

Chapter 9

Quality of Life and Fragmentation in the Argentina of the Nineties



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Abstract The Argentina of the nineties is, to a great extent, the product of the peculiar form of accommodation of the local hegemonic groups that, through the different stages of economic and social history, have managed to subalternize vast “popular” sectors based on development models, generally led *from* central countries. The greater or lesser functionality of the “comparative advantages” and the degree of autarchy or openness of the national system with respect to the centers of power have precisely determined the definition of these stages. In this particular framework and considering a weighted combination of socioeconomic and environmental indicators, we have tried to approximate the magnitude and incidence of some differentiating factors in the living conditions of the Argentine population. The regional analysis highlights the marked difference between the opportunities offered by each territorial unit. Thus, the northern regions, historically labor-providing areas, are the epicenter of adversity, while the remaining Argentine regions appear in more favorable position. From the methodological aspect, the principal novelty of the quality of life study in 1991 is the incorporation for the first time of an environmental dimension, which will continue to be used in future indices.

Keywords Quality of life index · Argentina · Socioeconomic dimension · Environmental dimension · 1991

9.1 Introduction

We consider the Argentine Republic an economic-social formation at the national level, with a predominance of the capitalist mode of production. Such training appears

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backward, peripheral and, above all, contradictory in terms of its level of economic and social development with respect to the international context. It is also politically, economically and socially dependent, understanding dependency as an integration strongly subordinated to the euphemistically called model of “interdependence” (and more recently of “globalization”) in which one of the parties is subordinate (or globalized).

The Argentina of the nineties is, to a great extent, the product of the peculiar form of accommodation of the local hegemonic groups that, through the different stages of economic and social history, have managed to subalternize vast “popular” sectors based on development models, generally led *from* central countries. The greater or lesser functionality of the “comparative advantages” and the degree of autarchy or openness of the national system with respect to the centers of power have precisely determined the definition of these stages.

The demographic and economic evolutions of Argentina, together with the phenomena of geographic distribution of the population and economic activities, are, to a large extent, a reflection of what was indicated in the preceding paragraph. The same occurs with the transfer of income between the different sectors of economic activity, the generation of employment and the socio-territorial appropriation of the resources generated from these activities. All this determines strong differences in the quality of life of the population, which constitute, in turn, another feedback element of pre-existing inequalities, leading to a true process of fragmentation.

In other words, the quality of life is the *result* of a process, but at the same time, it is the *generator* of new processes. Thus, around 40% of the Argentine population does not enjoy minimum living conditions, but if we consider the range of young ages (under twenty years old), this percentage increases to almost half of the respective group, due to differences in fertility among various social groups.

The formulation of an index to measure the quality of life of the population is a question that has not been resolved, since it depends on numerous factors such as: historical processes, society’s scale of values, expectations, experiences individual and collective dimensions, private (income, level of education) and public issues (accessibility, environmental issues), scale of analysis and its adjustment with the available information. To deepen the concept of quality of life and its objective and subjective aspects, we recommend seeing Chaps. 2 and 7. The main novelty of this chapter in the study of quality of life is the importance of incorporating an environmental dimension.

9.2 Methodology

For our analysis, we have considered socioeconomic dimensions (education, health and housing) and physical-environmental dimensions (risk of flooding, seismicity and volcanism, frequency of tornadoes and soil erosion). These dimensions will be composed by variables with different weights based on their explanatory value and their level of reliability. Although we cannot reflect it in a global index disaggregated

by political-administrative spatial units (counties), we must point out that the different variables have different weights according to the social groups that we consider. Probably, in the low-income strata, the “basic” issues are weighted more, while in the high-income strata the weight of “superfluous” factors increases.

Finally, there are dimensions that, although they are increasingly being valued by Argentine society (such as security), we have not considered them yet because the information available for this historical moment suffers from severe deficiencies, particularly due to underreporting, and could show results far from reality. Also, in the case of other aspects of undoubted weight such as diet, mental health or perception, the sources available for Argentina in the nineties are still scattered and precarious to try to incorporate them into a national scale.

From census information, other statistical sources and previous research works, we have created a map that covers all the counties of the Argentine Republic in the last two census dates, 1980 and 1991, whose main purpose is to differentiate levels of the population’s living conditions.

As we have already stated, the adjusted definition of an “objective” Quality of Life Index is not a simple or universally valid task. Based on our own experiences and on previous research works widely discussed in specific areas, mainly within the framework of the Latin American Network for Urban Quality of Life, we have used, on the one hand, the socioeconomic dimensions of education, health, housing and, on the other, the environmental conditions and the attraction of the landscape to determine levels of quality of life of the Argentine population.

In other methodological works (Marinelli et al. 1999; Torcida et al. 1999), starting from all the available census variables and using a strictly mathematical selection procedure, results are very similar to those obtained for the Tandil case (Velázquez and García 1996). Next, we will explain the indicators selected for each of these dimensions and for each case.

9.2.1 Education Dimension

- Percentage of population that no longer attends an educational institution and with a level of education attained below complete primary (prepared from table p13-d of the 1991 census).
- Percentage of the population that no longer attends an educational institution and with a full university level of education (prepared from table p13-d of the 1991 census).

The importance of both variables lies in their power to discriminate the extremes of the educational pyramid. Although the primary cycle is formally compulsory in Argentina, its non-compliance shows various situations of adversity: early insertion in the labor market, little family cultural heritage, etc., all of which tend to feed back a vicious circle that diminishes the possibilities of development and social promotion of vast sectors of the population. On the other hand, those who complete

their university studies have been able to delay their entry age to the labor market and are more represented among the middle and upper social sectors, mainly urban, since accessibility is a decisive factor for education opportunities. Once achieved, and despite the process of devaluation of the “educational credentials,” the university title will be a very important element for the expansion of “horizons,” for the increase of opportunities and, especially, for the insertion in the labor market, a decisive factor in the genesis of the social structure and, therefore, in living conditions.

9.2.2 Health Dimension

- Infant mortality rate according to place of residence of the mother for the years 1994, 1995 and 1996. (Ministry of Health, Directorate of Statistics). These are the closest years available to the beginning of the 1990s at the county level and the average of the three years is taken to reduce the random oscillations inherent to this rate.
- Percentage of the population without health coverage or mutual insurance (prepared from Table 7d of the 1991 census).

