Chapter 8
Quality of Life in Argentina in 1980

Guillermo Angel Velázquez and Juan Pablo Celemín

Abstract A quality of life index (QLI) is an indicator that seeks to show in summary form a set of socioeconomic, demographic, and environmental variables considered relevant at a given historical moment. In this context, the purpose of this work is to elaborate a QLI from different data sources for the provinces of the Argentine Republic at the time of the National Population Census carried out in 1980. The varied cartography obtained shows important territorial inequalities for the provinces of the country. On the one hand, the places with the best quality of life are the Autonomous City of Buenos Aires, some districts in the North of the Metropolitan Area and the province of Buenos Aires plus capitals of provinces located in relatively more developed regions (the Cuyo and Patagonia regions), other Pampean areas (Córdoba and Santa Fe provinces) and their adjacent areas. On the other hand, the lowest values are in structurally poor regions in the Northern portion of the country.

Keywords Quality of life · Argentina · 1980 census · Regional inequalities

8.1 Introduction

This research reflects the quality of life of the Argentine population in 1980 as the *result* of a process, but at the same time as a *generator* of new processes. Before starting to build and analyze this index, we need to define two concepts that, precisely during the eighties, will begin to differentiate: quality of life and poverty. And this because, although they point to closely related phenomena, they have significant differences between them.

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Table 8.1 Combinations of poverty according to income and UBN

Income	Satisfaction of basic needs	
	Without UBN	With UBN
Sufficient	Non-poor (1)	Only UBN (4)
Low	Vulnerable (2)	UBN and vulnerable (5)
Insufficient	Poor below the PL (3)	NBI and low LP (6)

Source Velázquez (2001)

Poverty is a measure of deprivation of those who do not reach an established minimum threshold. These thresholds can reflect conjunctural situations (poverty line—PL) or structural (index of population with unsatisfied basic needs—UBN), while the poverty line method consists of comparing the income per equivalent adult with the PL that arises from defining and valuing a basic basket of goods and services. Households with incomes less than the amount established by this "line" are called poor, as are the people who live in them. Those households in which the disposable income per equivalent adult exceeds it by 50% are vulnerable and those that are above this amount are "non-poor."

Lastly, the UBN method consists of comparing the situation of each household with a group of specific needs: (1) overcrowding, (2) inadequate housing, (3) sanitary conditions, (4) school attendance and (5) subsistence capacity. For each of them, rules are established that define the minimum below where the specific need is considered unsatisfied. The households with at least one unsatisfied need are considered poor, as well as the population that resides in them. LP and NBI can be combined to reflect six possible situations (Table 8.1).

Thus, group 1 includes those who satisfy their basic needs and have sufficient income, while group six includes those who do not satisfy their basic needs and whose income does not allow them to access the minimum consumption (basic basket of goods and services). The rest of the groups (2–5) reflect various mixed situation between LP and NBI.

Quality of life, on the other hand, is a measure of achievement with respect to a level established as optimal, taking into account socioeconomic and environmental dimensions that depend on the scale of values prevailing in society and that vary according to expectations of historical progress. More on, this subject can be found in Chap. 2.

We can say then that if poverty is measured with respect to a "floor," the quality of life is measured with respect to a "roof." While the poverty floor is relatively fixed, since it points to the satisfaction of basic needs, the quality of life roof is more variable—and ascending—as the scale of values and especially expectations change. Nor should we confuse quality of life with standard of living, since the latter expression usually refers to the level of consumption, that is, the acquisition of goods and services—in many luxury cases—and the increase in consumption does not necessarily imply better quality of life.

It is important to insist with the criterion of expectations for the definition of quality of life levels, since not always—or rather almost never in today's Argentina—the

passage of time implies objective improvements. Rather, it shows a greater degree of contradiction between what is expected (or desired) and what is achieved (or what the system allows to achieve), a mismatch that increases social fragmentation. Therefore, there is the problem of *subjectivity* and *objectivity*.

Given that the conceptualization of quality of life is both social and individual, factors such as age, gender, level of education, socio-occupational condition and location, among others, will significantly influence the conceptual scheme of each person. The concept of quality of life that, from a certain point of view, we can assimilate to "daily life." It is based on each of the inhabitant's conceptions, a subjective quality of life. Each assessment will focus, to a large extent, on their *own* experiences, the environment and the culture of each person. This kind of self-diagnosis can take part in "objective" elements such as provision of services, infrastructure, landscape, etc. However, factors such as memories, associations, affective ties, ideologies and beliefs, among others, will always be present in the perceptions—sometimes with greater weight.

We consider that the subjective dimension should be *compared*, but not *assimilated* with the objective; that is, subjective elements should not be included in a quality of life summary index. In studies carried out for the city of Tandil (Velázquez and García 1999), we were able to verify that many subjects with an "optimistic" perspective of their own reality quickly reconsider their assessment when seeing a map that shows them living in an area that is far below of the city average for a quality-of-life index. They immediately wonder—mixing indignation and amazement—why is my neighborhood so below average? Does "reality" hurt, deny, annoy…? In other words, the gaps between "measurement" and "perception" of quality of life can reflect situations of similarity and contradiction. In turn, the latter may be the result of poor measuring instruments or the subjective elaboration (collective imagination) of social groups that, in the face of harsh reality, "build" defense mechanisms that allow them to escape, at least partly, of that adversity.

