date. The last two sections of the paper will discuss economic conditions in the country and provide policy conclusions with reference to agrarian reform.

Colombia's land reform law has received widespread attention both among Latin American nations as well as in the United States. Colombia was the first Latin American country to pass a broadscale land reform law following the conference at Punta del Este. During the past decade the country has been one of the three main recipients of U.S. foreign assistance. Agriculture and ranching are often

³John Pollock suggests that part of the price farmers paid for political stability and unity was a stronger leadership elite with a sacrifice in civil liberties. John Pollock, "The Violence in Colombia: A Challenge to Political Elites?" Unpublished paper, Workshop on Crises in Political Development, Stanford University, November 1, 1969.

mentioned as leading potential sectors for development based on the nation's rich and varied natural resources, relatively small population and large land area.⁴ Colombia is about the size of France, Spain and Portugal combined with vast tracts of public lands.

Population is currently increasing at the rate of more than 3 percent annually. The average annual per capita growth in domestic output during the 1960's was between 1 and 2 percent, slightly below the goal set by the Alliance for Progress. Agricultural production has done no more than keep pace with population growth. Domestic food supplies provide average caloric consumption below recommended levels. Most of the increase in agricultural output has come from expanding crop acreage rather than from increased productivity on land already in use.⁵

Large acreages of public lands have been shifted to private ownership under the 1961 agrarian reform program. Yet both the accomplishments and the motives underlying Colombia's agrarian reform remain elusive. To some it is a paradox that Colombians have engaged in violent civil struggles for land, produced visionary agrarian laws, and yet have not charted a clear public policy of land access and use.⁶

⁴U.S. Senate, Survey of the Alliance for Progress.

⁵L. Jay Atkinson, Changes in Agricultural Production and Technology in Colombia, Foreign Agricultural Economic Report No. 52 (Washington, D.C.: U.S. Department of Agriculture, June 1969).

⁶T. Lynn Smith, Colombia: Social Structure and the Process of Development (Gainesville: University of Florida Press, 1967), Chapter 3.

II. Land Tenure and Agrarian Reform

A. Agricultural and Public Lands

In 1960 Colombia had 1.2 million farms with 27.3 million hectares of land under private ownership.⁷ The amount of land in farms increased between 1960 and 1970 to about 30 million hectares through publicly and privately initiated titling activities on public lands. Subtracting land in farms, roads, and towns, more than two-thirds of the total area of Colombia--about 80 million hectares--is still in the public domain. This seeming abundance of public lands, however, must be understood in terms of the quality of those lands as well as restrictions on their settlement posed by recent legislation and informal practices (see Table 1).

Little noted in Colombian agrarian reform discussions, but certainly of major consequence for public land use policies, have been national measures to regulate the occupation and use of forest lands. Under the stresses of the depression of the 1930's, the administration of President Alfonso Lopez wrote a forest and water protection clause into Land Reform Law 200 of 1936.⁸ This clause called for the exercise of governmental control and management over public forests and watersheds.

The 1936 legislation served as the basis for subsequent decrees giving the national government increasing regulatory control over

⁷Departamento Administrativo Nacional de Estadística (hereafter cited as DANE), Directorio Nacional de Explotaciones Agropecuarias: Censo Agropecuario, Resumen Nacional, Bogotá, 1960.

⁸Antonio J. Posada, "Economics of Colombian Agriculture" (Ph.D. diss., University of Wisconsin, 1952).

uninhabited territory. At the same time, the laws and administrative orders have in effect closed some areas to private acquisition.

TABLE 1. DISTRIBUTION OF COLOMBIA'S LAND AREA

	Hectares (in thousands)	Percent of total
1. Total land area of Colombia	113,611	100.0
2. National Forest Reserve land, part of the public domain ^a	50,000	44.0
3. Area in rivers, lakes, roads, cities and buildings	3,918	3.4
4. Land in farms, 1960 ^b	27,372	24.1
5. Land titled through INCORA, 1962-69, mainly from public domain ^c	2,833	2.5
6. Land theoretically remaining for private acquisition	29,488	26.0

General Source: Instituto Geográfico Agustín Codazzi, Atlas de Colombia (Bogota, 1962).

^aLand set aside by Decreto Extraordinario No. 2420 of 1968 as forest and watershed lands not to be privately titled.

^bDANE, Censo Agropecuario, 1960.

^cInstituto Colombiano de la Reforma Agraria (hereafter cited as INCORA), monthly office reports, Bogota.

In 1968 the Colombian government established the Instituto de Desarrollo de los Recursos Naturales Renovables (INDERENA), to identify and manage the use of national forest lands.⁹ The institute claims about 50 million of the approximately 80 million hectares of public lands remaining. Areas are only crudely defined--many are

⁹Instituto de Desarrollo de los Recursos Naturales Renovables (hereafter cited as INDERENA), Estatuto Forestal, Acuerdo Número 3, Bogotá, 1969.

partly settled by farmers, woodcutters and fishermen. These persons can receive title to the land they occupy providing they can show their claims were established before 1959.

Forest tracts are generally selected in large blocks. They include most of the eastern one-third of the country, the Pacific Coast and the northern end of the Andean Mountain Chain in Antioquia.¹⁰

Much of nearly 30 million hectares of public lands theoretically remaining for private acquisition, like much of the forest reserve land, is either unsuited for agriculture or unavailable in any practical sense for colonization. First, these lands include mountain peaks, deserts and swamps. Second, most available lands are located in low fertility, low access areas of the Eastern Plains (Llanos Orientales). Agricultural scientists are currently compiling data on this vast region which comprises 67 million hectares or 59 percent of the territory of Colombia.¹¹

The eastern soils are highly weathered and low in natural fertility. There are numerous smooth savannahs used mainly for livestock grazing. Subsistence colonization and cropping have been tried repeatedly without success suggesting that the region would require regular and substantial commercial inputs of fertilizers and

¹⁰Public forests can be harvested by contracting with INDERENA for a five to thirty year concession. Thus far about 3.5 million hectares of concessions have been applied for. Under current terms to encourage foreign exchange earnings, applicants who agree to export wood products receive preference. Interview with Armando Falla, Head of the Forestry Division, INDERENA, Bogotá, January 26, 1970.

¹¹Charles H. Mullenax, James S. Plaxico and James M. Spain, Alternative Beef Production Systems for the Eastern Plains of Colombia (Cali: Centro Internacional de Agricultura Tropical, 1969).

other materials in order to be used for intensive agriculture. The region is also hampered by an extended annual dry season, although this may not have serious consequences. During the wet period, the northern area, known as the Casanare, floods extensively.¹² There are an estimated 3 million hectares of well-drained smooth plains which physically have agricultural potential. But many of these lands are already in ranches. The technical observers say, "Because land has long been available for the taking, ranches are extensive. Ranch size varies from 500 to 50,000 hectares or more...."¹³

The previous statement suggests the third problem associated with figures showing theoretical land availability in Colombia. Much of the land listed as available is already in farms and ranches but is not included in statistical reports because it is not titled or recorded. Such lands are often effectively held under informal possession and use arrangements. Occupation rights, in turn, are bought, sold and exchanged outside of the recorded land transfer system.¹⁴ Distant plains areas are dominated by livestock ranching or capitalized agriculture able to overcome the barriers of poor access and low soil fertility.

Colombia thus has less available land than is commonly supposed. The rural population is highly concentrated on more naturally fertile

¹²Ernesto Guhl, Colombia: bosquejo de su geografía tropical (Rio de Janeiro: Instituto Panamericano de Geografía e Historia, 1967).

