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LABOR ABSORPTION AND ECONOMIC GROWTH IN CENTRAL AMERICA

by

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1. This paper examines what has happened to the allocation of labor in Central America in the face of accelerating population growth.

Central America is taken to include Guatemala, El Salvador, Honduras, Nicaragua, and Costa Rica--five countries on the isthmus connecting North and South America that have joined in recent years to form the Central American Common Market. Their level of development continues to be low: gross domestic product for a total population of some 13 million averages about 300 dollars per head. Some progress has nevertheless been achieved: though population expansion now approximates four percent per year, output has in recent years outpaced it at an average annual 5 - 6 percent. The proportion of the labor force employed in agriculture declined from 67 to 60 percent in slightly over a decade, but with the proportion in industry constant at 17-18 percent, the margin has wholly been accounted for by various urban service categories, where underemployment is endemic.¹

2. In international comparisons, the relative sluggishness of industry and the relatively high contribution of services to labor absorption are

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¹These trends may not exactly conform to the criterion of success proposed in John C.H. Fei and Gustav Ranis, Development of the Labor Surplus Economy: Theory and Policy (New Haven: 1964). "Industry" here includes, mining, manufacturing, construction, public utilities, transport and communications.

unusual, but not unprecedented.² Superficially, therefore, Central American trends need not be disquieting. This paper argues first, that the decline in the proportion of the labor force in agriculture has not been due to an autonomous expansion in the service industries, but rather to an increasing scarcity of land outside the plantations as population expands. Second, the lead in the economic growth of the region was given by exports of two or three plantation crops which have been land rather than labor intensive, thus contributing relatively little to the utilization of a growing labor force. Lastly, quite apart from industry's capital intensive propensities, an unusually skewed income distribution has kept the contribution of manufacturing to gross domestic product below levels typical in other countries with similar population size and per capita income. A process of economic development that can involve the entire population within a reasonable time horizon is thus contingent on social change.

Export Economies

3. We begin the analysis of these trends with the observation that economic growth in Central America has received its major impetus from export earnings. The following tabulation compares average annual rates of growth in exports with rates of change in gross domestic product and in government receipts:

²Simon Kuznets, Modern Economic Growth (New Haven: 1966).

Year	Export Earnings	GDP	Public Revenue
1950-57	7.1%	7.1%	11.6%
1957-61	-0.2%	2.9	-0.1
1961-64	8.1	8.1	14.4

On the side of public expenditures, most of the burden of adjustment was carried by capital outlays which declined sharply as exports slumped, while current expenditures continued to rise though at a much reduced rate. Imports have also been closely attuned to export earnings: statistically they are in fact somewhat better explained by exports alone than by total income net foreign capital movements have tended to be inward during export booms, outward at other times, necessitating relatively mild capital controls in some of the countries concerned.

4. Agricultural commodities continue to account for some 95 percent of export earnings for the region taken as a whole. Three staple crops--coffee, cotton, and bananas--predominate. The term "banana republic" was in fact coined with Central America in mind, though bananas now account for only 14 percent of regional exports as compared with 24 percent for cotton and 45 percent for coffee.³ Foreign capital predominates only in bananas where two North American companies still produce or market virtually the entire exportable crop.⁴ Like bananas, however, the overwhelming bulk of the coffee

³Intra-regional trade was subtracted from total exports to compute the ratios.

⁴The United Fruit Company of Boston, Massachusetts, and the Standard Fruit Company of New Orleans, Louisiana.

and cotton crops are exported abroad.⁵ Together with bananas also, the coffee and cotton industries tend to constitute islands of modern organization and techniques in an otherwise primitive agricultural environment.⁶ Finally, the growth prospects for all three of them are now equally close to exhaustion.

5. Further expansion in the banana industry is unlikely to maintain a pace comparable to the rate of population growth. Though employing a substantial labor force, the industry does not appear to have been attracted to the region by a relative abundance of labor, but rather by the exceptionally favorable soils and climate of its Caribbean coast, outside the hurricane belt yet in close proximity to major markets, particularly in the United States.⁷ With its rigid resource requirements, the industry will stop expanding whenever the limit of suitable land is reached, whether or not additional labor remains in the subsistence sector. The banana companies have had difficulty even reaching that limit, however. The appearance of Panama disease first induced the relocation of some plantations from the Caribbean to the Pacific coast of Central America. As the disease spread, however, and as floods, blowdowns and labor unrest were added to it in the mid-fifties, the companies began to look to Ecuador for additional supplies, leaving the Central American share of the expanding world exports to decline from 35 to 18 percent.⁸

⁵Of a total 5,732 thousand 60 kg. bags of coffee produced in 1965, 665 thousand were consumed locally; while 18 thousand metric tons of cotton were sold locally out a total production of 292 thousand.

