

SOCIOECONOMIC CONSEQUENCES OF MORTALITY CHANGE IN  
PEASANT SOCIETIES

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## INTRODUCTION

The present paper intends to explore the relations existing between certain demographic facts -particularly the decline in mortality- and the changes in agrarian structure. It begins by describing the main transformations which the agrarian sector in Latin America has undergone during the last 100 years. The main evidence offered consists in the transformation of economy, from a non-capitalist one with a relative lack of labour force, into another one in which capitalist relations prevail and give way to the processes that generate a surplus in the offer of labour force. This paper is intended to point out the role played by population growth in this transformation, and particularly the effects of the decline in mortality.

The following chapter tries to support, through the scarce empiric evidence available, the hypothesis that in spatial and temporary situations, demographic changes and conditions can impose new arrangements in practices and strategies directed toward guaranteeing the economic and social reproduction of agrarian production units and of families.

The most relevant and maybe obvious conclusion is the need to undertake specific studies in different agrarian contexts which allow a deeper analysis of relations between transformations in the agrarian structure and the demographic dynamics.

## I. AN HISTORICAL FRAMEWORK ON THE CHANGES OF AGRARIAN STRUCTURES AND POPULATION DYNAMICS IN LATIN AMERICA

To understand the relation between agrarian processes and population dynamics in developing societies, an analysis of the articulation between the different forms of social organization of production is necessary. This means, that the system of relations linking peasant and capitalist sectors to the overall social formation. This articulation between the peasant production and the capitalist enterprise has suffered an "historical evolution process which is characterized by a transition from a situation with a scarcity of labour force with slow demographic growth, to a situation where labour supply is in excess, due to a rapid growth of the rural population. Whereas the peasant earlier had access to sufficient land, maintaining viable production units, the peasant units now face increasing fragmentation and a decrease of the productive capacity", (Arámburu, 1983, p.2-3). It is in this context that the transformation of the agrarian sector in Latin America takes place, as a result of successive stages of capitalist penetration and the consequent redefinition of the peasant economy within the context of capitalist modernization.

The transformation of the Latin American agrarian sector has had a unique manifestation in each country of the region. However, we can distinguish at least two major stages wherein the entire Latin American agrarian structure is affected by these forces of change.

### A. The oligarchic phase

During the first stage, from the last third of the nineteenth century up to the first of the twentieth century, a rapid expansion of the commercial agricultural production took place in most of the Latin American countries. This was a result, on the one hand, of the accelerated industrialization of Western Europe and the United States, and, on the other, of the gradual enlargement of the internal market in the Latin American economies,

promoting an increasing demand for raw material and food. The expansion of the commercial agricultural production made necessary the reorganization of the forms of land tenure and the modalities of work exploitation. This made the "Hacienda" system of the Grundherrschaft type prevail. In this type of exploitation, the landowner would not engage himself in the direct cultivation, but gave all or part of his land to a certain number of landless peasants in exchange for a rent in kind or money. These peasants tied to the land, prevailed in all Latin American countries where the hacienda system existed. In Chile, for example, they were called "arrendatarios" and afterwards "inquilinos"; in México they were named "gañanes", "laborfios", "terrazgueros" and later on "peones acasillados"; in Peru and Bolivia they were "yanacunas" and in Ecuador "huasipungueros" (Kay, Cristobal, 1980, p.45; García, Antonio, 1981, p.30; Florescano, Enrique, 1983, p.103).

With the expansion of the internal market or the exportation market of certain products, the haciendas were gradually transformed into agricultural enterprises, incorporating new lands for cultivation. The labour force of the peasants was still exploited. However, rents in kind or cash were substituted for labour rent. This system was similar to the Gutsherrschaft existent in Eastern Europe.<sup>1/</sup>

The rapid expansion of a commercially oriented agricultural production brought with it the opening of new lands, the intensification of production and demand of labour force without precedent in the rural sector. However, factors like the slow demographic growth, the low population density in the areas where the commercial enterprise operated, the existence of a large agrarian frontier and the relative strength of the peasant economy which still controlled a large part of the exploitable land, implied an acute shortage of "free" labour force which, in turn, made difficult the development of the commercial agriculture.

<sup>1/</sup> The 'señorial' system of Grundherrschaft type of 'hacienda' developed in Western Europe from the sixteenth to the eighteenth century. The Gutsherrschaft type of 'hacienda' existed in Eastern Europe from the thirteenth to the nineteenth century. See Kay, Cristobal, op cit, pp.27-40.

In this context of a relative shortage of labour force, the commercial "latifundios" developed different practices to ensure a "stable" reserve of labour force within the productive unit, in order to develop a large scale agricultural production. The most used methods were: a) the expropriation or purchase of large extensions of land, thus provoking an artificial land shortage and therefore compelling the peasant to work on the "hacienda" for a salary or a day-wage; b) the direct assignment of labour force within the production unit through the granting of small plots for the family or through the enforcement of forced-labour recruitment systems.

