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Rural labour in Latin America

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Introduction

The status of rural labour and the performance of rural labour markets in Latin America have changed markedly in recent years under the pressure of rapid urban industrial development, modernisation of agriculture, changing land tenure patterns and labour laws, and increasing integration of rural and urban labour markets. Yet studies of Latin American agriculture have focused on other subjects dictated by changes in the dominant issues and reforms of the moment. Agrarian studies have concentrated on the distribution of landownership and on patterns of land use in the context of the land reforms of the 1960s, on the diffusion of modern technologies in the context of the Green Revolution in the late 1960s, on the status of the peasantry in the context of the rural development programmes of the early 1970s, and on the role of multinational agribusiness in the context of the increasing internationalisation of capital in the late 1970s.

In contrast with the extensive Asian literature, little is known of the status of rural labour and the performance of labour markets in Latin America. Yet landlessness is extremely high there; the peasantry is dependent on wage earnings for its survival, and its share of the agricultural economically active population (EAP) has not declined; surplus labour in agriculture remains high, and poverty is concentrated in rural areas in spite of the gradual shift of marginality towards the urban areas. It is thus important to give greater attention to Latin American rural labour, as regards both the economic performance of agriculture and the welfare of rural workers and peasants. It is the purpose of this article to provide a broad characterisation of the recent transformations of labour markets and labour relations in Latin American agriculture since the 1950s and to discuss the causes of some of the changes observed. The empirical basis is principally: the agricultural and population censuses; the research of the ILO and the Regional Employment Programme for Latin America and the Caribbean (PREALC); data from informants for Brazil, Chile and Mexico; and numerous cases studies, more often than not in unpublished form.

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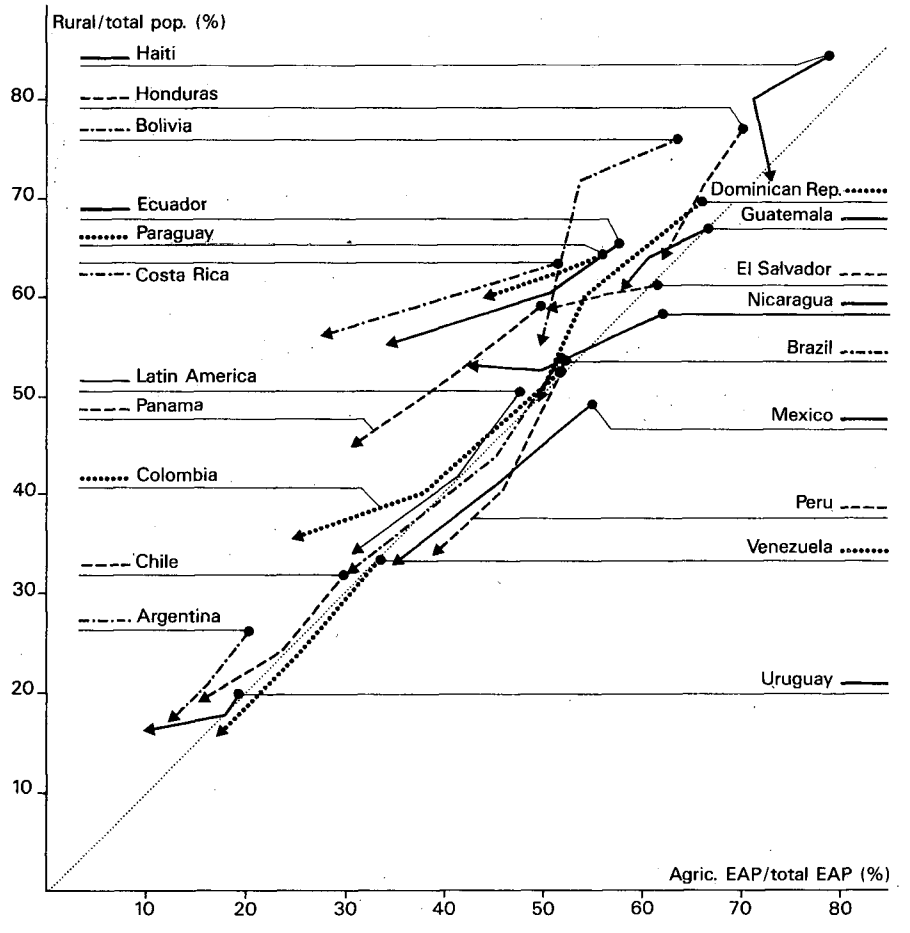
Figure 1. Shares of agricultural EAP and rural population, 1960, 1970 and 1980



Sources: As for appendix table.

The article is divided into four parts dealing with: changes in the rural and agricultural populations and the patterns of rural-urban migration; the structure of employment and the importance of wage employment in agriculture; the evolution of agricultural wages and surplus labour; and household incomes and the incidence of rural poverty.

The dynamics of population growth and employment

Agricultural and rural populations

While the average annual growth rates of population and of total EAP for Latin America (19 countries) between 1960 and 1980 were both high

Table 1. Characteristics of country groups, 1980

Indicator		Group 1	Group 2	Group 3
1.	GDP per capita (US$)	1 075	829	354
2.	Agricultural GDP as % of total GDP	8.4	12.9	23.0
3.	Rural population as % of total population	17.6	34.4	59.5
4.	Agricultural EAP as % of total EAP	14.7	31.9	56.3
5.	Ratio of share of rural population to share of agricultural EAP (3/4)	1.20	1.08	1.06

Sources: As for figure 1.

(about 2.6 per cent), as the appendix table shows, the growth rate of the rural population was only 0.65 per cent and that of EAP in agriculture 0.43 per cent, reflecting intense migration towards the urban sector and the weak employment-generating capacity of agriculture and the rural economy relative to population growth. The shares of rural population in total population and of agricultural EAP in total EAP have both declined rapidly, the first from 50.2 per cent (1960) to 34.3 per cent (1980) and the second from 48.7 to 31.7 per cent. Three groups of countries can be distinguished (figure 1):

(1) highly urbanised countries with low shares of both rural population and agricultural EAP – Argentina, Chile, Uruguay and Venezuela;

(2) industrialising countries with intermediate shares of both rural population and agricultural EAP – Brazil, Colombia, Costa Rica, Ecuador, Mexico, Panama and Peru;

(3) agrarian economies with high shares of both rural population and agricultural EAP – Bolivia, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Nicaragua and Paraguay.

As shown in table 1, the GDP per capita declines from group 1 to group 3, while the share of agricultural GDP in total GDP increases. The ratio of rural population in total population to agricultural EAP in total EAP falls, indicating that the richer and less agrarian economies are those where non-agricultural employment in the rural sector is relatively more plentiful. Given economic growth, we can thus expect to see a greater ability of the rural economy to retain population in non-agricultural activities.

For all countries combined (see table 2), the share of EAP in agriculture declined slightly faster than the share of rural population (2.0 per cent faster per decade). Even excepting a few countries such as Colombia, Costa Rica, Ecuador and Uruguay, which all had relative declines in agricultural EAP of 15 per cent or more per decade, the data indicate a weak employment-

Table 2. Relative decline of agricultural and rural population, 1960-80

Country	Growth rate of share of rural population in total population (% per decade)	Growth rate of share of agricultural EAP in total EAP (% per decade)	Col. 2 – col. 3
(1)	(2)	(3)	(4)
Argentina	–18.3	–19.4	1.1
Bolivia	–14.4	–11.7	–2.8
Brazil	–22.4	–23.6	1.2
Chile	–22.3	–26.3	3.9
Colombia	–16.3	–29.2	12.9
Costa Rica	–5.6	–25.5	19.9
Dominican Rep.	–16.2	–13.9	–2.3
Ecuador	–8.1	–22.4	14.4
El Salvador	–2.3	–9.4	7.2
Guatemala	–4.5	–6.9	2.4
Haiti	–7.3	–3.4	–3.9
Honduras	–8.7	–5.5	–3.2
Mexico	–17.7	–19.6	1.9
Nicaragua	–4.6	–17.2	12.6
Panama	–11.7	–21.3	9.6
Paraguay	–3.0	–10.7	7.7
Peru	–19.5	–12.8	–6.7
Uruguay	–10.3	–25.9	15.6
Venezuela	–29.2	–26.9	–2.4
Latin America (19 countries)	–17.3	–19.3	2.0

