

Social Indicators Research Series 57

Filomena Maggino *Editor*

# A New Research Agenda for Improvements in Quality of Life

 Springer

# **Social Indicators Research Series**

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Filomena Maggino  
Editor

# A New Research Agenda for Improvements in Quality of Life

 Springer

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# A New Research Agenda for Improvements in Quality of Life

As known, quality-of-life studies have a long history and inherited the tradition of the “social indicators” movement, aimed at supporting public administrations and interested in gathering and analysing data aimed at studying non-economic components of societal wellbeing. Between ups and downs, quality-of-life issues and researches roused scholars’ interest not only in the academic world.

In 1974, the scientific journal *Social Indicators Research, An International and Interdisciplinary Journal for Quality-of-Life Measurement* and during the 1990s *International Society for Quality-of-Life Studies* (ISQOLS – [www.isqols.org](http://www.isqols.org)) were founded and became reference points for the movement.

Starting from the 1990s, ISQOLS organized several international conferences around the world (Canada, USA, Spain, Germany, South Africa, Italy, and Thailand).

All ISQOLS conferences have been and are occasions for lively debates, involving statisticians, sociologists, psychologists, physicians, economists, architects, communicators, educators, civil servants, and other experts. This made the discussion transversal, captivating and engaging, leading to the developments of many networks, like the one involving community wellbeing studies.

This vitality aimed also at urging quality-of-life topic to be put in the policy agenda and among policy goals all around the world.

That is because one of the most important aims of those conferences is to verify if it is possible to move this important and essential aspect of wellbeing, quality of life, from the academic world’s agenda also to policy’s agenda.

In this perspective, it is particularly important that the ISQOLS network is able to improve the research agenda in the field of quality-of-life studies. This was particularly evident in the context of the XI ISQOLS conference.

Following the great success of the IX conference, which took place in 2009 (July, 19–23) in Florence, ISQOLS conference was back to Italy. In fact, the XI conference took place in another extraordinary Italian city, Venice, in November 2012. The event was organized with the organizational support of the Italian Association for Quality of Life Studies ([www.aiquav.it](http://www.aiquav.it)).

In Venice, many contributions were able to outline a possible new research agenda for improvements in quality-of-life research. The new orientation includes identifying and studying subpopulations and subgroups, disentangling the difficult task of identifying determinants of quality of life, refining the capacity of measuring conceptual dimensions, defining new indicators able to measure and monitor particular social conditions and show that these are not separated fields of studies but intersect each other and produce different outcomes which can be with difficulty classifiable, consistent with the idea of the complexity of our reality.

This volume represents a (small, if we compare it to the many papers presented) collection of some of the most interesting papers presented in that occasion.

The articles illustrate micro perspectives by taking into account the macro situation through both qualitative and quantitative approaches.

Some of them deal with national projects, identifying particular and relevant domains of wellbeing (*Well-being indicators on landscape and cultural heritage: the experience of BES project*) or aiming at constructing comprehensive accounts of all the assets of a country in order to assess the sustainability of its development path (*Towards Satellite Accounts on Education and Human Capital in OECD Countries*).

A particular ambit of quality-of-life studies, always considered of great interest, is represented by the analyses of determinants. This kind of studies needs to be focused not only on general population perspective but also on subgroups (*Determinants of student satisfaction with campus residence life at a South African university* and *Explaining the Ethnic Minority Disadvantage in Subjective Well-being: A Multilevel Analysis of European Countries* and *Associated factors to leisure activities in Quality of Later Life*).

Quality-of-life studies have to explore different methodological perspectives in order to study new social phenomena (*Dimensions of quality of living: An ethnographic research in two neighbourhoods of social housing*), take into account the relationship between the individual and the community perspective (*Making the Extraordinary Ordinary: A Fresh Look on Individual Action with Communities*), and relate objective and subjective dimensions (*Self-evaluation Affects Subjective Well-being: The Effects of Socioeconomic Status and Personality on Quality of Life in Taiwan* and *The Impact of Public Expenditures on Chinese Elders' Life Satisfaction* and *The Incidence of the Need for Personal Assistance and Care: Objective Living Conditions and Subjective Assessments*).

We believe that this volume represents not only a good evidence and proof of what was presented at the XI ISQOLS conference but also an inspiring collection of topics. This collective work, showing contributions by young and “less young” researchers, testify how this research field is not only lively in the present but also promising for the future.

Last, but not least, I would like to thank the anonymous reviewers of the papers, who made a great work and assured a high scientific quality of the publication.