At the end of the nineteenth century, different forms of latifundist organization coexisted within Latin American agrarian structure. First, appeared the "hacienda señorial" unit which developed in the regions of major peasant density. In the last decade of the nineteenth century, the "hacienda señorial" began a slow transformation into enterprises whose production was oriented, predominantly, to the internal and external market. The growing commercialization of agriculture often implied the expropriation of the land of the peasant producers, causing a permanent conflict between the indigenous communities and the "haciendas". These conflicts were evident during the first decades of this century. The landowners used a great variety of mechanisms to ensure the existence of a stable labour force. One of the most frequent was to attract landless peasants by offering them a day-wage and a small plot. The ties to a small plot were reinforced in some cases through related schemes of indebtedness to which the peasants fell victim. By advancing basic goods necessary for survival, the landowner tied the worker to an obligation that became permanent, thus compelling him to remain in the unit of production for an indefinite period of time, and thereby guaranteeing his continued attachment to the latifundium.<sup>2/</sup> For such workers, spatial

2/ In the Mexican "haciendas", the salaried worker was literally tied down to the land through a system of advanced payments that gradually resulted in his high indebted condition, until he and his family ended up living permanently in the "hacienda". Besides, the salaried workers, there were other workers who performed a number of non-remunerated tasks ("faenas") in exchange of board and lodging.

mobility was hampered and, in many cases, restricted. Moreover, when the worker died his children inherited not his wealth but his debts, and had practically no possibility of escaping from continuing exploitation.

The requirement for additional labour force during the harvest or cropping periods was satisfied by the flow of seasonal labour force, which was recruited through a network of "enrolment agencies" that operated in neighbouring areas with dense peasant population. The "free" workers were paid in cash and their mobility was stimulated by creating the need for money and making credit available. In many cases, the latifundium did not totally alienate the peasants since the subsistence of small neighbouring farming units guaranteed the presence of a pool of seasonal labour where cost of production and reproduction did not fall upon the commercial hacienda.

A second organizational pattern were the latifundiums established with the attempts to penetrate the deserts and the less populated arid lands. The constitution of a structural framework in which the "free" workers who came from the high density regions or from outside could only be incorporated as wage labour force. In these regions the landowners used intermediators or recruiters and salary stimulus to contract workers from other regions and even immigration from Western Europe was promoted. However, in many cases the responses to these mechanisms were not sufficient, resulting in a continual shortage of labour. For that reason, latifundiums often employed more rigorous methods of recruitment -including forced migration- to attract and to retain the labour force.

Finally, a third organizational pattern was represented by the plantation "hacienda", mainly located in the coastal regions and in temperate zones of Latin America, where the population density was extremely low. This exploitations required

a great amount of labour force to work under extremely unhealthy conditions. Obviously, the voluntary candidates for a work that supposed a high health risk were not too many. To solve this problem, the tropical plantations used different systems of forced recruitment from open slavery to less severe forms of coercitive work; in the plantation "haciendas" the use of slavery seemed to have been the predominant pattern.<sup>3/</sup> In Mexico, for example, the vagrants captured in the cities, the indians made prisoners in armed insurrections or the direct import of slaves from the British possessions in the Caribbean, constituted the traditional source of provision of labour force for the plantations located in the coast of the Gulf of Mexico (Katz, F., 1982, pp. 15-55; Dahl, V.C., 1960, pp. 21-35).

These organizational forms, that regulated land and work in a coercitive way, were the common answers to the relative shortage of "free" workers. In fact, the subsistence and re-creation of semi-slave forms in the development of the agrarian capitalism in Latin America was an essential component of the agrarian latifundist structure and not an isolated phenomenon. These non-economic mechanisms that were capable to retain the working population in the mines, the "hacienda" or the plantation lasted for a long time. The strength of such an agrarian structure permitted its existence until recently: the "haciendas" in Bolivia subsisted until 1952 ("haciendas de pegujaleros"); in Peru until 1972 ("haciendas de peones feudatarios"); in Ecuador until the end of the sixties ("haciendas de huasipungueros");

<sup>3/</sup> From the sixteenth century, when the traffic of slaves to America began, until the nineteenth century, when it ceased and slavery was abolished, almost 9,500,000 black people were transported from Africa. From this figure, 17% were taken to the Spanish colonies; 38% to Brazil; 6% to the U.S.A.; 17% to the British Antilles and 17% to the French colonies in the Caribbean (Ianni, Octavio, 1976, pp. 15-16).

in the South of Colombia until the fifties ("haciendas de terrajería"), and in Chile until 1965 ("fundos de inquilinaje"). (García, Antonio, 1981, p.30.)

#### B. The capitalist modernization of agriculture

Since the decade of the thirties, the oligarchic domination system has been in a crisis.<sup>4/</sup> The Great Depression of 1929-1933 was a hard blow on the economies of the region based on the agricultural exportation. In the years that followed, a reorganization of the agrarian sector began. This international situation and the political and economic internal conditions stimulated the implantation of an urban-industrial based model of accumulation. The development of this model tends to modify the relations between the agrarian and the industrial sectors: the former was increasingly subordinated to the accumulation needs of the latter. All this conditioned the reformulation of the social relations of production and, in general, of the production organizational forms in Latin American agriculture. Thus, the latifundist system based on the "hacienda" initiates a gradual modernization and technification process which resulted in profound changes in the land tenure systems, in the land use and in the forms and modalities of work exploitation.

