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THE MINIFUNDIA DILEMMA: A COLOMBIAN CASE STUDY

by

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One of the most important contributions of peasant agriculture to capitalistic development is its capacity to employ rural masses at near subsistence levels of living until more remunerative employment opportunities are created in the non-agricultural sectors of the economy. Through continued land fragmentation, informal tenancy arrangements, land use intensification, and in some instances, declining levels of living, many countries have kept burgeoning peasant populations "on ice" for generations while industrial development and urbanization gradually undermined their traditional economic and social order.

Like most developing countries, Colombia is experiencing an increased crowding of peasants onto the land. Notwithstanding an annual flow of 200,000 rural-urban migrants,[1] the rural population continues to grow at the rate of at least 1,000 new farm families per week.[2] While some of these families were undoubtedly among the nearly 60,000 beneficiaries of INCORA's title registration and land redistribution programs during the

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[1] Dale W Adams, "Rural Migrants and Agricultural Development in Colombia" (Paper presented at the 13th Conference of The International Association of Agricultural Economists, Sydney, Australia, August 1967).

[2] Speech to a Senate Commission by Enrique Peñalosa, director of the Colombian Agrarian Reform Institute (INCORA), quoted in El Tiempo, April 12, 1967, p. 23.

first six years of its operation,[3] the overwhelming majority obviously were not. Most of INCORA's efforts have focused upon the creation and strengthening of those family farms which have a high potential for increasing marketable surpluses. Meanwhile, more than 800,000 families--40 percent of the country's farm families--are landless or own too little land to provide even the barest subsistence.[4]

The fact is that neither the productive segment of the Colombian agricultural sector nor the incipient industrial sector seems to be providing sufficient income-earning opportunities to absorb the growing rural labor force. The only alternative for most of the annual increment in the rural labor force appears to be underemployment in the nearly saturated service sector of the cities, or peasant agriculture in already densely populated rural areas.[5] In view of the unprecedented national population growth rate of 3.2 percent per year and the backwash effects created by the mechanization of formerly labor intensive operations (especially family handicrafts), it seems likely that minifundio agriculture will be the only

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[3] Inter-American Development Bank, Socio-Economic Progress in Latin America, Seventh Annual Report (Washington, D.C.: IDB, 1967), p. 114.

[4] Interview with Enrique Peñalosa in El Tiempo, January 2, 1967, p. 17.

[5] Ibid. According to Peñalosa, the number of rural families is projected to increase by 500,000 during the next decade, while an estimated 300,000 rural families are expected to migrate to the urban areas. Also see Marco F. Reyes C., "Estudio Socio-económico del Fenómeno de la Inmigración a Bogotá: Segunda Parte," Economía Colombiana, 22:21-29, November 1964. Reyes' study of a representative sample of in-migrants to Bogotá shows that 62 percent of those employed listed manual occupations--sales, operatives, artisan, day and wage labor, and personal and other services. Nearly 60 percent were absorbed in the service and commercial sectors, while 20 percent were employed in the industrial sector. Of the nearly one-third who moved to Bogotá for reasons of employment, only 36 percent had a definite position prior to migration.

escape valve available to many rural people during the next few decades. Hence, the country faces the difficult task of expanding employment opportunities in both the agricultural and non-agricultural sectors of the economy without sacrificing the level of productivity required to meet its internal and external commitments.

This paper documents some of the important demographic and technological changes in a peasant community of the Colombian highlands. It suggests that in order to increase the employment capacity of the minifundia and improve peasant participation in the greater society, an entirely new developmental approach must be employed in the already settled rural areas.

II

A case in point is the densely populated Río Negro Valley located in the eastern part of Cundinamarca between the Federal District of Bogotá and the Llanos Orientales (see Figure 1). Excluding the sparsely inhabited areas above the timber line, the average population density of six municipios studied in this region is nearly 300 persons per square mile.[6] During the past decade, the population of the region increased at an average annual rate of about 1 percent[7] in spite of heavy out-migration

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[6] Departamento Administrativo Nacional de Estadística (DANE), Mapa Estadístico de Cundinamarca (Bogotá: Imprenta Nacional, 1966).

[7] From DANE, Censo General de Población de 5 de Julio de 1938, Tomo VII, Departamento de Cundinamarca (Bogotá: Imprenta Nacional, 1941); DANE, Censo General de Población de 1951, Departamento de Cundinamarca (Bogota: Imprenta Nacional, 1954); and DANE, XIII Censo Nacional de Población de 1964 (Bogotá: Multilith Estadinal, 1965).

