

LOCAL SUSTAINABILITY PROCESSES WORLDWIDE: A SYSTEMATIC REVIEW OF THE LITERATURE AND RESEARCH AGENDA

Abstract:

This article presents a systematic literature review of 109 articles (1992-2015) dealing with Local Agenda 21 processes worldwide. It analyzes two essential elements of Local Agenda 21: (a) the holistic approach of the sustainable development concept and (b) the main driving forces behind such processes. It shows that, although at the beginning sustainability was seen as a natural extension of environmental policy work, it has been perceived over the last years as a guiding principle applied to issues of environment, economic development, and social welfare, and Local Agenda 21 is perceived as a coherent approach to sustainability planning. In addition, Local Government Strategy is the main typology followed although it suffers from important limitations. Future studies could focus on local sustainability process outcomes. Further quantitative studies would be welcome, given the qualitative case study dominance in the field. We conclude with a research agenda to tackle theoretical, methodological, and empirical lacunae.

Keywords: Local Agenda 21, local sustainability processes, integrated view, types of process, systematic literature review.

1. Introduction

Sustainable development has been defined in many ways and its precise meaning is controversial. The most frequently quoted definition is from the Brundtland Report (WCED, 1987, pp. 49): “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Therefore, sustainable development focuses on covering a holistic view of needs (environmental, economic and socio-cultural) in ways that are renewable or viable in the long term. While this concept had an enormous impact among politicians and researchers from the very beginning, it was loose and needed to be developed. The United Nations Conference on Environment and Development (UNCED, 1992) contributed to making the concept more operational by proposing Agenda 21 (henceforth A21), a worldwide coordinated action plan. Implementation of Agenda 21 at the local level is known as Local Agenda 21 (henceforth LA21). Local Agenda 21 has been defined as a Local Action Plan for tackling environmental, social and economic issues (Hewitt, 1995; Freeman et al., 1996; Lafferty, 2001) through new forms of involvement and co-operation (O’Riordan and Voisey, 1998; Pellizzoni, 2001; Geissel, 2009; Harangozo and Zilahy, 2015) that lead to quality-of-life improvement (Meister and Japp, 1998).

LA21 has many components. However, two of them have been particularly stressed in prior literature (Selman, 2000; Hopwood et al., 2005; Echebarria et al., 2009; Aall, 2012; ICLEI, 2012; Otto-Zimmermann, 2012): (1) taking an integrated and systemic view (i.e., a suitable balance should be established between the three interconnected dimensions of sustainable development to guarantee long-term sustainability) and (2) types of process.

A three-dimensional sustainable development perspective (including social, economic, and environmental targets) is an essential element of LA21. Meanwhile, it has been widely acknowledged that, to advance sustainable development on a global scale, multi-level effort is needed (Stakeholder Forum for a Sustainable Future, 2012; Barrutia et al., 2013). The real question, however, is how to make the different levels of governance work together to make the most of their individual strengths while mutually supporting each other. Yet it seems that there is a lack of research focusing exclusively and in detail on these components of an LA21.

This research has a dual purpose: (1) to analyze the sustainable development concept; and (2) to identify the main driving forces behind LA21 processes, and the key reference frameworks that influence the scope and ambition of LA21 processes (as well as the changes experienced in these processes) over the period 1992-2015. These purposes are achieved through a systematic literature review.

It is important to throw light onto these components for at least two reasons. Firstly, an integrated view could lead to improvements in municipal governance, thanks to a better integration of sectoral policies, greater cooperation between departments and explicit consideration of cross-impacts between sustainable development dimensions (Pezzey, 1992; Littlewood and While, 1997; Counsell, 1999; Evans et al., 2006; Glavik and Lukman, 2007; Wittmayer et al., 2016). Secondly, knowledge pinpointing the key driving forces behind local sustainability processes could facilitate a good framework for a more in-depth understanding of characteristics, strengths, and weaknesses inherent in different types of processes, and thereby achieve a good local sustainability process (Jonas et al., 2004; Garcia-Sanchez and Prado-Lorenzo, 2009; ICLEI, 2012; Barrutia and Echebarria, 2013b). A more comprehensive understanding of the various types of local governance processes offers policy-makers the opportunity to improve their

sustainable development activities. In addition to making a scientific contribution, the findings of this systematic literature review may be used to improve the outcomes of LA21 processes.

This article is organized as follows. Section 2 presents the two major questions in the paper: an integrated view of sustainable development and types of LA21 processes are explained. In section 3, the design of the research is described. In section 4, the main results of the literature review are presented and discussed. Finally, the conclusions drawn are detailed and avenues for further research are suggested in section 5.

2. Theoretical Framework

This section is addressed to briefly review the two major topics covered by this literature review. First, we refer to the holistic concept of sustainable development which underlies LA21 logic, and then proceed to deal with the types of LA21 processes considered.

2.1. Sustainable Development: An Integrated View

The sustainable development concept is quite recent (it came into being in the early 1970s) and also relatively unclear and controversial (Pezzoli, 1997a; Hopwood et al., 2005; O'Riordan, 2009; Norton, 2014). If we simplify and return to its origins, sustainable development arose as a consequence of environmental concern: the limitations of the planet's natural resources (Pezzey, 1992; Du Pisani, 2006). This led the Club of Rome to suggest, in a first report (Meadows et. al, 1972), the need to limit growth to zero. The second report of the Club moderated its conclusions to propose positive but organic growth, similar, that is, to that of a living being: balanced and differentiated according to region. Since then, there has been division among academics

h between those who stand for an end to growth at the expense of natural resources in the developed countries (Latouche, 2010; Schneider, et al., 2010), and those who consider unlimited growth not to be incompatible with sustainability, always provided that specific environmental policies are adopted.

The same environmental concern caused the United Nations Environment Commission, under the direction of Gro Harlem Brundtland, to draw up the report “*Our Common Future*” (WCED, 1987). This work marked a turning point in the process of institutionalization of the sustainable development concept and, in addition, put forward what was to be the most commonly used definition of sustainable development:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 67). This definition more or less correctly reflects the concern for the environmental issue contained within the sustainable development concept (Aall, 2000; Hopwood et al., 2005). When we turn to development, however, it proves to be more opaque.

The issue of development as part of the sustainable development concept connects more with a concern for human poverty and the realization that growth, the only variable which economic science had bothered about until the report was commissioned, does not act to lessen its effects. Emphasis was laid on the fact that the cause of poverty does not lie in an insufficiency of resources, but in the lack of accessibility to them. That was how the concept of Human Development arose, jointly proposed and defined in 1990 by the United Nations Development Program (UNDP) and Amartya Sen and Gustav Ranis. Human Development is a broad comprehensive concept that entails “a *process* of enlarging people’s choices” (UNDP, 1990, p. 34), amongst which the main outstanding objectives are the enjoyment of a long and healthy life, the acquisition of knowledge, and having access to the resources needed for a decent standard of living. In line with

this approach, one may speak of development when people acquire better skills and not just when they can consume more goods or material services. The Human Development concept posits development geared toward the individual and to the community in particular, and not toward a country or national economy.

Consequently, in 1990, in connection with the concept of Human Development, the UNDP put forward the Human Development Report as a synthesis of the educational, health, and economic conditions of the populations of the different countries. However, the concept of Human Development does not consider the future sustainability of the development process, as it does not take into account whether satisfaction of present needs is attained by jeopardizing the possibilities of future generations satisfying their own needs.

From this stems the need to integrate the concepts of Human Development and sustainable development, and thence appears the concept of Sustainable (Human) Development, which places human beings at the center of its concerns, but from a perspective of not only intragenerational, but also intergenerational solidarity. In practice, the concepts of sustainable development and sustainable (human) development tend to be employed as synonyms, because the initial sustainable development concept, in which the environmental dimension was stressed, has gradually given way to a systemic three-dimensional perception in which economic, ecological, and socio-economic vectors are incorporated (Dooris, 1999; Pezzey, 1992; Dalal-Clayton and Bass, 2002).