During this stage the agrarian sector was assigned the task of supplying goods and food at low stable prices, even decreasing in relation to industrial prices, and to generate surplus transferable to the industrial market through the fiscal, banking and price systems. Likewise, this sector was responsible for generating a large part of the necessary foreign exchange through its exports, so as to finance the import of capital goods. Finally, it was expected to supply the large cheap labour force demanded by urban-industrial expansion. This implied, among other changes, the redefinition of agrarian production, the realization of large

4/ It is difficult to determine when the end of the oligarchic phase in Latin America took place, due to the diversity and heterogeneity of the national experiences. In spite of these differences, the end of the oligarchic system in the majority of Latin American countries started since the Great Depression of the thirties and had a great acceleration with the Second World War.



investments in irrigation and communications and transport networks, as well as the implementation of ambitious programs of agrarian reform. The state, representing basically the interests of groups of power from the emerging industrial bourgeoisie, became the most important promoter of this transformations. The redistribution of land, the formation of institutions to provide credit, agricultural inputs (irrigation, fertilizers, improved seeds, machinery and information), as well as commercialization channels, alongside with the differential definition of policies to regulate basic wages in the rural and urban settings are clear examples of the growing intervention of the state power. The gradual abolition of the labour-rent (*renta en forma de trabajo*) system and other work servitudes, that were the basis of the traditional "hacienda" system, opened the way for establishing and expanding the wage labour economy. In some regions, the opportunity opened by the expansion of the internal market for agricultural products forced the "haciendas" to introduce important changes in the technical and social relations of production. The great increase of work and land productivity made evident the advantages of direct cultivation of the plots rented by the "hacienda". This stimulated the landowners and the agrarian entrepreneurs to abandon the semi-slavish practices to ensure a cheap labour force reserve and, in turn, the use of wage labour.

During this phase substantial modifications in the demographic dynamics of the population of Latin America took place. There is no doubt that the decline of mortality was the fundamental cause for the rapid increase of demographic growth, far more than any substantial change in fertility, especially between 1940 and 1960. The use of modern medical technology, the expansion of health programs, the accelerated construction of health infrastructure and the improvements achieved in other areas like nutrition, housing and water supply, were salient elements closely linked to the mortality decline. Such changes

were especially important in the rapidly growing cities but even in rural areas such innovations were carried out through health programs which accompanied the penetration of capitalism

A good example of these changes is found in the evolution of malaria. In relation to this pathology Franco states that "it is not an occasional epidemy in only some of the countries of the continent, but an endemy extending to almost all the region (except Chile and Uruguay), and that because of its magnitude and negative impact on the interests of capitalism in expansion has attracted the states' interests who have devoted for a long time a good part of their efforts toward sanitary improvement actions" (Franco, 1980, p. 35). A proof of the lethality of this pathology is seen in the rates of 26.2 deaths per 1000 inhabitants in Surinam, British Guyana and Trinidad in 1919, as well as the epidemics in the same year in the states of Veracruz, San Luis Potosí and Tamaulipas in Mexico, and the epidemic that between 1932 and 1934 killed 32% of the resident population of the malarian area in Peru. When a follow-up analysis of the malarian case was undertaken, it was demonstrated that the principal interest of those fighting the disease was to "protect and promote the agriculture and international commerce of certain agricultural basic products in the power center market: sugar cane, rice, bananas and other fruits, cotton, etc." (Franco, 1980, p. 87), as well as the interest in strategic areas of oil and mineral extraction. Hence, at a time when information on health statistics was deficient, the United Fruit Company offered, through annual bulletins of their technical department, the only data that would permit an estimate of the extent and magnitude of malaria. Also in the first decades of this century, the Rockefeller Foundation started collaborating with the United Fruit Company in the solution of the problem, and later promoted the creation of independent units devoted to the eradication of malaria. In the annual report of 1947 of the Rockefeller Foundation it was stated that

"it is necessary to reduce the worldwide rate of malaria, presently estimated in 300 million cases a year, producing 3 million deaths" (The Rockefeller Foundation, 1947). It is certain that the health activities accompanying capitalist penetration in the rural areas of Latin America played an important role in the decline of mortality.

The intense demographic growth was a factor that stimulated the proletarianization of one sector of the peasant population; the one which had small plots of cultivable land.

The decline of mortality resulted in an increased survival of parents and children in the peasant unit. At first, the survival of a large number of children contributed to worsen the problem of fragmentation of land.<sup>5/</sup> The size of the plot was hence smaller when dividing it among the children, according to the cultural idea of giving each child a piece of land -even if it was small. In these circumstances, off-income was a fundamental element for the reproduction of an important quantity of small productive units. An enormous reserve of labour force was thereby constituted. At the same time, the greater survival of parents brought about the postponement of land distribution among the children, thus tending to reinforce conditions so that peasant families would develop strategies of occupational diversification and spatial mobility.

The accelerated construction of a vial and transportation system ended with the traditional isolation of the rural areas and affected spectacularly the spatial mobility of the labour force, giving way to the emergence of regional work markets.

<sup>5/</sup> Rosero (1983, p. 88) shows that in 1910 prevailed, in Costa Rica, infant mortality rates higher than 200 deaths per 1000 born alive. With such levels, only 4.9 children from the 7.7 that a typical couple had, reached the age of five. However, between 1910 and 1960 infant mortality suffered a spectacular reduction. In 1960, the rate was 40 deaths per 1000 born alive. With these levels, 6.6 from the 7.4 children born to each couple reached the age of five.

The rapid demographic growth, the increasing proletarianization of the rural population and the greater integration of the regional and national spaces facilitated a great disponibility of labour force. This situation strengthened the conditions for the landowners to abandon coercitive methods of contract and subjection of the labour force.