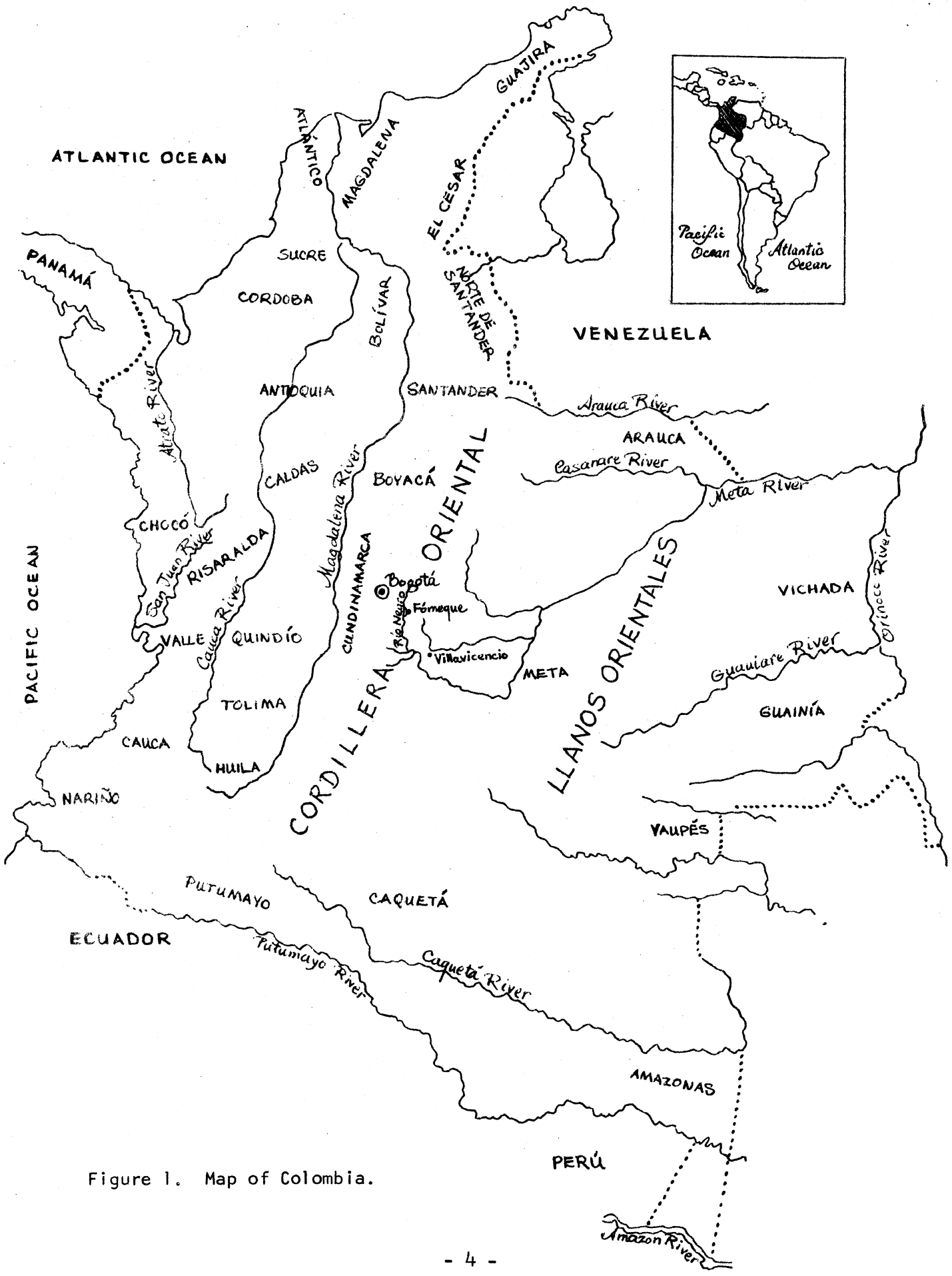

Figure 1. Map of Colombia.

to Bogotá and the Llanos Orientales. The effective fertility rates (the number of children under five years of age per 100 females in the child-bearing age group) have risen from 66.7 in 1938, to 69.3 in 1951, to 77.8 in 1964.[8]

The predominant settlement pattern of the region is one of small service and trade centers surrounded by dispersed minifundia. Eighty percent of the agricultural production units have fewer than three hectares of land.[9] Most of the minifundia are located on steeply sloped and highly erodible soils and are fragmented into two or more separate parcels.

An intensive study was conducted in one of the municipios--Fómeque--to learn more about the demographic and agricultural adjustments occurring in the community and the possibilities for improving the agricultural production and levels of living on the minifundia. Most of Fómeque's 11,500 inhabitants[10] live on scattered minifundia in the temperate and cold climate zones in the western third of the municipio. The other two-thirds of the land area lies above the timber line in extensive pastoral estates. The administrative and political seat of the municipio has about 400 resident families, most of whom own land in the rural hinterland.

