

*Full Length Research Paper*

# The local agenda 21 in Andalusia, Spain: A model for sustainable innovation

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**This study proposes an integrative model that includes a set of variables that define and influence an innovation process. This model suggest that, both organizational and institutional factors, affects the innovation process. The innovation under study is the implementation of a sustainable practice, the Local Agenda 21 (LA21), by the local councils in Andalusia, Spain. Since 2002, the City 21 program encourages these organizations adopting a LA21. The paper proposes, through thirteen case studies, nine propositions that show how empowerment, receptiveness to the change, climate of implementation, support for the implementation, culture organizational, institutional pressures, communication and coordination and participation of stakeholders are relevant factors that affect this innovation process.**

**Key words:** Innovation, local agenda 21, sustainable development, institutional theory.

## INTRODUCTION

In recent decades, environmental issues have awakened great interest and concern. Due to this, organizations are facing increasing pressures to adopt new practices. One of these practices is the Local Agenda 21 (LA21), a sustainable practice that since 1992 is being implemented by local councils around the world.

In Spain, the greatest impulse to become involved in this effort has not come from the national level but, in many cases, from the autonomous communities, which have played a relevant role in promoting the adoption of the LA21 in their town councils. This is the case in the autonomous community of Andalusia, which has, for some years, been encouraging Andalusian town councils to adopt behaviours that make Andalusian cities and towns more sustainable, through the Program for Urban Environmental Sustainability "City 21".

The scholarly literature on innovation was for a long time not very voluminous, but this is now rapidly changing (Fagerberg and Verspagen, 2009), and we can find, in the last years, new research about innovation within a

regional context (Coronado et al., 2008; Galia and Legros, 2004; Howells, 2005) and in the public sector (Osborne, 1998; Borins, 2001; Bartlett and Dibben, 2002). We want to contribute to develop this emerging field. In this paper, the organizations under study will be the Andalusian local councils that belong to the City 21 program and the innovation under study will be the LA21. Adopting the LA21 means incorporating a new and thus, an innovative practice for the specific context of each town council. Although, there are case studies that examine the performance of some LA21 programs, the literature has not explored the reasons for adoption (Owen and Videras, 2008).

The main research question guiding this study is how and why innovation in the area of sustainable development begins, develops, is implemented, and (perhaps) ends in a municipality. This question requires studying the sequence of decisions and actions related to the adoption and the implementation of the innovation. Further, it requires identifying both the external and the internal factors that influence the implementation of the LA21 programs.

To achieve this, we analyzed, using case studies, the particular situation regarding sustainable development in

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Andalusia and the implementation of the LA21s in the different municipalities that joined City 21 program. We hope to learn why specific actions were taken in relation to the adoption of LA21, where and for whom they were taken, how they were and continue to be implemented, what changes are being produced and with what results. In other words, our goal is to study a process of municipal innovation during the whole of the life cycle of the innovation.

To achieve this goal, we begin by defining the LA21 and the City 21 program and how were created. Next, we explain the methodology: We focus first on the research design, secondly on the data collection, and thirdly on the data analysis. Next, we present the main results through nine propositions based on the innovation process and the organizational and institutional factors we observed to influence the process of implementation of the LA21 in the town councils. We then present an integrative model that includes the set of variables that define and condition the innovation process. Finally, the main conclusions are presented at the end of the paper.

## AGENDA 21 AND CITY 21 PROGRAMS

As we said, in recent decades, environmental issues have awakened great interest and concern. After an era in which the goal of economic growth was pursued without taking environmental limits into account, society began to realize that this form of action was destroying the environment. Especially in the 1990s, a large number of organizations and government initiatives as well as much public opinion came to focus on the value of the environment. As awareness of the environment's importance grew, people no longer saw economic growth as incompatible with preserving the environment. The concept of sustainable development was born, defined as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundlant, 1987).

At the United Nations Conference on Environment and Development, known as the Earth Summit and celebrated in Rio de Janeiro in 1992, one of the agreements approved by the participating governments was Agenda 21, a world action plan to promote sustainable development. Chapter 28 invokes the principle of subsidiarity (authorities that make specific decisions should be those in closest contact with the people involved) to appeal to local authorities to establish strategies of sustainable development. Chapter 28 encourages these authorities to create their own LA21 that includes the general objectives of Agenda 21 translated into a city or town's own concrete plans.

The European response to the Rio Summit concerning local initiatives took concrete form in the 1994 First European Conference on Sustainable Cities and Towns, convened in Aalborg (Denmark). Here, the Aalborg

charter was developed, a document to be signed by local European authorities that committed to participating in the LA21 process. Four more conferences followed to evaluate the progress achieved and determine next steps. The second conference was held in Lisbon (Portugal) in 1996, the third in Hannover (Germany) in 2000, the fourth again in Aalborg in 2004 and the fifth in Seville (Spain) in 2007 and the sixth in Dunkerke (France) in 2010. In Europe, more than 2500 city governments have already agreed to adhere to the Aalborg charter, committing themselves to implementing an LA21.