¹³Mullenax, Plaxico, and Spain, Beef Production Systems for the Eastern Plains.

¹⁴Luis Arévalo, "The Legal Insecurity of Rural Property in Colombia: A Case Study of the Notarial and Registry Systems" (Ph.D. diss., University of Wisconsin, 1970).

mountain soils in the Andean Region. Slightly more than one-half (53 percent) of Colombia's rural population is located in 429 mountainous municipalities which comprise 8 percent of the national territory.¹⁵ In the 200 most densely populated of those municipalities there are only 1.3 hectares of land per rural inhabitant including forest areas, towns and roads, and wastelands.

In 1960, more than 70 percent of Colombia's farm families lived on sub-family sized farms or were headed by farm workers without land. Despite the fact that sub-family and family farms utilized less than one-third of Colombia's agricultural land, they accounted for two-thirds of the value of agricultural output.¹⁶ The basic misallocation of land and labor resources under these conditions is evident--too much land and too little labor on the large farms and too little land and too much labor on the small farms (Tables 2 and 3).

The figures in Table 2 illustrate the extremely large number of small farms of less than five hectares crowded into a very limited land area. The number of small farms today would be expected to be considerably higher since a common pattern of rural labor absorption in minifundia areas is to retain family members by dividing farm lands among them.¹⁷ Colombia's land problem is summed up in a local saying, "Lots of territory, little land."

¹⁵DANE, Censo Nacional de Población, 1964, Bogotá, 1967.

¹⁶Comité Interamericano de Desarrollo Agrícola (hereafter cited as CIDA), Tenencia de la tierra y desarrollo socio-económico del sector agrícola: Colombia (Washington, D.C.: Unión Panamericana, 1966).

¹⁷Emil B. Haney, Jr., "The Economic Reorganization of Minifundia in a Highland Community of Colombia" (Ph.D. diss., University of Wisconsin, 1969).

TABLE 2. NUMBER OF FARMS, LAND IN FARMS AND PERCENT OF ARABLE LAND UNDER CULTIVATION IN COLOMBIA, 1960

Size category in hectares	Number of farms	% of total farms	Hectares occupied	% of total area in farms	Approximate % arable land under cultivation
0 to 4.9	756,605	62.6	1,238,976	4.5	75
5 to 29.9	327,425	27.1	3,780,379	13.8	65
30 to 99.9	82,730	6.8	4,275,618	15.6	48
100 or more	42,912	3.5	18,042,654	66.1	36
Totals	1,209,672	100.0	27,337,827	100.0	

Source: DANE, Censo Agropecuario 1960, Resumen Nacional, Parte II, pp. 39-45.

TABLE 3. PERCENTAGES OF FARMS, WORK FORCE, AGRICULTURAL LAND AND VALUE OF PRODUCTION BY FARM SIZE GROUPINGS IN COLOMBIA, 1960

Percent of Total	Farm Size Grouping				Total
	Sub-Family a	Family b	Multi-Family Medium c	Multi-Family Large d	
Farms	64	30	5	1	100.0
Agricultural Work Force	58	31	7	4	100.0
Agricultural Land ^e	6	23	21	50	100.0
Value of Production	21	45	19	15	100.0

Source: CIDA, Tenencia de la tierra: Colombia.

^aSub-Family: Farms large enough to provide employment for less than two persons with the typical incomes, markets and levels of technology and capital now prevailing in each region.

^bFamily: Farms large enough to provide employment for 2 to 3.9 persons on the assumption that most of the farm work is being carried out by the members of the farm family.

^cMulti-Family Medium: Farms large enough to provide employment for 4 to 12 persons.

^dMulti-Family Large: Farms large enough to provide employment for over 12 persons.

^eCultivated and pasture land: same as the definition of land in farms.

B. Population Pressures

At the end of 1968, the total population of Colombia was estimated at more than twenty million.¹⁸ In the thirteen-year period 1951 to 1964, the annual rate of rural population growth was 1.2 percent and that of the urban population 5.6 percent.¹⁹ The growth rate of the total population approached 3 percent during the period 1951-1964.²⁰ Rural to urban migration has taken place at a rapid rate and is reflected in the dramatic growth of cities in the past twenty years. For example, three-fourths of Bogota's two million population 15-59 years old was born outside of the city. Half migrated to Bogota during the past eleven years.²¹ Although the agricultural population as a percentage of the total is declining (61.5 percent in 1951 and only 47.2 percent in 1964),²² even with major migrations population growth adds nearly 50 thousand new families to rural areas each year. As will be indicated later, land titling and new land settlement are not keeping up with this growth, resulting in greater crowding in minifundia farming regions and accelerated fragmentation and subdivision of already tiny

¹⁸DANE, Boletín mensual de estadística, No. 213 (diciembre 1968), p. 9.

¹⁹T. Paul Schultz, Population Growth and Internal Migration in Colombia, Memorandum RM-5765-RC/AID (Santa Monica, California: The Rand Corporation, 1969).

²⁰The annual population growth rate published by the Departamento Administrativo Nacional Estadística is 3.2 percent. This figure overstates the annual rate due to under enumeration in the 1951 population census. Several independent correction factors have been calculated and are reported in Schultz, Population Growth.

²¹Schultz, Population Growth.

²²DANE, Censo nacional de Población, 1964.

sub-family sized farms. Along with increasing population pressure on land resources in the minifundia areas has come a major destruction of soil resources due to intensive cropping with poor soil management practices.²³

Based on historical experience, the number of people in Colombia dependent on agriculture for a living can be expected to increase for many more years (Figure 1). The number of young people, persons under 15 years of age, on farms has nearly doubled during the past fifteen years. The net increase in the number of adults on farms between 1951 and 1964 was twice what it was during the previous 13 year period.

Discussions of land reform in Colombia are not new. Large families and rapid population growth produced a mass of surplus peasant farmers who rapidly spilled over the western mountains.²⁴ This happened little more than one hundred years ago. The farmers planted coffee trees, an export market was developed, and by 1900 Colombia was already exporting 25,000 tons of coffee a year. Coffee has been the main export ever since.²⁵