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[8] Ibid., and DANE (unpublished statistics from the 1964 census).

[9] Comité Interamericano de Desarrollo Agrícola (CIDA), Tenencia de la Tierra y Desarrollo Socio-Económico del Sector Agrícola: Colombia (Washington, D.C.: Pan American Union, 1966), p. 88.

[10] DANE, XIII Censo Nacional de Población, 1964, op. cit. On the basis of the data collected and reviewed during the study, it appears that the census figure may be understated by as much as 20 percent, especially in the rural sector.

Between the landlords residing in the village and those living in Bogotá, more than three-fourths of Fómeque's total land area is held by absentee owners.

According to sketchy census data and local informants, Fómeque has sustained a dense rural population since the latter part of the 19th century. This evidence is substantiated by the migratory movements from the municipio. From the end of the last centry until 1932 when the first road was completed to Villavicencio, Fómeque was an important intermediate trade center between Bogotá and the Llanos Orientales. Many local peasants worked as muleteers or cattle drivers during the dry seasons. Even after the road was opened, bypassing the municipio to the south, an impetus was given to crop production in the Llanos, many Fómequenos--predominantly the younger males--worked as seasonal laborers during the planting and harvest. There was also some permanent migration from Fómeque to the Llanos during this time. But because of malaria and other dreaded diseases of the tropics, most peasants preferred to raise their families in the cooler climate of the Río Negro Valley.

By the late 1940s and early 1950s when DDT had reduced the threat of malaria, "la violencia" had erupted in the Llanos. With the majority of its inhabitants oriented toward the traditional Liberal Party, the Llanos became politically inhospitable to most potential migrants from Fómeque whose residents are predominantly Conservative Party followers. Indeed, there was some reversal in the migration flow during this period as many families escaped to the relatively peaceful Río Negro Valley from the Llanos and other hostile regions of the country. Nearly 10 percent of

the households in the rural sample[11] indicated that one or more of its members had in-migrated or returned to Fómeque because of civil unrest elsewhere.

By the time the turbulence had been suppressed in the late 1950s, the influx of mostly Liberal migrants into the Llanos from the violence-torn provinces of Tolima, Huila, Caldas, and Valle--coupled with an accelerated population growth rate--had created a labor surplus in the region, and mechanization had been introduced on many larger farms. Consequently, seasonal migration to the Llanos declined steadily during the past decade. In the sample of rural households, one-fifth of the male household heads had worked in the Llanos as seasonal laborers. However, two-thirds of these respondents were over 40 years of age and had not worked there during the past decade.

Likewise, the opportunities for permanent migration to the Llanos seem to be diminishing as accessible areas of fertile bottom land become densely settled. A recent soil survey indicates that less than 10 percent of the foothill region is suitable for intensive cultivation or peasant agriculture, and most of this land is already occupied.[12] The rest of the

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[11]The rural data is based upon a probability area sample which included approximately 10 percent of the total number of rural households in the municipio. A census of the village households was completed in a separate phase of the study.

[12]Food and Agriculture Organization of the United Nations, Reconocimiento Edafológico de los Llanos Orientales: Colombia (Rome: United Nations Special Fund, 1965).

region, as well as the vast plains east of the foothills, is suitable only for extensive grazing and irrigated agriculture under careful management.

Only 20 percent of the migrant siblings and 15 percent of the migrant children of the sampled household heads and spouses in Fómeque were living in the Llanos in 1966. Eighty-three percent of the rural respondents indicated that they had never seriously considered moving to the Llanos. Their rationale usually included one of three factors: they considered the climate to be unhealthy, they perceived the social environment to be undesirable for raising a family, or they felt the services to be inadequate. On the other hand, 35 percent of the interviewees said that they would be interested in moving to the Llanos if they had an opportunity to acquire land near a population center.

During the early part of the century, permanent and seasonal migration to the coffee zone of Quindío also provided an important "escape valve" for the peasants of Fómeque. But, like the Llanos, heavy in-migration into the region eventually reduced the supply of available land and the demand for migratory labor. Outbreaks of "la violencia," which began here in 1946, apparently dealt a final blow to the half-century migratory movement. Fifteen percent of the male household heads in the Fómeque sample had worked in the coffee zone, but three-fourths of these respondents were over 40 years old. Only 14 percent of the migrant siblings and 6 percent of the migrant children of the sampled household heads and spouses were living in the Quindío region in 1966.