Quality of life can also be distinguished between *public* and *private.* In general, the first refers to macro-aspects, linked to environmental and accessibility issues, while the second depends on micro-indicators, associated with the level of income, the composition of the family group or the level of education.

For an analysis with a detailed scale (e.g., a city), it is possible to consider the weight of both dimensions (public and private) for the determination of quality of life levels by sectors and social groups. Thus, in a city, low-income sectors in general will be affected *privately* because their means do not allow them to have adequate housing, reach a certain level of education, or feed themselves adequately, but, additionally, low-income sectors located in the urban periphery are disadvantaged *publicly* because their accessibility to certain goods or services is less than that of those who reside in the city center. As it is known, the opportunity to use goods and services is the inverse of their accessibility.

In the case of studies like the present one, in which the scale of analysis is more global (all the counties of the provinces of Argentina), we should privilege the weight of the private component, since it is more feasible to be captured with the available information.

8.2 Methodology

The sources for measuring the differences in the quality of life of the Argentine population in the eighties are not numerous. The most important is the National Census carried out in October 1980 by the INDEC and the Vital Statistics of the Ministry of Health and Social Action of the Nation, since both cover the entire national territory, although with an availability of information inverse to that of scale of analysis. This means that many of the existing variables for studying the country as a whole are not for the provincial scale (24 units), much less for the counties level (more than 500 units) or for more detailed scales such as fraction or census radius. This sort of "paradox of geographic information" makes *the most interesting data available only for uninteresting scales,* and, as the level of spatial analysis increases, the data "evaporates." Although in some cases it is possible to obtain details, the reliability of these is also variable. This means that in an analysis such as the present one, a compromise must be sought between the scale of analysis, the availability of information and the existing resources. The intersection of the three elements has led us to choose the county scale, understanding that it constitutes a step forward with respect to the provincial analysis, but that it is still clearly insufficient to capture many social–regional realities.

There is an additional problem for measuring the quality of life differentials of the Argentine population: the use of "artificial" territorial units such as counties, which usually do not necessarily reflect the social–territorial reality. This phenomenon, typical of geography and geographic information systems, is known as the "modifiable spatial unit problem" (MAUP). In other words, the division of the territory and the resulting groupings are not neutral. This means that inequalities can be covered up, but cannot be "created."

In summary, 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, individual and collective experiences, private issues (income, level of education) and public issues (accessibility, environmental issues), scale of analysis and its adjustment with the available information.

For our study of the quality of life of the Argentine population in the eighties we have considered socioeconomic dimensions (education, health and housing). These dimensions will be composed of variables with different weights based on their explanatory value and 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 weight according to the social groups that we consider. Probably in the low-income strata, the "basic" issues are given more weight, while in the high-income strata the weight of "superfluous" factors increases.

Finally, there are dimensions that, although they are being increasingly valued by Argentine society (such as the environment or security), we have not considered them yet because the existing data for this historical moment has severe deficiencies,

particularly due to under-registration. Also, in the case of other aspects of undoubted weight such as food or mental health, the sources available for Argentina in the eighties are still scattered and precarious.

Based on census data, other statistical sources and previous research works (Velázquez 2001, 2008, 2016a, b), we have created a map that covers all counties of the Argentine Republic in 1980, whose main purpose is to determine the differentiation 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 widely discussed work in specific areas, mainly within the framework of the Latin American Network for Urban Quality of Life (Torrado 1992; Rofman 1988; Reboratti et al. 1982; Olave et al. 1995; Marinelli et al. 1999; Celemín et al. 2015; Camargo Mora 1996; Velázquez and García 1999, 1996; Velázquez et al. 2014), we have used the socioeconomic dimensions of education, health and housing to determine levels of quality of life for the Argentine population. Other methodological works (Marinelli et al. 1999; Torcida et al. 1999), using strictly mathematical selection procedure, had very similar results to those obtained for the Tandil case (Velázquez and García 1996). Below we will explain the indicators selected for each of the dimensions.

8.2.1 Education Dimension

- Percentage of population that no longer attends and that reached incomplete primary level (elaborated from Table 10 of the 1980 census).
- Percentage of the population that no longer attends and that reached a complete university or tertiary level of education (elaborated from Table 10 of the 1980 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.

8.2.2 Health Dimension

- Infant mortality rate (IMR) according to the mother's place of residence for the years 1980, 1981 and 1982 (Ministry of Health, Directorate of Statistics. For cases in which it was not possible to obtain reliable departmental information, we have chosen to use provincial data).

The IMR constitutes one of the fundamental indicators of the level of health of a population, since it is affected by a series of variables 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 information is inconsistent. For 1980, 1981 and 1982 reliable departmental information is only available for the Province of Buenos Aires, and, according to our own experience, even the most "reliable" data has important errors and omissions.

8.2.3 Housing Dimension

- Percentage of substandard housing—renting rooms, precarious, ranch or other (prepared from Table 25 of the 1980 census).
- Percentage of overcrowding—people per occupied house—(elaborated from Table 23 of the 1980 census).

The proportion of substandard housing (rental rooms, precarious, ranches or others) reflects the magnitude of the residential deficit suffered by an important part of the Argentine population. This proportion is very diverse throughout the territory and differs significantly between social contexts. Unfortunately, the information refers to the number of houses and not the number of residents in this type of dwelling. It should be noted that the affected population is larger due to the higher relative fertility of the sub-alternized social groups.