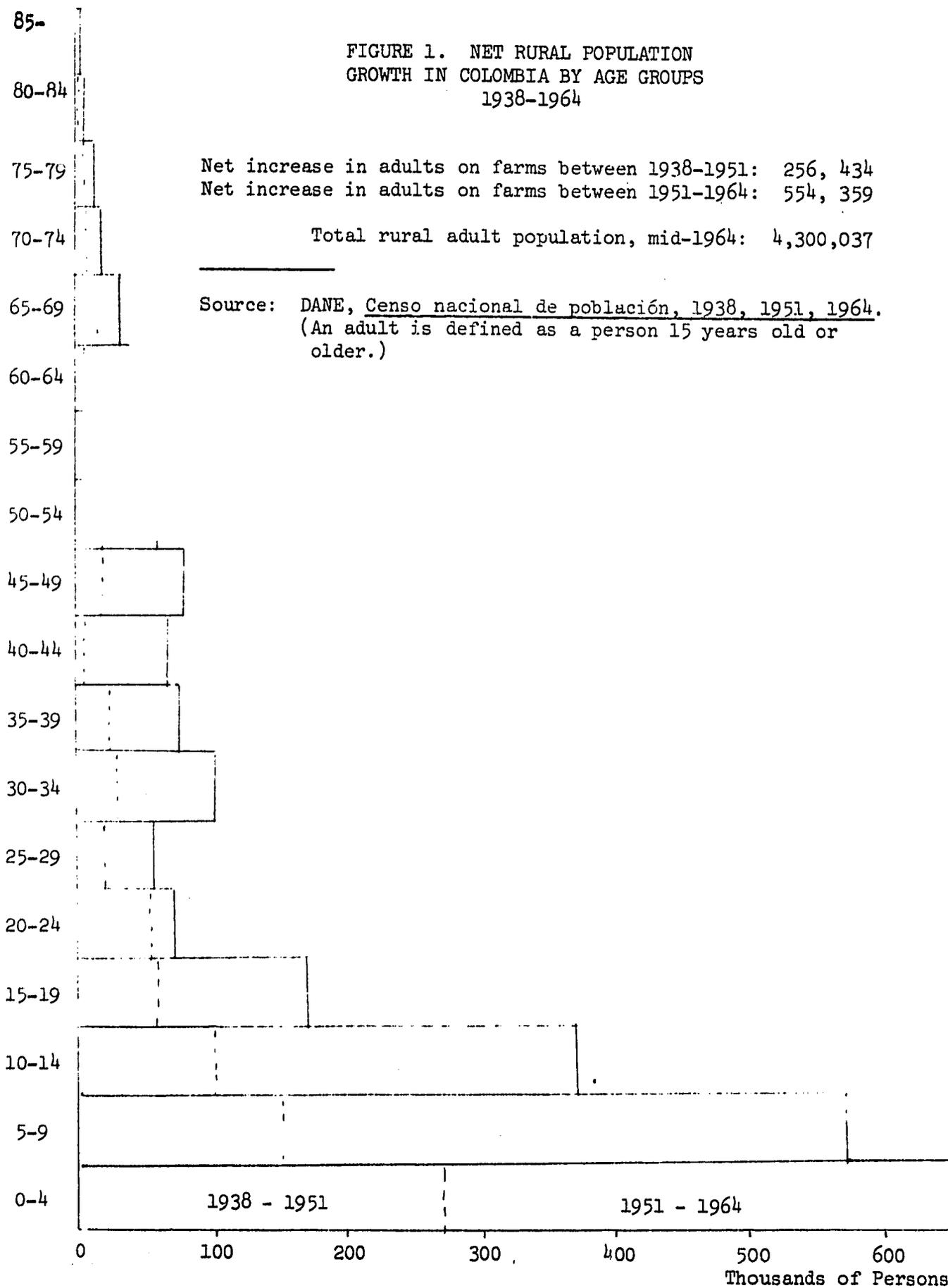
Intensive land use on mountain slopes built up increased pressures for valley and plateau lands which had been settled earlier in larger units. Owners of these lands resisted the encroachment, and the State was often called upon to find new

²³Haney, "Economic Reorganization of Minifundia."

²⁴James J. Parsons, Antioqueño Colonization in Western Colombia (Berkeley: University of California Press, Revised edition, 1968).

²⁵Federación Nacional de Cafeteros, Boletines de Información, various numbers, Bogotá.

FIGURE 1. NET RURAL POPULATION
GROWTH IN COLOMBIA BY AGE GROUPS
1938-1964



solutions. When the State failed to act after making numerous promises, the peasants sometimes acted on their own.²⁶

C. Land Reform Movements

Colombia's current agrarian reform movement and debate started more than 35 years ago. By the end of World War I, available coffee lands had been occupied. Some large plantations had been formed. Coffee was the principal export. When the New York stock market crashed in 1929, Colombian exports fell to a trickle. Central government revenues dropped from 75 million pesos in 1929 to 35 million in 1931.²⁷

Under conditions of spreading unemployment, Colombian peasants again turned to demand land, the only secure source of subsistence within a system which historically has reserved political and economic opportunities for a small group at the top. Each time peasant demands for land have been strongly stated, they have been answered by a new promise--an agrarian reform.

Facing widespread political and economic crisis in the 1930's, President Alfonso Lopez "...met the agrarian agitation by shoving through Congress Law 200 of 1936. This act gave the peasants 'squatters' rights' on both public and private land, by making their eviction subject to difficult legal process if they had made even minimal improvements."²⁸ In 1961, after widespread civil strife

²⁶Vernon Lee Fluharty, Dance of the Millions: Military Rule and the Social Revolution in Colombia (Pittsburgh: University of Pittsburgh Press, 1957), p. 45.

²⁷Ibid., p. 44.

²⁸Ibid., p. 53.

and violence, the Colombian government again responded by enacting agrarian legislation. This time land rights were not only to be "secured" but the landless were also to be aided through redistribution of private land holdings.²⁹

Law 200 of 1936 was important because it gave property rights to users and not just title holders. The sponsors of the legislation drew upon ideas of the Mexican Revolution to introduce the concept that land ownership carries with it the obligation to utilize the land productively. Second they defined use rights to give the cultivator the first claim to the land he worked and placed the resolution of doubts in the courts.

While the law provided important new rights, it also carried with it important consequences. Hirschman points out that after passage of Law 200, peons who formerly worked on large farms and were given small parcels for their support, now became a threat. If they were not dismissed, they could use their accumulated use rights on the family parcel to apply for ownership status.³⁰ Applications for title were handled through the local mayor's office and filed with a local notary. The mayor, a political appointee and at that time also chief of local police, became embroiled in the conflict.

Landlords took steps to protect themselves. They used their influence with the mayor and police. They acted to rid plantations and large farms of resident workers and the traditional Colombian

²⁹Hirschman, Journeys Toward Progress, p. 193.

³⁰Ibid., pp. 148-157.

aparcerero (a form of attached sharecropper). Often the landless remained landless and new ways to avoid the law were found. In the Department of Antioquia, for example, thousands of workers were given the right to live and work on a parcel of land under unwritten, but democratic sounding agreements, called en compañía, meaning partnerships. These agreements still are not recognized as establishing ownership rights under any of the agrarian laws including the recent farm tenant and sharecropper law.³¹

Following Law 200 there were a number of so-called "feeble attempts" at agrarian reform.³² In 1944 Congress passed Law 100 establishing procedures for farm rental. It also added emphasis to colonization projects. The agricultural bank (Caja Agraria) was charged with creating frontier settlement projects.

Four years later, just one month after the April 1948 civil uprising in Bogotá, the government passed Decree 1483 as a national emergency act. The decree called for division of uncultivated public and private lands and the creation of a colonization institute "...to avoid the spread of unemployment, to combat rising prices of foodstuffs, and to protect soils, watersheds and forests...."³³

Hirschman considers the most important activity of this period to be attempts to reorganize agriculture through fiscal measures.³⁴

³¹Interview with INCORA attorneys in Antioquia, March, 1969.

³²Ernest A. Duff, Agrarian Reform in Colombia (New York: Frederick A. Praeger, 1968), p. 17.

³³Posada, "Economics of Colombian Agriculture," pp. 64-66.

³⁴Hirschman, Journeys Toward Progress, pp. 160-191.

Ideas were mainly imported by foreign advisors. Most of the proposals to stimulate agricultural production or land exchange through taxation, however, failed. One important reason was the lack of a reliable system of land measurement and registration. This problem still has not been resolved and has hampered every agrarian reform program instituted including the present one. There are no systematic records to identify either private or public property.³⁵ Most farms, even when titled, are only generally described. There are few maps. The size of a unit is often an estimate meaning figures reporting land in farms are subject to large errors.