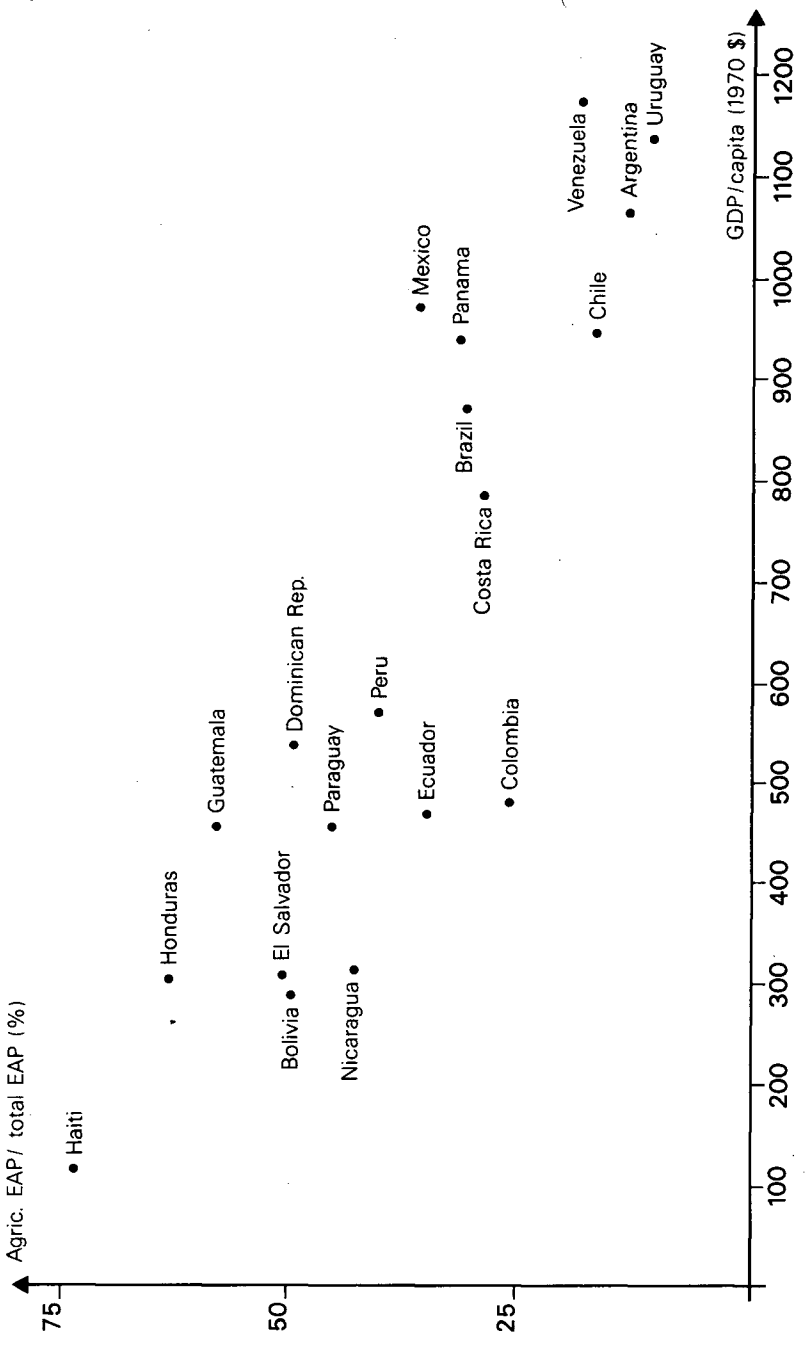
Sources: As for figure 1.

generating capacity in the rural sector of Latin American economies generally. Moreover, the apparent correspondence in the declining shares of agricultural EAP and rural population masks two complementary labour market shifts: more agricultural labour is coming from urban areas and more non-agricultural activities are located in rural areas. This increasing integration of the rural and urban labour markets will be analysed later.

As pointed out by Kuznets, there exists a close inverse relationship between GDP per capita and the share of EAP in agriculture (figure 2). The share of EAP in agriculture (1980 figures) ranges from 74 per cent in Haiti to 13 per cent in Argentina and 11 per cent in Uruguay, while GDP per capita ranges from US$115 in Haiti to US$1,132 in Uruguay and US$1,172 in Venezuela.[1] The share of GDP originating in agriculture also declines as

[1] GDP per capita figures are at constant 1970 prices and come from World Bank, 1983.

Figure 2. Share of EAP in agriculture by income level



Source: Based on data from World Bank, 1983.

Table 3. Rural out-migration and natural increase (%)

Country	Migration rates [1]			Share of urban population in 1975	Rate of natural increase in rural areas, 1970s
	1950s	1960s	1970s		
Argentina	3.25	...	2.29	80.5	2.26
Brazil	1.94	2.27	4.48	60.7	2.43
Chile	2.69	2.89	3.98	78.5	1.61
Colombia	1.77	...	4.56	65.4	2.24
Dominican Rep.	0.99	1.55	2.29	45.8	3.00
Ecuador	0.88	0.85	0.68	41.9	3.48
El Salvador	0.46	0.52	0.07	39.9	3.20
Guatemala	...	0.55	0.26	37.0	3.26
Mexico	...	1.93	3.07	63.0	3.16
Nicaragua	0.77	...	1.59	50.2	3.48
Paraguay	...	0.64	0.49	37.9	3.69
Peru	...	2.44	3.28	62.8	2.57
Uruguay	...	0.25	2.67	83.0	0.30
Venezuela	3.67	3.47	3.06	80.2	3.44

[1] Net rural out-migration as a percentage of average rural population over the decade.

Sources: Data for the 1950s and 1960s are based on United Nations, 1980. For the 1970s, rural and urban rates of natural increase were estimated using the 1960 ratios of urban to rural natural increase, and the average urban share of population in 1970 and 1980. Net rural migration was then calculated by comparing this urban rate with the growth rate of urban population during the decade. Data and estimations of urban population were taken from United Nations, 1980, total population from World Bank, 1983.

GDP per capita increases. Sharp declines in the share of EAP in agriculture can thus be expected to continue if the Latin American countries pursue their current styles of development, which are strongly biased towards a geographically concentrated urban industrial sector and labour-saving technology in modern agriculture.

Rural-urban migration

Rural-urban migration has been a very important demographic phenomenon in Latin America over the past three decades. As other studies show (e.g. United Nations, 1980), migration rates are higher in Latin American than in other developing countries – the Asian countries, in particular. Table 3 reveals significant variations in both levels and trends in migration rates across countries. While the rates have been high and increasing for most countries, Argentina and Venezuela have high but decreasing rates, and Ecuador, El Salvador, Guatemala and Paraguay all have low and decreasing rates.

For Latin America generally, we found that the variables most closely correlated with migration rates are initial GDP per capita and initial proportion of population in urban areas. Thus a pull effect appears to be the dominant motivating force for migration.

However, ranking the countries according to both the level of GDP per capita in 1970 and the migration rate provides an almost perfect division into a high GDP per capita, high migration group (1), and a low GDP per capita, low migration group (2).[2] For group 2 (which consists of relatively agrarian countries), although migration rates are low, both the rate and the change in the rate respond very closely to increases in the growth rate of GDP per capita, while the low positive association of migration rate with the growth rate of agricultural GDP per capita suggests that growth in the agricultural sector has been more or less neutral with respect to labour absorption. In contrast, agricultural growth has been fairly strongly associated with migration in the group 1 countries, probably owing to a combination of the increased use of labour-saving technology and land concentration.

Correlations of migration rate and change in migration with lagged urban unemployment show that, while the latter does not deter migration in absolute terms, it does slow its rate of increase. This is consistent with the Harris-Todaro theory that rural-urban migration is a function of expected urban wages.

The share of the peasantry in agricultural EAP is negatively correlated with both migration rate and change in migration (although the former coefficient is very small in absolute value), suggesting that the peasantry is effective as a buffer sector, particularly in slowing the rate of increase in migration. But causality in this correlation can be read more meaningfully the other way around, namely that rather than the successful expansion of the peasantry lowering the migration rate, it is the lack of migration opportunities (weak pull factors) that lead to an accumulation of surplus population in the peasant sector.

The rate of natural increase of the population in rural areas is negatively correlated with the migration rate overall, but rather different results are obtained when the two groups of countries are analysed separately. Population pressure appears to act as a push factor for group 2 countries but not for group 1 countries, which have a lower average rate of natural increase than those in group 2.