Local Agenda 21. Following the Brundtland Report and the Human Development Report the United Nation Conference on Environment and Development was held in Rio in 1992, aimed at identification of the appropriate paths to achieve sustainability.

Agenda 21, and its version for local governments, Local Agenda 21 (LA21), were the main outcomes of this conference. Agenda 21 was considered as a non-binding, innovative, and globally coordinated action plan that should involve action at international, national, regional, and local levels. LA21 was included in Chapter 28 of Agenda 21. LA21 approach was viewed as crucial to meet global sustainability aims, because of the proximity of municipalities to local stakeholders and their greater ability to understand and adapt to local demands, and influence the behavior of local actors (Evans et al. 2005).

Chapter 28 is the shortest chapter of the conference report, which, in itself, indicates that the LA21 proposal is very vague. However, the LA21 proposal was innovative and transformational as it involved a new management approach that included unusual practices at a local level such as community participation and strategic planning (Lafferty and Eckerberg 1998). LA21 is addressed to undertake the complex endeavor of finding participative, innovative, and synergistic solutions to the three (ecological, social, and economic) facets of the sustainability concept. LA21 means searching for consensual solutions to complex and controversial issues. An example of a controversial issue is waste management, where appropriate solutions from a climate change perspective, such as door-to-door collection, may be perceived as inconvenient for citizens and, therefore, arouse strong opposition.

Later, in 2001, the European Union, in its sustainable development strategy, emphasized the three basic pillars (Environment, Society and Economy) upon which sustainable development rests. This three-dimensionality was also accepted within the academic sphere (Pezzoli, 1997b; Aall, 2000; Hopwood et al., 2005; Glavič and Lukman, 2007). Sustainable Development is not exclusively identified with any of these dimensions. It is a macro-system composed of three systems with their corresponding processes: (1)

the environmental system, oriented to the conservation of resources as a basic support for life and human activities; (2) the socio-cultural system, with an orientation to distributive equity, supplying socio-cultural services and managing through participation, and (3) the economic system, geared toward efficiency in the use of resources and toward innovation, and supported by sound public finances. This systemic view introduces “interconnections between environmental protection, economic performance and societal welfare, guided by a political will, and ethical and ecological imperatives” (Glavič and Lukman, 2007, p. 1884).

In summarized form this philosophy of sustainable development incorporates a holistic perspective encompassing the concepts of human development, understood as a broadening of people’s opportunities in terms that are economic, social (equality, distributive equity, etc.), cultural (incorporating knowledge, identity, etc.), and political (participation in public life), and sustainability, understood as satisfaction of the needs of the present generation without compromising the capacity of future generations to satisfy their own needs.

2.2. Types of LA21 Processes Considered

Concerning the typologies of the local sustainability processes addressed, following Echebarria et al., (2009) and ICLEI (2012), five categories were identified:

- **Type 1: Local Government Strategy.** This typology refers to local sustainability processes which are initiated by local government leaders or civil servants who see the potential benefits such processes can bring to their own city or town. Some external support may exist from civil society, higher levels of government, and/or international bodies.

- **Type 2: Civil Society Initiative.** This typology includes LA21 processes in which civil society actors such as community groups, non-governmental and religious organizations or science and research institutions are the first to pursue sustainable development activities. However, the key factor when discussing civil society initiatives for local sustainability is the involvement of local governments.

- **Type 3: Networking Strategy.** This typology refers to a voluntary group of local governments which support and inspire each other. National and sub-national governments may participate in these networks or even promote them. Whatever the case membership of local governments is voluntary.

- **Type 4: Higher Tiers of Government Policy.** This typology refers to processes in which local action is determined by sustainability policies depicted by national and sub-national tiers of government; a top-down approach to the consideration of local characteristics may be incorporated in the national/subnational design. The national/subnational governments have a whole variety of instruments to initiate and support local sustainability processes and strategies, as well as to create favorable conditions for local action. These range from legal obligations on local governments through provisions such as the adoption of sustainability criteria in sectoral legislations or funding programs, to the establishment of national/subnational campaigns for local sustainability.

- **Type 5: International Cooperation.** This typology includes local sustainability processes initiated by international cooperation programs. These processes tend to follow a pre-defined common methodology with agreed process criteria, and failure in fulfilling them may endanger the further flow of financial support.

This often results in well-prepared and well-managed local processes that deliver remarkable results in a comparatively short time. On the other hand, as soon as (project) funding ends, these processes have to prove that they themselves have been established in a “sustainable” way.

3. Research Method

This article is based on a systematic review of the literature. A systematic literature review is characterized by a planned and structured approach to reviewing published academic research by using organized and replicable methods to identify, select, and critically assess literature

searches (Tranfield et al., 2003; Pezzoli, 1997a, 1997b; Fink, 2014). Systematic reviews have been argued to provide the most efficient and high-quality method for identifying and evaluating extensive literatures (Jalonen, 2012; Fleith de Medeiros et al., 2014; Klewitz and Hansen, 2014). By performing a systematic literature review, this article provides a comprehensive review of Local Agenda 21 processes, based on the two subjects under study, an integrated view and types of process.

The methodology followed for the literature review includes two main phases: 1) the study eligibility criteria, and 2) the search strategy and selection procedure.

3.1. Study Eligibility Criteria

To conduct the review, five eligibility criteria were used as a guide for selecting and assessing the studies for potential inclusion:

1. *Topic*– Articles should contain the terms *Agenda 21* or *Local Agenda 21* or *Local Sustainability Processes* in their title and/or abstract, and/or full-text.
2. *Study design* – Conceptual and empirical studies focusing on LA21 were eligible.

3. *Languages* – Articles written in English and Spanish were considered (papers were accessed by drawing on electronic and physical bibliographical resources from Universities in two different countries: Spain and the United Kingdom).
4. *Publication status* – Only peer-reviewed journal articles were included in the study.
5. *Year of publication* – Only selected articles published between June 1992 and December 2015 were included (in June 1992 LA21 was launched).

3.2. Search Strategy and Selection Procedure

To identify the articles, the literature review was conducted in four phases (Fig. 1).

INSERT FIGURE 1

In the first phase, computerized searches were carried out using the 2015 Journal Citation Reports (Science and Social Science Editions) database. This database was chosen as it has recognized prestige in the scientific community and provides a useful starting point. To ensure a broad range of scientific output we identified the categories of study of JCR that fit our subject: LA21. To find as many articles as possible, we were not restrictive. The final selection of fields included: Environmental Sciences, Ecology, Environmental Studies, Geography, Urban Studies, Planning and Development, Public, Environmental and Occupational Health, and Business and Political Science. All journals included in these categories were specifically accessed and searched for the period June 1992-December 2015, including both articles with volume and pagination, and articles in press. The last search was run on December 5, 2016. Once the study search was concluded, the studies were assessed based on their eligibility. The studies

were screened on title and abstract and – when needed – by reading the full text. The search yielded 398 articles.

In the second phase, we conducted an additional electronic search in the academic databases ABI Inform ProQuest, Elsevier Science Direct, Emerald, JSTOR, Academic Search Elite (EBSCO), EconLit, and Springer Link. By searching these databases, we sought greater coverage of results and confirmed the suitability of the first phase, as a relatively low number of additional articles was found. However, this phase let us identify four additional peer-review non-JCR journals that had paid attention to LA21: Local Environment, Ekonomiaz, European Environment (denominated Environmental Policy and Governance since 2009 and from 2012 up to 2015 indexed as a JCR journal), and Planning Practice & Research. Therefore, we specifically accessed these journals and conducted a search for the whole period considered. The second phase yielded 80 additional papers, which were also accessed, uploaded and included in our database. From the first and second phase we collected 478 articles. The full text of these papers was accessed by drawing on electronic and physical bibliographical resources from Universities in two different countries: Spain and the United Kingdom. Both sources proved to be complementary.

In the third phase, the 478 articles identified were desk-reviewed. For this purpose, a first quick content check of the articles was conducted. As a result of this process, 320 of them were excluded, mostly because they merely used the concept LA21 to advance some other point and did not meet the inclusion criterion 2. This process reduced the number of articles to a total of 158.