During the late 1940's and early 1950's, Colombia experienced widespread rural violence and civil disorder. Pressures mounted for a more comprehensive agrarian reform. Carlos Lleras Restrepo, currently president of Colombia, authored a new law which finally passed in December 1961. Law 135 established uniform procedures for titling land and placed limits on the amount of public land which could be claimed by any individual. An agrarian institute was established to coordinate and administer all activities. Details were spelled out for expropriating private lands and compensating the former owners. There were provisions for land consolidation and land reclamation and improvement. Colonization and resettlement projects could build roads, schools and other infrastructure under the new law. Overall, the law was the most comprehensive piece of agrarian legislation passed in Latin America up to that time.³⁶

³⁵Arévalo, "Legal Insecurity of Rural Property."

³⁶Duff, Agrarian Reform in Colombia.

Law 135 was directed at landowners or potential landowners. Still, none of the agrarian legislation considered the special problems of tenant farmers and sharecroppers. In order to remedy this situation and build political support among the peasants, President Lleras proposed Law 1 which passed the Congress in January 1968.³⁷ Law 1 gives tenants and sharecroppers, if they operate a unit of less than 15 hectares, the opportunity to purchase the land they rent or work. The government first acquires the property by purchase or expropriation if necessary, and sells it to the small farmer on favorable terms. About 25 percent of all farmers in Colombia were classified as tenants or sharecroppers in 1960.³⁸

D. INCORA Programs

The Instituto Colombiano de la Reforma Agraria (INCORA) is responsible for the administration of the agrarian reform program. Land titling, irrigation and reclamation, and supervised credit are its three main activities. INCORA claims to have titled 88,200 parcels of land as of July 1, 1969. About 91 percent of these titles represent de facto recognition of settler claims to public lands.³⁹ The total figure represents basically three different titling processes.

One, a colonist who has settled on public lands, made capital improvements and used the land for at least five years, can request

³⁷Explanations by Enrique Penalosa, director of INCORA, El Espectador, May 15, 1968.

³⁸DANE, Censo Agropecuario, 1960.

³⁹DANE, "La reforma agraria in cifras," Boletín Mensual de Estadística, No. 222, Bogota (enero 1970), pp. 111-132.

an INCORA title. An INCORA technical team will measure the land and draft documents for title application. Under this procedure, the services of INCORA are free, although the farmer must pay the costs of notarizing and filing his new title. He can claim up to 200 hectares under this procedure, or up to 450 hectares in certain parts of the country by paying for survey and mapping costs. There is a practical minimum size of 25 hectares under the procedure to prevent the formation of new minifundia holdings. However, parcels as small as one hectare can be titled if they are completely surrounded by other parcels and would be left in limbo if not adjudicated. A recent report indicates that 95.9 percent of all land titled by INCORA was public land where INCORA simply acted as the administrative title granting agency.⁴⁰

Two, since INCORA is the only official titling agency in Colombia, it also grants official title to claims which are privately initiated and processed. Before passage of Law 135 and establishment of INCORA, land titles were applied for through the mayor's office and approved by state governments. This customary procedure still exists, except that applications go to INCORA for final approval of the title. This method is often used to title large farms and ranches. An interested party who can establish five years use rights on public lands, may register his intention to title with the local mayor. The claimant must hire his own legal counsel and surveyor to map the land and draft a title. If there are squatters on the land, they can be removed through "friendly settlement" by

⁴⁰ Ibid.

paying them for the improvements they have made. Sometimes most of the land for a new farm or ranch will be assembled by buying squatters' rights rather than trying to accumulate use rights over the entire farm area.⁴¹

When preliminary documents are ready, the claimant must accompany the mayor to the property for a personal inspection. The claimant then publishes the intent to title in an official newspaper and turns the prepared documents over to INCORA for the final title. A claimant may title up to 450, 1,000 or 3,000 hectares of land by this method depending on region.

INCORA-released figures do not indicate the number of parcels titled in this way, but cross tabulations from file data show that 11,619 titles were granted under this system from 1961 to October 1969. The figure represents about 12 percent of the total titles granted.

The number of titles distributed under the first two procedures mentioned here are often quoted in statistical reports to illustrate the success of the Colombian agrarian reform program. It must be pointed out, however, that these figures represent distributions of public, not private lands. The main effect is to clear up the claims of squatters on public lands and give them ownership status. Agricultural production methods or land ownership patterns have not been transformed by these processes. If anything, the evidence

⁴¹ An account of this method was provided by the technical staff of the Geographic Institute, Agustín Codazzi, Bogotá, January, 1970.

suggests that the unequal distribution of farm lands has been extended on the frontier and in public land areas.⁴²

Three, INCORA may title land which it acquires from private owners through purchase, gift or expropriation. This third procedure was to be one of the key features of the 1961 agrarian reform law. Since public lands are often inaccessible or poorly suited to agriculture, the law was aimed at providing peasants with a chance to share in land already under cultivation. Detailed mechanisms for expropriation and government purchase were written into Law 135.

Expropriation procedures have been almost wholly unsuccessful. The legal procedures are complex, slow and cumbersome.⁴³ Usually land owners are able to stall government attorneys through legal moves in the courts or to negotiate a price and sell the land at market value to INCORA. Using both expropriation and amicable purchase procedures, INCORA acquired 123,889 hectares of land through June 1969. Of this amount, only 18,000 hectares were obtained by outright expropriation.⁴⁴

⁴²Herman Felstehausen and Roger Soles made tabulations of changing farm registrations in the Department of Meta for the past 10 years using data from the Instituto Geográfico Agustín Codazzi, Bogotá, May 1969.

⁴³Joseph R. Thome, "Title Problems in Rural Areas of Colombia: A Colonization Example," Inter-American Economic Affairs 19 (1965): 81-97. Also LTC Reprint No. 12 (Madison, Land Tenure Center, University of Wisconsin).

⁴⁴DANE, "La reforma agraria en cifras," plus file data at INCORA, Bogotá.