Filomena Maggino  
Chair of XI ISQOLS conference





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# Chapter 1

## Well-Being Indicators on Landscape and Cultural Heritage: The Experience of the BES Project

Luigi Costanzo and Alessandra Ferrara

### The BES Project

The BES project (where BES stands for *Benessere Equo e Sostenibile* – “equitable and sustainable well-being”) was launched in Italy in 2011, on a joint initiative of Istat and CNEL,<sup>1</sup> in the wake of the international debate on “going beyond the GDP”. The project is aimed at “measuring and assessing the progress of Italian society” by putting in place, within the framework of official statistics, the regular production of a set of well-being indicators. The BES project largely builds on the results of the *Commission on the Measurement of Economic Performance and Social Progress* (henceforth the Stiglitz Commission), convened by the French government in 2008, whose final report was published in September 2009.<sup>2</sup> To implement the project, a Scientific commission was established at the end of 2011, open to representatives of a wide range of civil society organisations, and a first report on “equitable and sustainable well-being in Italy” was published in March 2013.<sup>3</sup>

The idea underlying the project is that the GDP is improperly being used far beyond its original scope, relying on the assumption that the well-being of a population is a linear function of its market production of goods and services. For a number of reasons, after the World War II the GDP became the main benchmark for policy making worldwide, despite Kuznets himself – who first proposed this

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<sup>1</sup> Istat (*Istituto Nazionale di Statistica*) is the National statistical office of Italy ([www.istat.it](http://www.istat.it)), CNEL (*Consiglio Nazionale dell'Economia e del Lavoro*) is the advisory body of the Italian Government and Parliament in matters of economy and labour market ([www.cnel.it](http://www.cnel.it)).

<sup>2</sup> Stiglitz et al. (2009).

<sup>3</sup> Istat and CNEL (2013). To know more about the BES project, see [www.misuredelbenessere.it](http://www.misuredelbenessere.it)

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aggregate in 1934 – had warned against its use as a measure of welfare.<sup>4</sup> The adequacy of indicators of economic performance based on GDP figures, however, is being questioned since a long time, and substantial concerns have been raised mostly about their relevance as measures of social well-being, since the aspects of social and environmental sustainability of the economic growth are not taken into account.<sup>5</sup> In brief, the project’s challenge is to measure the performance of the society as a whole, conceived as something wider and more complex than the performance of its economy, in order to propose – both to policy makers and citizens – an alternative and more comprehensive view of progress and growth. This led to adopt the multi-dimensional approach recommended by the Stiglitz Commission, according to which the current macro-economic indicators should be complemented – not replaced – by indicators that reflect the people’s quality of life, including measures of the inequalities and divides that undermine social cohesion, as well as measures of economic, social and environmental sustainability: “the time is ripe (...) to shift emphasis from measuring economic production to measuring people’s well-being. (...) Changing emphasis does not mean dismissing GDP and production measures. (...) This means working towards the development of a statistical system that complements measures of market activity by measures centred on people’s well-being and by measures that capture sustainability”.<sup>6</sup> The implications of such a shifting are potentially enormous: to choose what official statistics shall measure, monitor, and bring to public attention is to define the priorities of economic policy; and to implement statistical information systems so conceived and oriented may significantly contribute to a deep cultural change, because “what we measure affects what we do”.<sup>7</sup>

As a first step, the Coordination committee, a steering group composed by experts of both Institutions, defined 12 domains, each identifying a specific *dimension* of well-being. Of these, eight match (although not exactly) those proposed by the Stiglitz Commission (see Table 1.1). The four additional ones were introduced as a result of an extensive consultation process, carried out in order to get, as far as possible, to a widely shared vision of what people deem relevant to well-being, also in relation to possible singularities of the Italian case.

This way of proceeding was essential to the project’s strategy, which is based on a participatory approach. The responses given to a specific question addressed to 24,000 households within a sample survey,<sup>8</sup> the results of a special web survey conducted among the users of the project’s website (answered by 2,500 people), the

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<sup>4</sup> Kuznets (1934), p. 7 (“The welfare of a nation can scarcely be inferred from a measure of national income”).

<sup>5</sup> See Costanza et al. (2009, 2014). For a comprehensive review of the various approaches to the measurement of individual well-being and social welfare that have been considered for the construction of alternatives to GDP (and for an extensive bibliography on this subject as well), see Fleurbaey (2009).

<sup>6</sup> Stiglitz et al. (2009), p. 12.

<sup>7</sup> *Ibidem*, p. 7.

<sup>8</sup> The Istat survey on *Aspects of daily life*, carried out on a yearly basis (edition 2011).