In the fourth phase, all 158 articles were read in full. During the reading process, it became obvious that some articles that were first selected on the basis of abstract had to

be rejected due to their minor significance. Therefore, the total number of articles under review for this study was 109, and they proceeded from 40 different sources during the period January 1994-December 2015 (including both articles with volume and pagination, and articles in press), because although we reviewed the period from June 1992 onwards, we found no publication for the years 1992 and 1993. In addition, some articles were selected although they were actually published in 2016, because they had already been issued as articles in press in 2013, 2014, or 2015.

Each article was studied in depth and the authors, publication year, title, journal, objectives, methods, results, and types of LA21 processes considered were summarized in a large table, which served as a basis for analysis and discussion.

Table 1 shows specific information about the journals that were ultimately considered, and the number of articles included in each journal (journals with only one article are not specified in Table 1, although they were taken into account in the analysis). Figure 2 shows publications per year (the number of articles per year).

To enhance the reliability of the research, databanks and journals, as well as individual papers, were checked by several researchers. It should be mentioned that the final selection of papers was separately conducted by five researchers (i.e. the co-authors), achieving a degree of inter-coder reliability of 92% (i.e., consistency between researchers in the selection of papers was high). Consensus was achieved in a subsequent work meeting.

INSERT TABLE 1

INSERT FIGURE 2

4. Results and Discussion

This section is addressed to discuss prior LA21 literature in relation to two distinctive elements of study: (1) Three-dimensional perspective, and (2) Types of LA21 processes considered. Due to the heterogeneity of the studies reviewed in terms of the date of publication, methods used and theoretical framework, a meta-analysis, i.e. the employment of statistical and econometric procedures for synthesizing findings and analyzing data, was not appropriate for this review (Tranfield et al. 2003; Jalonen, 2012; Fink, 2014). The analysis conducted was, in consequence, descriptive by nature.

4.1. Three-dimensional integrative perspective

Full integration of all policies and actions is complex but critical for achieving sustainable development objectives. Within this integration, cross-impact analysis between the three dimensions of sustainable development is also fundamental. There is a widely-held conviction that greater co-ordination and integration would enhance synergy, and also a belief that both movements could contribute different but equally important lessons concerning the processes of participation, empowerment, and inter-agency working (Dooris, 1999; Aall, 2000). The holistic approach, integrating social, environmental, and economic aspects, is certainly a key strength of these initiatives but may also turn out to be a weakness, if the concepts used are too general and difficult to translate into practice (ICLEI, 2012). It has also been argued that municipalities are better positioned than the highest tiers of government to perceive problems from an interconnected multidimensional perspective due to their smaller size (Barrutia and Echebarria, 2007; Stuart et al. 2016). The underlying idea is that problems are more comprehensively understood by the human mind when they refer to smaller geographical spaces and populations.

However, prior literature shows there is strong evidence showing lack of integration. Thus, Bond et al. (1998) surveyed UK municipalities and found that they were giving more emphasis to environmental issues. Dalal-Clayton and Bass (2000) studied national sustainable development strategies in various countries and identified a dominance of the environmental focus over economic and social aspects. Counsell (1999) questioned the ability of the UK planning system to deliver sustainable development and concluded that a more integrative planning system was needed. In other words, it was necessary to create appropriate mechanisms to integrate the LA21 process and its products into the existing planning and budgetary practices so that all local efforts reflected the principles of sustainable development. Adolfsson-Jörby (2002), who studied the LA21 processes in four Swedish municipalities, showed the difficulties in implementing LA21 visions in every department and in all municipal actions, as well as obstacles to sharing municipal decision making. Moreover, the social, environmental, and economic aspects were often considered separately (e.g. lists of projects referring to each of the three pillars) with little reflection on interdependencies. The same result was obtained by Barrett and Usui (2002) and Kusakabe (2013) in Japan, Echebarria et al. (2004) in Spain, and by Metha (1996) in 14 municipalities in different countries. Peris et al. (2013) studied the case of Benetusser, Spain. They showed that, although the context in Spain was clearly determined by a strong economic crisis, economic impact received the lowest recognition. They concluded that LA21 was clearly not considered as a tool for promoting the economic development of the town. Harvold (2003) studied two experiences with Local Agenda 21 Forums in Norway and demonstrated that it is not easy for local authorities and stakeholders to fully integrate sustainability criteria in their development and investment. Aall (2000) pointed out that the shift from a “traditional” locally-oriented environmental policy to a global sustainability oriented

policy in Norway had been difficult, even though Norway is usually considered a pioneer with respect to sustainable development. According to Lafferty et al. (2007) who assessed strategic sustainable development initiatives from 1989 to 2007, the Norwegian sustainable development profile was ‘long on promise’ and ‘short on delivery’, and one major reason for that was the influence of a booming petroleum economy on distributional politics.

Interestingly, Dooris (1999) reviewed concepts of health and sustainable development, and related the evolution of thinking that had taken place to the historical development of the Health for All and LA21 movements. Dooris argued that towns, cities and communities committed to promoting health and sustainability faced two key challenges as they approached the new millennium: how to move from the margins to the mainstream; and how to integrate the frameworks. There was a wide-ranging recognition and deeply held conviction that new integrated approaches were needed if meaningful human development was to be achieved.

However, it is not clear which tools could contribute to promote a three-dimensional integrative perspective, as few researchers have systematically studied this issue.

However, some insights were gained. Some authors, for instance, have indicated that systematic coordination mechanisms must always be set up. Littlewood and While (1997) studied the UK experience in particular and proposed the need to introduce a ‘binding agent’ capable of fusing environmental, social, and economic structures within an over-arching policy framework geared towards sustainable development. Gaye et al. (2001) propose cross-sectoral approaches to environmental problems, recognizing that they are often complex and cut across political, economic, statutory, and other boundaries. Ruwanza and Shackleton (2016) examined the incorporation of environmental issues in South Africa’s municipal integrated plans and found that there

was some (albeit small) evidence to show that metropolitan, district, and local municipalities in South Africa were mainstreaming environmental issues. For Selman (1998, 2000), it seems clear that LA21 has started to break the mold of unsustainable living. Kelly and Moles (2002) designed a methodology to promote active participation in the development of a range of sustainability indicators for the Midwest region of Ireland in 1998. Although this methodology was criticized it nevertheless demonstrated that a holistic understanding of the complexity of sustainable development could only be achieved by examining environmental, social, and economic components in an integrated manner.

Coenen (1998) who studied the LA21 processes in the Netherlands, found that a genuinely comprehensive approach was difficult to implement within municipalities. Stuart et al. (2016) analyzed the incorporation of sustainability principles in municipal planning and policy in Ontario, Canada, and found that these approaches were focused on promoting community involvement, inclusive decision-making, equity, socio-ecological civility, long-term integrative planning, and responsibility through stewardship.

Barrutia and Echebarria (2012 and 2015) identified the main dimensions that explain the embrace of LA21 by Local Governments. Results showed that the factors of entrepreneurial presence (at the regional and local levels), co-decision (consensus in decisions to generate integration of means and ends and effective solutions) and co-creation (interactivity, mutual engagement, and shared learning and communication between problem solvers) have an effect on local government embrace of the LA21.

An obvious conclusion is that, to manage the three aspects of sustainability in a balanced way it would seem more opportune, a priori, that such processes be led from

the central core of Government, rather than from a department or government area with responsibilities only in one of the sustainable development dimensions (Echebarria et al. 2004). This idea has led to the up-grading and new labelling of LA21 processes in some pioneering countries in which LA21 was perceived as an environmental tool (Eckerberg and Dahlgren, 2007). According to the ICLEI (2012), over the last years some countries seem to have moved on and established local sustainability within the mainstream, where it has become a part of everyday activities. More and more cities, asked about their commitment to sustainable development, answer that it has become a cross-cutting issue, a guiding principle applied to all their activities. This view seems to be consistent with that of Joas et al. (2007) who state that the ‘environment’ is the door through which policy actors must enter the sustainable development discourse – it is a familiar and more easily comprehensible route. As Tuxworth (1996) and Wittmayer et al. (2016) said, at the beginning sustainability was seen as a natural extension of environmental policy work, and the survey results presented confirmed a gradual emergence of LA21 work from an environmental focus, to a strategic approach to issues of environment, economic development, social welfare, and accessibility.