⁶Coffee production is relatively less efficient in Honduras and Nicaragua

6. Only recently have the companies begun to convert to disease resistant strains of bananas, and with these to expand their Central American plantations once more. At the same time a beginning has been made with the setting up of independent local producers, who continue for the present to rely on the companies technical assistance, marketing facilities, and finance. Concurrently, however, prices have begun to weaken in world markets. Per capita banana consumption is declining in the United States and has tended to stabilize in Western Europe and Japan. World demand is therefore expected to rise only fractionally above two percent per year.⁹ Western Europe is furthermore likely to continue preferential treatment for African suppliers, and Japan is expected to rely mainly on supplies from Taiwan and the Philippines. The recent expansion of production in Central America may again level off, therefore, even before the region's capacity output is reached.

7. The coffee industry provides the major economic base for the region's social and political elite, particularly in Guatemala, El Salvador and Costa Rica, where coffee contributes 8-12 percent of gross

⁷ Stacy, Mary and Galo Pláza, The United Fruit Company in Latin America (Washington: 1958).

⁸ United Nations, Food and Agricultural Organization, "Commodity Notes: Bananas," Monthly Bulletin of Agricultural Economics and Statistics (December 1964).

⁹ The banana companies themselves have begun to diversify into other lines. See, "Top Bananas: Things are Looking Up for Their Once-Harassed Growers," Barron's Weekly (December 13, 1965).

national product.¹⁰ Among some 150,000 coffee growers in Central America, roughly 5 percent own two-thirds of the total area in coffee and produce 80-90 percent of the crop. The distribution of ownership is least concentrated in Costa Rica, yet even there half the coffee area is owned by 15 percent of the planters. The coffee industry employs about 400,000 workers at harvest time in Guatemala, and about that many again in El Salvador each year. Still, as with bananas, it is primarily the natural resource base rather than the labor force that accounts for the coffee industry's success. The region offers fertile volcanic soils in moderate altitude highland areas with marked dry and wet seasons and ready access to the Pacific coast for shipment abroad. The product is exclusively made up of mild coffees which, though priced somewhat below similar Colombian varieties, nevertheless command a premium over Brazilian Arabica as well as over Robusta coffees in the international market.

8. Coffee production has risen rapidly in the last decade, partly in consequence of acreage expansion in a period of high prices in the mid-fifties, and partly because of increased yields due to double planting, better pruning methods, new varieties, and a sharply increased use of fertilizer introduced in the slump that followed. As a result, Central America now accounts for some 11 percent of world exports. Further increases in yields are possible with the adoption of parallel innovations in Honduras and Nicaragua. However, Central

¹⁰ See United Nations, Coffee in Latin America (New York: 1958), on El Salvador.

America is already pressing against internationally agreed quota limits, and expanding export under waivers authorized within the International Coffee Agreement, or in violation of its terms, have contributed to a new decline in world coffee prices. Efforts to reduce output by diverting coffee acreage to alternative uses have thus far proved disappointing, partly because the coffee terrain seems poorly suited to other crops, partly because at present world prices of coffee continue to earn exceptionally high profits. Nevertheless, further expansion of coffee production is likely to be limited in view of the intensified international tensions that it promises to create.

9. Cotton has thus far been the only major addition to Central America's traditional export staples.¹¹ With output doubling in the period 1961-1965, Central American exports at their peak contributed 7 percent of world exports, Japan taking about 60 percent of the Central American crop and the European Common Market another 30 percent. The construction of new roads and a successful malaria eradication campaign had opened up suitable lands along the Pacific coast for cultivation. The drop in coffee export prices after 1957 provided an additional incentive for diversification, and ample credit facilities augmented by American banks and international institutions supplied the necessary means. Nevertheless, much of the new movement into cotton was looked upon as hardly more than a gentlemen's sport. Thus 20 percent of the cotton growers using the most up-to-date American methods accounted for 80 percent of the Central American crop. Yet 60 percent of the cotton

¹¹U.S. Department of Agriculture, Cotton Production in Central America (Washington: November 1963).

area in El Salvador, was rented land only temporarily committed to the crop.