In Spain, the greatest impulse to become involved in this effort has come from the autonomous communities. This is the case in the autonomous community of Andalusia. In 2002, the City 21 Program was created to promote the adoption of the LA21 in the Andalusian local councils. The goal of City 21 Program, initiated by the Council for the Environment of the Andalusian government in collaboration with Andalusian Federation of Towns and Cities is improving the quality of the urban environment substantially within the framework of initiatives that foster sustainable development. To this end, it offers support and technical advice to Andalusian cities that show their commitment to creating a local action plan for sustainability and fostering citizen participation.

City 21 program is directed to all municipalities in Andalusia that belong to the Network of Sustainable Cities in Andalusia, although an initial phase considered including those with over 10,000 inhabitants and some in the Network of Natural Protected Areas of Andalusia. The program is voluntary. The city government commits itself to analyze and co-finance a diagnosis, improve the quality of the municipality's environment, establish tools that develop citizen participation, and define and undertake a local action plan. The order of the program is to be the following: Environmental diagnosis, citizen participation plan, environmental action plan, diffusion plan, and follow-up plan.

In the first call for participants, 111 municipalities of the 770 in Andalusia joined, representing nearly 5,000,000 inhabitants of the over 7,400,000 inhabitants of Andalusia. Later, after a second call, the number of municipalities participating rose to 231.

As organizations under study, the town councils operate in an institutional context with general pressures to change in general. Specially, the pressure is toward activities directed to protecting the environment and achieving sustainability. The pressures that this kind of organization faces to frame its activities within the goal of sustainable development are increasing. Due to the fact that town councils are one of the organizations closest to the people, they have been forced to respond to these new demands by considering a series of conditioning factors that direct them to new behaviours expressed in new practices such as the LA21.

The change involved in this initiative requires coherent

management of a multitude of factors that can affect the successful implementation of the idea of sustainability. It is believed that the identification and understanding of these factors will encourage the achievement of sustainable results. Although, the idea of achieving sustainable environments has a strong start, the overall idea presents its own obstacles that could weaken support among governments, administrations, authorities and citizens.

Based on this premise, we choose case studies as methodology, because, according to Yin (1989), "case studies are the best research strategy when "how" and "why" are the questions formulated, when the researcher has little or no control over the events and when interest focuses on an everyday phenomenon in some real-life context". Our research question is, as we said before, how and why innovation in the area of sustainable development begins, develops, is implemented, and (perhaps) ends in a municipality.

## METHODOLOGY

### Research design: Case study approach

Case study is a methodology that enables the researcher to study a topic as a dynamic and not a static process (Chetty, 1996). Further, as Gummesson (1988) argues, "conventional research methods are hardly applicable to studies of processes for change in companies". According to Bartlett and Dibben (2002), this methodology is well-suited to the complexity of studying the innovation process within the organisations encountered in a local governance context as it permits inductive analysis at multiple levels of analyses and facilitates the development of grounded theory and concepts.

The design of our research takes into account the two concerns expressed in the previous paragraphs; the whole picture and time, using what Yin (1989) describes as a "multiple case design". According to Eisenhardt (1991) "multiple cases are a powerful means to create theory because they permit replication and extension among individual cases". Taking these considerations into account, we will now explain the specific focus of the research performed.

The study started from the assumption that adopting the LA21 means incorporating a new and thus an innovative practice for the specific context of each town council. This is a premise congruent with the following definition of innovation: "Innovation is the sequence of activities by which a new element is introduced into a social unit, with the intention of benefiting the unit, some part of it, or the wider society. The element need not be entirely novel or unfamiliar to members of the unit, but it must involve some perceptible change or challenge to the status quo" (King, 1992). In the context of the current study, we can define the LA21 as an innovation introduced into a specific social reality, the town council, an innovation whose implementation requires a series of actions intended to help the municipality.

According to Taylor and McAdam (2004), research on the successful adoption and implementation of an innovation requires additional research to identify the underlying processes and structures through which organizations manage to assimilate an innovation successfully and, ultimately, to change.

Due to the exploratory nature of this research and the interest in identifying the main actors, events, activities and influences that affect the progress of innovation, we selected the research strategy proposed by Eisenhardt (1989), which he calls "building theory from case study research". One type of research attempts to develop a

theory using case studies. This means the researcher initiates the study "as close as possible to the ideal of no theory under consideration and no hypotheses to test" (Eisenhardt, 1989). Given the wealth and depth of data it provides, this research strategy continues to be recommended in the most recent studies of the adoption and implementation of innovations (Taylor and McAdam, 2004).

Although, it is not common in theory-building studies, it is valuable to specify here, in line with the research questions that guide the study, a core set of constructs or variables that may be important in the innovation process (Eisenhardt, 1989). This is also supported by Van de Ven and Poole (1990) —"implicitly or explicitly, the study of any change or innovation process requires a set of categories or variables to describe innovation development"— even if, as Eisenhardt (1989) states, "no construct is guaranteed a place in the resultant theory, no matter how well it is measured".