4.2. Types of LA21 processes Considered

Concerning the typologies of local sustainability processes addressed, five categories were formed (Fig. 3):

INSERT FIGURE 3

Figure 3 reaffirms the fact that Local Government Strategy is the main type of local sustainability process implemented. In second position the advance of Networking Strategy can be observed. In a clearly smaller proportion we can also find case studies implemented through International Cooperation, Civil Society Initiative, or Higher Tiers

of Government. Finally, a relevant number of 35 papers could not be classified in these categories due to two reasons: (1) it was not clear which element had been decisive to foster the LA21 process (either Local Government Strategy, Civil Society Initiative, Higher Tiers of Government Policy, International Cooperation, or Networking Strategy); and (2) they did not refer to specific LA21 experiences, because they are mainly conceptual articles.

-Type 1: Local Government Strategy

Local Government Strategy was the typology most employed, and was followed in 45 of the 109 articles. As examples of these, Nogueiro and Ramos (2014), Fidélis and Moreno-Pires (2009) and Carter et al. (2000) provide evidence on Portugal, where LA21 processes had been fostered by local governments without relevant support from higher levels of government. There was no central coordinating body or framework for LA21. Nor was there a network through which the experience of the more advanced municipalities could be disseminated. The municipalities had adopted a top-down approach, thus replicating the relationships between central and local government. There was no tradition of community involvement in local government decision-making. Similarly, Corbiere-Nicollier et al. (2007) study the case of Switzerland. This country is right at the bottom of the rankings for the dissemination of LA21 processes, which have only been implemented by some urban and relatively large municipalities. These authors explain this situation by arguing that in Switzerland, under the country's federal system, local authorities have for a long time enjoyed considerable autonomy. And, under the Swiss system of direct democracy, citizens are able to participate more fully in all political decision-making than in other countries. Motivation to initiate an LA21 process for institutional reasons and to foster participation is therefore less strong.

Aall (2000, 2012) and Lafferty et al. (2007) studied a country with a relatively wide sustainability tradition, Norway. In Norway LA21 was, to a large extent, developed by the municipalities themselves. Nevertheless, it proved difficult to maintain the leadership of municipalities with only a minimum of support from the national government. Eckerberg and Forsberg (1998), Adolfsson- Jörby (2000, 2002), and Eckerberg and Dahlgren (2007) analyzed the Swedish experience. The authors believe that long-term lasting LA21 depends on the success of municipal cross-sectoral institutionalization of sustainable development and on interaction between a bottom-up and top-down approach. Democratic aspects are one of the core issues in the LA21 process that are vital to achieving institutionalization but, for that to happen, issues such as dialogue and effective democratic participation are vital. In other words, success of the implementation depends on the stakeholders' sense of ownership of the process, measures, and outcome.

Barrett and Usui (2002) studied LA21 in Japan and found that a very small number of local authorities had begun to relinquish control over the environmental agenda to other stakeholders in the locality. However, the study also reveals that the direction of change is positive in these local authorities, particularly in the area of inter-organizational networking, collaboration, and community-based issue identification. In addition, where community planning for sustainability involves higher levels of citizen participation, the resulting progress towards sustainability is greater (Kusakabe (2013)). It must be said that the results also highlight widespread and significant problems with LA21, such as a narrowly focused agenda, the prevalent tendency for local authorities to retain control over the process and budget, the lack of inter-departmental co-operation, limited experimentation with different forms of community engagement and the difficulty of ensuring commitment to action from other local stakeholders.

Dezelan et al. (2014) analyzed four local planning processes in Slovenia and the analysis showed that the biggest problem in Slovenia is the narrow orientation of formal interventions in local communities, where they merely consider physical and temporary solutions and do not seek connections with the wider environment and society.

Grochowalska (1998) studied Poland and found that only a dozen communities (out of 2483) had developed LA21 processes. Barriers included: lack of knowledge about LA21, lack of financial resources, of information about access to foreign funds, and of co-operation between local authorities and other partners. Roberts and Diederichs (2002) studied Durban, the first city in South Africa that implemented LA21. They found several brakes on LA21 implementation. The perception that LA21 has a “green” focus and is “anti-development” (due to its location within an environmental department) resulted in a lack of proactive and sustained political support. These problems were exacerbated by limited human and financial resources, which restricted the program’s capacity to build support and consensus amongst stakeholders. In this respect, Ruwanza and Shackleton (2016) examined the incorporation of environmental issues in South Africa’s municipal Integrated Development Plans through an analysis of the Integrated Development Plans from 35 different municipalities and found that environmental issues were not viewed as a funding priority at the municipal level. Most key priority areas and specific development objectives from different municipalities centered on service delivery and promoting economic development.

Kern et al. (2007) analyzed LA 21 diffusion in Germany comparing the German federal states. The comparison demonstrated that in the state (Länder) this depended on factors at the local level such as the local authority’s capacities and its proximity to pioneering cities, and factors at state (Länder) level such as financial and political support of local actions, including the set-up of agenda transfer agencies. Local authorities with greater

capacities, located near pioneering cities in states (Länder) which supported LA21 financially and set up agenda transfer agencies, were more likely to initiate an LA21 process. Likewise, Novy and Hammer (2007) studied the potential and limits of participation as a means to overcome authoritarian structures in Vienna (Austria). The “naturalization” of the dominant liberal mode of governance was not questioned. The city government continued to negotiate large-scale urban redevelopment with private investors. The shift in power was from local democratic institutions of representative democracy to direct democracy and participatory initiatives.

Peris et al. (2013) analyzed the case of Benetusser (Spain) revealing that LA21 provides a new understanding of local governance of sustainable development and the role to be played by citizens. Kveton et al. (2014) observed different developments in the Czech Republic in municipalities implementing LA21 when compared to councils not involved in the scheme. The greatest differentiation was found in the set of environmental indicators, where the situation between the two groups differs noticeably. Municipalities implementing LA21 conducted more intense environmental awareness raising among both the populations and the economic entities. Thanks to strategic and land-use planning in place, these municipalities put more emphasis on the environmental aspects of development, as manifested, for instance, in the ecological stability coefficient and the extent of green areas.

Ferraz da Fonseca et al. (2012) studied the case of three municipalities in the Brazilian Amazon where LA21 failed to empower people to participate in planning processes in all three councils, and this lack of empowerment left the LA21 projects vulnerable to ongoing political disputes. Exclusion and politicization limited the potential for LA21 to promote environmentally sustainable development. The cases studied demonstrate the

difficulty of creating and sustaining participation in project planning processes over time.

Kupke (1996), Whittaker (1997) and Mercer and Jotkowitz (2000) noted that despite constraints in terms of resourcing, structural change, and legislative uncertainty (lack of effective political power), many local authorities showed a willingness to consider new approaches to sustainable development such as LA21 in Australia.

Bond et al. (1998) demonstrated that, at the beginning, local authorities in the UK were indeed giving more emphasis to environmental issues, this finding being at odds with previous studies and with the concept of sustainability. The research indicated that the cause may be a tendency to place LA 21 within the remit of environment departments and, whether this was the explanation or not, implied that a re-emphasis of effort may be required from the local authorities. Similarly, Carter and Darlow (1997) noted that if Local Agenda 21 was to be meaningful in the UK, all groups and individuals should participate in both the vision and its implementation. This also includes the vested interest groups, business and industry. They should all need to understand its relevance and feel a sense of ownership of the policies and programs for action, and be involved at the formative stages, the more bottom-up the better. Good quality participation demands administrative support and other resources. Dooris (1999) studied UK experience of moving from the margins to the mainstream of the strategic planning process; and, secondly, how to integrate frameworks and strategies in order to minimize duplication and confusion, and maximize synergy and effective working.