**Table 1.1** Well-being dimensions proposed by the BES project and by the Stiglitz Commission

BES project	Stiglitz Commission
Health	Health
Education and training	Education
Work and life balance	Personal activities including work
Economic well-being	Material living standards (income, consumptions and wealth)
Social relationships	Social connections and relationships
Politics and institutions	Political voice and governance
Safety <sup>a</sup>	Insecurity, of an economic as well as physical nature <sup>a</sup>
Subjective well-being	
Landscape and cultural heritage	
Environment	Environment (present and future conditions)
Research and innovations	
Quality of services	

<sup>a</sup>The BES dimension of *Safety* does not include the “insecurity of an economic nature”, which falls under *Economic well-being*

discussion – both on the project’s blog and in several public meetings – of a number of spontaneous contributions received from experts in various disciplines, were all part of a complex decision process. Eventually, the Scientific commission was tasked with implementing a subset of relevant indicators for each dimension and, after a new debating phase, released a list of 132 indicators, on which basis the first BES Report was finally compiled (a chart of the decision making process is provided in Fig. 1.1).<sup>9</sup>

In synthesis, the Report is meant to provide every year an overview of the Italian society, focused on the qualitative aspects of its development and seeking to evaluate the current trends in terms of their effects on people’s well-being. In each of the 12 dimensions identified, a positive evaluation is given to those dynamics that appear to be *equitable* (i.e. likely to enhance or at least not to reduce the social cohesion) and *sustainable* in the long term (i.e. not based on consumption of non-renewable resources, and not imposing burdens on the future generations). To take into account the well-known inequalities that characterise the Italian economy under the territorial profile, it was planned to produce each indicator both at the national and at the regional level,<sup>10</sup> also in order to provide a useful benchmark instrument for regional policies.

<sup>9</sup> Documentation of the BES Project in English is available at <http://www.misuredelbenessere.it/index.php?id=documents>

<sup>10</sup> The 21 NUTS 2 units (19 Regions and 2 autonomous Provinces), according to the current EU classification of territorial units for statistics, set by the Regulation (EC) No. 1059/2003 and subsequent amendments.

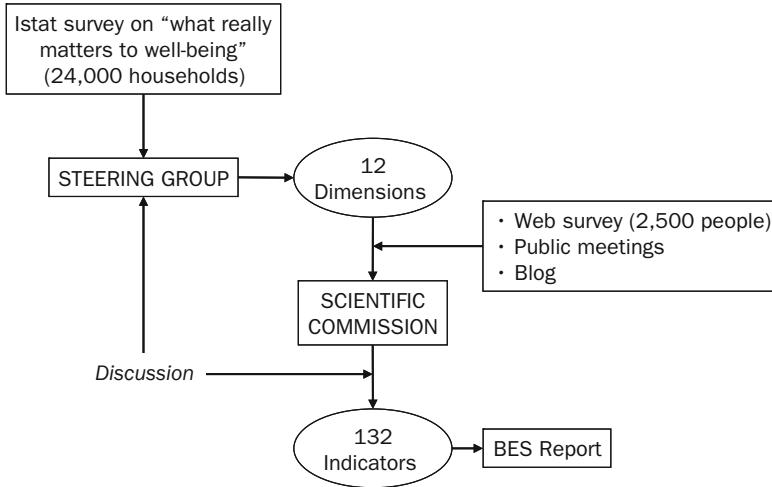


Fig. 1.1 Development of the BES project

## Landscape and Cultural Heritage as Well-Being Factors

This article focuses on one of the dimensions proposed by the BES project in addition to those identified by the Stiglitz Commission – *Landscape and Cultural Heritage*, which are considered under their aspect of *common goods* of a non-renewable nature, whose preservation is deemed relevant to well-being.<sup>11</sup> The decision to devote to this topic a dimension of its own was made after nearly 80 % of respondents of the above mentioned web survey had indicated this as one of the dimensions “most relevant” to well-being. Famously, Italy boasts an

<sup>11</sup> In the sense that is generally accepted in the economic theory, *common goods* are defined as goods that are *rivalrous* (because their consumption by one person precludes consumption by another one) and *non-excludable* (because no payment is required in order to use them), whereas *public goods* are non-rivalrous and non-excludable. Here, we refer to the more inclusive definition proposed by the Rodotà Commission, established by the Italian Ministry of justice in 2007 in order to modify the Civil code regulations in matter of public goods, according to which goods shall be distinct into private, public and common, and the latter are defined as “things that express utilities functional to the exercise of fundamental rights and to the free development of the individual. Common goods must be protected and safeguarded by the legal system, also for the benefit of future generations. Holders of common goods can be either public or private legal persons. In any case, it must be ensured that these goods are available for collective enjoyment, to the extent and in the manner established by the law”. This applies, in particular, to “the river streams and their sources, lakes and other waters; the air; the parks, as defined by law, the forests and woodlands; the mountain areas of high altitude, glaciers and permanent snows; the beaches and coastlines declared environmental reserves; the protected wildlife and flora; the sites and properties of archaeological, cultural and environmental interest, and any other protected landscape areas” (Ministero della giustizia 2007). The reform bill proposed by the Rodotà Commission was presented to the Senate, but never came to parliamentary debate.