While permanent and seasonal migration of Fómequeños (especially peasant families of the lower socio-economic strata) to other rural areas of Colombia continues at a pace much retarded from earlier in the century, the dominant migratory pattern today is toward the cities. This migration appears to be increasing. Whereas 47 percent of the migrant siblings of the sampled household heads and spouses went to Bogotá, this city has attracted 60 percent of the migrant children of the rural respondents. Three-fourths of the migrant children from the village have gone to Bogotá. Of these, only one-fourth were employed in manual occupations compared to three-fourths of the migrant children from the rural part of the municipio. When asked whether they had ever considered moving to Bogotá, the majority of the rural respondents replied affirmatively. Nearly all of the interviewees had traveled to the capital city and virtually everyone has relatives living there. In most of these peasant families, however, the threats of unemployment and personal insecurity in the city apparently outweigh the disadvantages of a deteriorating peasant agriculture.

Figure 2 shows the age and sex distribution according to place of residence from the 1964 census population of Fómeque. A sharp decline in the 15 to 29 year age groups for rural males and the 15 to 24 year age groups for rural females suggests a heavy out-migration of young adults. The figure also indicates the youthfulness of the population, especially in the rural portion of the municipio where the birth rate tends to be higher. Children under five years of age comprise 15 percent of the rural population, and 44 percent are under 15 years of age. The effective