Patterson and Theobald (1995, 1996) analyzed LA21 and the new local governance in Britain. The concepts of equality and equity are central components of sustainable development, and the principle of subsidiarity encompasses these concepts, with an emphasis on empowerment and participation by all sectors of society at the local level.

However, it is unclear whether such ideals can be achieved, particularly because local authorities are unable to move towards structures which will enable local participation, due to a lack of resources and a reduction in their powers of decision-making as more and more responsibilities are removed from their control, or are subjected to purely market-based criteria.

Scott (1999) found in a comparative study of LA21 in Mid Wales that, although LA21 is more than a consultative process, it is about action taken at a local level to improve people's quality of life, and this process requires effective partnerships between all relevant interests and a real commitment to make it work. The evidence from the research was that the process can easily become cosmetic and get bogged down in group dynamics and inertia.

Tuxworth (1996) conducted surveys and analysis of LA21 process development in UK local authorities and the results confirmed a gradual emergence of LA21 work from an environmental focus to a strategic approach to issues of environment, economic development, social welfare, and accessibility. The level of awareness of LA21 and commitment to it in general terms appeared high, but the survey results suggest that the full implications of the agenda, particularly those relating to new approaches to partnership, participation, and democracy, had not yet been addressed by all authorities.

Worthington et al. (2003) in their study about East Midlands Sustainable Development Partnerships suggested that private sector participation may be increased by encouraging a more action-orientated and less bureaucratic approach, and by developing more business-led operational forums. Efforts to market LA21 as beneficial to businesses also appear to encourage wider business involvement.

Selman (2000) took an elliptical look at LA21 experience until 2000 in developed countries, especially the UK, and reflected on emergent themes and achievements: first, there is a strong assumption that LA21 is fundamentally about process rather than product, that is, the inclusive way in which it is achieved is more effective in changing attitudes and actions than actual policy statements and projects which arise at the end of the day. Undeniably, the nature of the process is crucially significant. LA21 is leading municipal administrations into new dialogues with citizens and stakeholders which previously had scarcely been imagined, whilst even within local authorities themselves, it has demonstrably assisted the dismantling of departmental silos. A second theme is that of civiness, both when engaging citizens in participatory programs, and replenishing reservoirs of social capital to support activities and networks on the ground. Experience of LA21 suggests three main possibilities: (1) careful use of participatory techniques, backed up with visible evidence that public authorities have acted on their findings, may build up levels of trust, and thus encourage future engagement; (2) a 'mixed economy' of social capital, in which continuity of bureaucratic support for neighborhood catalysts minimizes the risk of burn-out, may optimize the complementary roles of professions and laity; and (3) the use of information technology can open up new opportunities for contributing to debate and the imaginative exploration of future scenarios. A realistic view, shared by many people most closely associated with LA21, is that the process helps manage conflict as much as it identifies common ground, and may be the best available arena in which 'wicked problems' can be explored and mediated.

Finally, Douglas (2014) in his study about the political filter in the local implementation of initiatives relating to urban ecology showed how variations in local political leadership produced different responses in different cities.

-Type 2: Civil Society Initiative

Only 4 papers were classified as Civil Society Initiatives. While civil society is considered as important in several LA21 initiatives there are not many articles reporting experiences in which the role of civil society is pioneer and determinant. Foronda (1998) contributed the case of Chimbote (Peru), in which the leadership comes from a civil society organization which is facilitating local cooperation among many actors, in spite of resistance from the mayor and from fish industry entrepreneurs with their short-term profit-oriented vision of the city. Hordijk (1999) describes how an integrated environmental plan was developed by the inhabitants of informal settlements on the edge of Lima, Peru – and how this formed the basis both for local action and for negotiating support from external agencies. Hordijk stated that this case could be considered as representative of most low-income urban neighborhoods in Latin America, Asia, and Africa in which government – both at local and higher levels – takes a reactive rather than a pro-active role. And she found that developing LA21 from the bottom upwards requires a much longer process than is usually taken for the formulation of an LA21. Similarly, Gaye et al. (2001) studied the case of Rufisque (Senegal). They highlighted the important role played by the wider community in LA21 implementation. The case of Ceredigion County Council in rural Wales is another example (Scott, 1999).

According to Geissel (2009), many participants of LA21 processes in Germany see the most important successes of LA21 as an improved flow of communication and information between the participating actors and a new culture of local co-operation between local politics, administration and civil society. In the same regard, Portney and Cuttler (2010) examined the pursuit of sustainability in the United States in 13 medium-sized (population: 400,000-600,000) cities and found 37 different local programs. They

noted that the cities that were more serious about sustainability displayed more interaction between local public officials and non-profit organizations.

-Type 3: Networking Strategy

The Networking Strategy was followed in 19 cases. These studies tend to show that networks lead to a wide spread of LA21 processes. Networks seem to have an effect in countries with a high sustainability tradition such as Sweden (Eckerberg and Dahlgren, 2007) or Norway, (Aall, 2012) and in countries with a low sustainability background such as Italy (Sancassiani, 2005), Spain (Echebarria et al., 2009, Barrutia and Echebarria, 2013a, 2013b), Turkey (Varol et al. 2011), or Peru (Miranda and Hordijk, 1998; Miranda, 2004).

Networks seem to have an important effect on LA21 diffusion regardless of their specific form. For instance, some cases have been reported in which only local governments are involved (Eckerberg and Dahlgren, 2007); some in which higher levels of government promote the network (Barrutia and Echebarria, 2013a); and others in which municipalities, NGOs, grassroots organizations, universities, and municipalities work together (Miranda and Hordijk, 1998, Miranda, 2004).

Echebarria et al. (2016), Barrutia and Echebarria (2013a, 2013b), and Castiella and Subirats (2007) reported a very wide diffusion of LA21 processes among municipalities in different regions of Spain. Miranda and Hordijk (1998) and Miranda (2004) reported that a network, the so-called Cities for Life Forum, had contributed to the creation and/or implementation of LA21s in 15 of Peru's 26 largest cities. The Peruvian Forum of Cities for Life had stimulated a strong LA21 movement which has no comparison in any of the neighboring countries of South America. Through training, educational services, and technical assistance substantial improvements of individual and

institutional capacities can be achieved, and this has directly or indirectly contributed to better management of cities and their environment, and to a betterment of living conditions. The model of a triangular relationship between municipalities, universities, NGOs, private sector, and civil society had been key to achieve consensus on issues which would have otherwise ended in confrontation and dead ends. The weakness of the Peruvian Agenda 21 process has, however, been the constrained funding situation for municipal investments (Steinberg and Miranda, 2005).

Likewise, Harvold (2003) describes the experiences with LA21 Forums in Norway. In some cities in Norway the “Forum model” was proposed to provide flexibility and be a mechanism for consensus building, as well as to provide a structured framework for pluralist input to policy-making for sustainable development. However, the Norwegian cases demonstrated the difficulties involved in harmonizing planning policies and procedures between a forum and a council. In other words, it was not easy for local authorities and stakeholders to fully integrate sustainability criteria within their development and investment. It may be that the problems met by the “Forum model” in the Norwegian cases were related to culture; these consensus-oriented models may fit certain types of societies, but not others. In a similar vein, Agger (2010) examined the experiences of three LA21 centers in Copenhagen, Denmark, and the evaluation demonstrated that LA21 centers perform several roles in the networks both as initiators of diverse projects, as bridge builders that coordinate the actions between several local as well as municipal actors, and as knowledge providers that translate scientific knowledge on sustainability into the context in question.

Kelly and Moles (2002) provide a description and critique of a case study in the Mid-West Region of Ireland involving interactive methodology to encourage active citizenship and participation. Interaction occurred among groups representative of the

local authorities, the communities, and university-based researchers. These groups collaborated in the iterative selection of a representative set of indicators for application in the region, as a prerequisite for incorporating sustainable development into local authority decision making. This methodology facilitates a multi-stakeholder, pragmatic, and user-orientated approach to sustainable development.