The IMR constitutes one of the fundamental indicators to establish the level of health of a population, since it is affected by a series of factors that have a strong social determination. Beyond the action of the health system, the socioeconomic factors that most affect IMR are the mother’s educational level and the father’s occupational stratum. In other words, in an adverse socioeconomic context, the multiplication of health establishments or human resources can reduce the IMR, but only to a certain extent, since the social structure will also determine the most vulnerable sectors.

The availability and reliability of the information is variable. Thus, the county rates for the province of Santiago del Estero for 1994 or those for Buenos Aires province for 1996 are not available, and underreporting and random oscillations of this rate are evident in some counties. The information on health coverage complements that of IMR, indirectly reflecting the proportion of the population “contained” in the health system and in the economic structure.

9.2.3 Housing Dimension

- Percentage of population residing in dwellings that lack a toilet for exclusive use. (Prepared from Table v6-d of the 1991 census).
- Percentage of overcrowded homes, considering those that exceed two people per room. (Prepared from Table v8-d of the 1991 census).

The consideration of such a basic element as the toilet highlights the lack of equipment in the homes. This element depends on the individual situation of the

family and the home and, unlike others such as water provision, is independent of its location with respect to an established water or sewage network. This consideration of a specific element (and more reliable in its measurement) was not possible with the information from the 1980 census.

The ratio of people per room highlights a quantitative aspect: the deficiency of the dwelling in relation to the number of inhabitants. Although the census criteria in 1991 established a threshold of three people per room to determine overcrowding, we have chosen to lower this threshold to two people per room. Thus, for the census, a married couple with four children residing in a two-bedroom house would not be overcrowded, while, according to the criteria we have established, it would be.

9.3 Environmental Problems and Attraction of the Landscape

Argentina is a country characterized by great diversity of environments and singular richness in natural resources. Both may act to the detriment or benefit of the population's quality of life.

Within these environments, there are problems associated with natural dynamics that negatively affect the population, which manifest as natural disasters and disturbances that affect the society that lives in that environment:

- Population residing in areas with flood problems (Made from maps of flood risk areas, cited by Di Pace 1992).
- Population residing in areas with different coefficients and scales of seismicity (Prepared from a seismicity map in Argentina from the *Total Atlas of the Argentine Republic*, 1982).
- Resident population in areas affected by tornadoes (Made from maps of natural hazards in Argentina, edited in 1996 by Geosistemas).
- Resident population in areas with soil deterioration (Prepared from the soil erosion map of the FECIC, 1988).

Flooding is a serious problem in many regions of Argentina. The mainly affected areas are close to rivers, low watersheds and depressions crossed by rivers. Flood and non-flood units were digitized in one layer. Each with 1 and 0. Then the population was calculated for each county affected by an operation of *layers* (layering).

Seismicity and the associated effects of volcanism occur almost exclusively in the Andes and foothills of western Argentina. Areas can be differentiated according to their frequency and intensity. These types of units have been vectorized in a layer, attending to those characteristics that were handled as an attribute. Then the degree of incidence of such units of the seismic layer on the population of the affected areas of each county was calculated.

The areas with the highest frequency of tornadoes appear mainly in the east of Córdoba and the northwest of Buenos Aires provinces. For this work, the tornado

zones were digitized, and they were characterized with gravity attributes according to their frequency and intensity. Finally, the degree of incidence of said layer units was calculated with respect to the population of the affected areas.

The deterioration of the soils is a very old problem and studied from many approaches. From the different source maps, the most serious problems have been vectorized for different reasons: water erosion, wind erosion and salinization. Different gravity values were assigned to these three types of units, with the strongest values corresponding to water and wind erosion (4 and 3, respectively), assigning less weight to soils lost by salinization. The layers of these units and that of the counties were superimposed to calculate the incidence of these deteriorations in the population.

The elements of the landscape also behave as attractive factors that improve the quality of life of the population; hence, in the assessment of quality of life, we have considered it important to try to address in some way the attributes of the landscape in each unit of analysis. Given the difficulty of recreating a methodology for analyzing the landscape as a receptor attribute of tourism and place of residence, we have considered the existence of summer and weekend homes (prepared from tables v13-d of the 1991 Census, by provinces and counties). This variable is taken as an indirect measure of the degree of attraction exerted by the counties located in a given landscape. Although it is difficult to generalize situations, a high proportion of this type of housing implies the existence of positive elements with regard to the morphology of the landscape, a benign climate and other resources that make up the tourist potential.

After this quick description of the relative situation of each variable, we will explain how we will use this information to construct an index that covers the aspects that we have considered separately.

The first step in the elaboration of the Quality of Life Index is the transformation of the rates into partial index numbers, which was carried out according to the following procedure, according to the type of variable:

Variables whose increase implies a worse relative situation (environmental problems, population with less than primary education level, population residing in crowded homes, population without social work, population without exclusive use toilet and deficient housing and IMR).

$$I = \frac{\text{Max} - a}{\text{Max} - \text{Min}}$$

where a : cost variable.

Variables whose increase implies a better relative situation (population with a university education level and summer or weekend houses).

$$I = 1 - \frac{\text{Max} - b}{\text{Max} - \text{Min}}$$

Table 9.1 Dimensions and variables for the Quality of Life Index

Dimension	Variable	Partial weight	Total weight
Health	Population without health coverage	15	35
	Infant mortality rate	20	
Housing	Houses without toilet	20	30
	Overcrowding	10	
Environment	Summer homes	5	20
	Environmental problems	15	
Education	Less than primary education	10	15
	University education	5	

Argentina, 1991

where b : benefit variable.

Once the variables have been transformed, it is possible to create the Quality of Life Index (Table 9.1). The most important component of the index is the health dimension, followed by housing, environmental and educational variables. The relative weight of each component in the index proposed for the 1990s is as follows:

Weighing the relative weight of each variable, we have determined a Quality of Life Index whose theoretical value can reach between 0 and 10 to reflect the worst and best situation, respectively.

9.4 Results

9.4.1 Health

There are high rates for the IMR (more than 25 per thousand) in large sectors of the north of the country. Also, to a lesser extent, in the second and third crown of the Buenos Aires suburbs and in the Patagonian plateau (Fig. 9.1). The population without social health coverage (Fig. 9.2) also reaches high percentages in the north (more than 56%), showing more satisfactory values in the Pampean region and some cities in the interior. Although one rate reflects health results (infant mortality) and the other a potential to prevent or face contingencies, both tend to coincide closely, identifying vulnerable (and affected) sectors with regard to their health.