In addition to high levels of rural-urban migration, there is an increasing incidence of rural-rural migration in the form of seasonal labour markets, a phenomenon well documented in Mexico (Pare, 1977; Astorga Lira and Commander, 1983). These seasonal labour markets are based on regional disparities and the development of areas of advanced commercialised agriculture which, because of crop specialisation and partial mechanisation of the labour process, require large numbers of casual workers for short periods of time. The development of one such migrant labour market in the northern states of Sinaloa and Sonora complements the more traditional migrant labour market of the southern coffee and sugarcane regions.

[2] Group 1 comprises Argentina, Brazil, Chile, Dominican Republic, Mexico, Nicaragua, Peru, Uruguay and Venezuela; group 2 comprises Ecuador, El Salvador, Guatemala and Paraguay. Colombia was the only country with inconsistent rankings of GDP per capita and migration rate. For the detailed results, see de Janvry, Sadoulet and Wilcox (1986).

These migrant labour markets draw on the large pool of landless labourers and those *ejidatarios* and *minifundistas* who can afford to stay away from their plots for long periods of time. Local labour markets, which increasingly offer more sporadic and casual employment than before as specialisation and mechanisation invade all regions of the country, draw more and more on women and children and smallholders living nearby. This off-farm employment is a necessary complement to production for many smallholders who cannot support a household from their plots.

As will be seen in table 7, the implicit remuneration of family labour on small farms has been eroded relative to the minimum wage. Smallholders who can secure a sufficient number of days of wage work (perhaps by joining a migrant labour stream) are probably well off compared with those who are tied to the land and pick up whatever casual employment they can in the local labour market.

The Latin American correlations corroborate what has been found in a study of all developing countries (United Nations, 1980). In that study, the net flow of migrants from rural areas was found to increase with the rate of natural increase of rural population, with growth in agricultural productivity, and with higher share of urban population. Using regression analysis, these variables were found to explain most of the wide range of migration rates that are observed across the different regions.

A specific analysis of rural migration in Latin America (Shaw, 1974) also suggests that the land tenure system is an important factor in explaining rural migration rates since it conditions employment opportunities in agriculture. A more concentrated land tenure system acts as a push factor, while a large small-farm sector allows a retention of population in agriculture and a reduction in migration rates.

While the limitations of correlation analysis must be borne in mind,[3] the major conclusion to be drawn is that pull factors appear to be more important than push factors as causes of migration, although population pressure does appear to be important for the small group of low-migration, relatively agrarian countries.

Patterns of employment in the rural and urban sectors

Table 4 presents some aggregate results based on country-level data compiled by ILO/PREALC (1982) concerning the shares of the economically active population in the traditional agricultural, modern agricultural and traditional urban sectors.[4] The data are based on population censuses but have been adjusted by PREALC so as to derive a more exact measurement of EAP. The EAP in traditional activities in both the agricultural and the

[3] Owing to the small number of countries for which various data were available, regression analysis was not feasible.

[4] For results at the country level see de Janvry, Sadoulet and Wilcox, 1986, table 6, pp. 24-26.

Table 4. Employment structure in the rural and urban sectors of Latin America, 1950-80 (17 countries)

Year	EAP in traditional agriculture				EAP in modern agriculture		
	% of total EAP	% of agricultural EAP	No. in millions	Index: 1950 = 100	% of total EAP	No. in millions	Index: 1950 = 100
1950	34.3	60.7	18.190	100.0	22.2	11.801	100.0
1960	29.1	60.5	18.473	101.6	19.0	12.061	102.2
1970	27.0	63.7	22.113	121.6	15.4	12.589	106.7
1980	23.0	65.1	26.117	143.6	12.3	14.027	118.9

Year	EAP in traditional urban sector		EAP in traditional activities					
	% of total EAP	No. in millions	% of total EAP	No. in millions	Index: 1950 = 100	Urban as % of agricultural	Adjusted EAP in millions	Adjusted agricultural EAP in millions
1950	13.1	6.951	47.3	25.141	100.0	38.2	53.103	29.991
1960	15.6	9.908	44.8	28.381	112.9	53.6	63.376	30.534
1970	16.9	13.832	43.9	35.945	143.0	62.6	81.936	34.702
1980	19.3	21.918	42.2	48.035	191.1	83.9	113.720	40.143

Note: The traditional sector in agriculture includes workers on own account and unpaid family members, excluding professionals and technicians. The urban traditional sector includes workers on own account and unpaid family members in non-agricultural activities, excluding professionals and technicians, and domestic services. The 17 countries included are Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Uruguay and Venezuela.

Sources: Shares of EAP in traditional agriculture, in modern agriculture and in the traditional urban sector are from ILO/PREALC, 1982; adjusted EAP and agricultural EAP are authors' calculations (see text).

urban sector is defined as including workers on own account and unpaid family members. In the urban sector, paid domestic services were also included in the traditional sector. The modern agricultural sector includes agricultural workers, employers, professionals and technicians. Because the population censuses tend to underestimate the importance of women in the agricultural EAP, the data on the number of unpaid family members and agricultural workers were adjusted by comparisons with the agricultural censuses. PREALC only reports the resulting shares of EAP in the traditional rural and urban sectors. In order to compute the absolute number of workers in the different categories, adjusted total EAP and agricultural EAP were estimated by taking the difference between the shares of agricultural EAP. This difference was attributed to traditional agriculture.

The total size of the marginal sector, defined as the sum of the EAPs in the agricultural and the urban traditional sectors, shows only a minimal decline in percentage of the total EAP over 30 years – from 47 per cent in

1950 to 42 per cent in 1980. Marginality is thus a highly resilient structural feature of Latin American societies. In absolute numbers, the EAP in the marginal sector increased by no less than 91 per cent – from 25 million in 1950 to 48 million in 1980.[5] This dramatic increase in the number of marginals shows the failure of recent modern sector economic growth to create productive employment in spite of rapid overall rates of industrialisation and economic growth.

Between 1950 and 1980, there has been a marked displacement in marginality from the agricultural sector towards the urban economy as indicated by an increase in the ratio of traditional urban to traditional agricultural EAP from 38 per cent to 84 per cent. This urbanisation of marginality occurred in all 17 countries for which data are available, except Uruguay. Countries with higher levels of GDP per capita have a higher proportion of marginal population in the urban sector, reflecting the fact that growth has induced migration and urbanisation and displaced marginality to the cities, though regression analysis shows the strength of this relation decreasing over time. In addition, the higher the growth rates of GDP per capita, the less the increase in the urban share of marginality, indicating that high growth rates are successful in drawing urban marginals into the economy, although the impact of this effect also diminishes with time. Growth of agriculture has not been employment-creating and has contributed to increasing displacement of marginality towards the urban sector.

In spite of the fact that the percentage of total EAP in agriculture declined from 32 per cent in 1950 to 20 per cent in 1980, the percentage of agricultural EAP in the traditional sector increased from 60.7 in 1950 to 65.1 in 1980; and the absolute volume of EAP in traditional agriculture increased by 43.6 per cent over the 30-year period. The share of peasantry in agricultural EAP increased in all countries, except five, all located in Central America and the Caribbean. The absolute number of peasants increased in all countries except Mexico, the Dominican Republic and Honduras. This indicates that, despite rapid urban migration and the displacement of marginality towards the cities, the peasantry remains a large refuge sector for surplus population and a labour reserve for modern agriculture.

Modern agricultural sector employment increased by only 19 per cent in 30 years in spite of a total increase of about 84 per cent in agricultural GDP over the period. A 1 per cent increase in agricultural GDP thus contributed only a 0.2 per cent increase in modern sector employment. The result is that the share of agricultural EAP working in modern agriculture declined slightly from 39 per cent in 1950 to 35 per cent in 1980. While countries with low agricultural growth (less than 2.8 per cent annually) had absolute losses in modern agricultural sector employment (Argentina, Chile, Peru and

[5] There is no exact correspondence between traditional and marginal sectors, particularly in the urban area where the traditional sector includes own-account workers such as shopkeepers and owners of repair shops, many of whom are not marginals. The traditional sector, as measured here, thus somewhat overestimates the true size of the marginal sector.

Uruguay with an average growth rate of 2.4 per cent and a 36 per cent employment loss), high-growth countries had a mixed employment performance (Bolivia, Brazil, Colombia, Ecuador and Nicaragua had an average growth rate of 3.9 per cent but an absolute employment loss of 17 per cent, while Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Mexico and Panama had an average growth rate of 3.2 per cent and a modern sector employment gain of 113 per cent). It must thus be concluded that the employment performance of modern agriculture has on the whole been highly unsatisfactory and that higher growth rates in agricultural output would not necessarily improve this performance so long as the current patterns of labour-saving technological change and land concentration are followed.