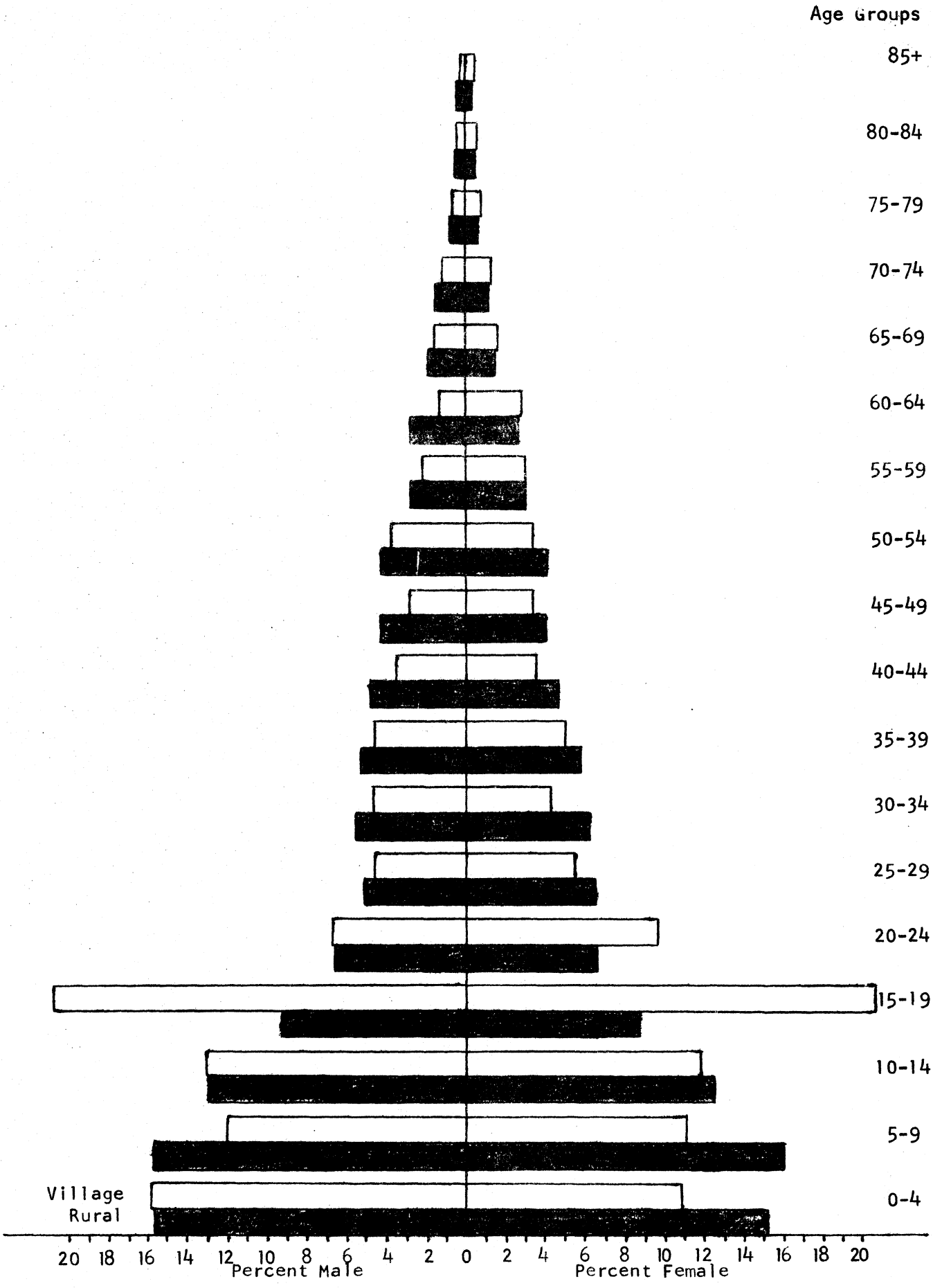

Figure 2. Age-Sex Pyramid for Rural and Village Population of Fómeque, 1964.

fertility ratio is 71.8 for the rural area compared to 47.0 for the village.[13]

In comparison to the national population, the municipio's population tends to be older. (See Figure 3.) With the exception of the 15 to 19 year age group for males, all age groups under 35 years for both sexes are proportionately smaller for Fómeque than those for the national population. Nearly 47 percent of the national population is under 15 years of age. The country's effective fertility ratio is 77.9.

While the crude birth rate for Fómeque has risen slowly from 31 in 1938 to 34 in 1964, the crude death rate has declined from 14.5 to 10.7 during the same time span.[14] The decrease in infant mortality as a result of improved medical facilities has been particularly notable. In 1938, over 12 percent of the infants died before reaching one year of age compared to only 5 percent in 1966.[15]

The intense demographic pressure on the land as a result of limited opportunities outside the community has manifested itself in numerous ways. Land conflicts in other parts of the country, which began in the late 1920s and continued at an accelerated rate, and the passage of Law

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[13] For the village, the 10 to 19 year age groups are inflated for both sexes because of the heavy influx of students from other municipios and to a lesser degree, the rural area of Fómeque.

[14] DANE, Censo General de Población, 1938, op. cit.; DANE, XIII Censo Nacional de Población, 1964, op. cit.; and local church records.

[15] Records from the local church and notary.