Following the definition of the innovation process provided by researchers Schroeder et al. (1989), we have adopted the five concepts that guided the data collection in their study: ideas, people, transactions, context and results. The concepts were selected because they constitute central factors of interest for innovation managers (Van de Ven, 1986), insofar as "the innovation process consists of motivating and coordinating people to develop and implement new ideas, by engaging in transactions (or relationships) with others and making the adaptations needed to achieve desired outcomes within changing institutional and organizational contexts" (Van de Ven and Poole, 1989).

Further, as the foregoing definition of the innovation process summarizes, the context in which the development of an innovation will take place will affect the success of its implementation. That is, one cannot separate an innovation from the context in which it is generated and performed. "One must see the process of organizational change within the broad context that includes the environment, which in itself consists of other organizations as well as social, political and economic patterns and changes and these efforts toward change in organizations" (Hall, 1996). Therefore, two broad theoretical constructs would be the existence of organizational and institutional variables that can affect the successful development of the innovation. If the innovation succeeds in the first town councils that adopt the program, the practice will spread to the other municipalities and will produce the institutionalization of the innovation (Tolbert and Zucker, 1996). This institutionalization will be affected by both the external and the internal institutional context (Kostova and Roth, 2002).

Our study included thirteen town councils belonging to City 21 program in Andalusia, in the south of Spain. We used theoretical sampling to determine our number of cases. Our goal was to choose cases which were likely to replicate or extend the emergent theory, and we stopped adding cases when our incremental learning diminished (Eisenhardt, 1989). All 8 provinces of Andalusia were represented in the thirteen town councils visited. These town councils also represent municipalities of different size and number of inhabitants. One of the municipalities has fewer than 5000 inhabitants, three have more than 50,000, and nine have 5000 to 50,000 inhabitants. However, one must keep in mind that LA21 is a program open to all municipalities that attempt sustainable development. Table 1 shows the number of inhabitants of each of the thirteen municipalities visited.

### Data collection

Data collection was guided by the goal of studying the innovation process from start to finish. In this study, the data were collected through interviews, direct observation and archive sources within the logic of triangulation in the research (Eisenhardt, 1989). The interview was the most used technique of the three mentioned

**Table 1.** The five concepts that guided the data collection in our study.

Town council	Information of interest and specific obtained within each town council's case history
Ideas	How people responsible for the implementation of LA21 define the content of the innovation at that time. Principal motivation with the process. Methodology followed in the implementation of the innovation. Level of development of the implementation of innovation.
People	People and interest groups involved in the innovation process, the roles and the activities that they perform over time, and how define problems and make decisions.
Transactions	Formal and informal relationships between people responsible for the innovation and other organizations and groups involved in the innovative effort.
Context	Organizational and institutional factors that provide opportunities and constraints on innovation process.
Outcomes	Outputs and assessments by people responsible of the innovation regarding how the innovation is progressing and achieving its expectations over time.

earlier. According to Yin (1984), this is one of the most important sources of information in case studies. It is also important that the interview should allow us to observe as well as to ask questions (Babbie, 1989). Furthermore, each interview was conducted for at least two researchers, with one primarily responsible for the interview and the other for taking notes and filling in gaps in the questioning. Immediately after an interview, the researchers cross-checked facts and recorded their impressions. The use of multiple researchers enhances the creative potential of the study and the convergence of observations from them enhances confidence in the findings (Eisenhardt, 1989).

We will now describe the stages of the data collection procedure. The *first phase* consisted of compiling and analyzing information from a large number of source documents in order to start from the actual state of City 21 program and the Andalusian municipalities at the time the research was begun. Conversations held with the technical secretary of City 21 program were also crucial in achieving this goal, as this official provided documentation and support whenever necessary. The second phase consisted of performing an exploratory investigation *in situ*. We investigated the state of development of the LA21 in thirteen city governments: Vcar, Jerez de la Frontera, San Roque, Montilla, Cartaya, Granada, Motril, Montoro, Punta Umbra, Villacarrillo, Fuente de Piedra, Arahal and El Viso del Alcor. In each city government, we carried out in-depth interviews with the official responsible for implementing the LA21 in order to gather information from people directly involved in the process. In this case the questions were aimed at obtaining precise information about the concepts on which the study of implementing the LA21 was concentrated.

We first had to develop the script of the in-depth personal interview addressed to those responsible for the program in the different town councils chosen. The personal interviews allowed us to obtain firsthand information on the specific situation in the city government and the municipality. The personal interview performed in the city hall itself enabled us to use direct observation as a means of gathering information. Further, this kind of interview gives some flexibility in gathering information, as it is open to any kind of suggestion or comment from the interviewee. The specific model of the interview was developed from the format of a mixed interview, with questions that were both open (leaving room for free expression, although adding the disadvantage of making subsequent analysis of the data more difficult) and closed analysis (with fixed and specifically detailed responses).

The interviews were backed up with direct observation and the study of documents (diagnosis documents, participation plans, meetings proceedings, brochures about the LA21, general and specific reports, etc.).