Case study experience emerging from the UK, Germany, and Norway, focusing on the role of local government as a major stakeholder in LA21, showed that the most important aspect of LA21 implementation in any country was support, through local government networks, domestic and international, partnerships with other local actors, policy and financial support from central government, and local commitment through public participation. However, the relative powers of local authorities, financial and resource constraints, the lack of a central coordinating framework, and of political will and information were the main barriers faced but, as the UK example showed, lack of power can encourage action towards greater local self-determination and LA21 (Voisey et al., 1996). By participating in networks cities gain an opportunity to share risk, learn from others and showcase their successes, promoting themselves as frontrunners in the field of sustainable development and stimulating healthy competition and trust among local governments (Barrutia and Echebarria, 2013a, 2013b). Networking can significantly contribute in the diffusion of information, social enhancement, and social capital and the creation of a rippling effect (Mehta, 1996).

-Type 4: Higher Tiers of Government Policy

Only 2 cases were classified in this typology. Gan (1999) studied the case of China, where the traditional system of governance is characterized by governmental policies that are implemented with a top-down approach with poor feedback mechanisms. Being

anxious about political instability, the Chinese government is reluctant to encourage the development of the non-governmental (NGO) sector. Many local governments have budget deficits and have difficulties in committing themselves to long-term sustainable development projects. In this context, China is taking a top-down approach with national priority projects supported by the central government. However, there has been no specific funding for LA21, which is a major challenge to making LA21 operational at the local level (Gan, 1999). A different case was provided by Houghton (2005). This author explains the South African case, where a national program of sustainability capacity building in municipalities was promoted in an effort to assist local government to improve levels of sustainability within their sphere of influence. The analysis revealed the need to consider the ways in which local contexts set the terms for interpretations of sustainability, as these conceptualizations can direct actions for sustainability and may interrelate to assist or hinder the implementation of local level sustainability plans.

-Type 5: International Cooperation

4 International Cooperation processes were identified. Mehta (1996) reported the experiences carried out by 14 municipalities participating in ICLEI's international action research project, the LA21 Model Communities Program (MCP): Buga, Colombia; Cape Town and Durban, South Africa; Hamilton City, New Zealand; Hamilton Wentworth, Canada; Jinja, Uganda; Johannesburg, South Africa; Johnston Shire, Australia; Lancashire County, U.K.; Manus Province, Papua New Guinea; Mwanza, Tanzania; Pimpri Chinchwad, India; Quito, Ecuador; and Santos, Brazil. The selected municipalities adopted the SD planning approach proposed by ICLEI (the Local Agenda 21 Planning Guide, ICLEI 1996). The municipalities and ICLEI jointly evaluated the outcome at the end of a 3-year period. This was a kind of pilot experience

and important lessons were learned. For instance, it was learned that joint dialogues between various stakeholders are necessary for the creation of new knowledge and appreciation of diverse points of view. However, this process becomes effective, focused, and productive only when there is proper facilitation and direction.

Tuts (1998) studied the experience of LA21 implementation in small cities in Kenya, Morocco and Vietnam sponsored by 'The Localizing Agenda 21 Program' of the United Nations Center for Human Settlements (Habitat), which offered a multiyear support system for selected medium-sized cities (between 50,000 and 500,000 inhabitants) in different cultural and institutional contexts to develop their LA21. Tuts found important brakes on the appropriate implementation of LA21, including lack of communication between municipal departments, as information is used as a power tool within the organization; lack of expertise in planning and management and consultation processes which tended to generate long lists of actions without clear priorities; lack of sufficient capacity for local authorities to create partnerships for the formulation and implementation of action plans and to mobilize resources for their implementation.

Hordijk (1999) described how an integrated environmental plan was developed by the inhabitants of informal settlements on the edge of Lima, Peru – and how this formed the basis both for local action and for negotiating support from external agencies. Hordijk stated that this case could be considered as representative of most low-income urban neighborhoods in Latin America, Asia, and Africa in which government – both at the local and higher levels – takes a reactive rather than a pro-active role. And she found that the developing of LA21 from the bottom up requires a much longer process than is usually taken for the formulation of an LA21.

Roberts and Diederichs (2002) studied the first four phases of the LA program, and outlined the difficulties faced in localizing the sustainable development concept in Durban, the first city in South Africa to accept the LA21 mandate as a corporate responsibility. Key amongst these challenges was the initiation and development of the program during a period of local government transformation and restructuring. The perception that Local Agenda 21 had a “green” focus and was “anti-development” (due to its location within an environmental department) resulted in a lack of proactive and sustained political support. These problems were exacerbated by limited human and financial resources, which restricted the program’s capacity to build support and consensus amongst stakeholders.

Overall, the articles reviewed show the potential and limits of different types of local sustainability processes based on their initial driving forces. However, it becomes clear that this area requires much more research. The approach adopted by this article aims to shed some light on this particular topic, drawing on the experience of the local sustainability processes studied.

5. Conclusions and Future Research

Policy makers and politicians have regarded LA21 as a necessary tool for advancing towards sustainability over the past two decades. Hence, LA21 seems to be considered a cornerstone for sustainable development. But what do we empirically know about LA21s, given their proclaimed importance? How evidence-based is the claim that LA21 is a relevant strategy?

To increase our empirical and conceptual understanding of the literature on LA21 processes, we conducted a systematic review of: (a) the sustainable development

concept; and (b) the types of LA21 processes considered. In this section, some conclusions are drawn and a future research agenda is drafted.

Returning to the first research question, concerning the sustainable development concept, the systematic literature review shows that, although at the beginning sustainability and LA21 were seen as a natural extension of environmental policy work in many countries, sustainability has been perceived over recent years as a guiding principle applied to issues of environment, economic development, and social welfare, and LA21 has been regarded as a coherent approach to sustainability planning. The story of local sustainability can be seen as one of (local) administrations adapting their management and governance processes to sustainable development as a cross-cutting issue, going beyond established policy silos. As the articles show, local sustainability is now established within the mainstream, becoming a part of everyday activities for thousands of local governments worldwide under many titles and labels, and there is a genuine belief that LA21 has broken the mold of unsustainable living (Tuxworth, 1996; Selman, 1998, 2000; Joas et al., 2007; O’Riordan, 2009; ICLEI, 2012).

Second, from findings presented in the literature review, which are in line with Echebarria et al., (2009) and ICLEI (2012), LA21 processes can be classified in five types based on their key initial drivers: Local Government Strategy, Civil Society Initiative, Networking Strategy, Higher Tiers of Government Policy, and International Cooperation. If we look at the main driving forces behind local sustainability processes, the most remarkable observation is that in nearly half of the eligible contributions (45 out of 109), Local Government Strategy was the typology followed. However, the literature review tends to conclude that isolated LA21 processes that fit the Local Government Strategy type may suffer important limitations such as:

- lack of government size. The availability of resources is generally linked to size (Kern et al., 2004; Sancassiani, 2005; Nogueiro and Ramos, 2014). Nevertheless, the size factor does not seem to be fully explanatory, as many large municipalities in Europe have not adopted the LA21 tool or were late in doing so. Empirical studies have not confirmed the effect of municipality size on LA21 diffusion (Barrutia and Echebarria, 2013a). Thus, Krueger and Agyeman (2005) studied the USA case and suggested that LA21 had been mainly developed by small cities (with higher levels of education and relatively homogeneous in their population in terms of race and class). Some authors (Barrutia and Echebarria, 2011) argue that although size favors resources availability, LA21 implementation might be more complex in municipalities with a higher population;

- lack of autonomy of municipalities associated with the disposability of resources and environmental, economic, and social competences. Adolfsson-Jörby (2000; 2002) and Eckerberg and Dahlgren (2007) stress this variable when analyzing the case of Sweden. Joas et al (2007) associated a high level of autonomy with successful implementation of LA21. It is interesting that these authors placed more emphasis on the emotional capacities that autonomy furnishes than on the actual resources and competences it implies. Gaye et al. (2001) achieved a similar finding. They showed that decentralization in Senegal had encouraged LA21 processes, although decentralization of responsibilities had not been accompanied by measures to ensure local financial capacity to meet them. However, they also argued that processes had been weak due to lack of resources. Mercer and Jotkowitz (2000) studied barriers to LA21 processes at the local government level in Victoria, Australia, and found that, by comparison with many overseas countries, an enormous barrier to local environmental policy formulation

was the lack of effective political power of both local government and the citizenry, in terms of influencing what happens at the local level;

- a lack of social and environmental experience and/ or culture. For instance, Eckerberg and Forsberg (1998), in relation to Sweden, and Gram-Hanssen (2000), for the Danish context, refer to a wide range of experiences and projects developed in the 1960s and 1970s, respectively, that could be considered to fit within the LA21 field of action.