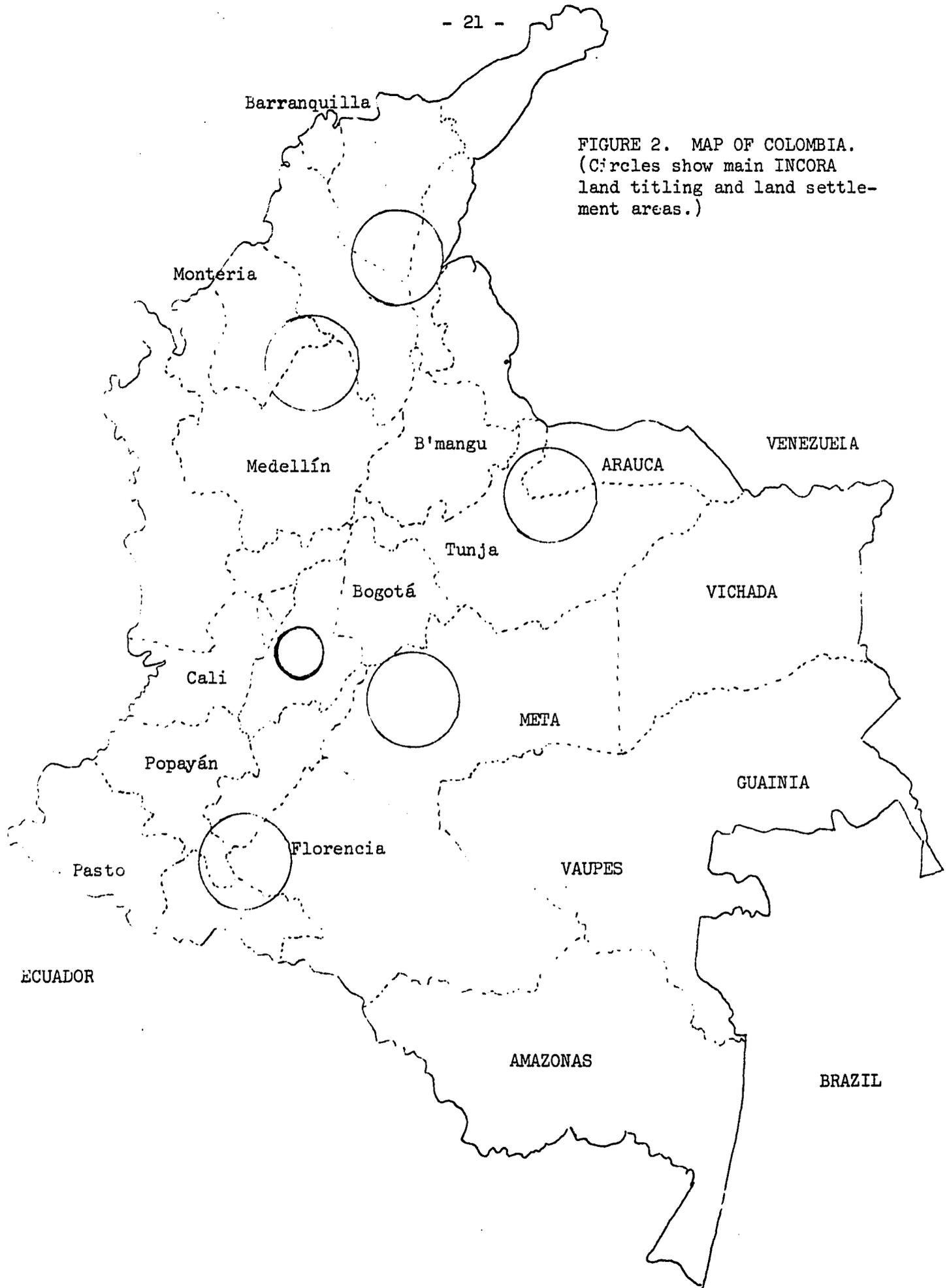


FIGURE 2. MAP OF COLOMBIA.
(Circles show main INCORA
land titling and land settle-
ment areas.)

Much of the land acquired by expropriation and amicable purchase was sought by INCORA for reclamation and public works projects, not necessarily for retitling to farmers. Through mid-1969 INCORA had titled only 1,194 parcels of expropriated and purchased lands returning 13,600 hectares of the total of 123,889 thus far acquired. This figure represents 1.3 percent of government titles granted in the past 9 years. In terms of numbers of new farm families or previously landless families seeking land, the figure is insignificant.

Nearly 50,000 new farm families are added to agriculture each year-- about 1,000 per week. When INCORA began operations, there were already an estimated 350,000 tenant and landless farmers in Colombia.⁴⁵ Not considering new land settlement, the Colombian land titling program based on purchase and expropriated lands has not begun to touch either of these large groups. Even when counting the total land titling activity during eight and one-half years of operations only about 30 percent of the original landless families could have received titles or about 25 percent of the new families.

These figures can be compared, for example, with the rate of progress of the Chilean agrarian reform where 18,000 families were resettled in four years with more than 3 million hectares of private lands acquired during the period. About a quarter million hectares of that land is irrigated.⁴⁶

Another main activity of INCORA is to establish irrigation and drainage projects. In terms of capital funds expended, these projects have received 40 percent of budgeted funds in recent years. On the other hand, only 4 per-

⁴⁵DANE, Censo agropecuario, 1960.

⁴⁶William C. Thiesenhusen, "Current Status of Agrarian Reform in Chile," Draft paper for AID Spring Review (Land Tenure Center, Madison, April, 1970).

cent of the total budget was being spent on land purchases and expropriations.⁴⁷ INCORA has planned or undertaken irrigation works in nineteen districts throughout Colombia. By the end of 1968 irrigated crops were being grown in seven of these districts. However, two districts, Coello-Saldaña in Tolima and the Zona Bananera in Magdalena had already been started earlier by other irrigation organizations and were transferred to INCORA. The two districts constitute 30,000 of the 41,000 hectares under irrigation.⁴⁸ Thus INCORA has been responsible for planning and constructing about 11,000 hectares of irrigation works.

A reported 456,450 hectares are scheduled for irrigation by INCORA counting projects taken over from other agencies. However, 160,000 hectares of this sum is listed in the Department of Cesar and appears to be either in error or grossly exaggerated.⁴⁹ No work has yet been started on the Cesar project.

Land improvement projects carry high costs with benefits to farmers still undetermined. In new irrigation districts, INCORA does not grant immediate title to new farmers who move onto the completed projects. Instead, they are assigned a parcel under contract with INCORA. This is intended to be a trial period to test the farmer's interest and farming skills. As nearly as can be discovered from INCORA records and reports, the agency has not yet given final title to new farmers in any of its irrigation districts. The latest statistical report indicates that 4,153 farmers are operating under parcel contracts.⁵⁰ This figure is also subject to inter-

⁴⁷Report of a Mission sponsored by the International Bank for Reconstruction and Development and the International Development Association, A Review of INCORA and Its Program in Colombia, Bogotá, October 1967.

⁴⁸DANE, "La reforma agraria en cifras."

⁴⁹Ibid.

⁵⁰Ibid.

TABLE 4. SUMMARY OF INCORA LAND TITLING AND LAND IMPROVEMENT ACTIVITIES IN RELATION TO TOTAL FARM LAND AND POPULATION

	National total	INCORA activity	% INCORA activity is of total
Land in farms in relation to land added to farms by INCORA (000s of hectares)	27,372	2,833	10.3
"Available public land" in relation to land titled by INCORA (000s of hectares)	29,488	2,833	9.6
Number of farms in 1960 in relation to farms titled by INCORA	1,209,672	88,200	7.3
Land in farms in relation to private land redistributed by INCORA (hectares)	27,372,000	13,600	0.05
Total lands titled by INCORA in relation to lands under INCORA irrigation (has.)	2,833,000	41,000	1.4
Number of farms in Colombia in relation to number receiving INCORA credit	1,209,672	29,849	2.5

pretation. In one project near the Atlantic Coast, parcels are assigned on a crop-season basis. Since some crops can be grown in four months, a farmer may hold as many as three contracts a year. The contracts are renegotiated for each crop and the farmer is moved to various parts of the irrigation district depending on season, rotation plans and availability of irrigation water. The project is managed by INCORA technicians without contractor modification of the plans. Some contract farmers view the program simply as a substitute for similar share-cropping arrangements held formerly with

ranchers and plantation owners.⁵¹

The supervised credit program is the third main feature within the concept of Colombia's agrarian reform program. When INCORA was organized, agricultural technicians argued that small farmers would not be able to modernize production without additional sources of credit--and that to maximize the effectiveness of credit use, trained agricultural technicians were needed to supervise the lending program.⁵² The Agency for International Development (AID), "concluded that a program of supervised agricultural credit was a key element of, and crucial to, agrarian reform in Colombia."⁵³ AID provided INCORA with a 10 million dollar loan in June 1963. In March 1966 the amount was increased by 8.5 million dollars and the equivalent of 20.6 million worth of counterpart pesos was also added.