The results thus show that a higher level of GDP per capita, which is fundamentally determined by non-agricultural GDP, induces rural-urban migration and a displacement of EAP out of agriculture. It should both reduce total marginality and displace it to the urban centres. In rural areas, however, the share of marginality in agricultural EAP remains high as increasing agricultural growth fails to generate enough employment; and the share of marginality in urban EAP increases rapidly with GDP per capita and remains absolutely constant as a share of total EAP (for Latin America as a whole, it remains at 30 per cent between 1950 and 1980), following a Todaro-type migratory effect.

It is distressing to observe that the very rapid economic growth that has characterised the past decade is not as employment-creating as earlier growth, thus reducing the expected positive effect of higher incomes on marginality. It is for this reason that the share of the marginal sector in total EAP has remained relatively constant in spite of rapid growth. In the recent period, modern non-agricultural employment has only been able to compensate for the inability of the growth of modern agriculture to generate employment.

Land and labour

Data on the number and average size of small farms over time confirm the observation of a peasantry growing in absolute numbers. Of the 17 countries for which there are data, 15 have an increasing number of small farms and only two (Panama and Venezuela) a decreasing number. A Latin American aggregate of the number of small farms, based on linear extrapolations for the years 1950 and 1980, indicates a growth of 92 per cent, corresponding to an annual compound growth rate of 2.2 per cent. It is thus clear that the peasantry did increase significantly in number, even if the qualitative nature of that peasantry changed over time.

Another clear direction of change over time is the decline in the size of small farms that accompanied the growth in their numbers. Of the 16 countries for which there is information, 11 have declining peasant farm size and only three increasing size; the other two showing no significant change. An aggregate for the 14 countries on which there is recent information, using

Table 5. Extent of landlessness

Country	Source	Year	Basis	Landless as % of basis
Brazil	(1)	1972	Rural households	61.3
Chile	(2)	1965	Agricultural EAP	36.1
Costa Rica	(3)	1965/1970	Agricultural EAP	2.0
El Salvador	(3)	1965/1970	Agricultural EAP	17.0
El Salvador	(4)	1961	Rural households	12.0
El Salvador	(4)	1971	Rural households	29.0
El Salvador	(4)	1975	Rural households	41.0
Guatemala	(3)	1965/1970	Agricultural EAP	7.0
Honduras	(3)	1965/1970	Agricultural EAP	26.0
Nicaragua	(3)	1965/1970	Agricultural EAP	31.0
Nicaragua	(5)	1978	Agricultural EAP	39.6
Nicaragua	(6)	1978	Agricultural EAP	31.5
Nicaragua	(7)	1970	Rural households	32.5

Sources: (1) J. Graziano da Silva et al.: *Estructura agrária e produção de subsistencia na agricultura brasileira* (São Paulo, Editora Hucitec, 1980), pp. 60-63. (2) P. Marchetti: "Reforma agraria y la conversión difícil", in *Estudios Rurales Latinoamericanos* (Bogotá), Vol. 4, No. 1, Jan.-Apr. 1981. (3) S. Barraclough and P. Marchetti: "Agrarian transformation and food security in the Caribbean Basin", in G. Irvin and X. Gorostiaga (eds.): *Towards an alternative for Central America and the Caribbean* (London, George Allen and Unwin, 1985). (4) E. Klein: "Pauperización campesina", in *Nueva Antropología* (Mexico City), Vol. IV, 1980, pp. 13-14. (5) International Fund for Agricultural Development: *Informe de la Misión Especial de Programación a Nicaragua* (Rome, 1980). (6) P. Peek: *Agrarian reform and poverty alleviation,* WEP Working Paper (Geneva, ILO, 1984). (7) A. Hintermeister: "El empleo agrícola en una estructura en transformación", in *Estudios Rurales Latinoamericanos,* Vol. 6, Nos. 2 and 3, May-Dec. 1983.

extrapolations for 1950 and 1980, shows that the average size of peasant farms declined from 2.4 to 2.1 hectares, an annual compound growth rate of –0.4 per cent. This observation confirms the interpretation of the peasantry as a cornered sector of population, increasingly dependent on non-farm sources of income but unable to find sufficient employment opportunities either to migrate and abandon the agricultural sector or to depend fully on wage earnings for subsistence. Thus, while the peasantry grows quantitatively, it undergoes significant qualitative changes from being pure farm producers towards increasing integration in the labour market.

Landlessness is generally not measurable through census data since a large number of workers who appear as hired workers in the agricultural EAP also have plots of land which are not sufficient to support their households. Thus the extent of landlessness must be estimated through household surveys or by other means, which often lead to widely varying estimates.

In table 5, data on the extent of landlessness have been compiled from a variety of case studies. Data over time are available only for Nicaragua and El Salvador, and these data, which come from different sources, are spotty and often inconsistent. In addition, the data for Brazil and El Salvador refer to rural not agricultural households and thus overestimate landlessness in the

agricultural labour force. The data for both Nicaragua and El Salvador indicate an increase in landlessness over time. In Nicaragua the share of agricultural EAP that is landless increased from 31 per cent in 1965/70 to 32-40 per cent in 1978. In El Salvador the proportion of landless rural households increased dramatically from 12 per cent in 1961 to 41 per cent in 1975.

While other data are not available over time, we notice the high levels of landlessness that exist in all cases and the relatively higher levels of landlessness in countries (such as Brazil, Chile and Costa Rica) with low shares of agriculture in total GDP compared with agrarian countries (such as Guatemala, Honduras and Nicaragua) having high shares of agriculture in total GDP. On this basis, one can expect that the current high level of landlessness in Latin America will further rise as the share of agriculture in an increasing total GDP falls.

The survival of the peasantry

The similarity in the evolution over time of the rural population and of the agricultural labour force could be erroneously interpreted as indicating a stable commitment of the rural population to agriculture. This is not the case. Deep transformations have occurred over the last 20 years which have led to an increasing integration of the agricultural and urban labour markets. The agricultural labour force has become more and more urbanised (mainly town-based) and the rural labour force increasingly works in non-agricultural activities.

The increased integration of the urban and rural labour markets can be seen in table 6 by examining two distinct, but complementary, processes: the share of the agricultural EAP that is urban-based has increased as has the share of the rural EAP that is employed in non-agricultural activities. For every country the share of urban-based agricultural EAP has increased, most strikingly in Puerto Rico and Brazil. At the same time, the proportion of rural EAP employed in non-agricultural activities increased in every country except Peru, with the greatest percentage increases in Brazil, Mexico and Nicaragua. In most cases, the magnitudes of these two patterns of change were dramatic.

It is important to note that census data tend to overestimate non-agricultural employment in rural areas. This is due to the fact that peripheral urban areas are often still classified as rural areas, and that, although most of their residents work in the urban areas, they are classified as rural workers. The overestimation is particularly high in countries where migration to the urban periphery has been extensive.

The origin of the urbanisation of the agricultural labour force can, in many cases, be traced to the introduction of new agricultural labour laws (Brazil and Chile) which led to the expulsion of resident workers from the large farms, their relocation in urban towns, and the generalisation of the practice of contracting non-resident workers on a temporary basis (in Brazil, in particular), often through labour contractors. In Chile labour legislation forced employers, in 1970, to replace payment in kind (land usufruct against

Table 6. Growing integration of agricultural and urban labour markets

Country	Year	% share of agricultural EAP in urban areas	% share of rural EAP working in non-agriculture
Brazil	1970	12.3	15.2
	1980	17.7	23.4
Pernambuco	1970	13.1	...
	1980	16.3	...
São Paulo	1970	26.6	...
	1980	38.0	...
Costa Rica	1963	5.4	29.1
	1973	6.2	41.2
Ecuador	1962	6.5	19.3
	1974	6.8	26.4
Mexico	1970	23.8	23.1
	1980	26.0	42.4
Nicaragua	1963	11.0	12.8
	1971	11.7	20.0
Peru	1961	18.3	20.1
	1972	23.7	18.8
Puerto Rico	1960	6.5	56.1
	1970	11.8	80.8

Sources: For Brazil and Mexico, censuses for 1970 and 1980; for other countries, United Nations, Department of International Economic and Social Affairs: Patterns of urban and rural population growth, Population Studies No. 68 (New York, 1980).

payment of land in labour services) by 100 per cent payment of the minimum wage in cash, which induced landlords to replace permanent workers *(inquilinos)* by temporary workers. In 1979 labour laws restricted union activity to farms with more than 15 permanent workers, further inducing landlords to reduce their permanent workers and employ temporary farmhands instead. Land concentration and the resulting increase in landlessness also accelerated rural out-migration in most countries.