extraordinary cultural heritage, both in quality and quantity. The management of this immense wealth, however, suffers from insufficient funding, while the Italian landscape is being threatened by one of the highest illegal building rates over Europe. Maybe to a wider extent than in other countries, the issues linked to heritage and landscape conservation assume, in Italy, a special relevance in relation to some crucial aspects of the societal performance, such as the care for public assets and the management of conflicts between private and public interest. In this regard, it is worth remarking how the Italian Constitution (1948) mentions the protection of “the landscape and the historic and artistic heritage of the Nation” among its “fundamental principles”,<sup>12</sup> while “landscape and cultural heritage” are the joint subject of the Code that has unified and renewed the whole Italian legislation on the matter in 2004.<sup>13</sup>

Initially, it was needed to set up a conceptual framework for the domain to be investigated, which was largely new to quantitative analysis. It was deemed useful to start from the classic distinction proposed by the Italian geographer Biasutti (1962) between “geographic landscape” (an abstract image, synthesising the most recurring or significant elements that characterise the visible form of a territory) and “sensible landscape” (the subject of individual perception).<sup>14</sup> On one hand, the *sensible landscape* pertains to the *subjective* sphere, and can be considered relevant to individual well-being – insofar the landscape of daily life has an influence on the people’s quality of life, depending on a variety of factors (not only of an aesthetic nature but also emotional, symbolic, etc.). The *geographic landscape*, on the other hand, pertains to the *objective* sphere, and can be considered relevant to collective well-being – insofar it provides any significant witness of the local history, tradition, or material culture. A landscape that has been shaped into specific forms along the course of history confers a special identity on a given part of the territory, and on this identity (or, more exactly, on the shared acknowledgement of it) relies the cultural value of a landscape, and its status of common good (heritage) to be preserved.

A first assumption we can make, then, is that the geographic landscape can be regarded as an integral part of the cultural heritage, being the result of a long interaction between mankind and nature (see Fig. 1.2). This does apply, however, only to *urban* and *rural* landscapes, and does not to *natural* landscapes, whose value relies on their environmental qualities, and primarily in the absence or insignificance of any form of anthropic alteration – which is just the opposite of what makes a landscape valuable from the cultural point of view. Therefore, with

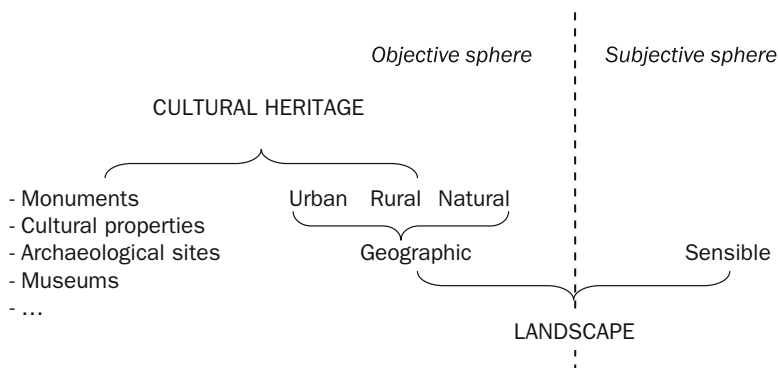
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<sup>12</sup> *Costituzione della Repubblica Italiana*, art. 9. For a critical history of the Italian legislation on landscape protection, see Settis (2010).

<sup>13</sup> *Codice dei beni culturali e del paesaggio* (Legislative Decree no. 42 of 22nd January 2004).

<sup>14</sup> Biasutti (1962) defines the *sensible* (or *visible*) landscape as “what the eye can embrace, or (...) is perceptible to all senses; a landscape that can be reproduced by a photograph (...), the work of a painter or the description of a writer”, while the *geographic* landscape is defined as “an abstract synthesis of the visible landscapes, which tends to detect the elements or features that present the most common repetitions over a given space (...), which is larger, in any case, than any space encompassed by a single horizon”.





**Fig. 1.2** Conceptual framework

regard to the objective sphere, only urban and rural landscapes are considered relevant to this domain, while, within the BES framework, the natural landscapes pertain to the Environment dimension, insofar their contribution to collective well-being essentially coincides with that deriving from the conservation of protected areas such as national parks, natural reserves, etc.<sup>15</sup>

With regard to the subjective sphere, instead, the landscape is considered in its entirety, as a general concept, without distinction between natural, urban and rural areas, and solely as an object of individual perception. In this case, what we consider relevant is the landscape of the places we live in (home and neighbourhood, working places, commuting trips, etc.), while the occasional enjoyment of other landscapes as travellers or tourists should be rather considered as a form of cultural consumption, like visiting an exhibition or going to the cinema – experiences that also contribute to individual well-being, but in another way and to a different extent.