9.4.2 Housing

The proportion of overcrowded households in the north of the country and Patagonia, especially in the north, includes more than half of the households. In the case, this

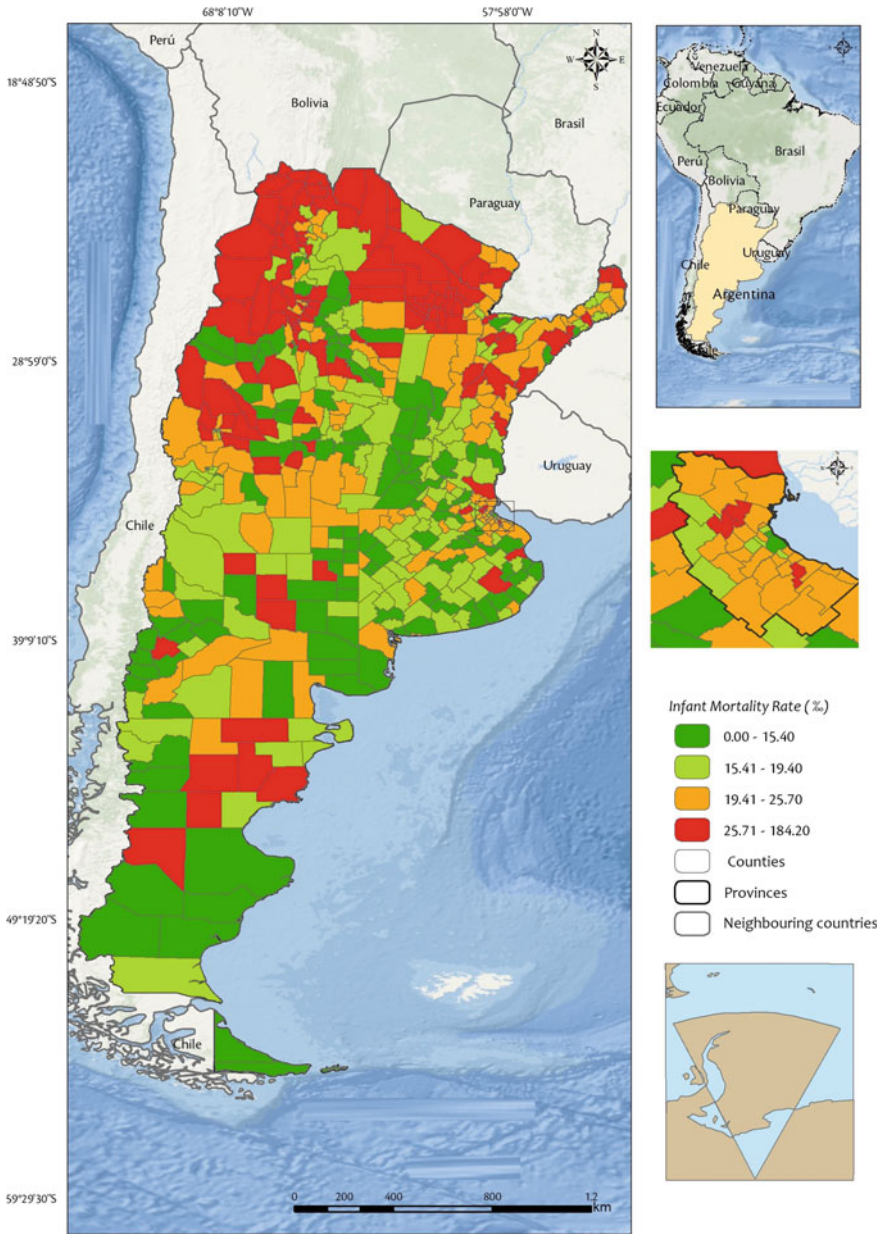


Fig. 9.1 Infant mortality rate. Argentina, 1991. *Source* Personal elaboration based on the 1991 National Census