By 1964, 2,556 families were receiving agricultural credit. The number increased to 11,570 by 1966 and was 29,849 in 1969. INCORA supervised credit tends to substitute for other credit sources--especially the agricultural bank (Caja Agraria).⁵⁴ The high cost of supervising the credit loans meanwhile has prompted INCORA to gradually shift the credit to larger and larger borrowers. The average size loan has moved up from about 800 dollars in 1965 to more than 1,500 dollars in 1968. INCORA reports that

⁵¹Unpublished notes on a trip to the Lower Magdalena Region by Herman Felstehausen and Roger Soles, Land Tenure Center, Madison, Wisconsin, March 1969.

⁵²Dale W. Adams, Antonio Giles, and Rodrigo Peña, Supervised Credit in Colombia's Agrarian Reform: An Evaluative Study (Bogotá: Centro Interamericano de Reforma Agraria, 1966).

⁵³U.S. Senate, Survey of the Alliance for Progress.

⁵⁴Adams, Giles and Peña, Supervised Credit. Also James E. Grunig, "Economic Decision Making and Entrepreneurship among Colombian Minifundistas," submitted for Journal publication.

the gross farm income of the average farmer involved in the credit program has more than doubled in two years,⁵⁵ but part of this increase can be explained because of shifting credit loans to larger borrowers.

The total amount of credit available in Colombia in 1967 was 774.7 million dollars. The distribution is indicated in Table 5. About three fourths of agricultural and livestock credit is lent through government agencies and banks, the other one-fourth through commercial banks. Between 1960 and 1967 foreign borrowing was increasingly used as a source of capital for Colombian agriculture. Foreign loans to agriculture came mainly from the United States and totaled 92.2 million dollars for the eight year period.

TABLE 5. AVAILABILITY AND DISTRIBUTION
OF CREDIT IN COLOMBIA, 1967

	<u>Millions \$US</u>
Agriculture	137.5
Livestock	140.1
Industry	180.5
Public utilities and services	15.9
Commerce and business	120.8
Other lending or sectors	<u>179.9</u>
Total	774.8

Source: República de Colombia, Los problemas del crédito agropecuario y el desarrollo económico en Colombia, trabajo presentado al Seminario Latinoamericano sobre Crédito Rural celebrado en El Salvador, Octubre 1968. Figures do not include regional finance corporations.

A fourth program was added to INCORA's agrarian reform package with the passage of Law 1 of 1968. This law includes renters and share-croppers into

⁵⁵Carl Purcell and Carol Steele, "INCORA Fulfills Dreams in Colombia," War on Hunger 4 (February 1970): 9-12.

the agrarian reform, two segments of the rural population not covered by previous legislation. It is too early to judge the general effects of the renter and share-cropper program. Unofficial reports indicate the program, after an initial nationwide campaign, will be quietly allowed to fade when the new president assumes office next August.⁵⁶

The program has met with many difficulties and has fallen far short of the goals set by program planners to give 100,000 families ownership status during the first two years. As of last October, only 29 farms had been taken over by INCORA providing 21,380 hectares of land for purchase contracts and titling to fewer than 2,000 tenants and share-croppers.⁵⁷

TABLE 6. VOLUME OF AGRICULTURAL CREDIT
LENDING BY COLOMBIAN AGENCY, 1967.

Lending agency	Millions US dollars	Percent of total ag. credit
Commercial banks including the Livestock Bank (Banco Ganadero)	130.0	44.1
Agricultural Bank of Colombia (Caja Agraria)	111.0	37.6
National Livestock Fund (Fondo Ganadero)	25.0	8.5
Colombian Agrarian Reform Institute (INCORA)	15.0	5.1
Regional Finance Corporations (this figure is for 1966)	8.0	3.0
National Coffee Bank (Fondo Rotatorio, Federa- ción Cafeteros)	5.0	1.7
Total	294.0	100.0

Source: República de Colombia, Los problemas del crédito, p. 131.

⁵⁶Susana Amaya, seminar presentation to the Land Tenure Center, Madison, Wisconsin, January 8, 1970.

⁵⁷INCORA statistical files, Bogotá, October 1969.

III. Agricultural Development Progress and Problems

Since Colombia's agrarian reform program has been limited in both scope and application, it would be unfair to either charge it or credit it with the country's current rate of agricultural development progress. The purpose of this section is to describe the levels of agricultural output and some of the structural problems encountered in attempting to modernize agriculture.

A. Agricultural and Industrial Growth

Agricultural output in Colombia during the past twenty years has increased at about the same rate as population growth. Most of the expansion in crop production was concentrated in cotton, sugar cane, and rice. Each of these expanded in both area under cultivation and in yield per hectare. These crops were cultivated with relatively modern technology and were produced on farms that were large in relation to peasant holdings.⁵⁸

Part of the emphasis in shifting to large scale cash crops has come as a result of pressures to find export products to substitute for a declining proportion of earnings from coffee. Colombia is still dependent primarily on agriculture for foreign exchange earnings. Coffee represent more than three-fourths of the total value of exports until recent years. Cotton, bananas and sugar are the three main export products besides coffee. In 1967 they together generated about 8 percentage of total exports but rose sharply in 1968 while coffee as a percentage of total exports dropped to 53 percent.⁵⁹

⁵⁸Atkinson, Changes in Agricultural Production.

⁵⁹Superintendencia de Comercio Exterior, Análisis del comercio exterior colombiano 1957-1967 (Bogotá: Imprenta Nacional, 1968), and reports of the Office of Agricultural Attaché, United States Embassy, Bogotá.

One of the effects of attempting to produce rapid and substantial increases in agricultural exports has been to emphasize mechanized field crops and extensive livestock enterprises. As a result, employment opportunities in agriculture are reduced on both large farms and in frontier areas. When trouble arose recently in organizing cotton workers in Cesar, a mechanical cotton picker was imported.⁶⁰ Estimates are that the machine will replace 200 seasonal workers.

At the same time, livestock production which is also low in its labor requirement, is being promoted in order to create meat supplies for export. This strategy also faces difficulties on marketing grounds due to the problems in entering and competing in the world meat trade.⁶¹

Agriculture provides about 30 percent of the gross domestic product and employs 47 percent of economically active persons.⁶² As already indicated, however, the migration out of agriculture is heavy. Since manufacturing is not able to absorb these additional workers, it would be economically advantageous to find employment for them in the country, even at low levels of productivity.

Output from manufacturing between 1951 and 1964 increased considerably faster than did growth in new employment. Employment in manufacturing grew at only about 2.2 percent while urban population increased by 5.6

⁶⁰El Espectador, Bogotá (enero 25, 1970).

⁶¹James O. Bleidner, "La situación económica de la ganadería," notes published by the Instituto Colombiano Agropecuario, Bogotá (February 1969).

⁶²Banco de la República, Cuentas Nacionales, Bogotá.

percent.⁶³ Consequently the proportion of workers in modern manufacturing declined, while employment in personal services and other low skill, low productivity employment grew proportionately faster than the total non-agricultural labor force. As a result, income distribution among urban workers also became more skewed. Workers in the higher income earning groups increased their lead over those in lower income groups.⁶⁴

Modern manufacturing currently provides about 10 thousand new jobs per year. This figure compares with an annual increase in the total labor force, including agriculture, of an estimated 168 thousand to 200 thousand persons per year. The lack in ability of manufacturing to keep up with the growing labor force can be expected to become even more acute in the future. Estimates of current unemployment rates in Colombia range as high as 20 percent of the total labor force, and one study has projected that by 1971, 36 percent of Colombia's labor force would be unemployed.⁶⁵

Farmers, especially small operators, even if accommodated on the land, face many structural limitations to increasing production. Grunig concludes from a study of a sample of small farmers that, "...Colombian rural conditions and public programs are such that very few campesinos can become entrepreneurs. The large majority are blocked from access to resources, markets, and education necessary to allow entrepreneurial development."⁶⁶

⁶³United Nations, Economic and Social Council, "El desarrollo industrial de Colombia" (Santiago, Chile: Economic Commission for Latin America, 1966).