In the first three decades of this stage, relatively simple methods were used to increase agrarian production. The increase of cultivated land constituted the prime basis of growth, with peasant economy gradually being displaced to marginal lands of low productivity. This lead to a rural exodus which predominant form was migration to expanding urban industrial settings.<sup>6/</sup>

However, the opportunities for salaried work declined severely in the 1960's, both in the agrarian and industrial sectors. The principal sources that had permitted the impressive expansion of agricultural-commercial production began to falter due to the technical and financial difficulties and, sometimes, due to substantially increasing costs. As a consequence, in many countries of the region there was a decline in harvested areas that was only compensated by an improvement in the yield and composition of crops. The modernization of capitalist agricultural enterprises brought about the reduction of demand of permanent labour force, while the need of off-farm income meant that agricultural workers became more dependent on migratory seasonal work. Various types of rural migration of a temporary nature began to gain importance including seasonal, pendular and circular movements.<sup>7/</sup>

<sup>6/</sup> In this respect, Lourdes Arizpe points out that in the case of Mexico there was a substantial increase in employment opportunities. Thus, for example, in the 1940's approximately 503,000 jobs were generated; 686,000 in the 1950's and 670,000 in the 1960's. "Migrants could easily find a formal job. The requirements for their insertion in the labour market were few and they could be trained in the various activities. For those migrants who sought temporary income, the housing and urban infrastructure construction industry offered plenty of job opportunities". (1983:15).

<sup>7/</sup> The seasonal migrations depend on the agrarian specific cycles; the pendular migrations are those which tend to be repeated annually, between specific areas, and the circular migrations includ an itinerary related to the harvest of one or more commercial crops (Sabalain and Reboratti, 1983).

II. MORTALITY CHANGES AND THEIR INTERRELATION WITH SOCIO-ECONOMIC PROCESSES IN AGRARIAN SOCIETIES: EVIDENCE FROM STUDIES OF FAMILY UNITS OF PRODUCTION

Due to the complexity and wide scope of the issue, the theoretical approaches and different ways of focusing the interrelation between demographic dynamics and agrarian structure have faced particular problems in operating with arguments and hypotheses of high level of generalization and of enormous universal assumption. Some of the traditional approaches, incorporating many variables with no hierarchization nor articulation among them, if not inadequate, are of little relevance to explain interrelations or to establish frameworks for theoretical analysis. Although common dimensions which define the features of the agrarian structure (land tenure, size of land, technological levels, work processes, etc.) are important in themselves and allow for a very general description of aspects of the structure, undoubtedly they have gained significance and relevance when studied as part of a specific social and historical context. The same argument applies when analyzing demographic events.

Neither agrarian nor urban societies are homogeneous categories. Their particular geographic, political, institutional and socio-economic features vary over time and space, and therefore their processes and stages of transformation assume different forms of concrete expression. Therefore, the patterns of settlement of population, the patterns of social and labor mobility, health and medical practices, as well as the prevalence or changes in values and norms related to reproductive behaviour, among other socio-demographic phenomena, respond not only to the particular features conferred by their social specificity, but also to the sequences and temporalities in which these "events" occur.<sup>8/</sup>

<sup>8/</sup> Several authors have discussed and illustrated some of the theoretical and methodological problems regarding sequences and temporalities of events and variables in socio-demographic analysis (Hareven, 1977; Zemelman, 1982; Quesnel and Lerner, 1983).

The complexity of this issue has lead much of the recent research toward the identification of specific agrarian contexts. The family or domestic group, according to its class position, is being defined as a social context or "social space" where the processes of production and/or reproduction of the population take place, therefore becoming a relevant level of analysis.<sup>9/</sup>

Recent studies have contributed with some empirical evidences on this interrelation, questioning theoretical assumptions taken for granted in the literature, enriching our knowledge on the state of the art, and opening new priorities on research topics in this area. Studies on the family structure, its composition and organization within agrarian contexts are a good starting point to illustrate the way in which the increase in population numbers that characterize a large number of agrarian societies in the last decades has affected families, both in their own immediate space and the social contexts wherein they are found.

Recent studies carried out in some agrarian micro-regions of Mexico (Lerner and Quesnel, 1982) have shown the way in which the present family "space" has been extended and transformed through the larger coexistence of different vertical and collateral nuclear groups<sup>10/</sup> as a result of the rapid decline of overall mortality, especially the fall in infant mortality, and the

<sup>9/</sup> The relevance of the family as economic unit of production and as a theoretical category in sociodemographic analysis is being emphasized in many recent studies. See, among others, Wargon, 1974; Burch et al, 1976; Brass, 1980; Lerner, 1980; Torrado, 1980; Olivera, 1982.

<sup>10/</sup> The vertical pattern in extended families is conformed by the central nucleus (father and/or mother and unmarried children) and at least one nucleus of descent (children of the central nucleus and/or their partners and respective children). 45% of the total number of domestic groups conform to extended arrangements and more than 80% of these correspond to this pattern (Lerner and Quesnel, 1982, pp. 26-27). Similar results have been reached in other studies with regard to the proportion in extended arrangements in agrarian areas (Torres, 1982; Cain, 1977, among others). The collateral or horizontal pattern in extended families will include, aside from the central, another nucleus composed by brothers or sisters of the family head or the spouse. When reference is made to vertical or collateral nuclear groups, its structure by definition is nuclear and its composition has the same meaning as described above.

continued prevalence of high levels of fertility. Though a vertical pattern presently dominates in the extended groups in the Mexican regions of the study (see note 10), it would seem obvious that under high mortality conditions, like the ones that prevailed in the past, this vertical pattern has not been prevalent.<sup>11/</sup> This example will demonstrate the way in which high mortality of the past influences: a) the reduction of common residence time among two or three related generations, and b) the decreasing number of generations of siblings that would have actually succeeded the corresponding one of their parents, or the limited number of married children of their descendants living with their parents. (A more detailed discussion on this aspect is in C. Young's Chapter included in this book.)