10. The initial speculative bubble has since burst in the face of rising costs and increasing uncertainty in world markets. The promise of quick and large returns led to a neglect of soil conservation and crop rotation practices. A consequent decline in fertility and a proliferation of insect pests induced intensified and somewhat indiscriminate applications of fertilizer and pesticides, at the same time that rapid acreage expansion was driving up land rents and wages for qualified labor. As of August 1966, finally, the United States put in effect a new cotton policy to reduce its cotton stocks and to recapture a larger share of the world market for North American growers. In response, Central American production has begun to decline, in some areas precipitously. A partial recovery can be expected with some further expansion possible in Guatemala where additional suitable land remains unexploited. For the region as a whole, however, the industry is expected to stabilize, as have coffee and bananas, not far from its present level.

11. The success of all three crops is thus traceable to the availability of suitable land in Central America. Land also constitutes the effective constraint on their long-term expansion, given the ample availability of labor from subsistence agriculture. If, therefore, reliance is to be placed on similar export crops for further economic growth and labor absorption, a perpetual search for new products, land-intensive in some other yet unused type of territory is called for. Two such products are currently under active consideration by potential

investors: cattle ranching for exports of processed meat, and the exploitation of extensive pine forests in Honduras and Guatemala.¹² Both of these opportunities could add substantially to the foreign exchange earnings of the region. But both of them tend also to be even more sparing in the use of labor per unit of land than any of the major crops already are. It seems doubtful, therefore, that they can contribute significantly to the absorption of a rapidly increasing labor force.

12. The concentration of exports on land-intensive rather than labor intensive products is as curious as it is pervasive. Whenever an export boom has come to an end in Central America, local as well as foreign capital has shown a tendency to drain off abroad, until the development of some new resource or resource-saving technique could draw it back. It might be argued, therefore, that so far from any capital having been drawn into Central America for development, some land was drawn out instead into the vortex of more highly developed economies abroad, where superior concentrations of technology guarantee not only higher profits but higher rents as well. The developed economies offer higher wages, too, of course. It may therefore appear that a policy to increase the international mobility of Central American labor would yield the quickest returns. However, with few notable exceptions, such a solution to the development problem is internationally unacceptable. Development strategy must therefore devise means to absorb labor on the spot.

¹²U.S. Department of Agriculture, The Beef Export Trade of Central America (Washington: November 1965).

A Common Market

13. The Central American Common Market was created to encourage industrialization by extending the size of the market for local producers. A regional market would not only amplify the effect of export earnings on economic activity, but perhaps go beyond that and generate an attraction of its own on local and foreign investors as well. First proposed in 1951, the Market was negotiated in 1958-60, and finally ratified in 1961-63.¹³ Treaty provisions call for the abolition of most internal tariffs by 1966, and for the completion of a common external tariff by 1970, but do not explicitly require freedom for factor movements. The effect of the Common Market on trade alone, however, has already caused it to be called "the most successful current example of integration involving developing countries."¹⁴ Regional trade more than quadrupled in 1960-65, rising from 7 to 16 percent of the member countries' external trade. Manufacturers in particular responded to the widening of markets, contributing some 85 percent to the 1962-65 increment to intra-regional trade.

14. Value added in industry increased at about 11 percent per year over this period. Not all of this achievement can be traced to the Common Market, however. The beginning of integration coincided with the onset of a vigorous boom in all three primary export commodities

¹³United Nations, Multilateral Economic Cooperation in Latin America, Vol. 1, Text and Documents (New York: 1962).

¹⁴Aaron Segal, "The Integration of Developing Countries: Some Thoughts on East Africa and Central America," Journal of Common Market Studies (March 1967), p. 253.

at once, causing merchandise exports as a whole to rise at a pace of 11 percent per year also. It is difficult to say, therefore, how much of the stimulus was due to the Common Market, or how much expansionary momentum will remain once the commodity boom has passed. A serious slowing down of industrial expansion will leave its proportionate contribution to gross product well below levels typical for other countries with similar population size and per capita incomes.¹⁵ Taking population size and per capita income as measures for the extent of the market, there would thus seem to remain ample scope for further industrial expansion. Thus far, industrial employment has barely managed to hold its own relative to the labor force. A greater contribution to labor absorption could certainly be expected.