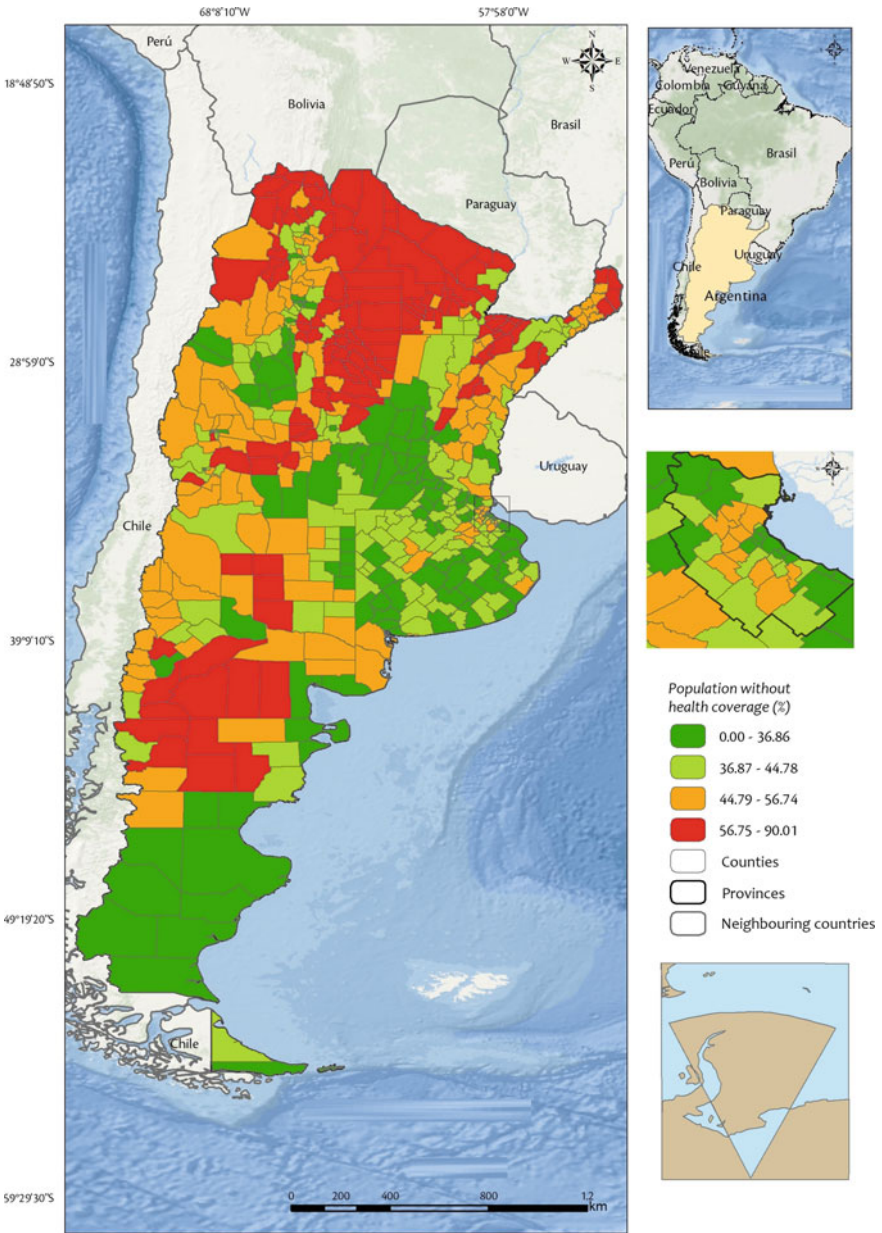


Fig. 9.2 Population without health coverage. *Source* Personal elaboration based on the 1991 National Census

is related to their high fertility, while in the case of Patagonia, it is the product of the strong migratory process, not accompanied at the same rate by the construction and expansion of houses. The situation in Greater Buenos Aires shows overcrowding in the second crown of suburbs. Within the City of Buenos Aires and in most of the Pampas region, overcrowding levels are low (Fig. 9.3).

The lack of a toilet is also very high in the north of the country, including more than 60% of the dwellings. The same occurs in the marginal areas of the other regions (Patagonian plateau, western Pampas and areas far from the main Cuyo region oases). In general, there is a clear correspondence between the most overcrowded areas and those that lack a toilet (Fig. 9.4).

9.4.3 Environmental Problems

Argentina has a diverse and complex environmental problem, so we will only try a very limited and preliminary approximation that, in general terms, we will consider representative. Considering the combination of risk of flooding, seismicity, tornadoes and loss of soil, we see that the pampa region, more specifically the depressed pampa and the Paraná River valley, appear to have a high level of environmental problems. There are also problems in some mountain ranges in the Cuyo region, mainly affected by seismicity, which takes place mainly in the provinces of San Juan and Mendoza.

For the 1990s, the presence of summer or weekend houses is important throughout the Atlantic coast of Buenos Aires and in the south of Entre Ríos provinces, since they are areas located near the main emission centers. The same thing happens in counties near provincial capitals that also have tourist attractions. It is worth highlighting the cases of the Iguazú Falls and the southern lakes in the Patagonia (Fig. 9.5).

9.4.4 Education

Regarding the population that did not complete basic studies, once again the northern regions appear in a very unfavorable situation, especially in those areas located outside the provincial capitals and intermediate cities. The position of the Patagonian plateau and the areas located outside the main urban centers is also very bad. Within the Pampeana and Cuyo regions, the difference between the central areas and their respective peripheries is also clear. The only region with low levels is Greater Buenos Aires, probably because accessibility contributes to complying, at least, with basic and compulsory education (Fig. 9.6).

The population with a university education level reaches its lowest levels in the North of the country, especially outside the main urban areas where the universities are located (Fig. 9.7). But this phenomenon is repeated in all regions, even in Greater

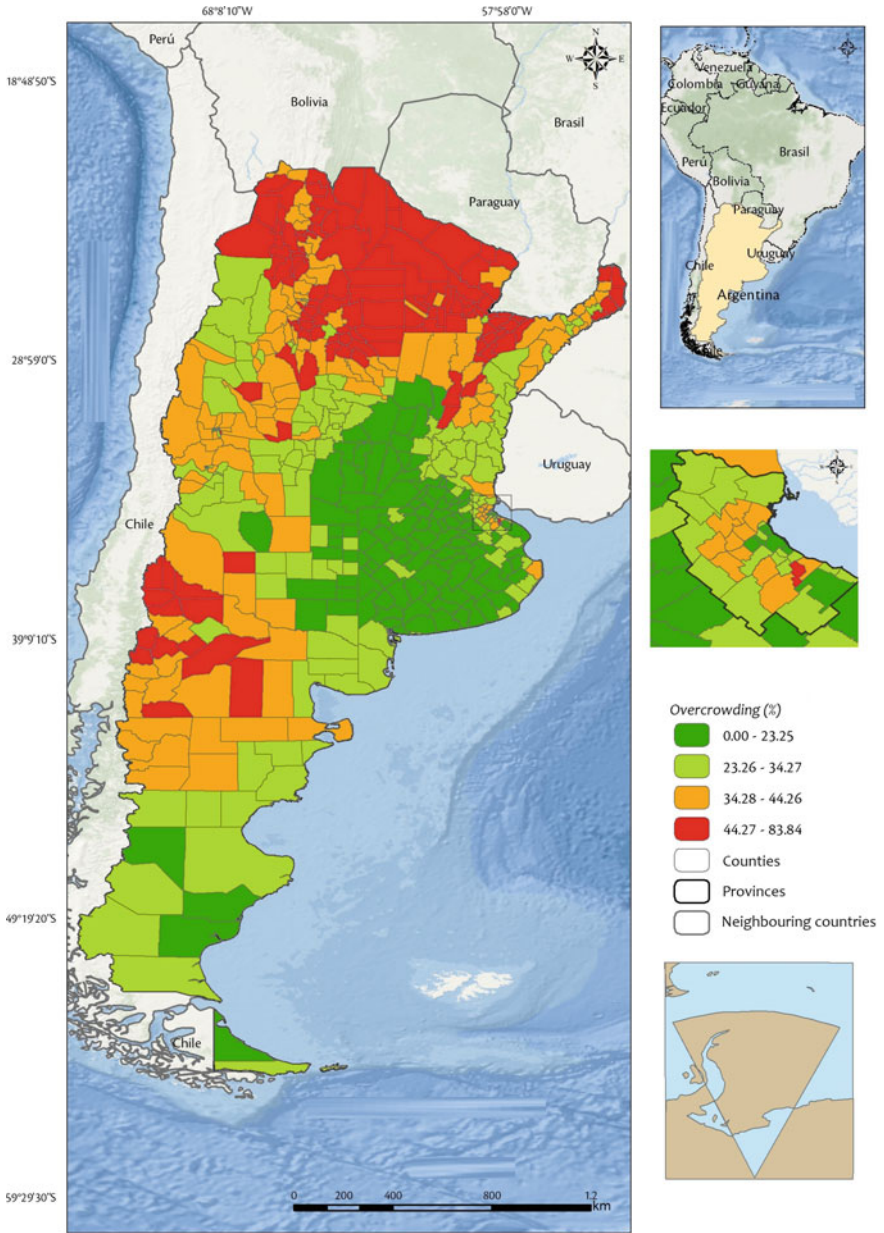


Fig. 9.3 Overcrowded households (more than two people per room). Argentina, 1991. *Source* Personal elaboration based on the 1991 National Census