From this extremely limited "familiar time", the existing household space in the past could easily have been identified and confused with the residential space, that is, with the so-called residential domestic groups defined by the traditional census criteria (having a common residence and sharing the same budget); also in the case of the father's absence, it is possible to assume that children broke into separate nuclear units and had little relation among them. On the contrary, in low mortality conditions, the survival of the father and/or his partner allows for a wider family space, with the increasing multiplication of nuclei integrated by the siblings and with the persistence of social relations among them and their groups of origin. In this case, given a larger "familiar time", the family space exceeds the residential space of the parent's domestic group: in the majority of cases, this family space includes the vertical pattern, that is, a group conformed by the parent's central nucleus and at least one descent nucleus and an increasing number of nuclear groups of descent living in different residential units, among which different relations of co-operation and reciprocity prevailed.

<sup>11/</sup> In the zone under study, which is located in the state of Yucatán, it was observed that general mortality at the state level has declined from 34.2% in 1930 to 8.3% in 1975 in the entire state. The birth rate until 1976 has been estimated in, approximately, 44%, level slightly modified since then. (CONAPO, Breviarios, México Demográfico, 1981-1982.)

Findings of the Mexican study mentioned demonstrate that at 30 years of age, more than 70% of the heads of domestic groups interviewed have living parents (op.cit., p. 18). In another study on Africa, it has been estimated that at 30 years of age, 85.3% of men have lost their parents under the hypothesis of high mortality levels ( $e_0^m = 30.07$  years of age), against 51.2% according to the hypothesis of lower mortality ( $e_0^m = 65.47$  years of age). More interesting are the authors' conclusions about the number of male births a peasant man requires to replace him at his 60th anniversary: with the high level of mortality, 4 male births are necessary in order to have at least one of his sons replacing him, and 8 if he wants 2 sons in his social position; in the case of higher life expectancy, the number is 3 male births for one son and 5 male births for two sons in his place (Locoh, 1977, pp.2-3).

Part of these findings have questioned the apparently increasing nuclearization observed in certain agrarian societies or in specific social groups within them, defined as a general trend in the large majority of the studies on the issue. The evidences on the study of Mexico show that nearly 50% of the heads of nuclear groups do not have surviving parents, and at least 28% of them are in a stage of their life-cycle in which there are no possibilities of conforming extended groups with descent nuclei (that is, with the heads of nuclear groups younger than 30 years of age). This means that the proportions of nuclear families decrease from 54.9% to 28.3%, considering as nuclear families only those where the head has a surviving father (Lerner and Quesnel, 1982, pp. 29-30). A similar conclusion was reached in another study that shows that during the eighteenth century in the Haute Province, in France, the proportion of nuclear families varied from 53% to 16% under the same consideration (Collomp A., 1972). Therefore, it seems even more important to attempt explaining the significance and relevance of the process of nuclearization or extension in



the conformation of family arrangements, as well as the modifications which this process brings about in the social relations among groups in peasant societies.

Taking into account at least the demographic influences, one conclusion should be that before arguing for the existence of an increasing proportion of nuclear domestic groups, it is necessary to distinguish, at first, if nuclearization conforms to the fact that these family heads have no surviving parents, or do not find themselves in the stage of their demographic life-cycle wherein their children are neither forming their own nuclear group, nor within the extended arrangements.

However, this type of conclusion should also be underlined when introducing other elements like age of family head, class condition and possibilities of supporting an extended family. According to the above mentioned study in Mexico, it appears that under the impossibility for a large number of descent nuclei of a common coexistence within the group of origin, the greater possibilities of forming nuclear groups were found among family heads of younger generations whose parents have no access to land (salaried or self-employed workers) or those whose parents have limited access to land. Similar results are found in other studies where prevalence of the extended family in traditional societies is analyzed. The level of economic resources necessary to support this family pattern and the complex domestic relations within it are strongly determining factors. Only a minority of families conform to this type of arrangements. (Levy, 1965, quoted by Torres, 1983.)

In the same sense, it is interesting to add, as a second remark, that in the case of the extended domestic groups directed by young family heads, it should be considered that the extension is partly a result of the demographic events

occurring in their family of origin: widow mothers, young collateral members whose family head or parents have died, orphans, divorced or other isolated members of their family of origin are integrated to extended groups. Again, this pattern of family structure expresses the difficult conditions of survival prevailing in some socio-economic contexts that inhibit or reduce the possibilities for nuclear arrangements. At the same time, it implies a greater complexity of extended familiar arrangements directed by young family heads. In some of the Mexican agrarian micro-regions, more than 80% of the extended groups of youngest family heads, and also the same figure for the groups belonging to the proletariat or paid worker class, are composed by members of their families of origin (mainly a widow mother with her own siblings). (Lerner and Quesnel, 1982, pp. 28; Lerner and Livenais, 1984, pp. 54.)

A similar situation is described in Togo agrarian society, between native and migrant populations submitted to different demographic conditions (Quesnel, 1981; Benoit et al, 1982).

Changes in the life-cycle of the family and its extension in time can also lead to a transformation and multiplication of the events occurring within it. Children can enter and leave the father's family groups a greater number of times, the duration of his own marriage and that of his children expands, the probability of couple's breaking-up increases, etc. That is, different practices correspond to different periods and sequences of events or, at least, different ways to perform old and traditional rules and practices that governed society.

The results and arguments mentioned hereby support our hypothesis of the presence of a new practice in the formation of residential domestic groups as a result of mortality decline.