15. Meanwhile the geographical distribution of such industrialization as did occur has already begun to produce tensions. The expectation at the time of negotiations was that, on laissez-faire principles, industry would tend to concentrate in Guatemala and El Salvador where it was already most advanced.¹⁶ Accordingly, less industrialized countries such as Honduras and Nicaragua would, by purchasing industrial commodities from them, tend to run deficits in regional trade which have to be covered by proceeds from commodity exports to world markets. Where such deficits in regional trade arise, the stimulus to industrial production and employment to be derived from primary commodity exports, is of course in part passed on to neighboring countries. By 1965, both

¹⁵ Only three quarters of the current Central American potential, as measured by the average performance of 80 countries, has been exploited. See United Nations, A Study of Industrial Growth (New York: 1963).

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Honduras and Nicaragua had in fact experienced appreciable deterioration on regional account, the Honduran deficit reaching 19 percent, and the Nicaraguan 100 percent of their respective Common Market exports.

16. Apart from Guatemala, however, whose surplus on Central American account increased from 14 to 19 percent of its sales to the region, it was Costa Rica rather than El Salvador that succeeded in deriving maximum advantage from economic integration.¹⁷ While El Salvador barely managed to hold its own, Costa Rica transformed an original deficit into a surplus equal to 21 percent of its sales to the region. Two circumstances account for this result. The first is the increasing dependence of El Salvador as the smallest but also most densely populated country in the region on Honduras for foodstuffs, particularly as land was being diverted from the cultivation of corn to cotton. El Salvador's rate of increase in industrial production was nevertheless equal to Costa Rica's and for both countries it rose again by half in 1961-65. The second circumstance was the predilection for Costa Rica on the part of foreign capital: fully 30 percent of the sizeable amounts attracted into Central America in 1961-65 came to it, compared with 27 percent for Guatemala, 21 percent for El Salvador, 18 percent for Nicaragua, and only 4 percent for Honduras.

17. In the trade literature, Costa Rica was found to be "the near-

¹⁶Miquel S. Wionczek, "The Central American Integration Experiment: Early Success and Growing Limitations," Bank of London and South America Review (March 1967), p. 132.

¹⁷This has come as a surprise to Costa Ricans. See James D. Cochrane, "Costa Rica, Panama, and the Central American Economic Integration," Journal of Inter-American Studies (July, 1965).

unanimous favorite of corporations with experience in more than one Central American country."¹⁸ An exceptionally high literacy rate of 80 percent compared with Guatemala's 30 percent, a relatively skilled and cooperative labor force in an unusually open society, as well as a climate no less pleasant than Guatemala's, and close proximity to Panama were listed as the main factors. All the same, Guatemala was still recognized to be the economic center of gravity for the Common Market: it accounted for 38 percent of the Common Market's industrial production in 1965, compared to El Salvador's 24 percent, Costa Rica's 14 percent, and 12 percent each for Honduras and Nicaragua. Agglomeration economies in Guatemala could raise rates of return not only to labor there, but to capital as well, and thus continue to draw investment despite the existence of cheaper labor elsewhere. Guatemala's Common Market partners could encounter the same difficulties in relation to it, that the region as a whole already faces with respect to the developed world outside.

18. The economic solution within an integrated market would be for labor to migrate along with capital to centers of growth where its productivity is highest and increasing fastest. However, the required freedom of movement remains unlikely in Central America as long as employment opportunities remain as scarce as they seem to be in all countries concerned.¹⁹ The emphasis in the integration treaties has

¹⁸"Where to Locate a CACM Investment?" Business Latin America (February 2, 1967).

¹⁹Robert S. Smith, "Population and Economic Growth in Central America," Economic Development and Cultural Change (October 1961).

therefore been on devising safeguards to ensure a "balanced growth" throughout the region.²⁰ The first device was to be the Regime for Integration Industries, a procedure agreed to in 1958 of selecting key industries for allocation one to each country before any could have another.²¹ Producers licensed under this scheme would enjoy immediate free access to the entire region, while potential competitors continue to be charged the external tariff, phased out over ten years, by all member countries outside its own. The rapid acceleration in the formation of a general customs union has, however, substantially reduced the attraction of special dispensations of this kind.