Similarly, a big tradition of participation was key in the case of pioneering countries, such as Sweden, Denmark, or Holland (e.g. Aall, 2012; Agger, 2010; Hoppe and Coenen, 2011). In a similar vein, Kupke (1996) studied the level of commitment to the LA21 process from local governments in South Australia, and highlighted problems in its implementation such as lack of training in environmental management, and a trend whereby local discretionary funding decreases and specific purpose grants increase, which does not facilitate integration or long term planning of local council operations;

- lack of a style of governance adapted to principles of good governance. Evans et al (2006) stress the importance of good governance, defined as institutional and social capital at the local level of government, as a precondition for sustainability initiatives like LA21 to be adopted and widespread; Kusakabe (2013) suggested that the types of governance available in communities make a difference in their LA21 outcomes;

- absence of key individuals (civil servants or politicians with sufficient charisma and commitment to motivate others and to promote the sustainability agenda). Some authors have emphasized the presence in the municipality of key individuals (civil servants or politicians) capable of driving a local sustainable development process forward (Barrutia et al, 2007; Joas et al., 2007; Masnavi, 2013; Senbel, 2015). Evans et al. (2006) conducted the European research project DISCUS (Developing Institutional and

Social Capacity for Sustainable Development) and found many cases where Mayors were perceived by others as entrepreneurial figures with sufficient charisma and commitment to motivate others and promote the sustainability agenda. These individuals have been given different labels such as local catalysts, frontrunners, and/or local firebrands (Mehta, 1996; Eckerberg and Forsberg, 1998; Miranda and Hordijk, 1998; Rowe, 2000; Joas and Gronholm, 2004; Barrutia et al., 2007). Several studies (qualitative and quantitative) have confirmed the prominence of key individuals in the spread of LA21 processes (Barrutia and Echebarria, 2011, 2013b; Masnavi, 2013). Most successful processes integrate external and internal leadership. When external leadership does not exist, processes may be supported by municipal leadership, as in Portugal where an increasing number of processes are explained by important commitment from local leaders towards LA21 (Carter et al., 2009). As explained by Fidelis and Moreno-Pires (2009), LA21 in Portugal is strongly and truly rooted in voluntary and somewhat disorganized local initiatives, curiously driven by smaller local authorities in the main, with small populations, few environmental pressures and sharp economic and social problems;

- and lack of a political orientation favorable to a sustainable development philosophy.

In Italy, for instance, Sancassiani (2005) found that 72% of LA21 processes were promoted by center-left governments. Eckerberg and Dahlgren (2007) found that municipalities governed by socialist parties, or socialists in coalition with the Green party, were more active in LA21 than those governed by non-socialist parties;

Third, some of the successful networks studied in the literature have been promoted by Higher Tiers of Government (Sancassiani, 2005; Echebarria et al., 2009). However, leadership, long-term commitment, the provision of human and financial resources and provision of knowledge for the LA21 tool from Higher Tiers of Government designed

to reduce local authorities' perceptions of uncertainty and fears, has not been a common place (only 2 articles were classified in this typology). As an example, Eckerberg and Dahlgren (2007) studied the Sweden case and found that a widespread opinion among LA21 coordinators was that there was a lack of political leadership for sustainable development at the national level and that many national policies contradict sustainable development. International experience shows that, when long-term commitment from higher levels of government is lacking, a high diffusion of LA21 processes in a specific geographical area cannot be expected (Gan, 1999; Echebarria et al, 2004; Houghton, 2005; García-Sánchez and Prado-Lorenzo, 2008). In addition, demand for more funding and human resources is a constant in every country (Patterson and Theobald, 1996; Coenen, 2001; Sancassiani, 2005; Dezelan and Maksuti, 2014). But all these fragmented and sometimes redundant and contradictory instances of support show a lack of comprehensiveness, density, and integration (Echebarria et al., 2009).

Fourth, the Networking Strategy was followed in 19 cases. In this typology, a comprehensive (all actors included), dense (strong links between them), and integrated (the network structure and initiatives are agreed by consensus) policy network of relevant actors runs as a "value network" (Brandenburger and Nalebuff, 1996; Echebarria et al., 2009; Masnavi, 2013) that offers significant additional value to adopters of the LA 21 tool by generating network externalities (Frels et al., 2003). Policy networks also involve a higher level of commitment from the network drivers and those who take part in them. In other words, the basic idea behind policy networks is mutual benefit (Echebarria et al., 2009; Kusakabe, 2013). In particular, networks seem to have an important effect on LA21 diffusion regardless of their specific form. Barrutia and Echebarria (2013a) found that networking generates a chain of interrelated effects that leads to higher levels of engagement of local authorities with LA21

processes. They showed that networking benefits, in terms of learning and social enhancement, positively affect perceptions of trust and identification (social capital) and lead to the involvement of local authorities in co-creation activities, and loyalty to LA21 processes.

Fifth, it seems clear from the literature review that Civil Society Initiatives (only 4 papers) need to cultivate a positive and productive relationship with the local government to achieve their goals. Likewise, the 4 International Cooperation processes identified allowed us to affirm that local actors need direct communication and accountability channels linking them to international donors, as well as long-term engagement, and activities sufficiently rooted in the local context. Therefore, this process becomes effective, focused, and productive only when there is proper facilitation and direction.

What do these results imply for the role of LA21 in sustainable development? To address this question, a number of considerations need to be taken into consideration: first, if we look at the progress of sustainable development on a global scale we can argue that LA21s have helped to facilitate local government policy innovation, both in relation to the internal organizational arrangements of local authorities, and in the ways that they deal with the local community. LA21s have allowed the identification, monitoring, and enhancement of good practice to be implemented by different actors in local communities. The literature review definitely highlights the importance of local implementation of sustainable development. Secondly, if we look at the key driving forces that have been identified behind local sustainability processes, we can say that we are now able to assess how local sustainability processes come into being. The literature review shows that LA21 processes have been headed in the right direction, bringing governance closer to people whilst also integrating it into a new multilevel regional and/

or national governance system, capable of dealing with complex challenges that global society is facing. However, despite these achievements, it is necessary to mention that there is a deficit in the scope of the theoretical background. Local governance processes towards sustainable development are weakly conceptualized and there is a dominance of case-studies in the field. Consequently, we consider that the literature on local sustainability processes could greatly benefit from a stronger theoretical debate.

Given these conclusions, what does a possible future research agenda look like? The first suggestion is to gain more knowledge about the LA21 process types being studied in order to contribute to a better understanding of the development of local sustainability processes. Our literature review may help to provide this understanding in two ways: first, we would like to emphasize that future studies should explicitly address how these driving forces work effectively. Furthermore, there is still much to investigate regarding the outcomes of LA21 processes. Hence, more in-depth studies are needed to capture the experience of different actors active on a local level, including community organizations, businesses, and other stakeholders, as well as to further explore the diversity of local processes and their impacts, both at the local level and beyond.