Today new generations form their nuclear cells and separate from their parents' domestic groups, and only one child remains within the group of origin; also this child may integrate members that separate in his own group. This new practice means the multiplication and dispersal in space of the related nuclear groups.

Different formations can be produced from the residential irruption of the family space, as a result of the increasing probability of survival of parents, children and grand-children, and according to the conditions and options given in each society. At least two different patterns can be recognized: on the one hand, the maintenance of the same family space through the nuclearization and multiplication of groups outside the community. On the other hand, as is the case in one of the Mexican regions under study, an extension of the family space within the locality's frame, that is, in the same geographical space.<sup>12/</sup> It is important to stress that in the latter case, the simple residential family concept is insufficient to explain the real family space and can lead to erroneous conclusions about the important family arrangements. Therefore, we emphasize the need to consider and redefine the family, as an analytical category, according to the given social relations among related domestic groups.<sup>13/</sup>

<sup>12/</sup> Under the mortality and fertility conditions of the mentioned region (see note 11), the average number of possible survival descent would be 6, figure corresponding to the average size of the living descent achieved.

<sup>13/</sup> For example, in our study in Mexican agrarian contexts, two approaches or redefinitions were identified. The first one, defined as the residential domestic groups respond to the conventional practice in socio-demographic censal studies; the second one is formed by the so-called interaction domestic groups, which include the domestic related groups living in separate housing units within or outside the community (head's and wife's family of origin, collateral family of both, as well as the descent groups).

What seems more important is the possibility of identifying, through structures and patterns of family arrangements found in specific contexts, their correspondence to residential and marital patterns, different working processes and productive relations and biological and reproductive practices, among others. All these are produced by changing social and demographic conditions. Without prejudging for the moment being the weight of one or another of these previous conditions on the changes, what is of interest to us is to particularly emphasize how in specific situations -spatial and temporal- demographic conditions can impose a new articulation to social practices, thereby exerting an influence on other structures or levels of society.

In this sense, Godelier (1974, pp. 123-256) has demonstrated how the rules of marital exchanges in an Australian aboriginal population can either disappear, or acquire a different form if a demographic shortage occurs, and how the return to previous demographic conditions does not necessarily mean that the rules and social practices can be revived in the same manner. According to the author, the complexity of demographic analysis lies in the fact that "each type of social relations, each structural level, is subject to specific demographic conditions in its functioning and its reproduction in time" (p. 226).

In the same line, another author has underlined the place of the aleatory demographic events in marital strategies. In the case of the Bearn communities, he points out how these strategies are designed around the preservation of patrimony. It is through these strategies that they seek to face aleatory events occurring within the family, which can jeopardize their fundamental principle: the transmission and prevalence of the familiar patrimony (Bourdieu, 1972).

In his analysis on some aspects of the relationship between the life-cycles and the economic mobility of households

in rural Bangladesh, Cain (1977) examines the sequence and timing of events in elements such as the number of living children and timing of male births and death of household heads. These are considered uncertainties (or aleatory demographic events) that they face in order to maintain or lose the familiar patrimony and, in general, these are related to the economic welfare of this social unit. Finally, in his study on the Polish peasants of the eighteenth century, Kula (1972) illustrates the control and direction that the feudal lords exerted on the reproduction of the population, of the families under his dependence. He demonstrated thereby how the demographic structure and its reproduction can be controlled from outside, according to specific objectives.

The above mentioned examples illustrate the relevance of reintroducing the notions of specific temporalities of population processes through the demographic conditions to which the population, or certain groups, have been subdued. What seems more important is that they also demonstrate, and support our hypothesis, that it is enough to incorporate as a "mediation" the changes in the temporality of the demographic events, so that certain social practices are altered. This is the case of the timing and pattern in mortality decline and its sequence with fertility decline or with other demographic events. Nevertheless, the latter does not mean to ignore that we are dealing with events that are, above all, subject to transformations of other material survival conditions, as well as to superstructural influences. These events not only lead to modifying the familiar space, but also influence other "records" of society.

Let's clarify and specify the above taking as an example the characteristics of the "ejidatarios" (mini-fundia or farmers that have the right to use and bequeath the land they have been granted) in the agrarian zones of Mexico. The increase of life expectancy of these peasants, particularly that of the father or head of the domestic group that gained access to the land during

the agrarian distribution, implies maintaining in his hands the power over the means of production for a longer period of time. At the same time, the increased survival of children that reach adulthood, that is, the age when they form their own families and obtain or share the father's rights, represents an increase in the number of persons who can occupy a similar social position within the household. Therefore, the timing and sequence of at least two demographic events -increased survival and maintenance of fertility levels- lead to a transformation and questioning of the power and property structure, as well as the control of means of production and practices of reproduction within the family.

Among the specific conditions that have characterized land distribution and agrarian development in countries like Mexico are the limited size of plots originally granted to the great majority of "ejidatarios". There is also a concentration of large extensions of land in only a few hands or else there is the problem of land fragmentation. This means that replacement conditions of access to the land for a good number of peasant children is absolutely impossible. It may be also that plots are drastically reduced in size and/or strongly modified. All this is accompanied, as has been emphasized, by a semi-proletarianization process of the peasant producers.