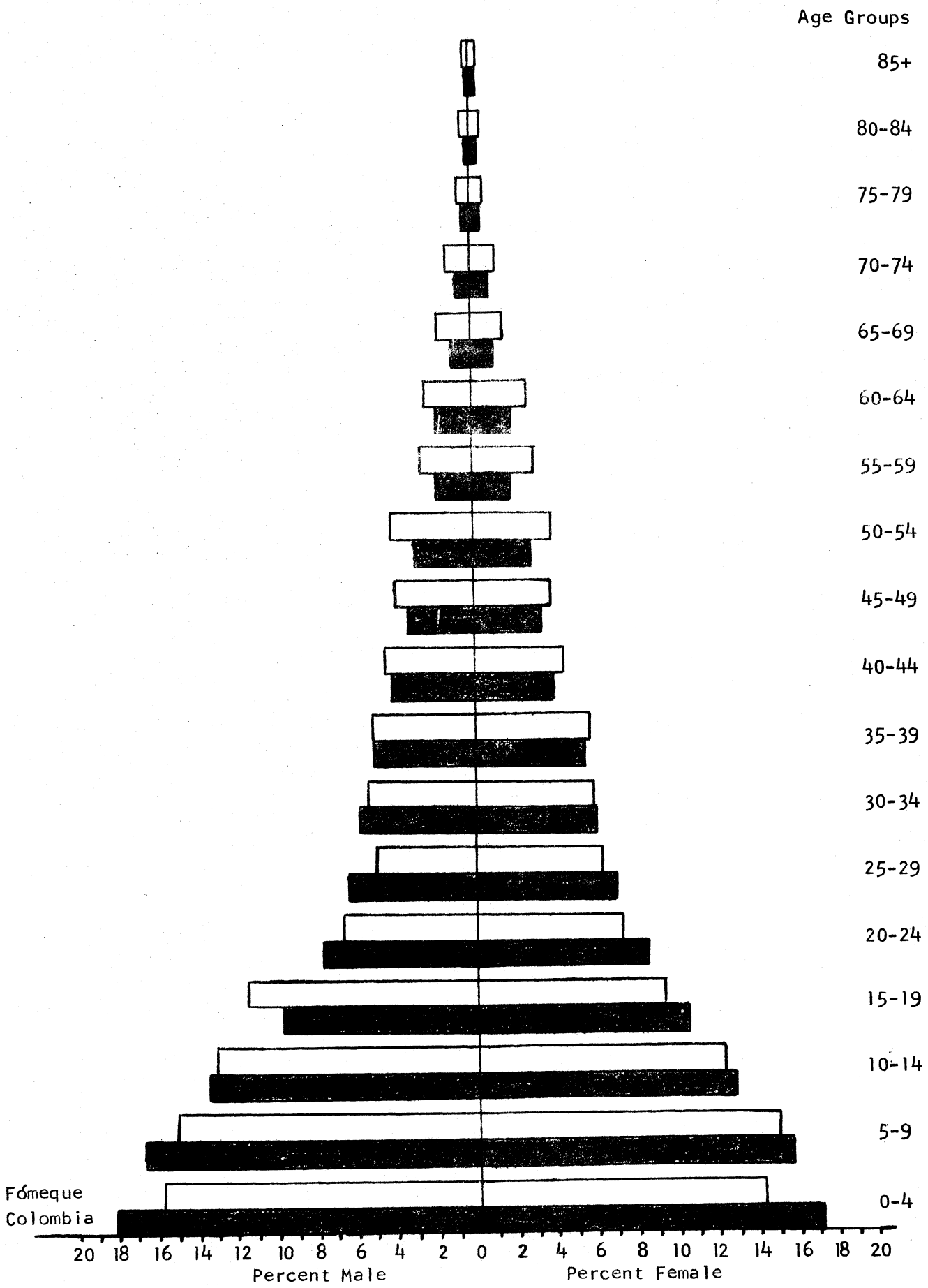

Figure 3. Age-Sex Pyramid for Total Population of Colombia and Fómeque, 1964.

200 of 1936[16] with its security of tenure clause, triggered a pervasive land fragmentation which still continues. During the past decade, the number of additional legally created land parcels in Fómeque averaged 168 per year while the average number of reported consolidations was only 24 per year.[17] Meanwhile, land prices have increased to as high as U.S. $1,000 per acre for good agricultural land close to the village. The restricted alternatives for peasant families, coupled with cumbersome transfer procedures and inheritance patterns, have also fostered de facto land fragmentation--the stacking up of two or three generations on a single family property.

A whole array of informal contractual arrangements have evolved to circumvent legal roadblocks and to provide a means of subsistence for new peasant families. More than one-fifth of the agricultural production units operated by families in the rural sample included land owned by non-nuclear family relatives; one-fourth of the respondents operated some land owned by non-relatives living in the rural hinterland; and, over one-fourth operated some land owned by village residents. The extreme fragmentation of properties and the paucity of income-earning opportunities on the

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[16] After three years of congressional haggling over earlier drafts, Law 200 of 1936--Colombia's first major legal instrument of land reform--was passed during the relatively progressive administration of Alfonso López. Precipitated by a growing number of land conflicts and rural unrest, the law attempted to provide a judicial basis for (1) clearing up uncertain titles and existing land occupancy rights, and (2) predicating ownership on the "economic use" of land. See Albert O. Hirschman, Journeys Toward Progress (New York: The Twentieth Century Fund, 1963), pp. 95-116.

[17] Cadastral records of Fómeque.

minifundia are further exemplified by the fact that 83 percent of the sample households reported income from either off-farm or non-farm employment.

The shortage of land and capital among the peasant families has forced most of them into informal tenancy and credit arrangements with the merchants, middlemen, and professionals of the village who, in turn, extract an economic surplus from the peasants to underwrite their own positions of power. Eighty-five percent of the rural respondents had obtained credit in cash or kind from village proprietors within the past two years. Such alliances between the peasants and villagers are important in the production of commercial enterprises and the diffusion of new technology in the community. Typically, the villagers provide the land and the physical inputs while the peasants, known as sembradores or partijeros, in this case supply the human and animal labor inputs. The value of purchased factors is usually prorated among the two parties and the product is shifted equally. More than one-third of the rural respondents produced tomatoes under these sharecropping (compañia) arrangements in 1966.[18] Fifteen percent of the rural respondents combined sharecropping

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[18] Compañía is an informal sharecropping arrangement wherein two or more parties combine their resources for production and share the output accordingly. More than one-half of the families in the rural sample were involved in such agreements for producing crops or raising livestock.

with service tenancy agreements (arrendamiento) with village residents and hence were obligated to perform other services as well.[19]

The landlords or creditors often purchase the producer's share of the output at a price somewhat less than the going market rate. As a result of tightly organized informal horizontal and vertical associations of local middlemen with those in the consuming centers, market margins between producer and wholesale levels usually exceed 50 percent for most commodities, and often are as high as 100 percent.