The second suggestion is methodological. The literature review on LA21 relies largely on case studies. This is understandable given the importance of contextual factors. However, there are a few possibilities for generalization. First, comparison between cases from different countries can show to what extent state tradition or governance structure influence LA21 processes. Second, quantitative approaches can show the weight of the main driving forces behind LA21 processes. Future studies could therefore be devoted to defining scales with which to measure these driving forces.

The last research suggestion is empirical. Lessons learnt from the LA21 experience can be very valuable in designing future instruments, e.g. in the field of climate change adaptation (Aall, 2012). With growing awareness of the inevitability of climate change, issues related to climate change vulnerability and adaptation have risen sharply on the global agenda. However, it is increasingly understood that global commitments, particularly in the field of sustainable development, are to be implemented locally, and mechanisms consequently need to be put in place to enable local, national, and international levels to work together and obtain real change in public policy-making.

Finally, although the notion of LA21 has evolved over time, this tool has inspired local governments worldwide to engage in voluntary sustainable development initiatives. These initiatives have made a lasting mark not only on local but also on national and international governance systems, profoundly changing the way we think about sustainable development and pushing the boundaries of what is achievable. The spirit of “thinking global and acting local” becomes all the more pertinent.

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Table 1
Journals/ # Articles Considered (ultimately)

JOURNAL	PERIOD	# OF ARTICLES	%
Local Environment	1994-2015	21	19.27%
Journal of Environmental Planning and Management	1994-2015	11	10.1%
Environment and Urbanization	1994-2015	10	9.2%
Journal of Cleaner Production	1994-2015	6	5.5%
Ekonomiaz	1994-2015	5	4.6%
Local Government Studies	1994-2015	5	4.6%
Geoforum	1994-2015	4	3.66%
Sustainable Development	1994-2015	4	3.66%
European Urban and Regional Studies	1994-2015	3	2.75%
Journal of Environmental Policy & Planning	1994-2015	3	2.75%
Environment and Planning A	1994-2015	2	1.83%
Environmental Politics	1994-2015	2	1.83%
European Environment	1994-2015	2	1.83%
European Planning Studies	1994-2015	2	1.83%
Habitat International	1994-2015	2	1.83%
International Journal of Sustainable Development & World Ecology	1994-2015	2	1.83%
Planning Practice & Research	1994-2015	2	1.83%
Other (23 different journals with 1 article)	1994-2015	23	21.10%
TOTAL SUM		109	100%

Figure 1
The Systematic Literature Review Flow Diagram

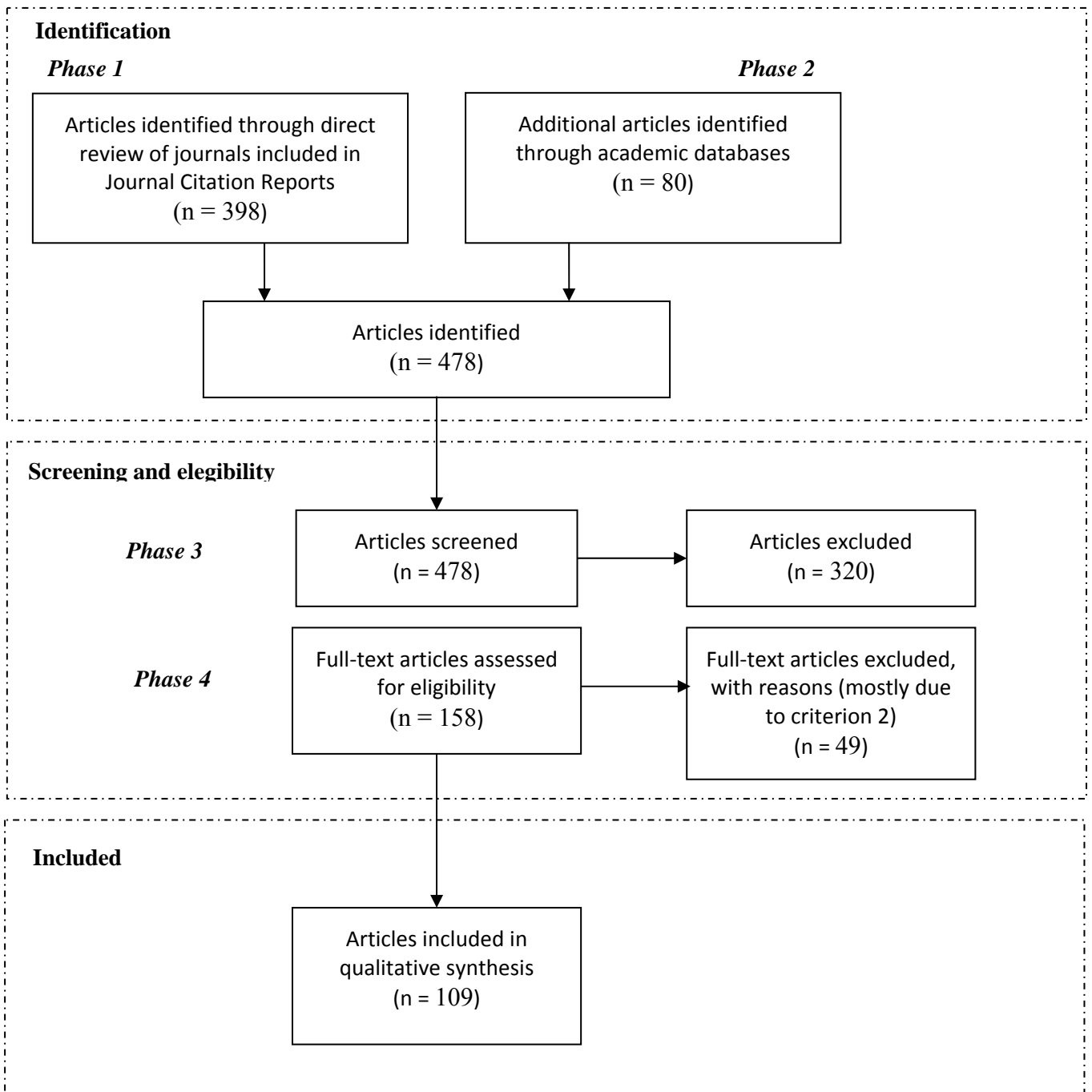


Fig. 2
Publications per year

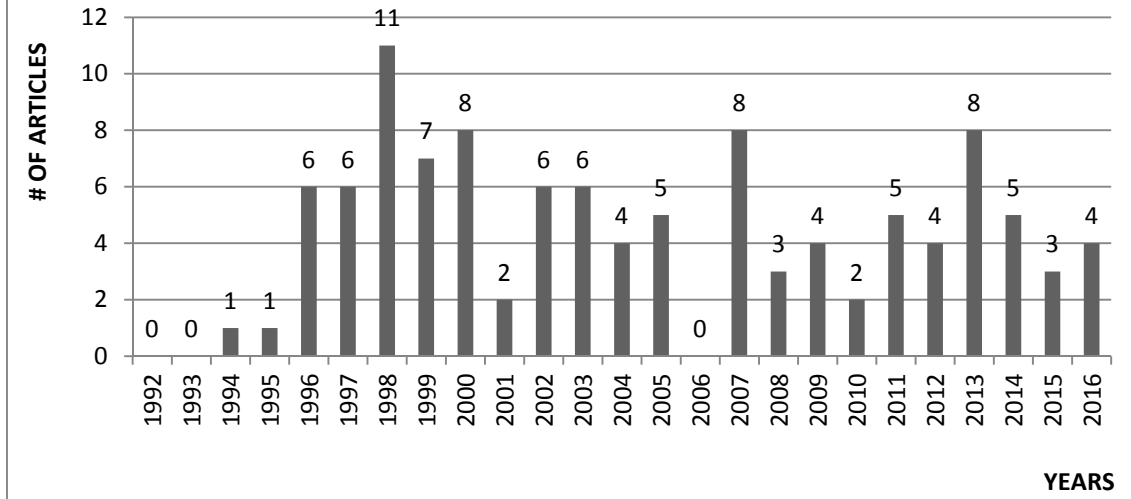


Figure 3
Typology of Local Sustainability Processes