The ratio of persons per house is an approximation of the degree of overcrowding. The 1980 census only considers this variable without taking into account the size of the house or the number of rooms. This constitutes a strong limitation that causes distortions, mainly in "micro"-level comparisons. Thus, for example, in 1980 the southern area of the City of Buenos Aires (La Boca, San Telmo, Barracas), which was more popular, had a low average number of people per house, while the northern area (Palermo, Recoleta, Belgrano), better positioned economically, was listed as "more crowded," with a high number of people per house. As we will see, this survey problem from the 1980 census is not as strong when considering larger units of spatial analysis.

Table 8.2 Dimensions and variables for the quality of life index. Argentina, 1980

Dimension	Variable	Partial weight	Total weight
Health	Infant mortality rate	1/3	1/3
Housing	Deficient housing	1/6	1/3
	Persons per house (overcrowding)	1/6	
Education	Less than primary education	1/6	1/3
	University education	1/6	

Source Personal elaboration

After this brief 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 under the following procedure, according to the type of variable:

Variables whose increase implies a worse relative situation (population with level from less to primary education, average number of people per household, proportion of substandard 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 or higher).

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

where b: benefit variable.

Once the variables have been transformed, it is possible to the quality of life index.

The relative weight of each component in the proposed index is as follows (Table 8.2).

8.3 Results

8.3.1 Health

The IMR is much higher in the North as shown in Fig. 8.1, with extreme values in the cases of the provinces of Salta and Chaco (49.9 and 49.5 per thousand for the

three-year period, respectively). These values would be even higher if we consider some counties in particular. Jurisdictions such as Córdoba, Mendoza or Neuquén appear with low rates, but surely, they hide internal differences. This can be clearly seen in the Province of Buenos Aires, which exhibits a wide spectrum of values with lower rates in the first ring of the Buenos Aires suburbs while other parts of the province resemble the most neglected jurisdictions of the country.

8.3.2 Housing

The average number of people per house (Fig. 8.2) shows high rates in the north of the country, as well as in northern Patagonia. In the case of the first two regions, this is associated with the high fertility of their population, while for Patagonia, it is more linked to their positive migratory balances. The situation in Greater Buenos Aires shows a certain degree of overcrowding in some suburbs.

The proportion of substandard housing is very high in the north of Argentina (Fig. 8.3). This situation also shows up with high values in the marginal areas of the other regions (Patagonian plateau, western Pampas and areas far from the main Cuyo region oases). Various counties in the suburbs of Buenos Aires do not escape this problem either.

8.3.3 Education

The proportion of the population that did not finish the primary level is very high: It exceeds 80% in several counties (Fig. 8.4). As a persistently repeating image, the North also appears to be in a very unfavorable situation, particularly in those areas outside the provincial capitals and intermediate cities. The position of the Patagonian plateau and areas located outside the main urban centers is also very bad. Within the Pampean 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, especially the first and second ring around the core of the city, favored by the accessibility to the educational establishments. It should be noted that the best-positioned counties have, in some cases, a lower proportion of the population with a low level of education than they will reach during the 1990s.

Regarding the level of higher education (both tertiary and university), it is relatively low (Fig. 8.5). This population group exhibits its lowest levels in the North, especially outside the main urban areas. The proportion is also very low in the Patagonian plateau, western Pampas and areas far from the main oases of the Cuyo region.