#### Data analysis

Data analysis is both the most difficult and the least codified part of building theory from case studies, since "unlike hypothesis-testing research, inductive research lacks a generally accepted model for its central creative process" (Eisenhardt and Bourgeois, 1988). Following one of the tactics proposed by Eisenhardt (1989), we used the following approach. First, in order to be intimately familiar with each town council individually, a case history was created for each of the town councils studied to describe the origin and development of the LA21 implementation. This allowed us to identify the specific development patterns that might appear within each town council before pushing to generalize patterns across cases. Second, in order to find patterns between cases, we organized all the information included in the case histories according to the five concepts that guided the data collection in our study: ideas, people, transactions, context and results. Then, we proceeded looking for similarities and differences between cases. Table 1 shows the five concepts mentioned earlier and the general information that they consider.

The analysis procedure was carried out by means of discussion groups. First, the four researchers exchanged analysis and searched for patterns in the data; second, the researchers had meetings with the technical secretary of City 21 program in order to obtain a greater consensus regarding the implementation of innovation by the different town councils.

After looking for similarities and differences between the cases, the process that follows is highly iterative, since it consists of systematically comparing the emerging structure with the evidence from each case. The aim is that the researchers should continuously compare the theory and the data, interacting towards a theory that will closely fit the data (Eisenhardt, 1989). After much iteration between data and propositions, we used comparisons with the existing literature to highlight our results. "Tying the emergent theory to existing literature enhances the internal validity, the possibility of generalization, and the theoretical level of theory building from case study research" (Eisenhardt, 1989).

## RESULTS AND DISCUSSION

### Presentation of propositions

The research enables us to identify a group of propositions based on the innovation process and the organizational and institutional factors that we observed to influence the process of implementation of the LA21 in the town councils.

P<sub>1</sub>: The empowerment given to the town council's employees in City 21 program has a positive influence on the adoption of the LA21.

Empowerment is a concept that seeks to explain the importance of delegating power and authority to subordinates by conferring on them a feeling of the importance of their work, thereby generating a "culture of contribution" (Fisher, 2004) among all of the organization's members and levels. In the process of the LA21, this culture is crucial for ensuring that all of the councils are involved in the process from the beginning and that the workers in each of them perceive that their role is crucial to the implementation of this innovative practice.

According to Thomas and Velthouse (1990), the concept of empowerment has multiple facets that can be summarized in four concepts that reflect an individual's orientation to the role he or she performs in the workplace. These are: meaning, such as the value of the objective or goal of the work relative to the individual's own ideals or standards; *competence*, that is, the individual's belief in his or her ability to perform tasks skilfully; self-determination, or the individual's sense of making his or her own choices in initiating and controlling his or her actions; and *impact*, or the degree to which the individual can influence the results through his or her work, whether these results are strategic, administrative or operative. Empowerment is a motivating variable that will become evident in these four cognitive facets: meaning, competence, self-determination and impact. Together, these facets reflect an active rather than passive orientation to performing work (Spreitzer, 1995).

According to the aforementioned authors, Thomas and Velthouse (1990), two significant results of *empowerment* will be effective organization and innovative behaviour. Thanks to the empowerment, the worker feels more autonomous and more creative in acting with fewer restrictions than usual. In addition, his or her behaviour will become more innovative. Empowerment helps to stimulate and manage change in organizations (Conger and Kanungo, 1988).

As to empowerment, the people interviewed expressed the importance that their work has for them personally, the value of the activities that they perform and the great value that their work has for them, illustrating the importance of the idea expressed by empowerment. Regarding the second concept, competence, the people interviewed showed great confidence in their preparation

and abilities to perform their tasks, as well as their possession of the technical knowledge needed to perform their work. Regarding self-determination, most stated that they were granted the autonomy to do their work and were allowed great independence and freedom in deciding how to perform it. The perceived impact of their work on what happened in their department was also substantial. Finally, as to the impact of their work, most say that they have great control and influence over what happens in their departments. This shows that the leadership team of the town council actively supported the initiative of adopting the LA21 to make it a success.

P<sub>2</sub>: Receptiveness to the change in the town councils in City 21 program positively supports the implementation of innovation.

As Beckhard and Harris (1987) indicate, resistance to change is a normal part of the process of change. One of the principal obstacles for local and regional governments is their unreceptive attitude to proposed changes (Coronado et al., 2008). Organizations are "stabilizing forces" (Klein and Knight, 2005). However, organizations can differ in the extent to which they are open to change and value it as a goal (Holahan et al., 2004). Following these authors, the current study has included the variable of receptiveness to change, as "organizations high on receptivity toward change value change, experimentation, and doing things differently. Thus, "these organizations may have norms or structures that enable them to implement new policies and practices that support innovation implementation more readily and to adjust these policies and practices as needed" (Holahan et al., 2004). The LA21 requires the city governments and their personnel to incorporate new criteria in decision-making, new practices and new initiatives in the city government, as well as incorporating new personnel with specialized knowledge in this area. Successfully implementing the LA21 will require environments receptive to the changes and capable of anticipating and managing possible resistance, environments with enthusiasm for the new project. As one of our interviewees told us, "we have to believe in the agenda". Success also requires flexibility from the town council and its capacity to adapt when confronted by those who benefit from the status quo. As indicated, the town councils studied are all in the implementation phase of the LA21, a phase characterized by the resistance that most hinders change (Pardo del Val and Martínez, 2005).