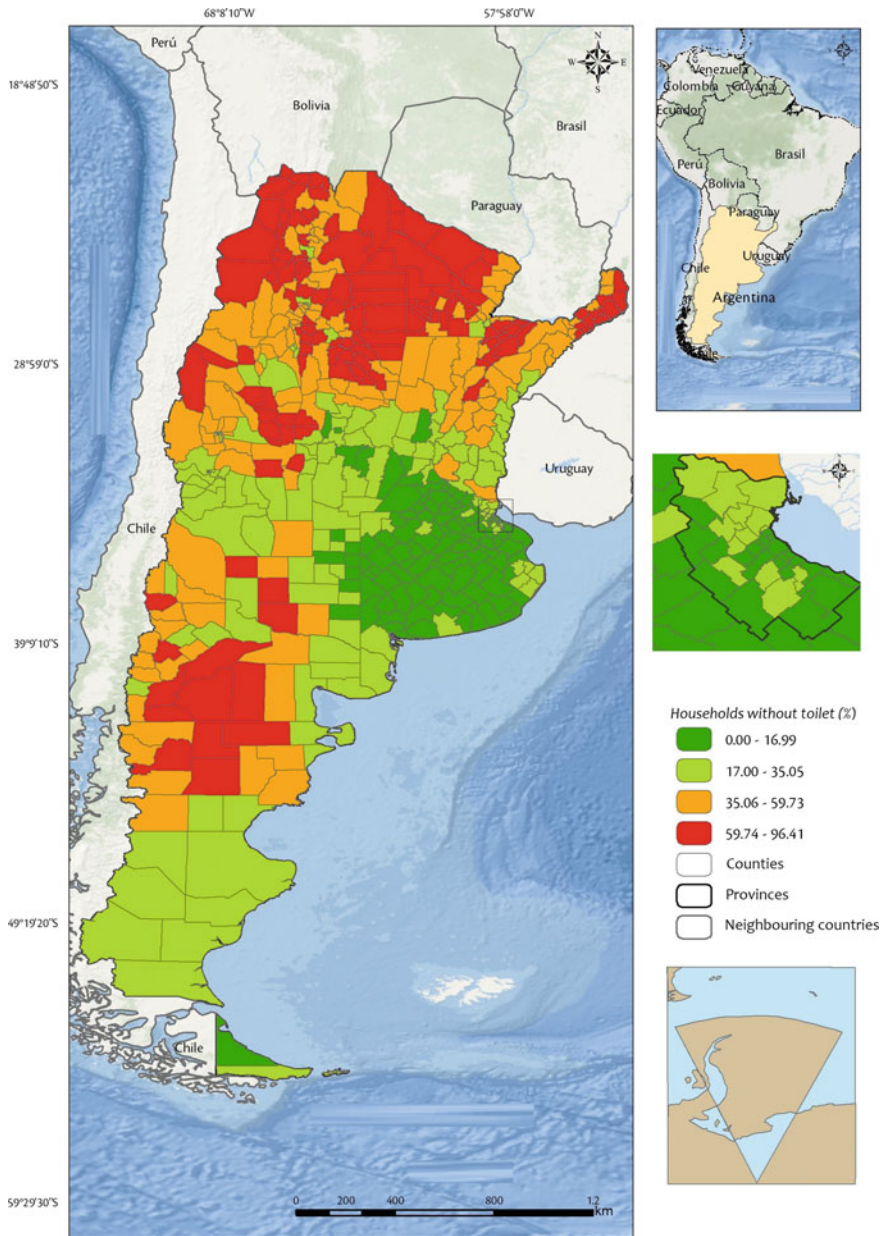


Fig. 9.4 Population in houses without a toilet. Argentina, 1991. *Source* Personal elaboration based on the 1991 National Census