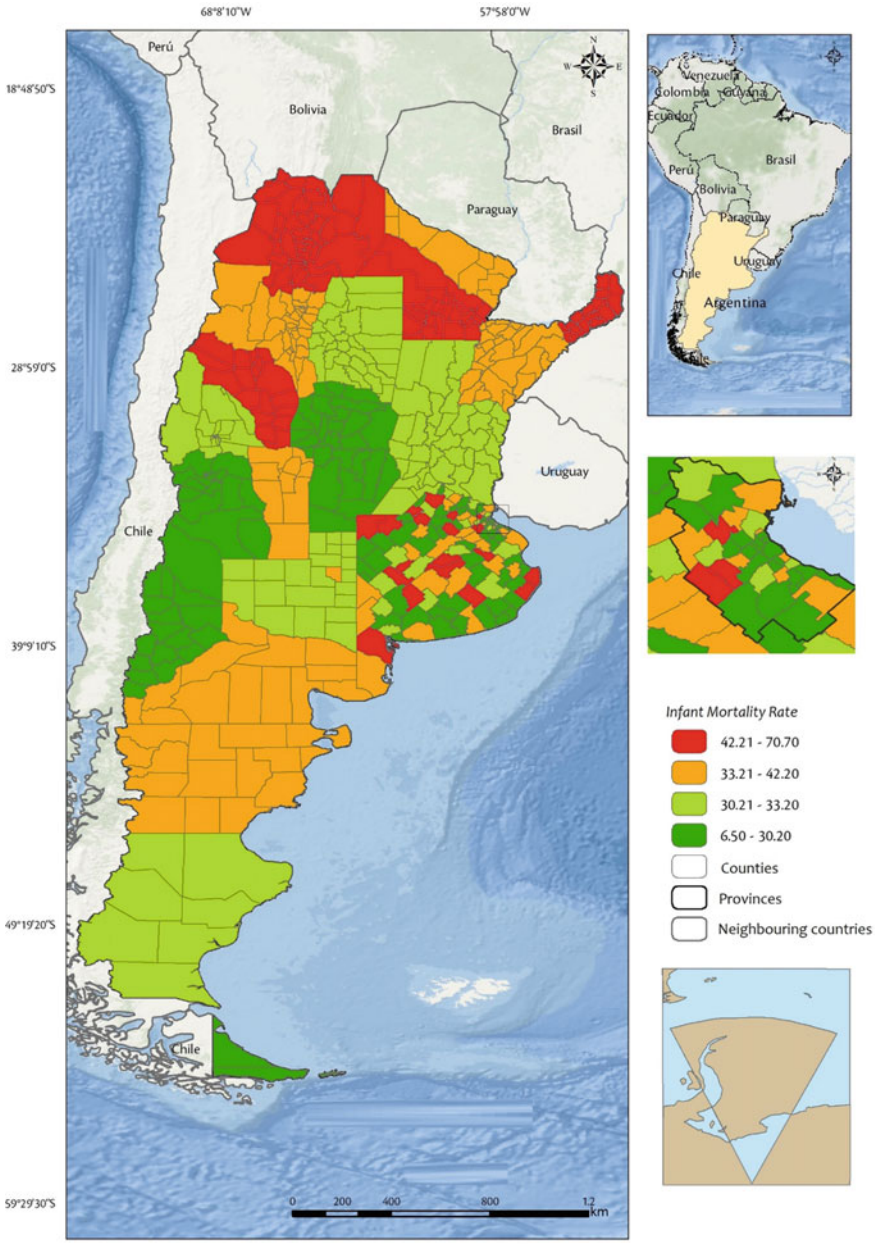

Fig. 8.1 Infant mortality rate. Argentina, 1980–82. *Source* Personal elaboration from DEIS

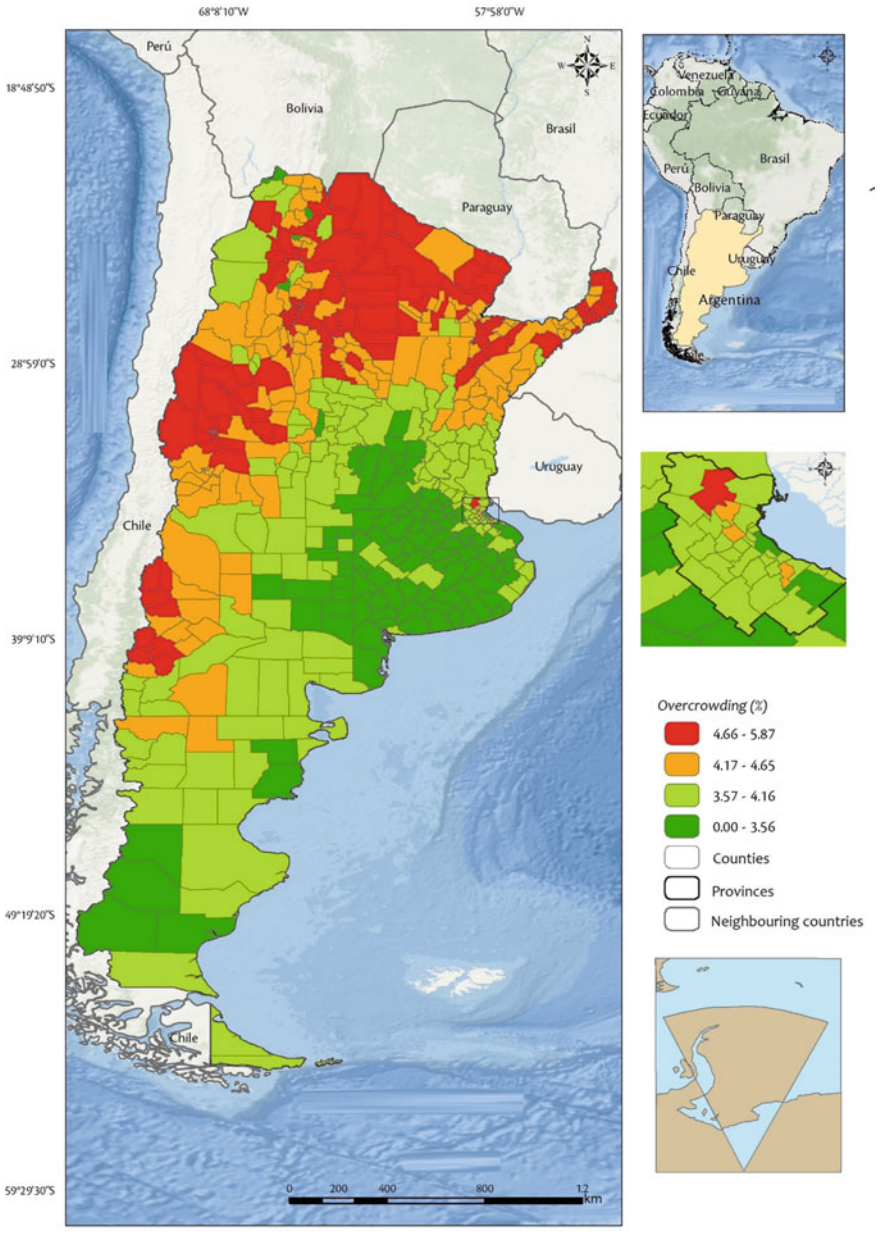

Fig. 8.2 Persons per house. Argentina, 1980. *Source* Personal elaboration from the 1980 Census