A very good example of this process of fragmentation and of limited access to land has been demonstrated by Lourdes Arizpe (1980) in two Mexican communities. The author notes that by 1928 in one of the communities the original endowment did not exceed an average of 2.5 hectares per family -this figure being smaller than the estimated extension needed to guarantee the simple reproduction of a productive unit. This low endowment obeys, in part, to the original high density of population. In contrast, the size of the plots in the other community was substantially larger, reaching an average of approximately

6.2 hectares. In the long term, the survival of a greater number of children affected the inheriting practices and the fragmentation of land: in the first community, by 1956, the average land extension had been reduced to only one hectare, whereas in the second, in spite of the emigration of a large family group, the plots reached an average size of 2.5 hectares. On the other hand, when analyzing the possibilities for some Mexican peasants and their collateral relatives to recreate an important part of the conditions of their parents' social reproduction, that is, to have access to land or to the "sistema ejidal", the greater semi-proletarianization process observed is explained, aside from the socio-economic structural changes, as part of a demographic and generational effect. The fact that the youngest or children peasants are much more involved also in salaried activities, is due to the physical requirements for such activities. Also, there is a saturation of the production system (for example, the possibility of incorporating other peasants to the "sistema ejidal") and the survival and active presence of the older peasant generation (the one that received the land during the agrarian reform in the case of Mexico) (Lerner and Quesnel, 1982 ).

As we have mentioned, the greater survival probabilities of parents, children and grand-children leading to modification of the household space is not inconsistent with or independent of the particular conditions of the social context wherein it is found. Extended family arrangements in the agrarian zones of Mexico arise out of certain difficulties experienced in the creation of autonomous groups, such as the limits on access to land or salaried permanent jobs, lack of sufficient remunerated income as means of securing the group's essential survival conditions and the availability of own housing facilities. These factors, among others, are more important in determining the family structure than the self-will or "traditional practice" of such family organization. In the Mexican agrarian context

it is not the need of a greater or additional familiar labour force by the members of the descent or extended nucleus that leads to the formation of extended arrangements. It is the rotation in the use of family labour of the head's nuclear group that enables him to satisfy the working requirements of his economic unit of production.<sup>14/</sup> The limited reduced proportion of family groups in a stage of disintegration (due to the couple's breaking up or the the children's departure) would seem another element to support the scarce possibilities of the great difficulties in the maintenance of this type of arrangement.

Another relevant matter is to consider that most of the social structures, such as the type of family arrangements, do not operate in an homogeneous way for the whole population. There is a differential acces to the means of production, the resources and input used in production, the opportunities to enter in other social relations within and outside the agricultural sector and, in general, the differential access to economic and social services (credit, commercialization channels, educational and health services, among others). These imply that modifications of different "social spaces" do not necessarily lead to different structures and behaviours, but have always a different significance and articulated structure in themselves and with other processes.

In this sense, it should be recognized that mortality decline in agrarian contexts, characterized by an intensive process of social differentiation, also means that different

<sup>14/</sup> These results lead us to question the direct and mechanical relation that is generally assumed between the size of the group and the needs or requirements of familiar labour force of the descent nucleus that conform extended arrangements; this relation would only function in the cases of nuclear families and under certain specific conditions.



social groups do not participate or benefit equally from the decline. Different studies on Mexico and other Latin American countries explain this situation of inequity before death (Behm, 1979; Lerner and Quesnel, 1982; Menéndez, 1981; Bronfman and Tuirán, 1983). Among their results there is one showing how a specific social class position implies differential access to sanitary infrastructure, health system, diseases, nutritional levels, technological availability, etc. These aspects obviously relate to other conditions in this context. All these facts, as mentioned in the studies, express at the same time the differential impact of the various actions and policies developed among different geographic areas and social groups. This polarization, as it was supposed, has been intensified since mortality decline has reached a limit that has not been overcome by a substantial increase in the welfare of the majority of the pauperized population living in agrarian zones.

With the preceding paragraphs, our intention has been to point out the importance of considering the impact of demographic transition and especially the impact of rapid decline in mortality in the family structure. This has produced, as one of its results, a multiplicity of nuclear components leading to the expansion of the household space and to the modification of social practices within and outside this space. Now we shall consider some of the possible effects of mortality decline on other behaviours.

As it was mentioned, the system of social relations given among related groups that define the real family space can develop

both within and outside communities and can overflow the rural limits or remain within them. When the division of one or more of the nuclear components appears to be accompanied by a migratory movement outside the community, their nuclearization with respect to their group of origin does not necessarily mean a rupture with the original family space, especially when both parents, or at least one of them, survive. On the contrary, the case could be where nuclear components can leave their original space and settle in the same community and maintain, extend or restrict their relations with the group of origin. Also, both trends can be represented. In any of the cases, it would mean an extension of the family space, a wider network of exchange and reciprocity, expressing above all one of the principal features of the agrarian change and development: the coexistence among different types of economic organization, the greater link between the domestic economy and the market economy, as well as the influence of the latter in the former. It should be understood that the practices, and resulting exchanges, between the residential and interaction groups (see note 14) shall be different according to whether the latter are inside or outside the community.

This thesis emphasizes the importance of considering two processes closely interrelated to each other: the spatial mobility and the occupational diversification of the members in the domestic unit. Both processes are an essential part of the strategies of the domestic group to guarantee the perseverance and reproduction of the economic unit of production as well as the familiar group's survival.

Different studies have suggested that the spatial mobility and the occupational diversification of the members of the domestic unit form part of the adaptative mechanisms which the peasant economy utilizes to adjust the availability of familiar labour force to the working requirements of this unit

in each productive cycle. This has led to state that proletarianization thereby becomes a mutable procedure during the individual and familiar life-cycle, insofar as the domestic economies can combine both strategies in rural and urban settings. In this sense, one of the most relevant findings in the Latin American region is the fact that the changing processes in the agrarian sector have not necessarily led to the definite proletarianization of the labour force, but that this process has adopted different modalities that go from the semi-proletarianization, the peasant restructure, to a total proletarianization. In a certain way, these modalities respond to the tendency observed in the rural labour markets with respect to the increasing and accelerated replacement of permanent laborers for temporary ones, as well as the lack of dynamism of the urban-industrial sector which determined a lower capacity of absorption of labour force. Therefore, due to the fact that the capitalist sector has not been able to totally assume the reproduction of rural labour force, there still remains an important space for the development of multiple forms of domestic economy.