In our study, receptiveness to change was defined according to the views that the person interviewed held on issues related to the extent to which the LA21 was adopted without resistance. The town council was perceived as flexible and open to change. Most of the people interviewed stated that the members of the town council did not strongly resist adoption of the LA21 but rather accepted and supported it with great enthusiasm, showing the town council to be flexible and to adapt to

continual change. Nor did the interviewees agree with the statement that the town council was more interested in keeping things as they were than in change. There thus seems to be great receptiveness to change in the town councils that have adopted LA21.

To overcome resistance to change, it is advisable to invest in developing a positive climate surrounding the innovation. "Climate is the atmosphere that employees perceive is created in their organizations by practices, procedures, and rewards. These perceptions are developed on a day-to-day basis. They are not based on what management, the company newsletter, or the annual report proclaim — rather, the perceptions are based on executives behaviour and the actions they reward" (Schneider et al., 1994). Those in charge of an organization create a specific climate through what they do, not what they say.

According to these authors, then, the employees observe what happens to and around them and draw conclusions about their organization's priorities. They then establish their own priorities accordingly. These perceptions orient how employees focus their energies and skills, which in turn becomes a major factor in the creation of the climate. A conceptualization of climate consistent with the work of Klein and Sorra (1996) affirms that the climate for implementation in an organization is a "targeted employees shared summary perceptions of the extent to which their use of a specific innovation is rewarded, supported, and expected within their organization". According to these authors, "the more comprehensive and consistently implementation policies and practices are perceived by targeted employees to encourage, cultivate, and reward their use of a given innovation, the stronger the climate for implementation of that innovation" (Klein and Sorra, 1996). Thus, the more employees responsible for and affected by the LA21 innovation perceive it to be a priority for the municipality and recognize efforts made on the innovation's behalf to make its goals a success, that is, the more the LA21 implementation is considered an important goal in their municipality, the more not only will they feel concern and motivation to take maximum advantage of the LA21, but the more a climate will emerge to push the process of implementing the LA21 forward. The more these perceptions are discussed and shared in the town council, the stronger this climate will be.

As a result of our observations according to the climate of implementation of the innovation in the different town councils studied, we were able to make the following proposal:

P<sub>3</sub>: The climate of implementation of the innovation in the town councils in City 21 Program will have a positive influence on the success of the implementation of the LA21.

The climate of implementation was defined according to a series of the interviewee's perceptions about issues

related to the priority, effort, commitment and motivation shown by their town council. From those interviewed, we could confirm the perception that implementation of the LA21 was considered to have high priority in the town council and that one of the town council's goals was to use the LA21 effectively, showing that it was concerned with the success of this practice. On the other hand, support for the implementation is a variable related to the climate of implementation, given that much support from the team leading the town council should help to create a better climate for implementation of the innovation.

The literature on organizational change and innovation (Angle and Van de Ven, 1989; Beer, 1988; Klein and Sorra, 1996; Nadler and Tushman, 1989) suggests that the main antecedent of climate favourable to implementation in an organization is precisely the leadership team's support for the innovation. Yet despite leadership support, it is clear that in many cases the team fails to give its own support. Klein and Sorra propose two reasons why this happens: first, the team does not allow participation from people lower in the town council's hierarchy; second, there is lack of a deep understanding of the change (Klein and Sorra, 1996). If we focus on the second reason, the failure may be due to the fact that, because the team lacks sufficient knowledge of the innovation, it delegates the implementation to town council workers who possess this knowledge but lack the authority and resources to create a strong climate for implementation. In the case of the LA21, although, the decision to adopt the agenda comes from the mayor and the rest of the leadership team, implementation may fall to other positions in the organization (whether the counsellor for the environment, the technical expert for environment, agents for local development, etc.) who have greater knowledge of what is involved in the LA21 process but do not possess either sufficient authority or sufficient resources to stimulate a better climate for implementation of the LA21.

Thus, although, the coordination and organization of the LA21 process is delegated to other areas of the city government, there must be active support from the leadership team at every moment. The team must show strong interest, emphasize the importance of the LA21 to the town council and the municipality, and share seriously in its implementation. In general, the leaders' support for implementation of the innovation is related significantly and positively to the quality of the policies and practices of an organization (Klein et al., 2001, Imran et al., 2010). In our case, as a result of our observations, we were able to make the following proposal:

P<sub>4</sub>: Support for the implementation of the LA21 by the leadership team of the town council will improve the climate for implementation of LA21 in the town councils in City 21 program.

Support for the implementation was defined through the views of the person interviewed on issues related to

support from the town council's leadership team for the implementation of the LA21. Those interviewed agreed that this team was seriously committed to the successful implementation of the LA21 and emphasized its importance for the town council which took active interest in the problems and successes of the LA21. They disagreed with the statement that the leadership team showed little interest in the LA21. Likewise, they did not express doubts about whether the LA21 would really help the town council, and their confidence influenced the success of implementing the practice.