Such asymmetrical linkages between the peasants and the dominant community groups mean that most rural families are effectively excluded from the major decision-making processes of the community and they have little or no recourse to the actions taken by their superordinates. Except for members of the municipal council, Colombian local government officials are appointed. The municipal council itself has the prerogative of nominating a list of candidates from whom their successors are elected by the public. They, in turn, appoint the other local officials except for the mayor who is appointed by the departmental governor. Throughout the past decade, no fewer than five out of the ten council members have resided outside Fómeque, and most of the mayors have been short-termed outsiders. Fómeque has never had an elected or appointed peasant representative in the local

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[19]The sistema de arrendamiento, as it is known locally, consists of informal land tenancy contracts involving service obligations on the part of the tenants (agrogados). Typically, tenants are supplied a house and a subsistence plot of land for their usufruct in exchange for services such as tending livestock, harvesting permanent crops, and delivering produce to the landlord. Landlords and tenants operating under this arrangement quite commonly enter into compañía agreements, as well, for producing annual crops or livestock enterprises.

government. Small wonder that only 14 percent of the 1967 municipal budget, equal to approximately U.S. $47,000, was designated specifically for projects in the rural portion of the municipio where 80 percent of the people live.

III

In general, the peasant families are locked into a chronic state of poverty on land which is condemned to a short life through the persistent use of exploitative production techniques. As a result of heavy demographic pressure, the cloud forest zones of the municipio are being threatened by rapid fragmentation and intensive cultivation. The destruction of these natural reservoirs, in turn, severely disrupts the normal hydrological cycle of the community--especially the populous lower areas of the municipio--by accentuating the wet and dry seasons.

Intensive commercial crops have provided additional slack in the delicate balance between the community's population and its natural resource base. But they have also injected new perils into the system. Clean cultivated crops such as tomatoes, which are produced in vertical rows on steep slopes, deplete the soils at a much more rapid pace than the traditional intercultivated subsistence crops (such as maize, parsnips, broad beans, and squashes). With this accelerated rate of depletion, it is becoming impractical and even impossible to produce commercial crops without improved fertility practices. But the increasing amounts of chemical fertilizers which are used are not being applied with complementary soil and water conservation practices.

Although the introduction of intensive commercial enterprises (such as green beans, peppers, onions, flowers, as well as tomatoes) has resulted in a greater output per unit of land, population pressures have caused a continual decline in the average farm size. Much of the land formerly planted to subsistence crops has been shifted to commercial crop production; however, the depletive techniques used in the cultivation of these intensive enterprises reduce the capacity of the soil to produce subsistence crops which are traditionally grown without improved fertility practices. Increasing amounts of chemical fertilizers and pesticides are required to maintain constant yields, to say nothing of improving them. Because of a diminished land base for the production of subsistence enterprises and because of a decline in former artisan crafts, peasant families must purchase a greater portion of their family needs. But because they also must purchase more inputs than before at increasingly disfavorable costs in relation to the prices received for their products, the peasants are caught in an accelerating technological squeeze.

Yield-increasing technology such as improved livestock breeds, new crop varieties, chemical fertilizers and pesticides has generated additional employment opportunities in the past. Yet the Fómeque case illustrates that there are limitations to increases in employment which can be brought about by such technological change. In densely populated rural areas like Fómeque, it is unlikely that the existing types of technology and institutional arrangements will permit a further absorption of people into agriculture and an improvement in levels of living for the rural masses without causing irreversible damage in the natural resource base.

Case studies and programming analyses of selected minifundia indicate that a great potential exists for a further expansion of production and employment through an extended usage of agricultural chemicals and genetic improvements in combination with improved soil and water management techniques. Labor-intensive conservation practices and irrigation schemes are presently used to great advantage on the more progressive farms of the community. For most commercial crops, yield differentials between the lowest and highest producers are greater than tenfold. Most of this variation may be explained by differences in technology and management.

Unless changes are made in the institutional structure, however, the possibilities for augmenting the productivity of the community's human and physical resources are not bright. On the one hand, the effective demand for new inputs is reduced by heavy liens against the peasants' production, unstable product prices, a high incidence of natural calamities, and restricted opportunities for acquiring new knowledge and skills. Under these constraints, incentives for seeking out and adopting relevant high pay-off combinations of new technology are dampened. On the other hand, the development and supply of new technology is dependent upon a grossly inadequate and outmoded agricultural service structure. Unlike the more progressive farmers of the community who have access to the country's major agricultural research stations, supply agencies, and financial institutions, peasants must rely upon local sources of information and physical inputs. In the absence of effective instrumental organizations through which peasants can formulate collective goals and devise

plans for achieving them, there is little inclination on the part of the community's dominant groups to improve the agricultural infrastructure.