This labour force of landless workers tended to concentrate in the neighbourhood of small rural towns, especially in the areas of temporary employment in agriculture, where labour contractors could easily mobilise them. Klein (1985) argues that, where this has happened, town-based rural labour increasingly displaces the traditional peasantry from employment opportunities since they are easier to mobilise on a temporary basis and do not have employment conflicts with the labour needs of their own farms as peasants often do in the critical weeks of harvest. The traditional peasantry then becomes increasingly disconnected from the labour market and is forced to migrate to the towns if it cannot subsist on its small plots of land.

In Chile, between 1970 and 1982, the rural population increased at an annual average rate of 0.2 per cent and the population of the large cities by 2.8 per cent, while that of small towns increased by 3.6 per cent (Rivera and Cruz, 1984). Living in these urban areas and working in agriculture, principally on temporary contracts, induced this labour force also to participate in the urban labour market and contributed to the greater integration of the two markets. For Chile, in 1982, Rivera and Cruz show that the structure of household income for residents of small rural towns was as follows:

	%
Agricultural temporary labour	33
Agricultural permanent labour	10
Urban temporary labour	11
Urban permanent labour	7
Public minimum employment programmes	6
Self-employment	33

An important consequence of this increased integration of the two labour markets is a narrowing of the gap between agricultural and non-agricultural wages. As will be seen later, this narrowing occurs particularly in periods of rapid economic growth when competition of the non-agricultural sector with agriculture for access to temporary urban-based labour increases.

For Brazil, Rezende (1985) observed a decline in the level of qualification of temporary workers in agriculture due to the increasing integration of markets. Jobs in agriculture usually have less desirable features, such as instability, interruptions, lack of social security rights, and weak enforcement of labour legislation, than employment on the urban labour market, and, consequently, agriculture does not attract the more competitive workers. Data reveal an increased participation of unskilled workers, the handicapped, women, old men and children in this urban-based agricultural labour force. Thus the market for temporary agricultural labour increasingly acquires the characteristics of a secondary labour market.

Competition between this new urban-based labour force and the peasantry for complementary temporary work can, indeed, in many circumstances turn against the semi-proletarianised peasantry. While the economic structure of peasant households, with family labour generating income from the home plot, allows them to compete for lower levels of wages than a fully proletarianised labour force (the theory of functional dualism), the conflict between their own labour needs and the needs of employers in periods of peak seasonal employment will operate against the peasants. Urban-based workers (once plentifully available owing to dispossession of the peasantry through changing labour laws and reduced access to land) are,

by contrast, more flexibly accessible, and the concentration of urban dwellings facilitates and cheapens access to workers by labour contractors.

While the traditional semi-proletarianised peasantry remains the major labour reserve for the modern agricultural sector in most countries, we increasingly witness a weakening of this role with the emergence of a landless town-based labour force that gravitates with great fluidity from one temporary employer in agriculture to another, and between agricultural and urban employment opportunities. The rural and urban labour markets are thus increasingly integrated, and wages paid on the two markets tend to converge, except for differences in labour skills, with agriculture acquiring the features of a secondary labour market.

Returns to rural labour

Evolution of agricultural and non-agricultural wages

Data for 15 countries compiled by PREALC (de Janvry, Sadoulet and Wilcox, 1986) show that only in a few countries was the real agricultural wage (either minimum or average) substantially higher in 1979-80 than in 1965-66. These countries are Mexico (where it was some 60 per cent higher); Ecuador (52 per cent higher than in 1968); Colombia (47 per cent); Brazil, Chile and Costa Rica (40 per cent); and Panama (30 per cent). It should be noted, however, that a 40 per cent increase over a 15-year period corresponds to an average annual increase of only 2.3 per cent. In all the other countries, real wages in 1980 were either at the same level as 15 years before or substantially lower, the most extreme cases being Argentina where the real average wage fell by more than 40 per cent and Nicaragua where it fell by 30 per cent. During this period, 1965-80, GDP per capita (although erratic in movement) increased significantly in most countries. The result is that, during this favourable growth period of 15 years, agricultural wage earners lost very significantly compared with the average income in the nation in nearly all countries (Chile and Mexico being the exceptions).

This absolute impoverishment in a majority of Latin American countries has further worsened in the 1980s. During this period, real agricultural wages have fallen drastically in all countries, the only exceptions being Colombia, Honduras and Panama. In Mexico, for example, where wages had risen enormously between 1965 and 1980, the dramatic fall in the early 1980s has brought the real agricultural wage back to its 1965 level. In Brazil, wages were only 11 per cent higher in 1984 than in 1965; in Chile, 17 per cent.

For some wage earners, falling real wages may have been compensated by greater access to land. Indeed, the number of small farms increased by 92 per cent between 1950 and 1980 while agricultural EAP increased by 67 per cent. Yet we do not know whether the growing number of small farms is a result of landless people gaining access to land or of medium-sized farms being increasingly subdivided. While land reform programmes have given

landless workers access to land in Peru, for instance (Brass, 1980), the aggregate effect of these reforms has been small, and subdivision would appear to predominate in the creation of small farms.

The impoverishment of agricultural wage earners has been shared by urban unskilled workers as well. In fact, wages of urban unskilled workers have declined even more than agricultural wages during the last 20 years. The result is that, relative to their urban counterparts, agricultural workers have improved their wage conditions in all countries except Ecuador and El Salvador. Wages of agricultural and non-agricultural workers have thus converged over the past 20 years in a downward movement as rural wages fell less than urban wages.

This overall evaluation of wage movements during the past 20 years does not adequately reflect the very contrasting periods through which each country has passed. Most have, indeed, had very unstable growth of GDP per capita with, in most cases, either a change in economic regime or a short recession in the mid-1970s. Exceptions are Colombia, Costa Rica and Ecuador, which have had moderate but sustained growth, at least until 1980. The evolution of wages is observed to be strongly influenced by macro-economic changes. For most countries, a periodisation of the macro economy also gives a good periodisation of wage movements (de Janvry, Sadoulet and Wilcox, 1986).

It is interesting to note that agricultural wages do not seem to be influenced by the growth of the agricultural sector itself but rather by overall economic growth. This confirms what was found in the analyses of migration and employment patterns, in which pull effects outside agriculture clearly predominate over push effects that originate in agriculture.

Cross-country comparisons of the growth periods show a great diversity in the movement of real wages but some regularity in changes in the ratio of agricultural to non-agricultural wages. During the growth periods of the mid-1960s to the mid-1970s, characterised by annual growth rates of GDP per capita of 2 to 4.5 per cent and by fairly low rates of inflation (below 15 per cent for most countries), the ratio of agricultural to non-agricultural wages remained fairly constant in most cases. In the growth periods of the late 1970s, characterised by higher growth rates (3.5 to 7 per cent) and higher rates of inflation (over 20 per cent in most countries), the ratio of agricultural to non-agricultural wages rose. This resulted from either a larger decrease in the urban wage or a larger increase in the agricultural wage (ILO/PREALC, 1980). The narrowing of the wage gap can be attributed, as was seen in the study of the changing employment structure of rural and urban populations (table 6), to an increasing integration of the agricultural and non-agricultural labour markets, particularly in periods of rapid economic growth.

Periods of stagnation and of recession, by contrast, exhibit less regularity in the evolution of relative wages. But absolute levels of real wages remain strongly affected by overall economic performance and the rate of inflation. In the periods of stagnation in the late 1970s and in all recessions,

real wages declined everywhere except Colombia. However, the magnitude of the decline seems to be related more to the rate of inflation than to the depth of the recession as such. This also emerges when real wages are related to inflation on a year-to-year basis within each period contrasted.

Unemployment and underemployment in agriculture

Data on unemployment rates for Chile, Peru, El Salvador, Mexico and Brazil show sharply rising levels, particularly through the 1970s and the early 1980s, with regard to both national and agricultural unemployment. However, it assumes different forms in the urban and agricultural sectors, with higher levels of open unemployment in the former and higher levels of underemployment in the latter.