Basically, the sensible landscape, being the subject of individual perceptions, can be investigated only by means of a survey, and synthesised as the sentiment of respondents in relation to the landscape of the places where they live. To this goal, a couple of experimental items were included in the questionnaire of the Istat sample survey on “Aspects of Daily Life”, starting from 2012. It is possible, instead, to obtain measures relating to the cultural heritage (including the geographic landscape), although mostly of an indirect nature, based on existing data sources of various nature.

A set of well-being indicators on landscape and cultural heritage should therefore contain both measures referred to *subjective aspects* – to evaluate the

<sup>15</sup> Measures of the conservation of protected areas were developed within the Environment dimension of BES. See, in particular, the indicators *Terrestrial parks* (Ratio of the surface of terrestrial protected areas to the total surface), *Marine protected areas* (Extension of marine protected areas) and *Areas of special naturalistic interest* (Ratio of the surface of areas belonging to the EU network “Natura 2000” for the conservation of biodiversity to the total surface).

contribution (positive, negative or null) of the sensible landscape to the quality of life of individuals, and measures referred to *objective aspects* – to evaluate the state of the cultural heritage as a common good, of which the present and future generations have the equal right to enjoy.

## Indicators Proposed for the Subjective Aspects (Sensible Landscape)

The indicators proposed to capture the subjective aspects of this dimension of well-being derive from two questions purposely included in the Istat survey on “Aspects of Daily Life”: (1) *Do you consider the landscape of the place where you live affected by evident degradation?* [Yes/No], and (2) *Which of the following environmental issues are you most concerned about? (5 responses allowed)* [Greenhouse gas, ozone hole/Extinction of animal/vegetal species/Climate change, global warming/Waste production and disposal/Noise/Air pollution/Soil pollution/Pollution of seas and inland waters/Events such as earthquakes, floods, landslides, etc./Deforestation/Electromagnetic pollution/Decay of landscape due to overbuilding/Exhaustion of natural resources/Other (to be specified)].<sup>16</sup> The first question is meant to detect situations of extreme hardship, which are associated – in the perception of interviewees – to a negative characterisation of the landscape as the setting of daily life; while the latter aims to measure – against other environmental issues – the social concern about the protection of the landscape. Through these questions it is sought to capture two key aspects of the landscape as the object of individual experience – the need for a pleasing landscape as a factor of life quality, and the awareness of the landscape’s value as a common good. The proposed indicators are:

- *People that are not satisfied with the quality of the landscape of the place where they live* – Proportion of regional population reporting that the landscape of the place where they live is affected by “evident degradation”. In 2012, the overall share of unsatisfied people was 18.3 %, but this figure highly varies by region along the North-south axis (from 6.8 % of Trento Province to 31.1 % of Campania), largely echoing the general economic conditions of the individual regions.<sup>17</sup>
- *Concern about landscape degradation* – Proportion of regional population reporting, among the “most concerning” environmental problems, the “decay of landscape due to overbuilding”. People who mentioned this among the five “most worrying environmental issues” were 20.4 % of the total in 2012, against 15.8 % of

<sup>16</sup> The first question has been introduced in 2012, while the second had been already used in 1998. From 2012 onwards, both questions will be submitted every year. For the time being, it was preferred not to overload the questionnaire (quite demanding already) with further questions on this topic.

<sup>17</sup> Source: Istat, *Aspetti della vita quotidiana* (2012).

1998. Figures significantly vary according to education levels (from 17.7 % among lower education levels to 26.7 % among the higher ones – the same gap recorded in 1998, witnessing a persistent social divide in the sensitivity to environmental issues). Also in this case, however, the greatest variability can be observed at the territorial level. The concern is more felt, and increased more, in the North (from 18.5 % of 1998 to 25.3 %), less so in the Centre (from 14.4 % to 18.9 %) and even less so in the South (from 13.0 to 14.6 %).<sup>18</sup>

## **Indicators Proposed for the Objective Aspects (Cultural Heritage, Including the Geographic Landscape)**

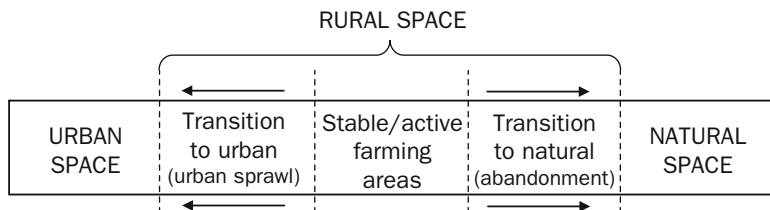
To analyse the geographic landscape, it was proposed a partition of the territory in three main “phases” (urban, rural, natural), each characterised by specific problems and different evaluation parameters, focusing on urban and rural landscapes, as parts of the cultural heritage. It was also agreed to give emphasis to some cross-cutting themes of a special relevance in Italy, such as the endowment of heritage items and the related expenditure by the local authorities for management and conservation, as well as the plague of illegal building.