19. A second measure was a 1960 treaty commitment to adopt as soon as possible a special convention providing for regional coordination of fiscal incentives for industrial development. In anticipation of the Common Market, all countries had begun to grant exemptions from income taxes and from tariffs on imported equipment and inputs in accordance with fairly broad criteria of essentiality.²² The lively competition that developed between governments in their granting was explicitly recognized in the Honduran and Guatemalan legislation which permits the matching, independent of local criteria, of concessions granted elsewhere. The fiscal impact has been considerable. Data on income tax

²⁰The ambiguities involved are analyzed in Eduardo Lizano, La Crisis del Proceso de Integracion de Centroamerica (San Jose: 1965).

²¹See James D. Cochrane, "Central American Economic Integration: The Integrated Industries Scheme," Interamerican Economic Affairs (Autumn 1965), and J. Alan Brewster, "The Central American Program for Integrated Industrial Development," Public and International Affairs (Spring 1966).

²²Joseph Pincus, The Industrial Development Laws of Central America (Washington, D.C.: March 1961).

exemptions are not available but the ratio of import duties remitted to those collected in 1965 came to 11 percent in Honduras, 16 percent in Guatemala, and 23-24 percent in the remaining three countries. A regional Agreement on Fiscal Incentives was negotiated in 1962, amended in 1966, but remains to be ratified still.

20. A third device to foster balanced growth was the establishment in 1961 of the Central American Bank for Economic Integration to finance projects of regional significance particularly in less developed member countries such as Honduras, where the Bank's offices are accordingly located. Its total lending resources in 1966 amounted to \$100 million of which \$17 million were paid-in capital. Of the rest some \$60 million were contributed in credit by USAID. Until 1965 most of the Bank's operations were directed towards industry. Since then it has taken on an Integration Fund of \$42 million, including a United States contribution of \$35 million, reserved for investment in infra-structure and allocated primarily to highways. The Bank did succeed in channeling slightly larger portions of its commitments to less developed member countries: 24 percent to Honduras, 22 percent to Nicaragua, 20 percent to El Salvador, and the rest in equal portions to Costa Rica and Guatemala.²³

21. With the passing of the export boom the prospects for further progress with economic integration have become uncertain. New lines of

²³ Nevertheless, the allocation of net public loans and transfers to the region in 1961-65 reproduced the same geographical bias as private capital: about 30 percent went to Costa Rica, roughly 20 percent each to Guatemala, El Salvador, and Nicaragua, and 10 percent only to Honduras.

advance nevertheless continue to be pressed by its supporters. The apparent need for special fiscal incentives to promote industrialization suggests that the tax systems of the member countries are inadequate tools for development in themselves: this is particularly evident in the application of the same progressive rates to business as, in all countries except El Salvador, to personal income. With assistance from the Panamerican Union, a program has therefore been drawn up for a general harmonization of revenue systems throughout the region.²⁴ A second initiative dating back to the integration treaties themselves looks to the eventual establishment of a monetary union.²⁵ A Central American Clearing House is already in operation, and a Central American Monetary Council consisting of the five Central Bank Presidents offers a framework for consultation. Support for both these projects is weak, however, for they both violate the self-consciously non-political orientation of the integration movement, which has thus far helped to save it from political obstruction.²⁶

22. A more fundamental problem in the Common Market tends to be obscured for much the same reason perhaps. This is the fact that the impetus to industrialization provided by the Common Market falls well below the average performance of other countries with similar populations

²⁴ Marto Ballesteros, Reforma Tributaria e Integracion Regional: El Caso de Centroamerica (Washington, D.C., no date).

²⁵ Gonzalez del Valle, "Monetary Integration in Central America: Achievements and Expectations," Journal of Common Market Studies (September 1966).