Open unemployment in Chilean agriculture increased from 2.2 per cent of the agricultural labour force in 1966 to 4 per cent in 1975 and 9.1 per cent in 1980.[6] There was a similar sharp increase in Mexico with open unemployment in agriculture increasing from 0.8 per cent in 1950, to 1.3 per cent in 1960 and 6.3 per cent in 1970.

In Chile, labour surplus in agriculture (defined as the sum of open unemployment and underemployment measured relative to labour needs for observed production) decreased from 18 to 11 per cent between 1955 and 1970, basically as a result of rapid rural-urban migration and a declining agricultural labour force. Between 1970 and 1980, however, labour surplus increased to 17 per cent in spite of continued migration and a declining rural labour force owing to loss of access to land in the agrarian reform sector and a sharp increase in overall unemployment.

What is striking are the very high estimates of agricultural underemployment in countries such as Peru (60-70 per cent), El Salvador (39-47 per cent) and Brazil (29 per cent). These figures show no tendency to decline and indicate the permanence of large masses of surplus labour, low labour productivity, and poverty for a very large part of the rural population.

Implicit remuneration of family labour

In Brazil the number of active family members per farm increased slightly between 1970 and 1980 (table 7), and the average size of farms smaller than 10 hectares declined, increasing population pressure on land for small farms. Nevertheless, income per family worker increased substantially in real terms because of rising product prices, with the result that average implicit income of active family members in agriculture caught up with and surpassed the average wage of permanent workers between 1970 and 1980. However, for all small farmers – on farms of less than 5 hectares (which

[6] For derivations and sources of these and other figures in this section, see de Janvry, Sadoulet and Wilcox (1986).

Table 7. Implicit remuneration of family labour

Brazil

Farm size (ha)	Active family members				Income per active family member [1]				
	No. per farm		% distribution		In 1970 cruzeiros		Annual growth rate (%)	As % of average wage of permanent workers	
	1970	1980	1970	1980	1970	1980		1970	1980
0-5	2.09	2.13	33.0	32.8	417	719	5.6	27.7	31.1
5-10	2.34	2.41	14.7	14.0	718	1 436	7.2	47.7	62.1
10+	2.48	2.53	52.2	53.3	1 783	3 986	8.4	118.4	172.5
Total	2.32	2.38	100.0	100.0	1 163	2 487	7.9	77.2	107.6

Chile (Region IV, 1976)

Farm size (ha)	% distribution	Income per active family member [2]			
		In 1976 US$		As % of minimum wage	
		On-farm income	Total income	On-farm income	Total income
0-2	59	92	224	17	42
2-5	25	385	511	72	95
5-10	11	830	967	156	181
10+	4	1 899	2 270	356	424

Mexico

Farm characteristics	Farm income per active family member [1] (in 1950 pesos)			As % of minimum wage		
	1950	1960	1970	1950	1960	1970
Ejido	656	597	779	99	55	39
Private, 0-5 ha	340	103	745	51	10	38
Private, 5+ ha	2 254	2 574	4 747	339	239	239
All farms	1 060	787	1 315	159	73	66
Rural minimum wage (250 days worked)	665	1 078	1 985			

[1] Income calculated as difference between gross value of sales and expenses. [2] Income from all sources; 3.8 active family members per household.

Sources: For Brazil, *Agricultural census* (various years); for Chile, A. Monardes: *El empleo en la pequeña agricultura: Un estudio del Valle Central de Chile* (Santiago, University of Chile, 1979); and for Mexico (wages), C. Hewitt de Alcantara: *Modernizing Mexican agriculture: Socioeconomic implications of technological change, 1940-1970* (Geneva, United Nations Research Institute for Social Development, 1976) and (other data) *Agricultural census* (1950, 1960 and 1970).

account for 37 per cent of all farms and employ one-third of family labour) – income from home production is only 31 per cent of the wage of permanent workers, a percentage that barely increased during the 1970s. On the large farms, by contrast, implicit income increased from 118 per cent of wages to 173 per cent. Thus, although the absolute income of the poorest increased at an annual rate of 5.6 per cent, inequality in family farm incomes grew substantially over the decade. In other words, there was a reduction in absolute poverty and an increase in relative poverty – which is consistent with similar changes noted at the national level.

Implicit remuneration of family labour from home production on small farms is only a fraction of the wage of permanent workers and can be used as a measure of surplus labour on such farms if the wage of permanent workers is taken to indicate their potential full-time income. We conclude that there is considerable surplus labour for one-third of family members on farms of 0 to 5 hectares, reaching 69 per cent in 1980, and note that this surplus did not decline appreciably over the last decade. On farms of 5 to 10 hectares, with 14 per cent of family labour, surplus labour was still 38 per cent in 1980, but it had declined by 28 per cent during the previous decade. Absorption of surplus labour thus appears to have benefited the medium-sized more than the smaller farms.

In Chile (Region IV), as in Brazil, on-farm income for family members increases rapidly with farm size, indicating how important land is as the limiting factor on income levels. Again using the minimum wage of permanent workers as a measure of full-time income, we see that the small farms (0 to 2 hectares), with 59 per cent of farm households, have as much as 83 per cent surplus labour; and farms of 2 to 5 hectares, with another 25 per cent of farm households, still have 28 per cent surplus labour. Off-farm income, principally wages, nearly eliminates surplus labour for this latter farm category, but for the smallest farms there is still 58 per cent surplus labour when both on- and off-farm incomes are taken into account.

In Mexico, as in Brazil, the data on implicit remuneration of family labour show a substantial increase in real income on small private farms between 1950 and 1970 (an average annual growth rate of 4 per cent), whereas on the *ejidos* real income per active member remained essentially constant (an average annual growth rate of 0.9 per cent). The distribution of income thus worsened between private and *ejidal* sectors, while the ratio of family incomes on small private farms to those on large ones remained constant (16 per cent in 1970). The ratio of *ejidal* to large private farm income deteriorated from 29 per cent in 1950 to 16 per cent in 1970.

The real rural minimum wage increased sharply between 1950 and 1970 (an average annual growth rate of 5.6 per cent). Using this as a yardstick of full-time employment income on family farms, we see that surplus labour increases greatly over the 20-year period on both small private farms and *ejidos*, with surplus labour reaching 61 per cent in 1970. The deterioration was particularly severe on the *ejidos* where surplus labour increased from

1 per cent in 1950 to 61 per cent in 1970, showing the increasing need for *ejido* family members to seek off-farm income. While *ejido* family labour was relatively better off than small private farmers in the 1950s, their conditions converged in the 1970s to a common situation of large surplus labour and a high level of dependency on off-farm income.

Incomes and poverty

Sources of income

Data on sources of income by farm size are scarce, even for specific micro regions where household surveys have been conducted (table 8), and cannot be aggregated in any systematic way to reflect the overall Latin American situation. Yet there is a considerable degree of consistency across the data available, showing a high level of dependency on non-farm sources of income for a large percentage of farm households. Among off-farm income sources, wages are always by far the largest contributor, indicating high levels of semi-proletarianisation among small farmers. For farms of the same size, the share of wage labour in total income is higher in areas with well-developed labour markets (Cajamarca, Puebla and Guatemala) than in predominantly peasant areas with few employment opportunities (García Rovira). Wage earnings are thus important in enabling small farmers to continue to subsist when home plot production alone would not suffice. The more employment opportunities are available, the smaller the viable farm size. Thus small farmers constitute a large reserve of cheap labour for the rural and urban labour markets.

There are unfortunately no data on sources of income over time, and we cannot directly observe whether small producers are increasingly dependent on wage income or not. We have to rely, for this purpose, on other indicators such as the declining average size of small farms.

Rural poverty

The available data for 1970 indicate that poverty is much more widespread in rural than in urban areas of Latin America (table 9). For Latin America as a whole, 62 per cent of rural households lived in poverty and 34 per cent were destitute. The corresponding urban figures were 26 and 10 per cent. Ranking countries in three groups by decreasing level of rural poverty results in the statistics shown in table 10. It will be seen that, although the percentage of rural households below the poverty line declines sharply as GDP per capita and agricultural GDP per capita increase, the main focus of poverty, as measured by the ratio of shares of rural to urban households below the poverty line, is increasingly in the rural sector. Thus, in spite of rising average per capita income in the country as a whole, and in spite of the relocation of marginality towards the urban sector, the rural sector remains the principal reservoir of poverty.