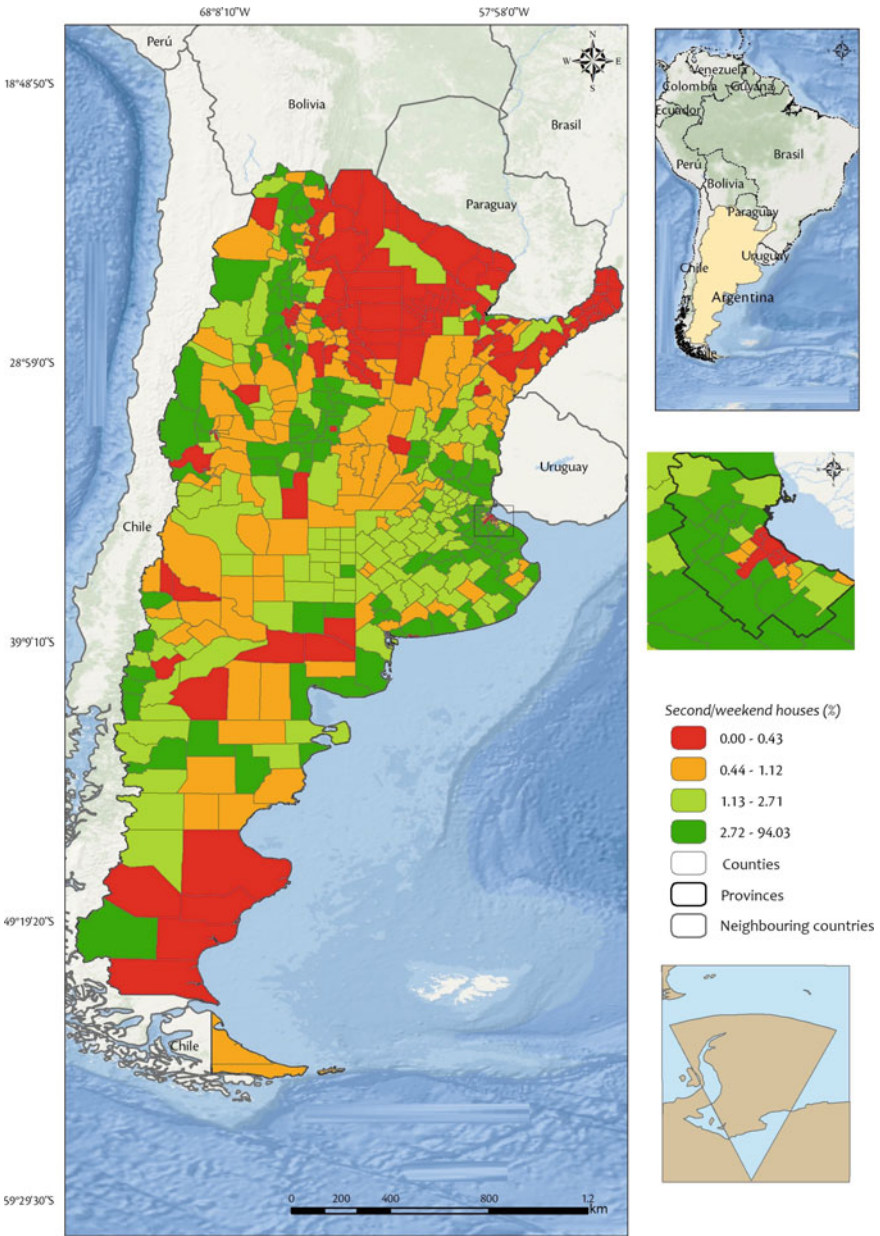


Fig. 9.5 Summer houses / end of week. Argentina, 1991. *Source* Personal elaboration based on the 1991 National Census

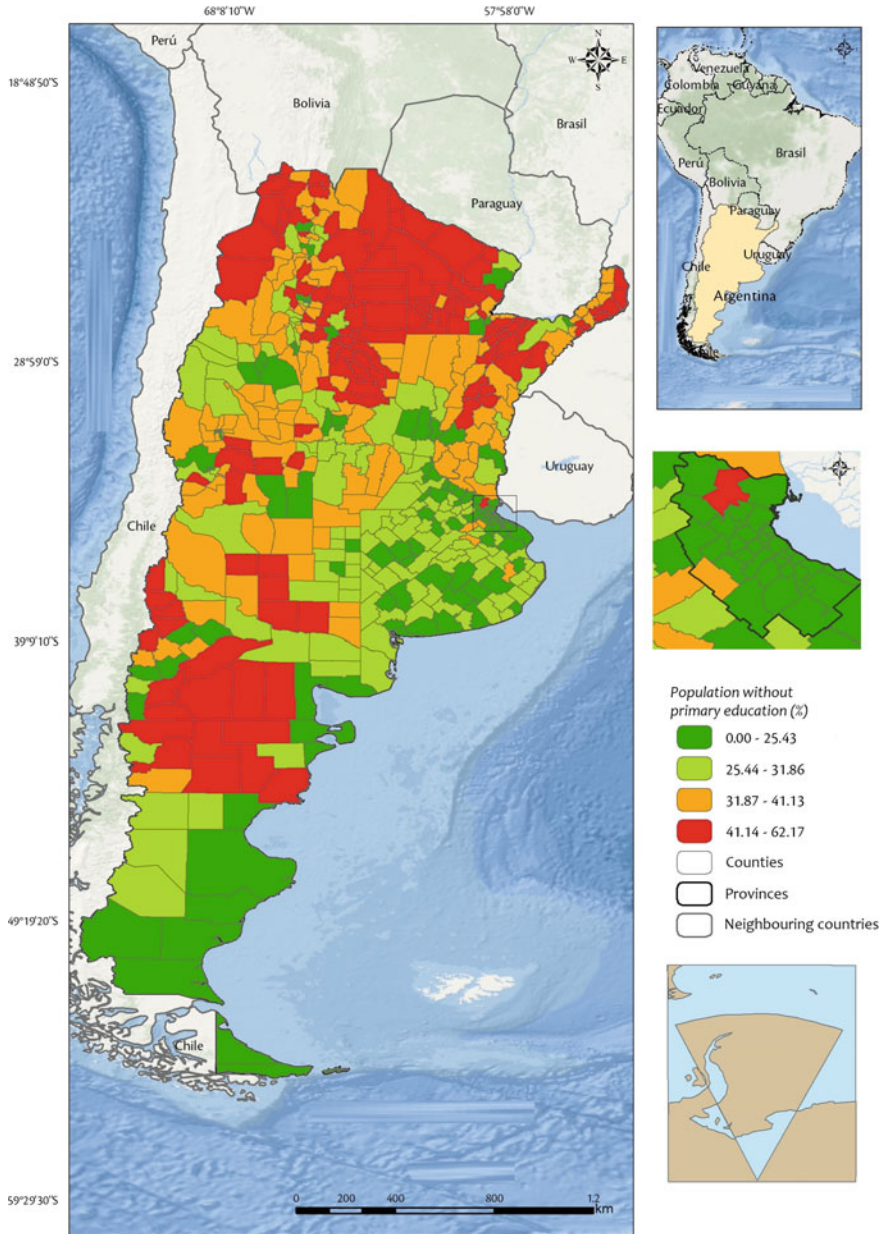


Fig. 9.6 Population without complete primary level. Argentina, 1991. *Source* Personal elaboration based on the 1991 National Census

Buenos Aires, where the difference in the educational level achieved by the population of Buenos Aires and the districts of the first ring of the suburbs contrasts sharply with those of the second crown.

9.4.5 Quality of Life in 1991

The following map shows our Quality of Life Index for the 1990s (Fig. 9.8).

The differences between the northern regions are evident, historically the most neglected areas of the country, with respect to the Pampeana region and Greater Buenos Aires, with the Cuyo and Patagonian regions at an intermediate level. In all cases, however, there are strong internal differences.