Some authors have advanced the thesis that the pervasiveness and recreation of peasant economy has been functional with respect to the logic of reproduction of dependent capitalism. For example, it has been suggested that the preservation of small holdings permit the presence of an important labour force reservoir that the capitalist sector only utilizes at specific times of the year, saving thereby the cost of production and part of the reproduction cost of this labour force. Likewise, the reproduction of one of the largest sectors of population has been supported by peasant economy, avoiding thereby, from a social point of view, the waste of productive forces due to the capitalist sector's inability to integrate them productively.

In the peasant economy, these trends have reinforced the link between the family group and the land, in spite of the

exhaustion and deterioration of the productive conditions of their land. The occupational diversification process accomplishes thereby the function of maintaining part of the members of the familiar group as a productive force within the confinements of its unit, at the same time that the rest of the family inserts in extra-farming activities in order to obtain additional income that the domestic group needs to recreate the conditions that permit the reproduction of the productive unit and the subsistence of the family group.

In this process, migration has been a fundamental mechanism and a strategy. The earning of an extra-farming salary and the search for alternative sources of income has generally resulted in the population's spatial movements. What seems important to stress is the fact that both spatial mobility as well as occupational diversification of the family members are not independent from the conditions that allow for an increase in children's survival and life expectancy of parents.

Regarding the different patterns which characterize migratory movements in Latin America, there is a certain consensus on the idea that these patterns have not only responded to specific forms that the transformation processes of the agrarian structure assume in different contexts, but also obey to certain elements of the familiar environment which explain why specific groups or individuals migrate whereas others, with similar characteristics, do not. The relation between structural conditions and migration or between the family and migration is not unilateral. Each of the units implement particular reproduction mechanisms according to their material resources and to the type and intensity of the external pressures it is affected by. These strategies can, at the same time, assume different forms and nuances according to the size, vital cycle and demographic dynamics of the familiar groups on which the reproductive unit is based.

In recent studies, the available evidences demonstrate how the selectivity of migration -as a survival strategy of domestic economy- links with the stage of the vital cycle where in the familiar group is found. In her study on the movements of population, Lourdes Arizpe observes the manner in which different group members during the vital cycle alternate or replace each other in obtaining additional income. This task usually results in spatial movements toward other contexts. These movements are defined by the author as "replacement migration". In the "minifundista" unit, the father is the first one to migrate. He is then replaced by the elder sons and daughters who tend to remain in the zones of destiny as they have almost no chance to inherit a piece of land, due to its intense fragmentation and to the institution of inheritance rights, like the "last-born". These migrants regularly send a certain amount of money to the family group of origin. Younger sons and daughters that remained in the unit at the beginning, taking care of agricultural chores, as they start growing older assume the responsibility to provide the domestic group with complementary income, thus relieving their parents and elder siblings of this duty. Due to their future security of inheriting a patrimony according to the "last-born" right, the youngest children make only temporary movements, to guarantee the essential survival of the family nucleus.

Similar conclusions have been reached through a different study wherein it has been demonstrated that migration is a mechanism that permits the reproduction of the domestic unit through the acquisition of complementary income, and contributes to diminish the costs of goods consumption through the departure of some of the members of the family group (Negrete, 1980).

None of the studies undertaken in Latin America and perhaps other regions have, up to this moment, explicitly analyzed the interrelation between mortality changes and the processes

mentioned as part of the peasant economy. Nevertheless, when studying the migration patterns, as is the case of the replacement movements found, implicitly it is possible to visualize, and therefore consider, that a general and different replacement process is going on in which, undoubtedly, the increasing life expectancy of parents and their offspring is playing an important role.

In a recent study referred to temporary movements in a sugar cane economy area in México, the following became evident: a) the excessively young ages found among the actual migrants involved in this seasonal group (almost half of them were between 14 and 24 years old, p.22); b) the still younger age when realizing their first temporary movement (more than 70% were 15 years old and 18% had their first movement between 0 and 9 years of age, p. 24), and also the young age to form their own families (53% had their first union between ages 15 and 19 and 90% had it before they were 24 years old, see Venegas, 1983, pp.27-28) and c) the close relation found among these migrants, with respect to way of supporting their family unit of production (minifundia plots worked during the rainy season), where, due to their age, less than half of the sugar cane temporary workers with access to land are family workers without payment in their units of production at their places of origin (p. 25). These evidences support the replacement or changing process that is taking place both at the family level and at the economic and social levels, that are influencing the semi-proletarianization of a majority of the younger members, the maintenance or recreation of wider and different family arrangements and relations and in general the persistence of the peasant economy in many societies. Moreover, if we consider, as we intended to point out with the few empirical evidences mentioned, that the decline in mortality coupled with high levels of fertility has played an important role in the widening and

redefinition of this replacement process as well as in many other changing processes of these societies. The most important conclusion derived from this paper is the need for major efforts in the empirical research regarding the social dynamics of the peasant communities, taking into account demographic changes as well as the specific socio-economic processes of each society and giving priority to the economic unit of production and the family as levels of analysis.

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