Within the geographic landscape, special attention was paid to the component of *rural landscapes*, whose protection was one of the main objectives of the “National strategic plan for rural development” (2007–2013), where the landscape is regarded as “a fundamental resource resulting in a value added for the products with designation of origin, instrumental to the development of tourism as well as for the biodiversity of cultivated areas, and a key factor for life quality in rural areas”.<sup>19</sup> In Italy, home to an ancient and pervasive anthropisation process, rural areas cover the far larger part of the territory, but also the more vulnerable one, as regards the landscape. While the protection of historical centres and natural areas is well settled in the regulatory framework and widely passed into common sense, the conservation of rural landscapes is still struggling to be recognised by legislation and, even more, to aggregate a broad consensus among the public opinion. The selection and industrialisation of the most profitable crops, the abandonment of traditional farming practices (mostly in mountain areas), the competition between farming and real estate in urban surroundings, are still largely perceived as acceptable (if not desirable) dynamics of modernisation and economic development, regardless of their collective costs – not only in terms of a loss of cultural and biological diversity, but also in terms of environmental degradation and hydro-geological instability. The current crisis of the rural space in Italy can be compared to an *erosion process*, acting on two fronts – urbanisation and re-naturalisation. In other words, as shown in Fig. 1.3, the residual stable or active farming areas are losing ground in favour of

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<sup>18</sup> Source: Istat, *Aspetti della vita quotidiana* (1998 and 2012).

<sup>19</sup> Ministero delle politiche agricole, alimentari e forestali (2010), p. 26. See also: Ministero delle politiche agricole, alimentari e forestali (2007, 2009).



**Fig. 1.3** Erosion of rural space

vast transition (erosion) areas, either invaded by the low-density urbanisation that stretches out from the outskirts of consolidated towns (so-called “urban sprawl”) or abandoned by farmers and returning to some kind of wilderness.

Ten indicators, briefly presented below, have been developed in relation to the aspects of the cultural heritage and geographic landscape:

(Cross-cutting indicators)

- *Endowment of cultural heritage items* – The number of archaeological sites, monuments and museums surveyed by the “Risk Map of Cultural Heritage” (an information system held by the Ministry of Heritage and Cultural Activities), per km<sup>2</sup>. This indicator allows representing a territorial distribution of the cultural heritage. At the end of 2012, there were more than 100,000 items surveyed across Italy (on average, 33.3 per 100 km<sup>2</sup>). The regions where a higher density of heritage items combines with a relatively low population density (such as Umbria, Marche and Tuscany), appear to be in the best position to protect and valorise their patrimony as a factor of collective well-being, as well as to fully exploit its potential for territorial marketing.<sup>20</sup>
- *Expenditure of Local authorities for the management of cultural heritage* (museums, libraries and art galleries), per capita. In times of shrinking of public spending, and competition between public services for funding, an above average share of spending on culture is a good indicator of the sensitivity of local communities to cultural issues. Italian Municipalities provide about 45 % of the national public spending on culture – on average, € 10.5 per capita (2010). Regional mean values follow the territorial distribution of income, ranging from less than € 5 per capita in Southern Italy to € 12 in Central, up to € 14 in Northern Italy.<sup>21</sup>
- *Illegal building rate* – Ratio of the number of unauthorised buildings to the number of building permits issued by the Municipalities. This indicator points out a key aspect of governance – the protection of public goods against the private speculation. Illegal building not only harms the landscape, but undermines the credibility of local governments and encourages negative behaviours

<sup>20</sup> Source: Elaboration from Ministero per i beni e le attività culturali, *Carta del rischio del patrimonio culturale* (2012).

<sup>21</sup> Source: Elaboration from Istat, *Bilanci consuntivi delle amministrazioni comunali* (2010).

and expectations. Taking advantage from a wide social tolerance, this phenomenon has reached proportions that are uncommon in Europe: it equals approximately the 5 % of legal building production in the North, 10 % in the Centre and 30 % in the South – where a major upturn seems to have taken place in correspondence with the current economic crisis.<sup>22</sup>

- *Urbanisation rate of areas subject to building restrictions by virtue of the Italian laws on landscape protection* – Number of buildings realised after 1981 in areas subject to building restrictions by virtue of the Law no. 431/1985, per km<sup>2</sup>. The so-called Galasso Law of 1985<sup>23</sup> imposed a general building restriction on coastlines, inland waters, mountain areas and other areas of a special environmental interest. A count of the buildings erected in these areas (legally or not) provides a direct measure of the pressure exerted on contexts of a special environmental value. In the coastal areas, the most attractive for building development, there were, on average, 437 buildings per km<sup>2</sup> in 1981. Twenty years later (after more than 15 years of enforcement of the Galasso Law) the figure rose up to 540 buildings per km<sup>2</sup> (+23.6 %).<sup>24</sup>