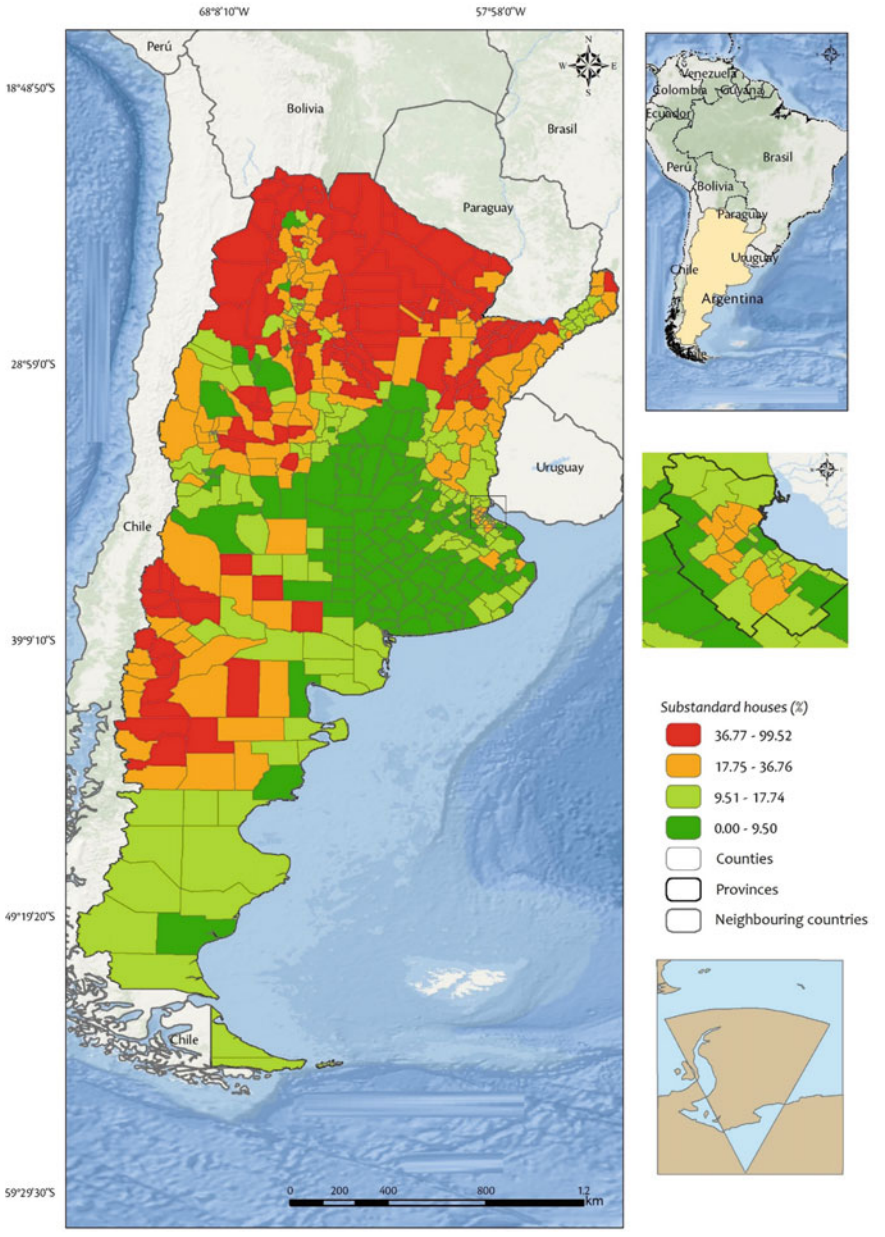

Fig. 8.3 Substandard houses. Argentina, 1980. *Source* Personal elaboration from the 1980 National Census