Perhaps, the peculiarity of the nineties is the greater fragmentation due to the emergence of “enclaves” with good quality of life in historically relegated regions. The main ones are: Castro Barros, where the small town of Anillaco is located, which became famous for being the birthplace of the former provincial governor and then president Carlos Menem, Valle Viejo (Catamarca), the Capital County in San Luis, another case from Catamarca (Fray Mamerto Esquiú) and the capital districts of Catamarca and La Rioja.

Finally, it is interesting to observe the processes of divergence or unmasking of territorial units that did not adequately show internal differences. This is particularly observable in those counties that were divided during the last intercensal period.

9.4.6 QLI Comparison 1980–1991

Quality of life maps in Argentina show a high level of differentiation in both decades. Here we propose to examine whether during this period, there were processes of divergence or convergence in the living conditions of the population. We will use a simple comparison between some relevant indicators (Table 9.2).

The table gives that the different quality of life indicators has behaved differently during the period considered.

Considering the educational dimension, we see that for the basic level of schooling, there has been convergence, since in 1980, the gap between the best and worst situation (the counties of Adolfo Alsina in Buenos Aires and Santa Victoria in Jujuy) was 23.3 to 1, while that in 1991, the same gap decreased to 8.4 to 1 between Santa Victoria (Jujuy). On the other hand, if we take into account the level of university education, the fragmentation increased. If, in addition to the census figure, we could take into account the effectiveness of schooling, we would surely come to the conclusion that the extension of basic education in a context of fragmentation causes its quality to differ significantly between different social and geographical contexts.

Taking into account the health dimension, we can observe that there has been a very modest convergence in the infant mortality rate. It is probably associated more

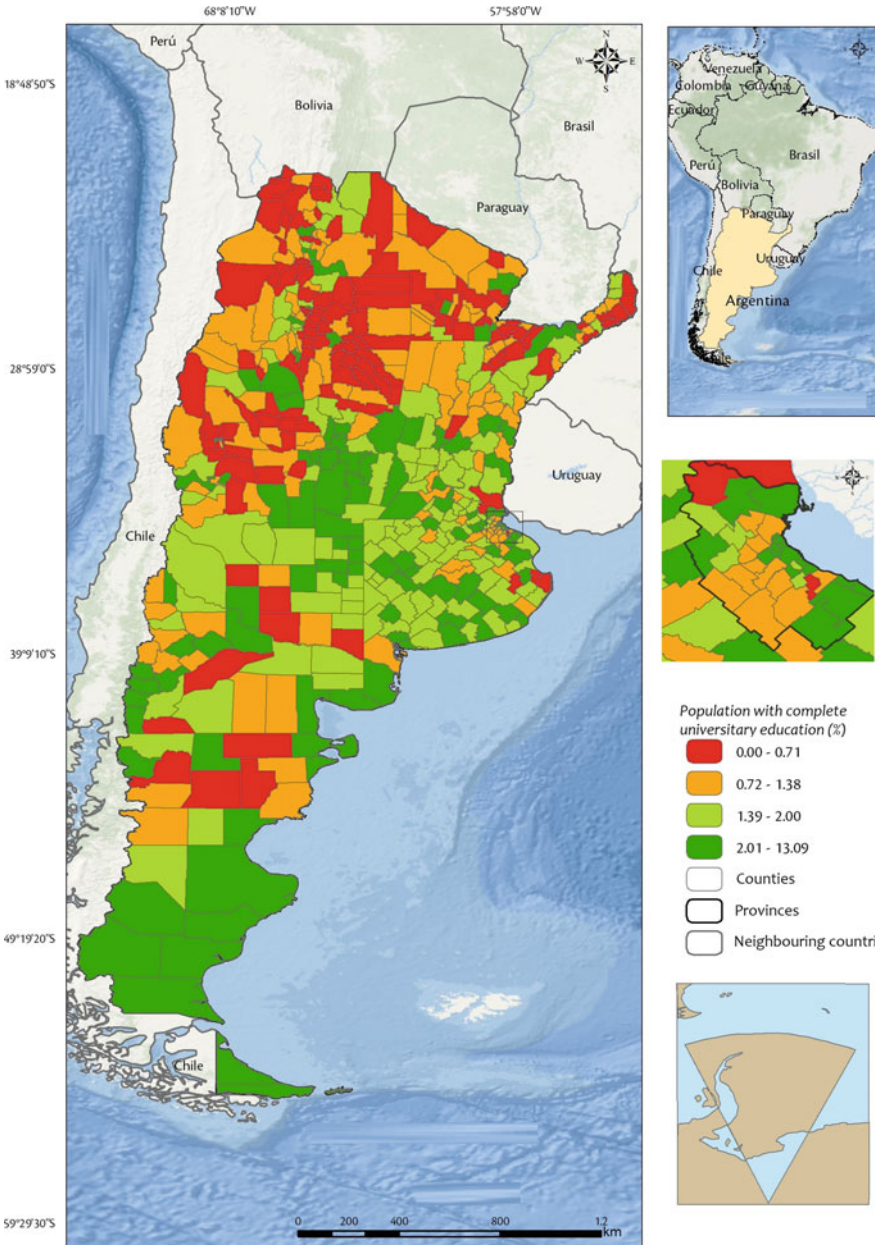


Fig. 9.7 Population with complete university level. Argentina, 1991. *Source* Personal elaboration based on the 1991 National Census