Table 8. Sources of income by farm size

Country and farm size (ha)	Source	Year	% share of farm households	% shares of income derived from:			Total household annual net income (US$)
				Farm activities	Wages	Other activities	
Bolivia (South)	(1)	1976-77					
0-5			67	38	← 62 →		320
5-10			15	63	← 37 →		373
Brazil (Vertentes)	(2)	1979					
0-10			16	...	56	...	...
10-20			49	...	15	...	...
Chile (Region IV)	(3)	1976					
0-2			59	36	48	16	848
2-5			25	73	21	6	1 941
Colombia (García Rovira)	(4)	1972					
0-4			20	79	16	5	365
4-10			45	86	10	4	543
Ecuador	(5)	1974					
0-1			34	23	63	14	561
1-5			43	57	35	8	579
5-20			16	79	12	9	1 218
Coast	(6)	1974					
0-1			...	32	53	15	...
1-5			...	60	31	9	...
5-20			...	77	14	9	...
Sierra	(6)	1974					
0-1			...	19	54	27	...
1-5			...	52	36	12	...
5-20			...	71	12	17	...
El Salvador	(7)	1975					
0-1			49	59	31	10	...
1-2			22	75	19	6	...
Guatemala (N.W. Altiplano)	(8)	1978					
0-1.4			63	24	63	13	...
1.4-3.5			22	42	47	11	...
3.5-44.8			15	58	34	8	...
Mexico							
Chamula	(1)	1970-74	...	11	← 89 →		240
Puebla	(4)	1970					
0-4			71	32	58	11	393
4-8			25	64	32	3	675
Peru (Cajamarca)	(9)	1973					
0-3.5			72	23	50	27	223
3.5-11			17	55	24	21	270

Sources: (1) C. D. Deere and R. Wasserstrom: "Ingreso familiar y trabajo no agrícola entre los pequeños productores de América Latina y el Caribe", in *Agricultura de ladera en América tropical* (Turrialba, Costa Rica, CATIE, 1981). (2) E. da Silva: *Peasant production, labor reserve, and the food economy of Northeast Brazil,* unpublished Ph.D. dissertation, Department of Agricultural and Resource Economics, University of California, Berkeley, 1983. (3) A. Monardes: *Empleo de mano de obra, producción e ingresos en predios de pequeña agricultura del Valle Central de Chile,* Documento de Investigación No. 17 (Santiago, Departamento de Economía, Universidad de Chile, 1977). (4) A. de Janvry: *The agrarian question and reformism in Latin America* (Baltimore, Johns Hopkins University Press, 1981), p. 245. (5) S. Commander and P. Peek: *Oil exports, agrarian change and the rural labour process: The Ecuadorian sierra in the 1970s,* WEP Working Paper (Geneva, ILO, 1983), p. 33. (6) E. Ortega: "Peasant agriculture in Latin America", in *CEPAL Review* (Santiago de Chile), No. 16, Apr. 1982, p. 94. (7) C. D. Deere and M. Diskin: *Rural poverty in El Salvador: Dimensions, trends, and causes,* WEP Working Paper (Geneva, ILO, 1984), p. 6. (8) A. Hintermeister: *Pobreza rural y crédito agrícola al campesino* (Santiago de Chile, PREALC, 1985), p. 37. (9) C. D. Deere and A. de Janvry: "A conceptual framework for the empirical analysis of peasants", in *American Journal of Agricultural Economics* (Ames, Iowa), Vol. 1, No. 4, Nov. 1979, pp. 601-611.

Table 9. Rural poverty: Estimates of poverty in Latin America around 1970

Country	% of households below poverty line [1]		% of households below "destitution" line [2]	
	Rural	Urban	Rural	Urban
Argentina	19	5	1	1
Brazil	73	35	42	15
Chile	25	12	11	3
Colombia	54	38	23	14
Costa Rica	30	15	7	5
Honduras	75	40	57	15
Mexico	49	20	18	6
Peru	68	28	39	8
Uruguay	...	10	...	4
Venezuela	36	20	19	6
Latin America	**62**	**26**	**34**	**10**

[1] Income sufficient to cover the cost of minimum food needs, housing and publicly provided services such as health care and education. [2] Income sufficient to cover the cost of minimum food needs.
Source: Oscar Altimir: *The extent of poverty in Latin America,* World Bank Staff Working Paper No. 522 (Washington, DC, 1982), p. 82.

Table 10. GDP and poverty in Latin America by country group, 1970

GDP and poverty indicator	Honduras, Brazil and Peru	Colombia, Mexico and Venezuela	Costa Rica, Chile and Argentina
Rural households below poverty line (%)	73	49	22
Rural poverty/ urban poverty	2.1	2.1	3.1
GDP per capita (US$)	479	652	933
Agricultural GDP per capita (US$)	46	85	104

Conclusion

The empirical information on the labour process in agriculture and on the rural labour market analysed in this article gives us only a partial and imperfect picture owing to the lack of systematic information and the paucity of rural labour studies in Latin America and to the tremendous heterogeneity of Latin American nations. The general picture that nevertheless emerges is of a rapidly declining share of agriculture in the total labour force, of weak capacity for generating non-agricultural employment in rural areas, and of extremely rapid rural-urban migration dominated by pull factors. With lack of employment creation in the modern agricultural sector, insufficient access to land, and limited urban and rural non-agricultural employment

opportunities, the peasantry persists not as a superior form of agricultural production but principally as a refuge sector for surplus population. The result is that, even though total marginality (which has remained roughly constant as a share of total EAP) is being increasingly displaced towards the urban sector, the size of the peasantry has increased over the past 30 years both in absolute numbers and in share of agricultural EAP, that size being inversely related to the global performance of the economy. Over time, the number of small farms has grown rapidly; but average farm size has been falling and landlessness may well have risen as well. Peasants are thus forced to rely increasingly on off-farm income opportunities – principally employment on larger farms. Semi-proletarianisation of the peasantry has thus increased.

Unpaid family labour remains the principal source of work in agriculture. The bulk of wage labour still appears to be supplied by semi-proletarianised peasant household members, not by full-time wage workers. It is for this reason that, to be complete, an analysis of rural labour markets in Latin America needs to incorporate a study not only of the landless population but also of peasant households.

Increasing integration of the rural and urban labour markets has induced a partial catching-up of rural with urban wages. But a rapid decline in permanent relative to temporary employment together with land consolidation has relocated in rural towns a significant proportion of agricultural workers who compete with the semi-proletarianised peasantry for scarce temporary employment in agriculture. Being easier to recruit on a short-term basis, they may well be preferred by employers. The net effect on peasant welfare is, however, not clear from the existing data: real wages in agriculture have fallen in most countries since 1965 and particularly since 1980; land availability per peasant household has declined; but temporary employment has increased as has access to non-agricultural employment.

In countries and regions where large masses of peasants remain, they provide the bulk of labour supply; and wages are subsidised by unpaid family labour on the home plot in what has been described as functional (but contradictory) dualism. Where a substantial town-based labour force is available and well-integrated labour markets have developed, this system of functional dualism increasingly breaks down either because peasant labour is unavailable or because it is not cost competitive with town-based workers for temporary recruitment, particularly at peak seasons. In this case, agricultural wages tend to increase. How the labour of the rest of the household is utilised, how it may still subsidise agricultural wages, and whether the annual real income of rural workers and households is higher than under functional dualism are questions to which the answers are unknown at this stage and warrant further research.

It is nevertheless clear that rural poverty remains extensive in Latin America and that agriculture harbours an increasing share of total absolute poverty in spite of the displacement of total marginality towards the urban areas.

Changes in the labour process in agriculture are characterised by a rising capital/output ratio, indicating rapid mechanisation in the medium-sized and large farms and explaining the slow pace of employment creation in spite of eventually rapid rates of agricultural output growth. Mechanisation tends to increase the seasonality of employment except in the most advanced areas where mechanisation of all the stages of the labour process has been completed. There has been a rapid shift away from permanent employment towards the use of temporary labour.[7]

By contrast with Asia, there is sparse evidence of interlocked factor markets, with land and credit transactions related to transactions in the labour market. In Latin America labour increasingly assumes the form of a pure commodity traded for a cash wage in response to the forces of supply and demand. While open unemployment is small, hidden unemployment is extensive, indicating massive surplus labour relative to the labour needs of the modern agricultural sector. The rural labour market takes the form of a secondary labour market with lower-skilled and lower-paid workers and increasingly precarious labour contracts. Wage determination is dominated by pull factors and wages tend to rise when urban migration tightens the rural labour supply.

The analysis suggests several lines of policy intervention to improve the welfare of rural workers and semi-proletarianised peasant households.