²⁶ Joe S. Nye, "Central American Regional Integration," International Conciliation (March 1967).

and per capita incomes. Two reasons can be adduced for it. The first is that other barriers besides tariffs, notably inadequate road and telecommunications systems, need to be removed if the population outside the urban centers is to be integrated into a single common market.²⁷ Apart from the Pan-American highway, the Central American transport system continues to reflect the plantation-to-port orientation of the economies it is designed to serve. The second consideration points to the unusually skewed income distribution to which the same export economy has given rise. This skewness may render population and per capita income alone somewhat misleading indicators of actual as opposed to potential market size.²⁸

Land Reform

23. Neither the rise of export production nor the expansion of industry in the Common Market have, therefore, exercised much drawing power on the population in the traditional agricultural sector. Nevertheless, the proportion of the population in agriculture has steadily declined, with urban services and trade taking up the margin. It is in principle conceivable that even a relatively modest growth in domestic industry and foreign trade should have induced a more than proportional demand for service employments.²⁹ This does not appear to

²⁷The ratio of "urban" to total population is estimated at 35 percent for Central America as a whole, compared to 47 percent in Peru and 55 percent in Mexico. Differences in the definition of "urban" exaggerate the Central American ratio somewhat.

²⁸William R. Gigax, "The Central American Common Market," Inter-american Economic Affairs (August 1962).

²⁹Kuznets, op. cit.

have been a major factor in Central America, however. Instead, the transfer of labor out of agriculture was very likely touched off by deteriorating living conditions in the countryside. In El Salvador, for example, the transfer was associated with an increased parcellization of farm land at the lower end of the scale, and a dramatic reduction in the proportion of owner-operated farm units from 62 to 39 percent from 1950 to 1961. Comparable statistics are not available for other countries in the region, but similar trends are likely to have occurred in the densely populated parts of the Costa Rican central plateau, for example, and in Western Honduras and the Guatemalan highlands.

24. The cause for rural deterioration must in large part be traced to population pressures that could not wholly be absorbed by expansion in the areas of settlement. The land in farms rose from half to three quarters of the total area in El Salvador, and from about a third to a half in Guatemala and Costa Rica. Significant variations in land use patterns can be observed with variations of population pressure on the land. Three relationships in particular emerge: (1) apart from Honduras, the more of the land area already in farms, the smaller the proportion of the farm area in forest and waste; (2) apart from Nicaragua, the less of the farm land in forest and waste, the larger the number of cattle grazed per hectare of pasture; (3) except for Honduras, the lower the share of the farm area in forest and waste, the smaller the proportion of farm units accounted for by squatters and sharecroppers. It appears, therefore, not only that scope remains for more intensive settlement outside El Salvador but also, as this process continues, that Salvadorian conditions are rapidly coming to be reproduced

elsewhere.

25. Salvadorian conditions are likely to be approximated even before similar ratios of land in farms to total area have been reached. Most of the lands remaining for settlement are tropical rainforest located inland from the Caribbean coast to which El Salvador alone in Central America does not have access. The techniques of cultivation in traditional agriculture are adapted to the temperate highlands of Central America, however, where the population has historically retreated from diseases and other discomforts of the tropical zone. The unmodified transference of traditional techniques to a tropical environment has already begun to accelerate erosion, as the removal of the tree cover exposes the soil to tropical heat, wind, and rain, reducing its organic content to soluble minerals more quickly, the more easily to be lost to the soil, without the usual replenishment.³⁰ For similar reasons the tropics have with few exceptions shown themselves incapable of supporting dense populations elsewhere in the world also.³¹ Outside the banana plantations, therefore, their large scale settlement in Central America can not go very far either, without fundamental changes in the technical characteristics of peasant agriculture.

26. Virtually all the expansion in land settlement has thus far been spontaneous, with migration especially rapid into areas made newly

³⁰ James Taylor, "Some Findings and Implications of Land Tenure Research in Nicaragua," Land Tenure Center Newsletter (Madison: February 1968).

³¹ Pierre Gourou, The Tropical World (London: 1953).

accessible by construction of roads such as the Rama road, the first between Nicaragua's population centers and the Caribbean coast. At the same time, in all countries small land reform institutes have now been set up, all of whom have concentrated on relatively modest colonization schemes. In Costa Rica about 1,600 families have been settled since 1962, about 600 of them on a cooperative plantation producing bananas. In El Salvador about 3,000 parcels of land have been distributed since 1963. In Guatemala, one project on the Pacific coast has settled several hundred families, but other plans for settlement in the Caribbean region have not materialized. Little has so far been achieved in Honduras despite ambitious plans for the Aguan river valley, while preparatory studies remain to be completed in Nicaragua. All schemes have so far suffered from a lack of operating funds, inadequate coordination with road building programs, and poor internal organization.