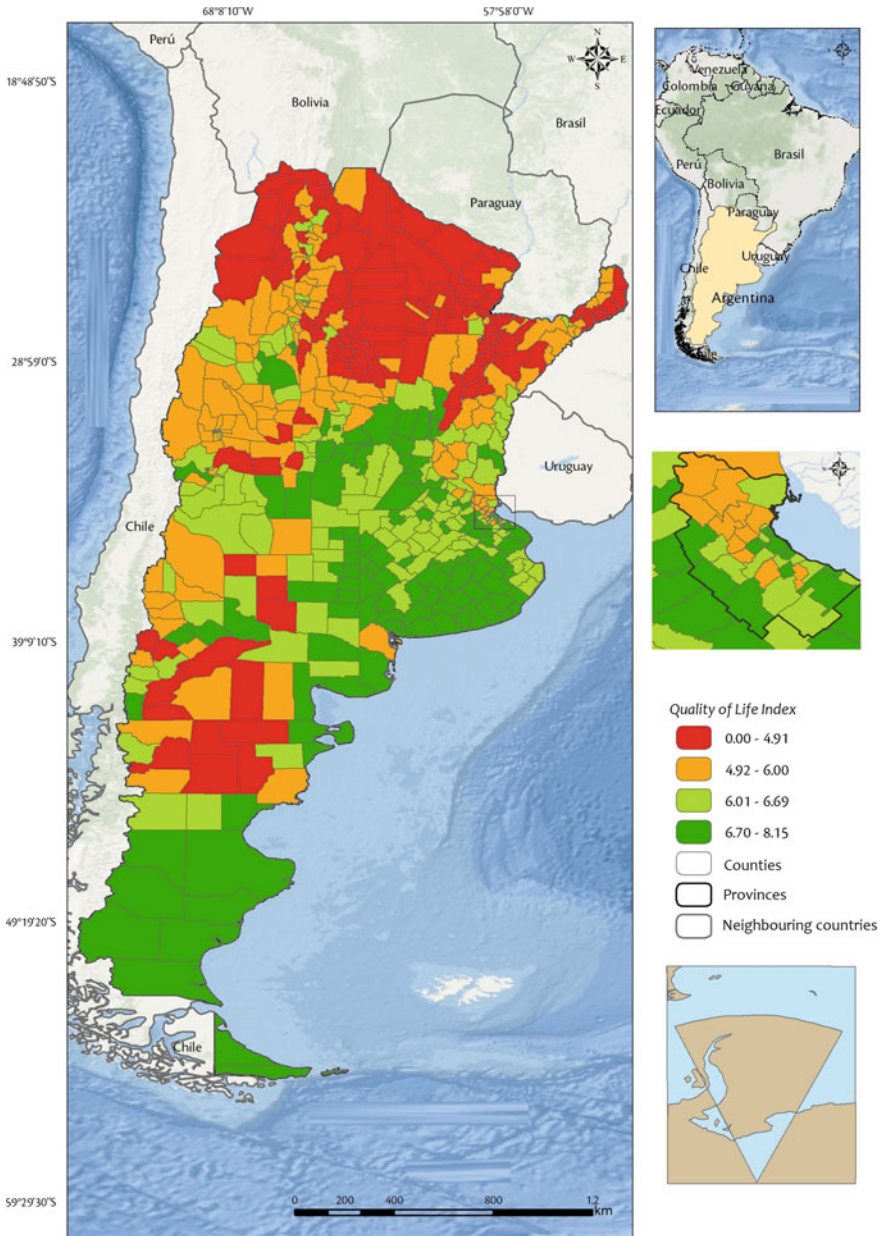


Fig. 9.8 Quality of Life Index. Argentina, 1991. *Source* Personal elaboration based on the 1991 National Census

Table 9.2 Quality of life indicators in Argentina in 1980 and 1991

Dimension	Indicator	1980	1991
Education	Level of education below primary	23.3	8.4
	Level of university education	10.9 ^(a)	13.1 ^(a)
Health	Infant mortality rate ^(b)	200.0 ^(c)	184.2
Housing	Housing	26.5	20.2
Quality of life	Quality of Life Index	5.2	18.5

(a) This of the maximum values, since the minimums are 0

(b) Maximum rates observed

(c) Estimated rate for the county of Susques (Jujuy)

Relationship between the best and worst situation (best /worst)

with the small reduction in fertility (and therefore in the risk of infant death) in the most vulnerable groups, accompanied by greater accessibility to health centers (rural–urban migration) than with objective improvements in the socioeconomic conditions.

Here we see that the gap between the counties with the highest and lowest proportion of substandard housing narrowed slightly between 1980 and 1991. This can be linked to the construction of housing units in border areas far from the large urban centers.

Considering these variables in isolation from the dimensions of education, health and housing could lead us to think that in Argentina, there would have been convergence between 1980 and 1991. Unfortunately, it is not possible to make a strict comparison of all the variables included in each case.¹ However, we clearly see that *the Quality of Life Index shows an Argentina much more fragmented in 1991 than in 1980*. While in 1980, the relationship between the best quality of life situation and the worst (city of Buenos Aires and the La Poma in Salta or Susques counties in Jujuy) was 5.2 to 1 in 1991, this same gap between Coronel Rosales (Buenos Aires) and Chicalc6 (La Pampa) expanded to 18.5 to 1.

9.5 Concluding Remarks

With of the predominance of the capitalist mode of production and the beginning of its financial stage, Argentina in the 1990s already exhibits a high degree of social and territorial fragmentation. This exacerbates the gaps in the population's quality of life, which become a feedback element for pre-existing inequalities.

¹ Thus, for example, there is no information on social coverage in 1980 or on infant mortality for the county level in some provinces. The criteria of overcrowding and precariousness of the dwellings are different in 1980 and 1991. In 1980, those who have attained tertiary and university studies, etc., are included in the same category.

As we have pointed out, quality of life is the result of a process, but at the same time, it is the generator of new processes. Thus, around 40% of the Argentine population did not enjoy minimum living conditions at the beginning of the nineties, but if we consider the range of young ages (under twenty years of age), this percentage increases to almost half of the respective group, due to the differences in fertility and mortality between social groups.

Given that the Quality of Life Index constitutes a weighted combination of socioeconomic indicators and that, since the 1990s, environmental problems are also included (incorporated in the 1994 Constitutional Reform), we have tried to approximate the magnitude and incidence of some differentiation factors in the living conditions of the Argentine population.

These differences are the product of secular processes of socioeconomic and territorial divergence, aggravated in recent decades by successive adjustment plans, the deepening of transnationalization and the mechanisms of the entrenched neoliberal economy that enhance the differences between winning and losing social groups.

Although a first general analysis shows a certain degree of similarity in the socio-spatial distribution of Argentine living conditions between the 1980s and 1990s—due to the characteristic inertia of the territories and their societies—some of the emergence of some enclaves of “progress” located in historically marginalized geographies. The regional analysis highlights the marked difference between the opportunities that each region offers to its residents. The regional analysis highlights the marked difference between the opportunities offered by each territorial unit. Thus, the northern regions, historically labor-providing areas, are the epicenter of adversity, while the remaining Argentine regions appear in more favorable position. This, however, should not lead us to a regionalism in uncritical terms, since within these regional formations, the same mechanisms of socio-territorial differentiation that operate on a national scale are reproduced, defining minority social groups with growing privileges and social groups increasingly removed from the supposed benefits of “modernity.”

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