A concept closely related to an organization's climate is the concept of culture. Culture is farther-reaching and deeper than climate and includes "beliefs, expectations and fundamental or basic principles shared by the members of an organization" (Leal, 1990). According to Burnside (1990), the climate is defined as "what we are doing," whereas culture is "why we are doing what we are doing". That is, there is a "why" behind the actions performed by the highest officials of an organization like the municipality. By observing and interpreting these actions, the employees in city hall can explain to themselves why things are the way they are and why their town council focuses on certain priorities. Culture, then, comes from the employees' interpretations of the beliefs, expectations and principles that produce the climate that they experience (Schneider et al., 1994). We can understand the fundamental role that the highest official in the town council has in creating the culture and climate of his or her organization. Clearly, how he or she understands and internalizes the significance of the LA21 is crucial for how it is interpreted in the rest of the city government. As a result of our observations according to the role of the sustainable beliefs and principles in the different town councils studied, we were able to make the following proposal:

P<sub>5</sub>: The continued success of the LA21 requires a culture attuned to its precepts.

The nature of the LA21 makes it complex to manage. It is an instrument of unquestionable principles, but these principles lack power. The effectiveness of the initiative depends on its capacity for influence, and this capacity will be greater if the context in which it must operate is receptive to the principles that it upholds. Insofar as these principles come to be assumed and shared by more people, both in the town council and in the local community, a culture favorable to the successful implementation of the LA21 will be created. This culture must remain embedded in the local corporation independently of the team that governs for a specific period of time.

One cannot ignore the temporal limits of the mayor's role in the town council. However, although, the individual person leaves, his or her beliefs and principles can come to permeate the organization, being preserved and kept alive in the permanent members of the town council, as

well as in the community that will have to support future officials. Furthermore, given that it is a variable considered consistently for its relation to innovation, we studied the size of the town councils. As we have indicated, the sample represents municipalities of different sizes. One of the municipalities has less than 5000 inhabitants, three have more than 50,000, and nine have 5000 to 50,000 inhabitants. Further, LA21 is a program open to any town that advocates sustainable development, where according to Khan et al. (2009) "a leader may influence the employees and procedures of the organization regardless of its size".

We do not observe significant differences in the town councils and processes of adopting the LA21 based on the size of the town. From this we are able to formulate the following proposal:

P<sub>6</sub>: The size of the town councils in City 21 program does not affect the decision to adopt the innovation.

As we have explained, a supporting organization allowed to the innovation to proceed successfully. Furthermore, we are able to observe how the institutional context explained the motives to adopt the LA21 in the town councils. Institutional context should not just be used to explain inertia and stability, because they can also be used to conceptualise the dynamic interplay between actors and structures (Geels, 2004).

Institutional theory is one of the theories that analyzes organizations in their environment and that considers multiple factors in the institutional context in which organizations are immersed in order to understand their behaviour. This theory analyzes the pressures of the institutional context that organizations must face and to which they must respond. Through these coercive, normative, and mimetic pressures, organizations adopt certain structures, programs, policies and procedures (DiMaggio and Powell, 1983; Greenwood et al., 2002; Meyer and Rowan, 1977; Scott, 1987). Institutional change plays an important role in the generation of opportunities for entrepreneurial activity, yet relatively little research has examined this relationship (Sine and David, 2003).

As regards *coercive pressure*, we indicate the increase in legislation on environmental matters, which regulates the activities of firms and public organizations more rigorously to protect the environment. The LA21 is not a practice with which these organizations are required to comply, since the city governments that decide to adopt the LA21 do so freely. This does not mean, however, that there is no implicit coercive pressure. Although, there is no pressure through sanctions for not implementing the practice (there are no such sanctions), there may be expectations of support in doing so. Normative pressure includes values and norms that are translated into practices and policies appropriate for achieving them. There is no doubt that in recent decades the values of

sustainable development have been diffused in various spheres. On many occasions, it is the very people responsible for or participating in certain practices, such as LA21, who disseminate these values. Such values may derive from their own university or other form of professional education or from subsequent training in courses, seminars, conferences, etc. where these values are considered to be legitimate and the practices that pursue their achievement to be the right ones. Finally, *mimetic pressure* derives from the search for models in other organizations that are perceived as successful. Town councils that have not adopted the LA21 have been able to become familiar with it and begin to know about it from other town councils that have adopted it. This knowledge can be a factor that motivates adoption of the measure. These pressures can have a positive effect on the adoption of innovations. The evidence obtained allows us to formulate the following proposal:

P<sub>7</sub>: The coercive, normative and mimetic pressures of the institutional context of the town councils in City 21 program influence them in the process of adopting the innovation.