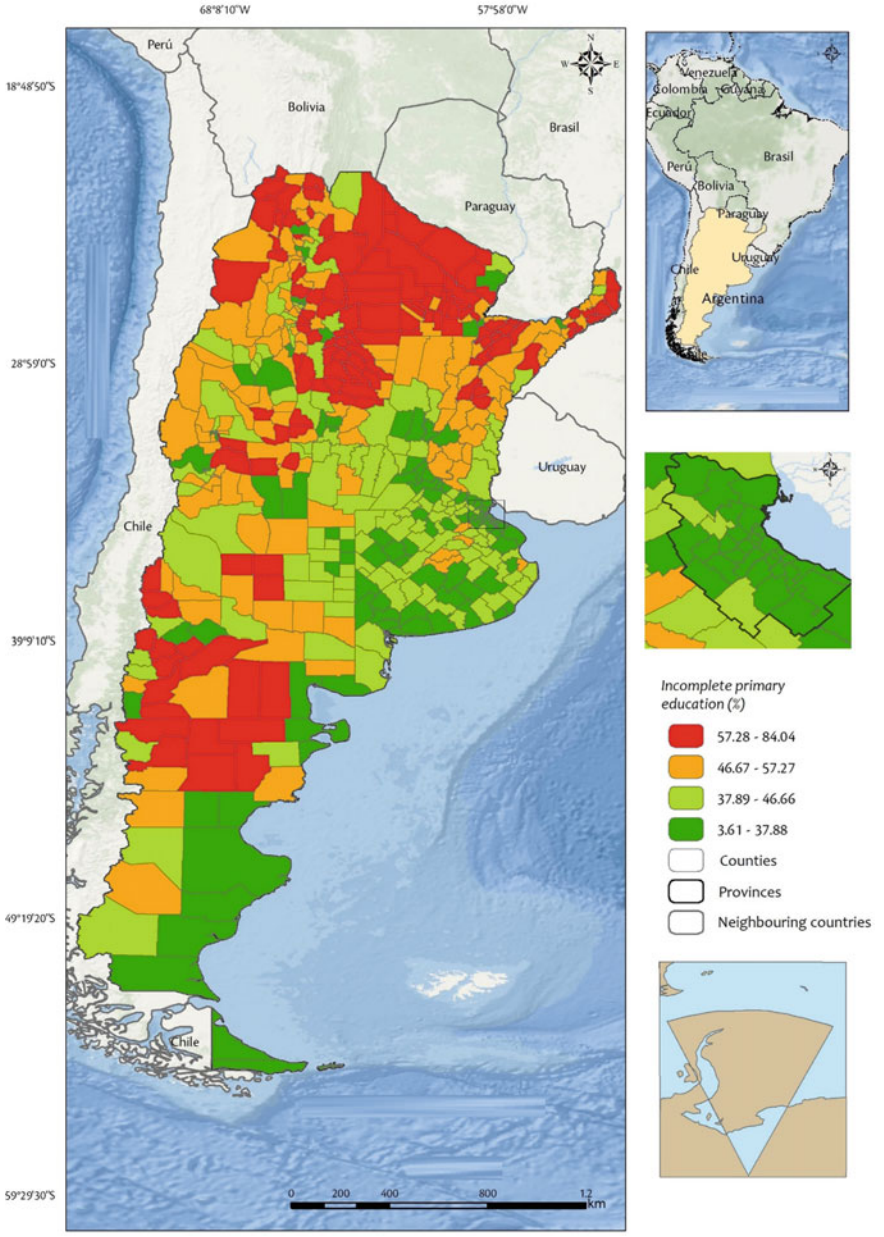

Fig. 8.4 Population without primary education. Argentina, 1980. *Source* Personal elaboration from the 1980 National Census

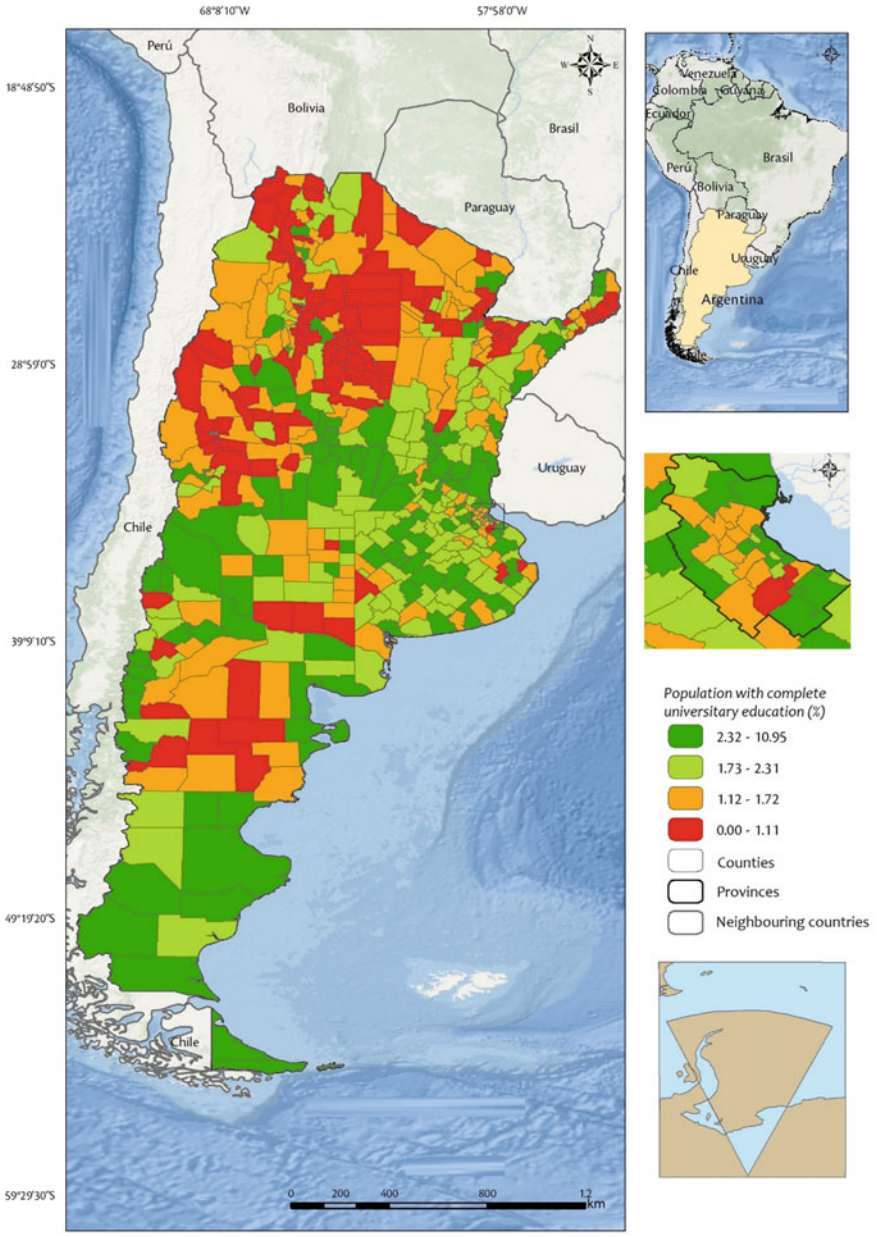

Fig. 8.5 Population with complete university/tertiary education. Argentina, 1980. *Source* Personal elaboration from the 1980 National Census

8.3.4 Quality of Life in 1980

The map that we present below shows the results of our quality of life index for Argentina in 1980 (Fig. 8.6).