At the same time, there is little reason to anticipate massive commitments from the national government for minifundia communities. Under the present national political system, priorities are given to projects in the urban areas and in the more productive segment of the agricultural sector. However, if a larger portion of local resources were channelled into infrastructural investments such as roads, schools, health facilities, markets, and technical information systems for which the rural masses manifest a need, the employment and production capacities of the minifundia and their operators could be increased substantially.

Some of the resources required for these projects could conceivably be diverted from public funds now used to support local bureaucracies and conspicuous projects in the villages. But because of the narrow spectrum of local political power, the peasants are unable to effectively challenge such expenditures. Land taxes are the principal source of revenue for most local governments in Colombia. But because of low property assessments complicated by cumbersome reappraisal procedures, inflation, and a high incidence of noncompliance, the actual amount of funds collected falls far short of the potential. In 1966, Fómeque collected U.S. $7,838 in current and delinquent property taxes--only one-fifth of the total revenue of the local government. Most of the local government revenue consisted of participation funds and transfer payments from the departmental and national governments. A reassessment program just completed increased the potential land tax collections of the municipio by more than five times in real terms.

But in context of the existing local political structure, peasants will have little incentive or justification for paying the additional taxes. In other minifundia communities, reassessment programs have apparently resulted in an expansion of local bureaucracies and higher rates of non-compliance.[20]

The local church has been more successful than the government in extracting resources from the peasantry. In 1966, it collected more than U.S. $25,000 in the community through Sunday collections, paid masses, bazaars, and fund campaigns for a new cemetery and rectory. It is estimated that nearly an equivalent amount of revenue was contributed in the form of labor, food, and building supplies. Formerly, a portion of the religious funds was returned to the rural neighborhoods for the construction of schools and roads. But in recent years, the growing village bureaucracy (teachers, municipal officials, and employees of public agencies) has effectively controlled the disbursement of these church funds into village projects including a complete elementary, secondary, and vocational school system, a consumer cooperative, a credit union, an experimental farm, a hospital, a market plaza, and a theater.

Meanwhile, peasant participation in the church's community development program has remained essentially that of contributing generously to a one-way flow of resources from the rural hinterland to the village. Few peasant children are enrolled in the village school system, for example.

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[20] L. Harlan Davis, "Economics of the Property Tax in Rural Colombia," (unpublished Ph.D. dissertation, University of Wisconsin, Madison, 1968).

A bulldozer owned by the local church-sponsored development corporation is rented to a neighboring municipal government instead of being used to improve local penetration roads. In these cases and many others, effective pressure from the peasants could produce many benefits through extended usage of existing facilities and a better allocation of current revenues.

IV

The dilemma, then, is not simply a matter of dismantling peasant agriculture and assimilating a burgeoning rural population into the cities as Laughlin Currie suggested in his "Operación Colombia" plan of 1961.[21] There is also the concomitant task of increasing the absorptive capacity of the agricultural sector so that growing numbers of rural people can be absorbed in remunerative employment during the early stages of industrialization. The challenge is rendered particularly difficult by the necessity to favor employment maximization subject to the physical and political constraints of providing adequate supplies of agricultural products for domestic consumption and foreign exchange earnings.

The capacity of peasant agriculture to increase the absorption of labor and the production of marketable surpluses has been constrained by structural barriers which impede the mobilization of relatively abundant low opportunity cost resources in this segment of the agricultural sector.

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[21] Laughlin Currie, Accelerating Development: The Necessity and the Means (New York: McGraw-Hill, 1966). The basic ideas of the plan were originally presented by Professor Currie in a paper entitled Operación Colombia: Un Programa Nacional de Desarrollo Económico y Social (Bogotá: Departamento Administrativo de Planeación y Servicios Técnicos, 1961).

The Fómeque case demonstrates that a continuing source of flexibility for increased employment and production on the minifundia can be achieved through a further application of agricultural chemicals and genetic improvements in combination with labor-intensive soil and water management practices. However, a continuous supply of improved inputs and services at remunerative prices is contingent upon an effective organization of the peasants through which they can present their demands to the community and the greater society.

Such technological and institutional changes in minifundia agriculture are, of course, only transitory steps in the over-all development effort. Unless these changes are accompanied by pervasive structural modifications in the national economy, sustained high population growth rates will continue to generate unemployable rural masses. Indeed, the creation of remunerative employment opportunities for the existing backlog of rural youth constitutes a very formidable challenge to the nation, to say nothing of the future generations.

Increased employment and improved levels of living in peasant communities are consistent with the national goals of greater agricultural productivity and increased transfers of productive resources to the non-agricultural sectors of the economy. The costs of inaction will be quite high in terms of prolonged violence and destitution in both rural and urban areas as well as the continued destruction and waste of human and physical resources at an accelerating rate.