1. Lack of access to land remains the key determinant of poverty in rural Latin America. Consequently, policies that promote redistributive land reforms should be the prime instrument of poverty alleviation. Even access to small plots of land which allow the valorisation of the labour of household members with low or no opportunity cost on the labour market provides an important complementary source of income to wage earnings. Thus, even where land is so scarce that redistributive land reforms could not create viable family farms, access to small plots of land can contribute significantly to welfare. In most of Latin America, however, land is still sufficiently plentiful for redistributive land reforms to create viable family farms if the political will to do so were present.
2. Technological and factor price biases that favour mechanisation in modern agriculture militate against employment creation because they prevent the benefits of eventually rapid agricultural output growth in the medium-sized and large farms from benefiting the landless and marginal farmers. Removing these price and technological distortions in order to stimulate employment creation and tighten up rural labour markets is thus an important instrument for alleviating rural poverty.
3. A significant proportion of rural labour households remains tied to small plots of land. Rural development programmes should be set up to increase labour productivity in semi-proletarianised peasant farms of sufficient size

[7] For more details see de Janvry, Sadoulet and Wilcox (1986).

to use modern technologies. It should be clear, however, that a majority of peasant households will not benefit from such programmes because their access to land is insufficient. Thus effective rural development programmes need to come as a sequel to redistributive land reform and not as a substitute for it, as has all too often been the case in the past 15 years.

4. By contrast with Asian countries, Latin American nations have not been particularly successful in developing non-agricultural sources of employment in the rural areas. To correct this, decentralisation of the highly concentrated pattern of urbanisation and industrialisation is required.

5. General labour-absorbing economic growth is one of the main determinants of migration and reduction of surplus labour in agriculture. With the peasantry as a refuge sector for surplus population, the best antidote to rural poverty is therefore an actively growing and labour-absorbing urban economy, particularly if rural reforms and decentralisation of economic activity are not forthcoming.

6. Institutions that facilitate the integration of the rural and urban labour markets and ease the meeting of supply of and demand for labour in agriculture should benefit landless and semi-proletarian peasant households. They include public land bureaux to provide information on employment opportunities, skill development programmes for the rural labour force to give it better access to non-agricultural employment opportunities, and enforcement of labour laws.

7. Finally, special anti-poverty programmes directed towards the rural areas are warranted by the observed inability of current patterns of economic growth to reduce rural relative to urban poverty. Examples are employment creation programmes through rural public works, social welfare programmes to increase access to health, education, potable water and other social amenities in the rural areas, and food subsidies for that portion of the population which is at immediate nutritional risk.

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Appendix. Population data for Latin America, 1950-80

Country/ year	Population (millions)				Rural/ total popula- tion (%)	Agricul- tural EAP/ total EAP (%)
	Total	Rural	Total EAP	Agri- cultural EAP		
Argentina						
1950	17.085	...	7.070	1.778	...	25.1
1960	20.611	5.441	7.887	1.592	26.4	20.2
1970	23.748	5.130	9.055	1.486	21.6	16.4
1980	27.740	4.882	10.068	1.314	17.6	13.1
Bolivia						
1950	3.019	...	1.387	1.009	...	72.7
1960	3.428	2.605	1.180	0.752	76.0	63.7
1970	4.325	3.110	1.387	0.745	71.9	53.7
1980	5.570	3.097	1.782	0.886	55.6	49.7
Brazil						
1950	51.973	...	17.689	10.572	...	59.8
1960	72.594	39.128	23.089	12.030	53.9	52.1
1970	95.847	42.269	29.944	13.655	44.1	45.6
1980	118.332	38.340	42.801	12.992	32.4	30.4
Chile						
1950	6.058	...	1.148	0.674	...	58.7
1960	7.585	2.442	2.479	0.744	32.2	30.0
1970	9.368	2.323	2.935	0.699	24.8	23.8
1980	11.104	2.154	3.581	0.583	19.4	16.3
Colombia						
1950	11.330	...	3.847	2.182	...	56.7
1960	15.754	8.161	4.689	2.410	51.8	51.4
1970	21.266	8.549	6.193	2.347	40.2	37.9
1980	25.892	9.399	7.509	1.937	36.3	25.8
Haiti						
1950	...	...	1.769	1.052	...	59.5
1960	3.630	3.064	1.973	1.557	84.4	78.9
1970	4.235	3.392	2.297	1.641	80.1	71.4
1980	5.009	3.632	2.717	1.997	72.5	73.5
Honduras						
1950	1.372	...	0.472	0.338	...	71.6
1960	1.943	1.500	0.610	0.428	77.2	70.2
1970	2.639	1.882	0.783	0.521	71.3	66.5
1980	3.691	2.377	1.107	0.693	64.4	62.6
Mexico						
1950	26.282	...	8.201	4.983	...	60.8
1960	37.073	18.240	10.705	5.898	49.2	55.1
1970	51.176	20.982	13.933	6.298	41.0	45.2
1980	69.393	23.108	18.893	6.726	33.3	35.6
Nicaragua						
1950	1.133	...	0.374	0.233	...	62.3
1960	1.411	0.827	0.484	0.301	58.6	62.2
1970	1.836	0.969	0.527	0.264	52.8	50.1
1980	2.672	1.424	0.767	0.327	53.3	42.6
Panama						
1950	0.795	...	0.282	0.158	...	56.0
1960	1.095	0.643	0.350	0.178	58.7	50.9
1970	1.464	0.766	0.484	0.201	52.3	41.5
1980	1.835	0.839	0.555	0.175	45.7	31.5

Costa Rica						
1950	0.859	...	0.293	0.167	...	57.0
1960	1.236	0.785	0.361	0.186	63.5	51.5
1970	1.732	1.044	0.512	0.215	60.3	42.0
1980	2.279	1.290	0.765	0.219	56.6	28.6
Dominican Republic						
1950	2.136	...	0.794	0.331	...	41.7
1960	3.047	2.127	0.895	0.592	69.8	66.1
1970	4.006	2.392	1.339	0.726	59.7	54.2
1980	5.431	2.661	1.815	0.890	49.0	49.0
Ecuador						
1950	3.231	...	1.316	0.841	...	63.9
1960	4.422	2.901	1.454	0.841	65.6	57.8
1970	5.962	3.607	1.803	0.920	60.5	51.0
1980	8.354	4.628	2.342	0.814	55.4	34.8
El Salvador						
1950	1.922	...	0.670	0.442	...	66.0
1960	2.542	1.568	0.825	0.508	61.7	61.6
1970	3.398	2.059	1.171	0.657	60.6	56.1
1980	4.540	2.674	1.565	0.790	58.9	50.5
Guatemala						
1950	2.791	...	0.989	0.679	...	68.7
1960	3.966	2.657	1.229	0.820	67.0	66.7
1970	5.353	3.442	1.608	0.981	64.3	61.0
1980	7.262	4.437	1.639	0.946	61.1	57.7
Paraguay						
1950	1.397	...	0.491	0.274	...	55.8
1960	1.778	1.145	0.599	0.337	64.4	56.3
1970	2.290	1.440	0.743	0.391	62.9	52.6
1980	2.982	1.807	1.019	0.458	60.6	44.9
Peru						
1950	8.217	...	2.889	1.519	...	52.6
1960	9.665	5.190	3.223	1.678	53.7	52.1
1970	12.833	5.197	3.829	1.770	40.5	46.2
1980	16.610	5.780	5.126	2.029	34.8	39.6
Uruguay						
1950	2.193	...	0.493	0.211	...	42.8
1960	2.538	0.505	0.970	0.191	19.9	19.7
1970	2.808	0.503	1.083	0.197	17.9	18.2
1980	2.908	0.465	1.122	0.121	16.0	10.8
Venezuela						
1950	5.035	...	1.718	0.403	...	23.5
1960	7.632	2.549	2.354	0.793	33.4	33.7
1970	10.709	2.549	3.133	0.803	23.8	25.6
1980	14.930	2.493	4.368	0.786	16.7	18.0
Latin America (19 countries)						
1950	146.828	...	51.892	27.846	...	53.7
1960	201.950	101.478	65.356	31.836	50.2	48.7
1970	264.995	111.605	82.759	34.517	42.1	41.7
1980	336.534	115.487	109.541	34.683	34.3	31.7

Sources : Based on data from World Bank : *World tables,* 1976 and 1983, for population ; and ECLA : *Statistical Yearbook for Latin America, 1983,* for economically active population.