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

The best counties for the quality of life index for that date were concentrated in Greater Buenos Aires: the Autonomous City of Buenos Aires, Vicente López, San Isidro, Tres de Febrero, to which four more counties from the Province were added. Outside the Pampean region, only the capital county in Mendoza (Cuyo) and Ushuaia in Tierra del Fuego (Patagonia) are in the best situation. The worst were the most marginal of the North, including the Puna in Salta (La Poma), Jujuy (Susques and Santa Catalina), the west of Formosa (Ramón Lista and Bermejo) and its extension in Salta (Rivadavia), in addition to two from the province of Chaco (General Guemes and Almirante Brown).

When adding progressively the rest of the spatial units, we observe that including 6% of the cases, other counties in Buenos Aires are among the best cases and Tierra del Fuego is completed with the inclusion of Río Grande. Among the worst cases appears in a county in Corrientes province (Concepción).

Grouping 8%, Buenos Aires continues to add counties among the best situations and two provincial capitals also show up: Córdoba and San Juan. The town of Godoy Cruz is also included as part of Greater Mendoza. The group of the worst continues in the North, but incorporating more provinces: Santiago del Estero, Catamarca and Tucumán.

Gathering 10%, we have Buenos Aires adding more counties among the best situations, while Punilla from the province of Córdoba is included. Those with a low quality of life already include all the provinces of the North of the country, except Misiones, whose counties still do not appear in either of the two groups.

Adding to 12% of the counties, we have new counties in Greater Buenos Aires, among the best cases (GBA): San Martín and Morón and the rest of Buenos Aires. In the North, the "spreading" of bad performing spatial units continues to increase.

Including 14%, the best cases continue to increase in Buenos Aires and the worst cases continue their trend in the North, but an extra-regional case is added: Ñorquín in the interior of Neuquén province.

Up to 18% of cases, the tendency indicated so far continues: better situation in some counties of Greater Buenos Aires and Buenos Aires city, some provincial capitals (Mendoza, Córdoba) and worse situations in the interior of the North.

Integrating 20% of the counties appears Cafayate (Salta), the first of the North located among the best. Among the best cases are Rosario (Santa Fe), Corpen Aike (Santa Cruz) and Maracó and Capital (La Pampa). Among the worst, there is another county in Neuquén (Catán Lil) and then another county in Misiones (Belgrano).

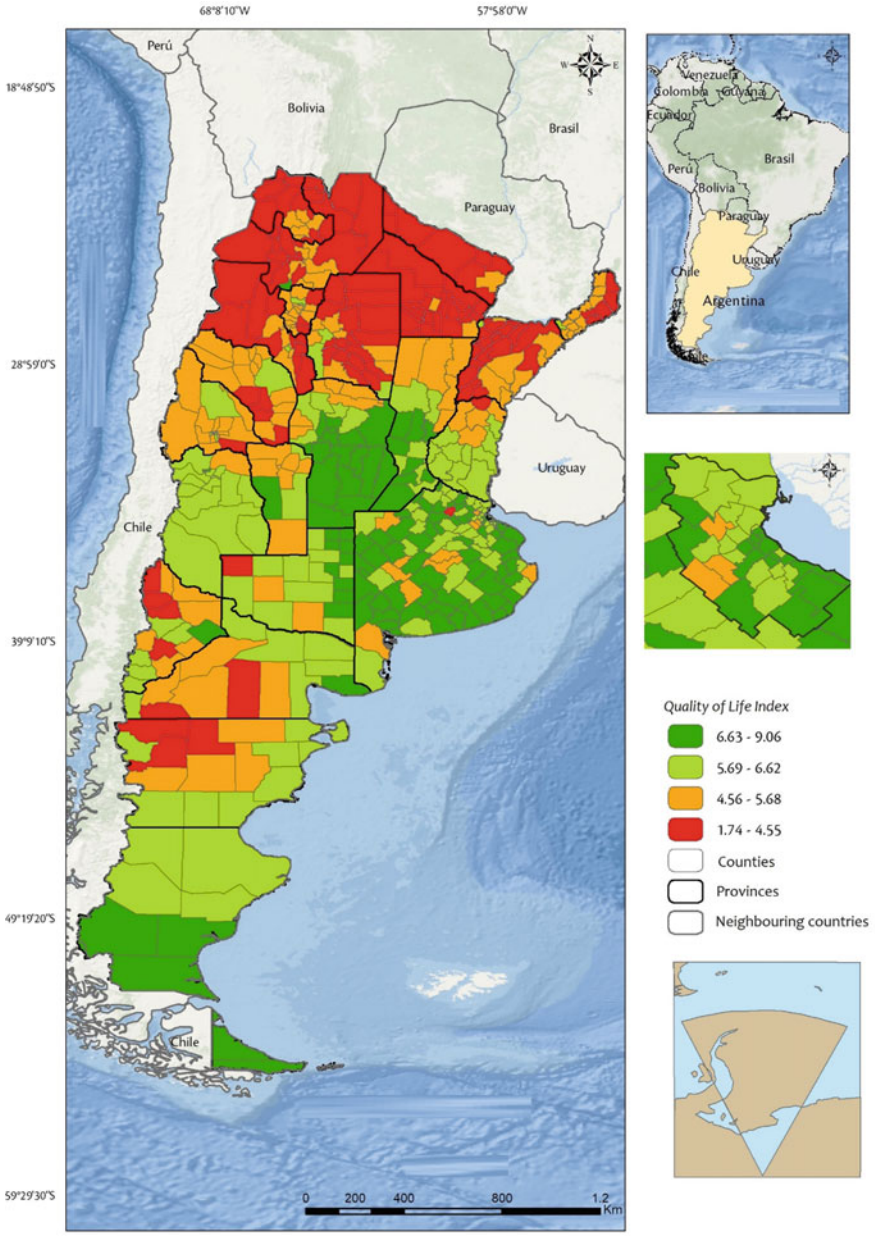

Fig. 8.6 Quality of life index. Argentina, 1980. *Source* Personal elaboration based on the 1980 National Census