The most general motivation at the moment of implementing the LA21 was the development of a good environmental policy. It seems that environmental values are disseminated in the organizational area of these town councils. In most, the idea of adopting the LA21 and participating in City 21 program emerges from the technicians on the town council. Professionalization, a characteristic of normative pressure (DiMaggio and Powell, 1983), thus emerges as a vehicle for transmitting these values. These technicians, as well as political officials, usually belong to municipal networks, networks of environmental sustainability, etc, where they share and disseminate these values. Thus, the town councils that form part of City 21 program belong, among other organizations, to Andalusian federation of towns and cities and network of sustainable cities in Andalusia. Most of the town councils participate in conferences and seminars that these organizations promote, making the normative pressure for implementing sustainable practices felt strongly in the city government.

Further, in all of the cases analyzed, an external team is given the responsibility of making the environmental diagnosis along with the town council, whether this team comes from the provincial government, the university or an external consultant. In addition, all of the town councils were very aware of the increase in current legislation on environmental matters. This makes them more alert to new practices and sustainable behaviours. They may be motivated not only by the need to avoid punishment or sanction but also by the positive reward of adopting this kind of behaviour. When we asked the town councils about the motivations that led them to adopt the LA21, many mentioned the subsidy they receive for joining City

21 Program, which shows coercive pressure for adopting it.

As to mimetic pressures, town councils show that they know about the successful experiences of other town governments. Communications media also do important work in this area. City 21 program receives a lot of publicity, which makes town councils take as models other town councils that already form part of or are implementing a LA21. Even so, we believe that, as the number of town councils forming part of this program increases, the mimetic pressure will increase and a greater number of town councils will decide to adopt the LA21 due to this kind of pressure. This will mean that the practice is perceived as the right way to act and has become fully institutionalized (Tolbert and Zucker, 1996).

According to our observations, the previous propositions describe the organizational and institutional context that favoured the adoption and implementation of LA21 in the town councils. Then, if we look at the process of implementation of the innovation a little closer we are able to observe what makes it to progress successfully in its day by day. The following propositions describe our observations:

P<sub>8</sub>: The implementation of the LA21 requires communication and coordination within the town council so that it does not function as an isolated task but as a task that permeates the entire town government.

The goal of LA21 is to find a balance between the criteria of social, environmental, and economic decisions within the town council in order to initiate effective actions in one's community in the three areas. It is difficult to understand how the town council as a whole can satisfy this triple decision-making criterion if the vision of LA21 does not permeate the decisions and actions of each of its departments/councils.

As the researchers could see, the absence of good communication and coordination between departments was one of the variables most frequently mentioned by the interviewees as a cause of greater advance in the process of implementing the innovation. A more detailed analysis of the possible motives for this lack of integration between departments showed other lacks hindering the LA21 implementation process. On the one hand, in 12 of the town councils analyzed, LA21 lacked its own clear structure and location in the town council's organigram, a structure that draws together tasks, people and officials in a stable and professional way. Only one of the town councils studied had created a formal structure to respond to the efficacy of implementing LA21, with a fixed team dedicated to subjects related to LA21. The other town councils had proposals for organizational structure available for LA21. We wish to stress an interesting difference between the two structural designs. While in the first case, the "Technical Office of LA21" forms part of the town council's hierarchy through its



formal integration in the Council for Environment, the second case proposes the creation of a specific organization for LA21 to operate in parallel to the town council's formal structure, integrating both its members and external interest groups related to LA21.

On the other hand, all interviewees agreed that better coordination between departments in the implementation of LA21 must include the strategic and long-term planning of the town council. Further, the town council's highest official must be greatly involved, not only in pushing the initiative but also giving it legitimacy and moderating when necessary, as well as creating incentives for the change. Motivation for the innovation requires attention. The integration of LA21 in the organizational structure and strategic plan of the town council would help to integrate the meaning of the agenda into the town government. As one of the interviewees put it, "The agenda is technical work plus political support".

As another interviewee confirmed, "we have to avoid imposed processes". The implementation of the agenda has clear repercussions for the everyday life of the municipality and affects how all of its interest groups make decisions. Managing to infuse the municipality with the values that LA21 promotes requires making these interest groups participants in the implementation process. In fact, when we asked the interviewees to define in order of priority the obstacles they encountered in implementing the agenda, social obstacles were placed first, followed by economic and political ones. As we can see from our conversations with those in charge of the agenda:

P<sub>9</sub>: The absence of interest group participation makes it harder to perform the innovation successfully.

People related to the implementation of LA21 can be classified into two groups: those whose main task it is to implement LA21, or the "LA21 team", and those who influence or are affected by the program, that is, "interest groups" or "*stakeholders*". Within these interest groups, we find professional, research and entrepreneurial associations; unions and associations of ecologists and neighbours; citizens, the education sector, NGOs, the different administrations (the national, regional, local governments, the provincial delegation, and the community of municipalities), and any other specific actor in the municipality.

As the researchers observed, these interest groups play an important role in the successful implementation of LA21, as the program requires their support in transforming the principles of sustainability that define LA21 into practice in the municipality. It is necessary to understand thoroughly how one can motivate interest group participation in LA21 implementation in order to achieve high, active, significant, receptive and committed participation in the municipality's LA21.