(Indicators relating to rural landscape):

- *Erosion of farmland from urban sprawl* and *Erosion of farmland from abandonment* – Ratios of the surface of agricultural districts affected respectively by urban sprawl (anomalous decrease of cultivated farmland + anomalous increase of extra-urban population<sup>25</sup>) or by abandonment (anomalous decrease of cultivated farmland + anomalous decrease of extra-urban population) to the total of the regional territory. This couple of indicators are calculated through a single classification procedure, applied to sub-regional observation units (the “agricultural districts”).<sup>26</sup> Areas affected by urban sprawl cover 20 % of the national territory with generally higher values in the Centre-North, while the erosion from abandonment has an overall greater impact at a national level (28.3 %), but is less concentrated, with a slight prevalence in the South. Considering both forms of erosion, the provinces of Trento and Bolzano are the areas where rural spaces appear to be least threatened. The same applies, to a lesser extent, to

<sup>22</sup> Source: Cresme estimates on illegal building (2011) and Istat, *Statistiche sui permessi di costruire* (2011).

<sup>23</sup> Recast in the Legislative Decree no. 42 of 22nd January 2004 (*Codice dei beni culturali e del paesaggio*).

<sup>24</sup> Source: Elaboration from Ministero per i beni e le attività culturali, *Carta del rischio del patrimonio culturale* (2012) and Istat, *Censimento generale della popolazione e delle abitazioni* (1981 and 2001).

<sup>25</sup> Extra-urban population: people living outside the boundaries of the “inhabited localities”, as surveyed by the Population Census.

<sup>26</sup> The agricultural districts (*regioni agrarie*) are territorially continuous clusters of Municipalities belonging to the same Province and class of altitude, and homogeneous by the market value of crops, which are established for Land registry purposes. Italy is divided into about 800 agricultural districts. The classification procedure is described in Costanzo and Ferrara (2013).

Piedmont, Tuscany, Umbria, Puglia, Sardinia, Friuli-Venezia Giulia and Marche, while the most critical situations appear to be those of Liguria and Veneto.<sup>27</sup>

The transformation of large portions of the countryside into low-density suburbs, where often productive, commercial and residential uses mix with residual cultivated areas, is the outcome of a no longer sustainable development model, based on high soil consumption and increasing dependency from private mobility for commuting, with obvious negative consequences for both individual and collective well-being.

- *Presence of historical rural landscapes* – A score that takes into account the ranking of the Regions by the number and surface of the sites classified as such by the National inventory of historic rural landscapes (a project of the Ministry of Agriculture, Food and Forestry Policies, in progress).<sup>28</sup> If we consider the historical landscapes – especially where they are the outcome of traditional practices still in use – as an integral part of a local cultural heritage, this indicator can be seen as a necessary complement to the *endowment of cultural heritage items*.
- *Quality assessment of Regional programmes for rural development (PSRs), with regard to landscape protection* – Score assigned to the PSRs by a Commission convened by the Ministry of Agriculture, Food and Forestry Policies in 2009, based on an assessment of the potential impact on rural landscape of the measures adopted within the National strategic plan for rural development 2007–2013. The general objectives of agricultural policy set out by the EU and the national government (including the protection of rural landscapes) are implemented through planning instruments that are designed at the regional level. Although sharing a common framework, such instruments can greatly differ from a qualitative point of view, depending on the adequacy and feasibility of the envisaged measures. The PSRs deemed most likely to have a positive impact on the landscape are those of Umbria, Veneto, Valle d’Aosta e Friuli-Venezia Giulia.<sup>29</sup>

(Indicators relating to urban landscape):

- *Presence of historical parks/gardens and other urban parks recognized of significant public interest* – Parks and gardens classified as “historical” and/or “of a significant public interest” by the Legislative Decree no. 42/2004 in the provincial capitals (sq km per inhabitant). This indicator can be seen as another measure of *endowment*, referred to a specific component of the urban landscape. The overall surface of green areas and parks of historic or artistic interest that fall

<sup>27</sup> Source: Elaboration from Istat, *Censimento generale dell’agricoltura* (1990 and 2000) and *Censimento generale della popolazione e delle abitazioni* (1991 and 2001).

<sup>28</sup> Source: Elaboration from Agnoletti (2011).