27. The evident mobility of the farm population makes the need for organized settlement schemes in any case doubtful. The fundamental problem in the peasant sector is, rather, one of unchanging techniques both in the old and in the newly settled regions. Technical stagnation tends to be perpetuated by the illiteracy and poverty of the rural population, compounded by a severe lack of credit facilities. The banking system has been geared primarily to the export sector, where returns are in any case higher. Some four fifths or more of new credits in 1965 have correspondingly been extended to export crops in Guatemala, El Salvador, and Honduras, and about three quarters in Nicaragua and Costa Rica. Among the reasons typically advanced for the neglect of peasant agriculture, not only poverty and educational deficiencies rank

high, but the widespread lack of clear title to the land and therefore of suitable collateral as well. Insecurity of tenure has apparently also been a major obstacle to the effective functioning of specialized rural credit schemes, especially outside Costa Rica.³² In Costa Rica the rural credit system now covers about one half of the total number of farms; but only two percent are reached by it in El Salvador, and even fewer in Guatemala, Honduras, and Nicaragua.

28. The widespread uncertainty of tenure in the Central American peasant sector derives from the almost total lack of systematic land records, and from the diverse ways in which tenure rights can be acquired. Three alternatives exist: the first derives tenure from the prerogative of the sovereign state to make grants of land; the second derives it from an inherent right of an individual lacking alternative opportunities to seek refuge on the land; and the third represents a survival of the pre-Columbian system of communal ownership vested in village units. As a result, existing tenure patterns in Central America have had to be described in six categories for census purposes: apart from owners and renters in the modern sense, there are in Honduras and Nicaragua also "ejidatario" members of village communities, "colono" settlers on public lands throughout Central America, squatters or share croppers on private lands, and a category of "others" to indicate the rough and ready way in which all the categories have to be applied in practice. An effort to systematize rules of tenure would therefore appear to be a prerequisite to agricultural modernization in Central

³²George W. Hill, "The Agrarian Reform in Costa Rica," Land Economics (February 1964), p. 46.

America.³³

29. The need for systematization and recording of land titles has only recently been acknowledged, somewhat reluctantly in view of the possible revenue implications of cadastral-surveys.³⁴ The confusion of land rights for a majority of the population has not prevented a significant concentration of them in relatively few hands. In the 1950-55 censuses, three tenths of a percent of the farm units in the region account for one third of the land in farms throughout the region: in Guatemala alone two percent of the farms accounted for virtually three quarters of the farm area, in El Salvador four percent for two thirds, and even in Costa Rica six-tenths of a percent took up a full third. Land taxes are assessed in all Central American countries, but with rates theoretically ranging from 0.15 percent in Honduras to 1.05 in Costa Rica, they yield only 2 percent of public revenues in Guatemala, El Salvador and Honduras, and for no more than 5-6 percent in Nicaragua and Costa Rica. Nevertheless, cadastral surveys have now been initiated in all five countries, with technical assistance and financing from abroad.

30. The high concentration of landed wealth in Central America also helps to account for the fact that though penalty taxation on idle

³³K.H. Parsons, The Orientation of Research in Agricultural Development and Land Tenure Policy in Central America: A Field Report (Madison: January 1967).

³⁴There has, of course, been an ample if somewhat confused history of land legislation. See for example, W.S. Stokes, "Honduras: Dilemma of Development," Current History (February 1962).

or underutilized land has been enacted in several countries, collection has thus far proved unworkable in all. For all that, at least half the total area in farms in each country continues to be held as unimproved pasture, forest and waste. Even in El Salvador where the proportion declined the most as settlement expanded, the acreage so employed still increased in absolute terms. By contrast, the share in annual crops, including cotton in addition to the standard subsistence crops, now ranges from about 15 to 30 percent of the total area in farms in each country. The remainder is in perennials and improved pasture. To be sure, a large part of the territory involved may not be suitable for subsistence agriculture. It is nevertheless true for a number of regions that "one finds scrawny cattle grazing untended plains, while beans and corn are being intensively cultivated on the nearby bare slopes".³⁵