We consider that some member or members of the

town council from the environment implementing the measure should play an important role as liaison or spokesperson who must gain acceptance (from private citizens and from interest groups) and support (economic resources, information, technical support, outside experiences) that guarantee the development of this innovation. This spokesperson must act as an energetic and sufficiently influential defender of the innovation, and promote bottom-up participatory processes between the local council and the municipality. This bottom-up processes will be appreciated as empowering for the stakeholders and will promote sustainable results (García-López and Arizpe, 2010) by improving civic skills and social capital (Geissel, 2009), while top-down participatory processes continue and enhance the status quo.

On the other hand, according to Owen and Videras (2008), "culture can affect the success of sustainability programs when policy adoption requires the coordination of multiple stakeholders". It is important to know if the stakeholders trust in the sustainability programs in order to obtain their collaboration with the implementation of such programs. In areas in which trust is low, voluntary cooperation may be less likely to occur and programs should be designed to promote trust building activities to get higher levels of it in the community. Figure 1 shows the variables and the model that describe our observations in the study of the implementation of the LA21 as innovation in the town councils.

## Conclusions

Since the birth of Agenda 21 in 1992 at the Río Summit, more and more town halls have decided to implement LA21 to make the towns and cities of the world more sustainable. This paper has focused on a specific region, Andalusia, where we have analyzed how these processes are being carried out. To perform this analysis, we have defined the LA21 as an innovation introduced into a specific social reality, the Andalusian town council; an innovation whose implementation requires a series of actions intended to help the municipality. For a long time there were very few scholars interested in innovation. However, this is changing, and more and more workers are focusing on the topic of innovation. This article is one of these studies and seeks to contribute currently to the advance of innovation studies.

This research enables us to enter into and understand in greater depth the current state of the LA21s in Andalusian municipalities. It used the strategy of case study research, which allowed us to get to know personally those responsible for the implementation of the Agendas in thirteen town councils selected for participation. We were also able to obtain direct impressions in real time of the Andalusian LA21s and their circumstances in each of the town councils. The main

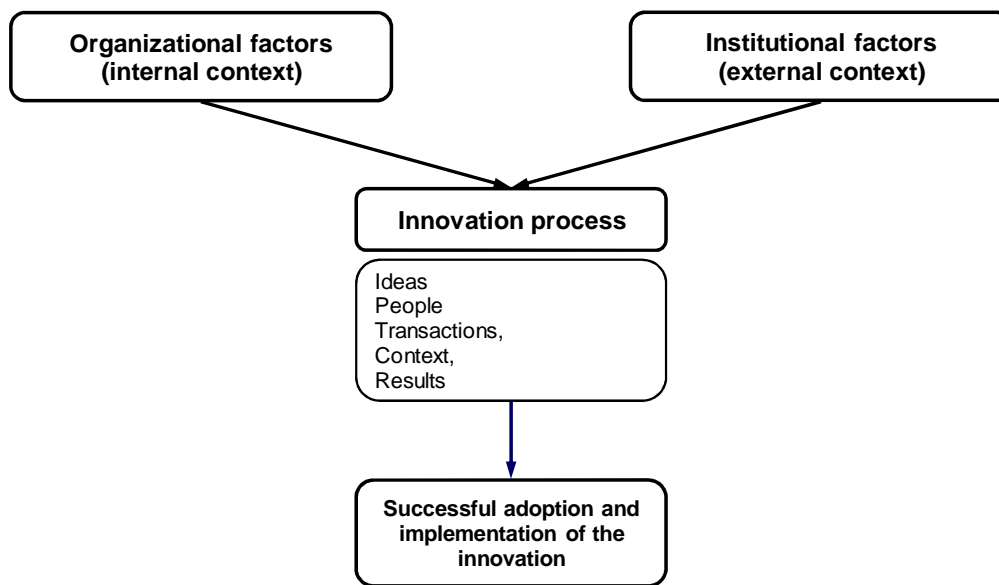


Figure 1. Proposed model of the innovation process.

contribution is the integrative model that we propose, defining a set of variables that influence an innovation process, the implementation of the LA21. It requires identifying both the internal and external factors that affect its adoption and create an environment for its successful implementation. Internal factors such as the empowerment given to the town council's employees, the receptiveness to the change in the town councils, the climate of implementation of the innovation, the support for the implementation of the LA21, the organizational culture, the size of the town councils, the participation of stakeholders and the communication and coordination within the local councils, affect the innovation process. External factors, from the institutional context in which these organizations are embedded, also influence the innovation process. We think that institutional theory is the theoretical frame to analyze the institutional pressures that organizations must face and to which they must respond. Coercive, normative and mimetic pressures influence the process of adopting the innovation.

These town councils that have adopted and are implementing the LA21 are aware that, in a world like the present one, there is a need for continual renewal. Therefore, the incorporation of the LA21 in the town council management can be a beneficial, appropriate and coherent instrument for achieving renewal and adapting to society's new demands, which require attention and responses from the most local authorities. We hope that the proposed model helps town councils to develop management by and for sustainability, according to the repercussions that their decisions can have for future generations. At the same time, we hope to advance regional studies of innovation.

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