Gathering 38% of the units, the tendency continues, but appear among the worst Chicalcó (La Pampa), Gastre and Languiñeo (Chubut) and 9 de Julio (Río Negro), the latter in the arid Patagonian plateau. By integrating 46%, new counties of Santa Cruz (Lago Argentino and Güer Aike) show up among the best and the first badly positioned county appears in the Pampean region and in Buenos Aires (Carmen de Areco).

Adding to 50% appears, among the best cases, the capital county (San Luis). Among the best, San Rafael county appears in Mendoza province, and, later, the counties of Escalante and Biedma (Chubut province). The North meanwhile continues to expand the area and population affected by poor living conditions. Grouping 60% of the cases, another county of the Northeast shows up among the "best": the Capital in Santiago del Estero. Also, here two counties of Entre Ríos (Uruguay and Paraná) are incorporated.

It is necessary to gather 70% of the cases so that the county of Pilar, of the Great Buenos Aires, shows up among the badly located. Another exception is also incorporated, as it is located in the Northwest region: Yerba Buena (close to the capital of Tucumán).

Just including 84% of the cases, the capital of La Rioja will appear among the best, while it will be necessary to wait until 94% for a case of the Northeastern region to show up among the best: the capital county of the province of Misiones.

Finally, dividing the country into two halves according to their quality of life in 1980 we have that of the Argentines who lived in better condition, were concentrated in the City of Buenos Aires, some districts of the northern Metropolitan Area and Buenos Aires, and progressively incorporating provincial capitals located in relatively more developed regions (Cuyo and Patagonia), other Pampas areas (Córdoba, Santa Fe), and their adjacent areas and, finally, enclaves (provincial capitals or particularly dynamic sites) situated in structurally poor region located in the North of Argentina.

8.4 Concluding Remarks

Quality of life is an object of analysis of increasing interest to different disciplines, each one from its own scientific position. However, there is a lack of its territorial study and, even more so, from a recent historical perspective. That is why this study proposes to know the living conditions of the population at the time of the 1980 census. The importance of this type of study lies in the fact that it allows a temporal analysis to be carried out and to determine whether the quality of life has improved or worsened in a specific period.

For 1980, we observe that the quality of life index shows wide territorial contrasts in the counties of Argentina. The width of the gap is very large (1.74 the lowest value and 9.06 the highest register). Broadly speaking, we can say that the areas most lagged with respect to the index correspond to the north of the country, while the counties with the best values are found in the provinces of the Pampean region

and southern Patagonia. It is also to highlight the existence of "enclaves" with a good quality of life in historically relegated regions, generally corresponding to the provincial capitals.

Finally, the importance of geographic information systems for this type of analysis is highlighted, since with the elaboration of various maps permit us to analyze the spatial distribution of the variables of the index on a scale with a high level of territorial disaggregation. Thus, enclaves with differential performance in relation to neighboring spatial units can be found, supporting the elaboration of new hypotheses and lines of research.

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Invited lecturer at the Complutense University, Madrid (1991); UAH, Alcalá (1991); Valladolid (1991 and 1994); UFRO, Temuco (1999); Bio-Bio, Chillan (2000); UNP, Piura (2000); UNLP, Santa Rosa (2001 and 2009); UNESP, Marilia (2001 and 2004); UFZ, Leipzig (2002); UNNE, Resistencia (2003); USP, São Paulo (2004); PUCP, Minas Gerais (2004 and 2014); UPV, Vitoria (2008); UNLZ (2013); UMSA, La Paz (2015); UNL, Santa Fe (2015).

Senior Researcher at CONICET since 2014.

CONICET Principal Investigator (2007−2014). First in order of merit (100/100 points).

Professor−Researcher Category "I" (maximum) since 1998.

Secretary of Research and Extension. Fac. Cs. Humanas UNICEN (1989−1992).

Vice President of the Association for Population Studies of Argentina (AEPA). (2001-2003)

Director of the Center for Geographical Research (CIG). (1996−2012)

Director of the Institute of Geography, History and Social Sciences (IGEHCS) since 2018

He directed 12 projects, 17 postgraduate scholarship holders, 7 CONICET researchers, 11 doctoral theses and 3 master's theses at UNICEN (Tandil); UNMdP (Mar del Plata); UNS (Bahía Blanca); UNNE (Resistance); UNPSJB (Trelew); UAER (Entre Ríos); UBA (Bs Aires); UNC (Córdoba); Lund University (Sweden); FLACSO; CIC; ANPCYT and CONICET.

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• PhD in Geography. National University of the South. (Universidad Nacional del Sur). Argentina. 2010.

• Master in Conservation and Management of the Natural Environment. International University of Andalusia, Huelva, Spain. 2006.

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