⁶⁴Robert L. Slighton, "Relative Wages, Skill Shortages, and Changes in Income Distribution in Colombia," Memorandum RM-5651-RC/AID (Santa Monica, California: The Rand Corporation, 1968).

⁶⁵U. S. Senate, Survey of the Alliance for Progress.

⁶⁶Grunig, "Economic Decision Making among Minifundistas."

B. Transportation

Most Colombian farms are isolated, alternative markets are limited and educational and service opportunities are seriously deficient. Colombia currently produces more than 21 million metric tons of agricultural products annually. More than half of this produce moves off the farm toward markets on the backs of animals. There are more than 1.7 million horses, mules and donkeys in Colombia, almost all used for transport purposes.⁶⁷

In 1968 the Ministry of Public Works reported that Colombia had 18,000 kilometers of national highways of which about 4,000 were paved, 16,000 kilometers of departmental (state) roads, and 4,000 kilometers of rural access roads. The nationally owned railway has 3,436 kilometers of track connecting the main cities and sea ports. River transport is also available in many regions, but its relative importance is declining. Airlines and motor buses are the main carriers of passengers.

The number of motor vehicles is currently increasing at the rate of 7 to 9 percent annually. Nearly 50 percent of all vehicles are concentrated in the three main urban centers of Bogotá, Medellín, and Cali. Consequently most vehicles use a few heavily traveled primary routes during almost every trip out of town. The following table shows that the number of vehicles has continued to increase faster than the kilometers of roads.

⁶⁷Herman Felstehausen, "Planning Problems in Improving Colombian Roads and Highways," submitted for publication.

TABLE 7. NUMBER OF MOTOR VEHICLES AND KILOMETERS OF ROADS IN COLOMBIA BY TEN YEAR PERIODS.

<u>Year</u>	<u>Number vehicles</u>	<u>Kilometers of roads</u>	<u>Vehicles per kilometer of road</u>
1904	1	--	(1st auto)
1920	1,900	2,800	0.68
1930	11,500	5,800	1.98
1940	24,600	7,300	3.37
1950	63,300	21,750	2.91
1960	182,000	32,000	5.69
1967	266,000	38,000	7.00
1970	320,000	41,600	7.69 ^a

Source: Bulletins of the Departamento Administrativo Nacional de Estadística, Bogotá. Donald S. Barnhart reports on the first automobile brought into Colombia in "The Development of the Surface Transportation System of Colombia, 1820-1940" (Master's thesis, University of Chicago, 1950), p. 66.

^aEstimate.

Rural access planning and investment is the most neglected aspect of Colombian surface transportation. Local road building is the responsibility of the municipalities working in collaboration with departmental committees of Community Roads (Caminos Vecinales). Community Road legislation calls for the formation of municipal road commissions composed of a representative from the mayor's office, the parish priest, and a departmental highway representative. Recent studies indicate that the local commissions have not been formed in many communities, or if they have, they have built few rural roads; and in many areas they have been wholly inactive.⁶⁸

⁶⁸Felstehausen, "Improving Colombian Roads and Highways."

Rural areas lack practical fiscal and administrative structures to allocate social capital. Municipalities receive the income from a land tax, but the rate of the tax is so low that the income it produces is almost wholly consumed to maintain local bureaucracies.⁶⁹ At the same time, control over rates and tax structures rests with the national government which generally has been apathetic to local tax reforms.

C. Education and Social Services

Rural communities face serious shortages in education, health, information, public utilities and other services because of many fiscal and administrative limitations. The majority of rural youth in Colombia receive less than three years of education. The value of education received must be further discounted because of the low quality of rural schools and teachers, and because of the traditional practice of dividing children by sex, providing for attendance during only one-half of the day or half of the days per week for each sex group.⁷⁰

Because of regular defaulting by the municipalities and the nation in carrying out public education, many rural communities have begun using informal procedures for raising funds and building schools. This practice was partly formalized in 1958 when locally organized and already operating community action boards called "Juntas de Acción Comunal" were given legal status. The enabling legislation provides that local groups may assume and share responsibility for certain public services, especially schools, health

⁶⁹L. Harlan Davis, "Economics of the Property Tax in Rural Areas of Colombia" (Ph.D. dissertation, University of Wisconsin, 1968).

⁷⁰A. Eugene Havens, "Education in Rural Colombia: An Investment in Human Resources," Research Paper No. 8 (Madison, Wisconsin: Land Tenure Center, University of Wisconsin, 1965).

centers, roads and bridges, recreation and cultural centers, and activities to improve agriculture and cooperatives.⁷¹

Matthew D. Edel indicates that community action boards are currently the main builders of rural schools in Colombia and that their investments in local projects in 1964 were greater than those of departmental and municipal governments combined.⁷² They have no tax powers, however, making them highly dependent on the central government bureaucracy. Their procedures are filled with delays and frustrations and many projects fail.

D. Technical Assistance

Technical assistance and information services for farmers are provided by a variety of agencies and organizations. There is no comprehensive nation-wide technical service. The three largest technical assistance programs in terms of personnel and coverage are operated by the National Federation of Coffee Growers, INCORA, and the community action boards. The Coffee Federation and INCORA are semi-autonomous national agencies while Community Action remains locally based though it is chartered, supervised, and to some degree, supported by the national government.

The Coffee Federation is the oldest and also the largest agricultural assistance agency. It works only in coffee growing areas thus limiting itself to about one-third of the counties in Colombia. It employs more than 500 workers in technical assistance and information programs. Control is centralized. Technical assistance goes primarily to farms of five hectares and above, eliminating about half of the nation's 300,000 coffee farms.⁷³

⁷¹Congress of Colombia, Law 19 of 1958.

⁷²Matthew D. Edel, "The Colombian Community Action Program: An Economic Evaluation" (Ph.D. dissertation, Yale University, 1967).

⁷³Pat M. Holt, Colombia Today and Tomorrow (New York: Frederick Praeger, 1964), Chapter 6.

The Coffee Federation has a stable and guaranteed source of income through its control over market prices, product quality and export taxes. Growers are taxed domestically through double pricing systems and straight deductions regulated by the federation. About 6 percent of foreign sales are earmarked for technical assistance activities, giving the federation more than 18 million dollars annually with which to operate. The Coffee Federation has strengthened its already independent position through other investments including a coffee growers' bank and a merchant fleet.

INCORA operates the second largest technical assistance program in Colombia by providing assistance along with farm credit to small and medium-sized farms with the program supervised through approximately ninety zone offices and 550 field workers. Operating funds are received through annual governmental appropriations. INCORA has agreed not to overlap areas served by the Coffee Federation. Borrowers often must submit to pre-requisites in order to obtain credit--such as the compulsory purchase of shares in INCORA farm supply cooperatives.