<sup>29</sup> Source: Ministero per le politiche agricole, alimentari e forestali, *Paesaggio e sviluppo rurale. Il ruolo del paesaggio all’interno dei Programmi di Sviluppo Rurale 2007–2013* (2010).

under the protection of the Code of cultural assets and landscape covers about 5 % of urban areas.<sup>30</sup>

- *Conservation of historical urban centres* – Ratio of inhabited buildings realised before 1919 and in excellent or good state of conservation to the total number of inhabited buildings realized before 1919.<sup>31</sup> Like for the rural landscapes, the conservation of historical centres is relevant to well-being as long as these are vital and maintained in good conditions. Based on the latest available Census data (2001), almost two buildings in ten, on the total of inhabited buildings (2001), were built prior to 1919, 60 % of which are still in excellent or good state of conservation. In Tuscany and Umbria, such proportion rises to nearly 75 %, while it is below 50 % in Campania, Calabria and Sicily.<sup>32</sup>

## **A Critical Commentary on the Indicators Proposed and Some Concluding Remarks**

Undoubtedly, the two indicators proposed for the subjective sphere (*People that are not satisfied with the quality of the landscape of the place where they live* and *Concern about landscape degradation*) can provide only a limited representation of the complexity underlying the relation between well-being and the perception of landscape, leaving unexplored – among other things – any influence that the town planning or the architecture of public spaces may have on subjective well-being. Moreover, the concern about landscape degradation is being measured only in relative terms, through a comparison with other environmental issues – which is likely to affect the comparability of data over time, insofar occasional emergencies may alter the respondents' rankings in the short term (not to mention any change in the response categories). The regularities found in the distributions of frequencies are consistent with well-known socioeconomic and territorial divides that characterise Italian society, proving that a structure exists in the relation between living conditions and the perception of landscape. On this basis, the subjective aspects of well-being relevant to this domain can be further developed within the framework of the BES Project, essentially by widening and consolidating the instruments for data collection. Currently, the landscape is represented only as a potential source of discomfort. Widening this representation so to consider also the benefits that may derive from the daily experience of a friendly and pleasant urban landscape, for instance, could lead to a more comprehensive view of the relation of people with the

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<sup>30</sup> Source: Istat, *Dati ambientali nelle città* (2011) and *Basi territoriali dei Censimenti* (2010).

<sup>31</sup> The year 1919 was chosen as a plausible turning point between the prevalence of traditional building technologies and the diffusion of the technology of reinforced concrete.

<sup>32</sup> Source: Elaboration from Istat, *Censimento generale della popolazione e delle abitazioni* (2001).

places they live in. More generally, a clearer separation, on the survey questionnaires, of the conceptual domain of landscape (and cultural heritage) from that of environmental issues, could improve accuracy and relevance of the statistical measurement.

The indicators proposed for the objective sphere are mainly affected by problems of timeliness, because much of the data used come from the Censuses of Agriculture and Population, and are collected every 10 years. In addition, the validation process of some of the input data produced by these sources tends to be quite long: the 2011 Census data on population by enumeration districts, as well as those on buildings by year of construction, had not been released yet in 2013, which explains why the indicators of *erosion of the rural space* and that of *conservation of historical centres* refer to 2001. Also the *quality assessment of Regional programmes for rural development* cannot be updated every year, as its periodicity is clearly bound to the cycles of the EU and national agricultural policies. Different data quality issues regard the indicators of *endowment of cultural heritage items* and *presence of historical rural landscapes*, whose updating depends on the implementation of inventories that are managed for purposes other than statistical and, in the case of the *Catalogue of historical rural landscapes*, are still at an early stage of development. The enumeration of heritage items made by the *Carta del rischio*, on the other hand, is made on a regional basis, and the consistency of the inclusion criteria from one region to another, as well as the alignment of the updating operations, cannot be ensured. Nevertheless, these sources provide the best available basis for a quantitative measurement of heritage and historical rural landscapes in Italy.

Among the dimensions of well-being identified by the BES project, that of landscape and cultural heritage can be considered as one of the most pioneering ones, since it explores a field that is largely new to official statistics. Most weaknesses of this study can be linked to this exploratory approach, as well as to the tight schedule assigned to the Scientific commission to synthesise in a shared output a variety of inputs received from a wide range of interlocutors. In particular, the conceptual framework needs to be further developed and consolidated, also in order to organise the definitions and measures into a more homogeneous set. Crucial shortcomings have been identified as regards the available sources. In relation to landscape, in particular, which is essentially a dynamic entity, it would be most needed to develop a time series approach, but this is seriously limited, for the time being, by the poor usability of data from historic censuses, most of which are still not available in digital form, neither for the needed territorial detail. At the same time, the demand for relevant information related to this domain should be taken into account in the planning of future surveys, with special regard to the Censuses of population and agriculture – as well as it would be useful to collect more information on subjective perceptions and opinions on this matter: although of a clear evidence, the relationship between landscape, heritage and the quality of life has been only marginally considered so far in the domain of official statistics. A functional disaggregation of expenditure items within public administration balance sheets would be also needed, to make possible a more accurate identification