31. Since the major commitment of the leading landowners is to export crops, an impoverished rural population ensures them a cheap labor supply without in the process reducing their markets. Any interest in rural uplift on the part of the Central American elite must therefore be purely humanitarian, without the bracing effect of economic advantage to support it. Economic interest alone would in fact point the other way, for with increasing standards of living in the countryside, wages would have to rise to draw labor to the plantations. As was noted before, elasticities of substitution in the production of export crops tend to be low, so that, while limited by the extent of the land suited to

³⁵ Vincent Checchi, et.al., Honduras, A Problem in Economic Development (New York: 1959), p. 53.

the particular crop, the demand for labor tends to be highly inelastic as well. Similar economic conditions in other parts of the world have led to various schemes to reduce the viability of subsistence agriculture, including forced labor, head taxes, the reservation of fertile lands to alien settlers, and various marketing restrictions.³⁶

32. Latin America of course differs fundamentally from many of the new nations of Africa and Asia--"in that the traditional power holders have not withdrawn, but remain a vital part of the political system."³⁷ A commitment to reform has nevertheless emerged in Central America, however, restricted to a small if expanding group of technicians, but one that contains "a surprising number of foreign educated and nationalistically oriented sons of the present politically backward elites."³⁸ Their room for maneuver remains severely limited, of course. The Arbenz regime in Guatemala, for example, was swiftly overthrown "once an agrarian reform policy threatened the position of the landholding groups and the establishment of a 'workers militia' threatened that of the army."³⁹ Their tactics must therefore be restricted to incrementalist measures--an expansion of rural credit facilities, improved marketing and price

³⁶W. Arthur Lewis, "Economic Development with Unlimited Supplies of Labor," The Manchester School (May 1954), reprinted in A.N. Agarwala and S.P. Singh, The Economics of Underdevelopment (New York: 1963), pp. 409-10.

³⁷C.W. Anderson, "Politics and Development Policy in Central America," Midwest Journal of Political Science (November 1961), p. 347.

³⁸Wionczek, op. cit., p. 136.

³⁹Anderson, op. cit., pp. 348-49.

stabilization schemes, and expanded education.⁴⁰ Whether such programs can yield measurable results before social tensions become intolerable remains to be seen.

Conclusion

33. The rapid acceleration of population growth in Central America can be traced to an impressive spread of public health measures, many of them under international sponsorship. As a result, "some scourges of the tropics, such as yellow fever and smallpox, have been reduced in Central America to the status of sporadic afflictions."⁴¹ Anti-malarial campaigns, a part of the World Health Organization's "World-Wide War on Malaria," have also proved very effective. UNICEF and the Pan-American Health Organization have active programs for the prevention and treatment of tuberculosis. By participating in these programs, the Central American political leadership has helped to improve the environment for rich and poor alike, at very little cost. They may also have taken on some of the characteristics of the Sorcerers Apprentice, whose water-bearing servants multiplied until he nearly drowned in the flood they carried.

34. Seen in this context, the political sponsorship of birth control programs acquires a fresh moral dimension. Population policy is

⁴⁰A.O. Hirschman, Journeys Toward Progress (New York: 1963) refers to this method as "reform-mongering." For some of its limitations see C.W. Anderson, "Reform-Mongering and the Uses of Political Power," Inter-american Economic Affairs (Autumn 1965).

⁴¹Robert S. Smith, "Population and Economic Growth in Central America," Economic Development and Cultural Change (January 1962), p. 140.

of course not unique in being based, at least implicitly, on moral judgments which should be made explicit to facilitate intelligent judgment. Opposition to family planning is traditionally based on the precept that interference with the natural process of procreation is wrong. Advocacy of it is currently based on the moral responsibility of parents to their children's material welfare. Apart from whether the practice as such is right or wrong, however, questions can certainly be raised also about the subjective intent with which an objectively ethical act is proposed. Furthermore, if birth control becomes attractive because a static population is more easily held in economic and social bondage than a rapidly expanding one, perhaps birth control should once again be opposed, not as a long run ideal for mankind as a whole perhaps, but as a temporary sacrifice to break fetters that cannot be broken for less.

NOT FOR QUOTATION