The agency has no unit which develops and adapts farm technology. Field agents obtain information from any source available--a process which is casual and incomplete. INCORA also supports infrastructural investments in colonization and resettlement areas. The agency has built or assisted about 250 schools, 500 houses, and 2,000 kilometers of rural roads.

Community Action programs perform a different kind of technical assistance. Some would not classify them with other agricultural assistance agencies, yet in scope and function they probably have more impact on rural areas than the centralized institutes. These community efforts are provided with central government support in the form of an assistance fund and about 450

full-time community agents called "promoters." While government services are often over-centralized, Community Action suffers from lack of formality. Local units vary greatly from area to area.

Besides the programs already mentioned, Colombia has numerous commodity and regional assistance agencies. The main commodity agencies are for cotton, tobacco, rice, barley, cocoa, and livestock. The main regional groups are in the Bogotá Plateau, the Cauca Valley, the Magdalena Valley, and the State of Antioquia. These programs are usually directed to large producers and usually provide specialized services. Together they employ about 500 agricultural technicians and in the case of mechanized crops such as cotton and rice, often serve only a few thousand farms.

The Colombian Agricultural Institute (ICA) is launching a general extension service connected with the national agricultural research stations and the National University, and patterned after the United States land grant college system. ICA plans to have 42 district offices and about 250 technicians in the field. The program has absorbed the remnants of an extension program of the Ministry of Agriculture which was founded in the mid-1950s through assistance from the United States International Cooperation Administration.

E. Cooperative Organizations and Unions.

Cooperative markets have not met with much success in Colombia. Cooperatives face the same structural difficulties which often limit producers-- they find it hard to maintain a democratic form and open competition while competing for transportation and operating under wide price fluctuations. Private dealers, on the other hand, resort more readily to monopolistic prac-

tices and purchase agreements based on credit and other commitments which allow them to fix prices.⁷⁴

By the same token, union movements have not been particularly strong in Colombia. Attempts to obtain land have provided impetus to organize some rural peasant unions. Miguel Urrutia in his study of the development of the Colombian labor movement describes the process of rural land invasions:

The tactic of land invasions organized by rural unions is still practiced successfully. On the sparsely populated Atlantic coastal area, rural agrarian unions belonging to the Federación Agraria Nacional (FANAL), which is affiliated to the Unión de Trabajadores de Colombia (UTC), have organized land invasions which have given de facto property rights to thousands of peasants. In the report of the secretary general of the UTC at the tenth congress of that labor body, it was reported that unions affiliated to FANAL had made 44,000 hectares of land available to landless peasants through invasions of "uncultivated" private and public lands. In some cases, the agrarian union forces the landowner to sell land to the peasants on credit; in other cases the Land Reform Institute intervenes and declares the invaded land a "land reform" area; and in other cases, the peasants keep their land through force. /sic/⁷⁵

Strong actions by peasants leading to land invasions appear to be partially effective in keeping the government active in land reform work. Urrutia cites Enrique Peñalosa, former director of INCORA, as saying that very few land reform projects have been started in areas that have had no serious social conflicts.⁷⁶ Strike settlements in industry have often been made on a more peaceful basis through bargaining, but with the concessions granted to only small groups of workers.

⁷⁴Karl Wierer, "Economics of Improving Marketing Organization and Facilities to Accelerate Agricultural Development in Land Settlement Projects," Instituto Latinoamericano de Mercadeo Agrícola, Bogotá, 1967.

⁷⁵Miguel Urrutia, The Development of the Colombian Labor Movement (New Haven: Yale University Press, 1969), p. 133.

⁷⁶Ibid., p. 134.

IV. Implications for Policy

This examination of the Colombian economy and agrarian reform suggest two conclusions. First, that the agrarian reform program has been too limited in scope and coverage to have a significant impact on agricultural production. Second, that employment and income distribution measures, while never included in the agrarian reform, may also be needed in order to expand markets and increase productivity.

It may be necessary to move away from current investments in high cost mechanization and infrastructures like irrigation projects to facilitating land settlement and property security. At the same time, greater emphasis may be needed on measures to increase employment opportunities on the land to slow the rapid migration of rural workers to low productivity and high social cost urban areas.

Future increases in demand for farm products will be dependent largely on the domestic market. And unless a large share of this market can be generated by a better distribution of incomes resulting from a more equitable distribution of productive opportunities among the farm population, the increase in effective demand will probably be insufficient to justify continued future investments in large farms and capital intensive industries. Likewise, the demand for manufactured goods will continue to have a narrow base, and the problems of unemployment and underemployment will become even more serious.

Colombia faces the need to review and probably revise its development policies for agriculture. We propose consideration of an alternative policy

course.⁷⁷ The immediate purpose of such a policy would be to create new and more secure income earning opportunities in rural areas. The longer term objective is to speed up the required structural transformation of the traditional agricultural system.

The two most important policy measures are: one, to take steps to reduce the direct competition between small and large farmers for land, capital and services and; two, to manage the allocations of land, capital, and technology in order to increase output and employment in both subsectors. The small farmer is at a serious disadvantage in competing for cost-reducing technologies and services without specific policies aimed at reallocating resources in his favor. Without special programs many peasant farmers are either driven out of agriculture or back to the margins of subsistence. Rapid population growth and slow industrial expansion serve to reinforce and further enhance the economic advantage of large producers and to aggravate the problems of peasant underemployment.

Colombia's remaining public lands must be an integral part of a small farm assistance policy. The small farm subsector needs additional land in order to employ a growing population of new workers without further dividing existing small holdings. Some of this land must eventually come from existing large holdings if peasant farmers are to be accommodated within farming regions similar to the ones they now occupy. A number of measures will be needed: a maximum limit on farm size, progressive land taxation, special long term credit for land purchases by the landless or those who have too little land, and a method for obtaining a quick and low cost property title with an efficient form of transfer.

⁷⁷This discussion is developed at greater length in a paper by Peter Dorner and Herman Felstehausen, "Agrarian Reform and Employment: The Colombian Case" (Madison, Wisconsin: The Land Tenure Center, University of Wisconsin, 1970); submitted for publication.

International lending agencies could play a direct and important role by providing technical personnel to assist in designing rural infrastructure, improving land measurement and registration systems, and by funding the resulting programs. To date such agencies have tended to be indifferent to public land policies related to redistribution and spontaneous settlement.

Agricultural research in Colombia generally has given overwhelming emphasis to large farm agriculture. Research and demonstrations are usually geared to mechanized field cropping or large scale ranching as opposed to small farm practices.

Larger investments in rural infrastructure are needed for small farms. For example, large farmers usually send their children to urban schools, own their own transportation and storage facilities, bypass local market channels, and depend less on village service and supply agencies. The small farm subsector, on the other hand, is the main client for rural schooling and health facilities, collective forms of transportation and communication, and local product handling and marketing facilities. This being the case, neither urban residents nor farmers in the large farm subsector can be expected to be very sympathetic to the needs and demands of farmers who live on small plots in the country. Improved average incomes for the large number of small farmers will provide the small farm subsector with more economic and political leverage with which to influence decision making bodies on the questions of improved rural services. Improved income would also strengthen the demand for nonfarm inputs and consumer goods by the small farm subsector pulling additional commercial services into the countryside and creating some additional jobs.

In the credit market, the small farmer remains in an insecure and vulnerable position. Not only must credit programs for the small farm subsector be expanded, they should likewise have special terms and conditions for borrowing. Subsidized lending to small farmers should not be ruled out if it assists in making agricultural adjustments, increases employment and generally aids in improving income distribution.

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