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The ISC framework: modelling drivers for the degree of Local Agenda 21 implantation in Western Europe

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Abstract. We analyse the Local Agenda 21 (LA21) implantation process in Western Europe from 1992 to the present day. Basing our work on a literature review and on our own direct observations, we construct a model that explains the development of LA21 processes. We term it the 'isolated, supported, and connected' (ISC) framework. Our model attempts to make a contribution to (1) LA21 literature and (2) policy network literature. On the one hand, previous LA21 literature discussed factors that hold back and drive LA21 processes, but a comprehensive conceptual framework has not been constructed. Our model integrates the different variables within a single conceptual ISC framework. On the other hand, conceptual policy network literature holds that fully connected models ought to be superior to less connected, or isolated, models, but empirical evidence is scanty and inconclusive. Our research supports the conclusion that policy networks are superior in terms of disseminating LA21 processes.

1 Objectives and methodology

Our research focuses on the European experience of Local Agenda 21 (LA21) implantation, such as it has been understood within the general framework that was mainly defined by the 1992 United Nations proposal, the International Council for Local Environmental Initiatives (ICLEI) methodologies, Aalborg 1994, and Aalborg+10 (eg Echebarria et al, 2004). We adopt the degree of implantation of LA21 processes as our dependent variable and we focus on explaining its drivers.

LA21 has been defined as a local action plan for tackling environmental, social, and economic issues (Hewitt, 1995; Lafferty, 2001) through new forms of involvement and cooperation (O'Riordan and Voisey, 1998; Pellizzoni, 2001) that lead to quality-of-life improvement (Meister and Japp, 1998). Civil society involvement and three-dimensional sustainable development (SD) perspective (including social, economic, and environmental targets) are essential elements of LA21. So we focus on three-dimensional and participative LA21 processes.

There exists an important consensus that the environmental, social, and economic targets of SD will not be met without the full involvement of local governments (LGs)⁽¹⁾ and of civil society (eg Krueger and Agyeman, 2005). Many of the problems and solutions relating to SD are to be found at a local level (in the area of dispersed pollution, for instance). In the 1980s, many governments made advances within what is known as the first phase of ecological modernisation (eg Weale, 1992). In the 1990s the targets of environmental policy changed from a calculable number of large-scale industrial producers to a much larger number of small-scale producers and consumers.

⁽¹⁾ For the purposes of this paper we will consider local governments to be the lowest levels of government contemplated in the European Union's nomenclature of territorial units for statistics (NUTS), which are termed local administrative units. See http://ec.europa.eu/comm/eurostat/ramon/ nuts/home_regions_en.html.

This second phase of ecological modernisation implies that LGs can be seen as the natural unit of government authority (O'Riordan, 1996). The United Nations proposal to push for local SD strategies, under the name of LA21, to be drawn up and implemented, and harmonically integrated within strategies at higher levels of government, was undersigned, at least nominally, by all the European countries participating in the Earth Summit held in Rio de Janeiro (Brazil, June 1992). However, fifteen years later, LG response to the United Nation's proposal is far from generalised.

Our investigation seeks to go into the causes of this unsatisfactory response and at the same time to indicate possible alternative routes towards a more extended diffusion of SD strategies within the local sphere. We assume that the generalised dissemination of LA21 processes is a desirable target and we try to model its specific drivers. Our research focuses on the degree of implantation of LA21 processes in the different countries of Europe. Our study does not make it possible to obtain conclusions in relation to the comparative quality of the processes in the different countries.

In addition, we attempt to establish some order in the fragmented and relatively chaotic literature about LA21 in Europe (Echebarria et al, 2004). Most of the previous LA21 literature centred on case studies or studies referring to specific states. Some exceptions are the studies by Coenen, Eckerberg, and Lafferty (eg Eckerberg et al, 1999; Lafferty 2001; Lafferty and Coenen, 2001); the ICLEI (eg ICLEI, 2002) and, more recently, the Developing Institutional and Social Capacity for Urban Sustainability European research project (Evans et al, 2005), an investigation covering forty European LGs; and the Swiss Federal Office for Spatial Development report (ARE, 2005). LA21 studies have employed a variety of methods. Some quantitative studies of specific states have tried to evaluate the degree to which processes, their characteristics and their results have made headway, and they have sometimes related survey results to LG characteristics or profiles (Eckerberg and Dahlgren, 2007; Sancassiani, 2005). But since there is no consensus-supported theory identifying variables that are explanatory (size of municipality, for example, or degree of autonomy), or an outcome (the degree, sav. to which processes are disseminated), or how they connect, and providing scales of measurement, surveys have been constructed ad hoc, based on a concrete situation and on researchers' prior experience. One first contribution we make is to identify the factors that cause LGs to get an LA21 process moving and that appear in dispersed form in the literature. So our work might serve as a foundation from which to preselect factors and items for a possible quantitative study in the future at a European level.

But the main aim of our work is to build theory from an analysis of the LA21 implementation process in Western Europe since 1992. We focus on (1) LG perceived value and (2) policy making at higher levels of government (HLG) in each country as key drivers of our assumed target: generalised dissemination of LA21 processes in Europe. Our thesis is that intracountry HLG policy making for LA21 promotion in Europe is of great relevance for explaining the rhythm of LA21 diffusion.

Over the following sections we develop a new conceptual framework and show that the argument shared by policy network literature, that the most connected models are superior to those that are less connected, is right in terms of the diffusion of LA21 processes. This constitutes a contribution to policy network literature, which, although it has argued broadly in favour of the advantages of networking, has provided little empirical evidence to show the superiority of networking over other disconnected alternatives. Thus, Kenis and Raab (2003a) state that policy network literature has assumed that policy networks are by definition a good way of policy making. But

"this claim that policy networks are a superior form of policy making as such (if only properly managed), is, however, far from being proved" (page 6).

Some authors have also recently demanded the development of an explicit theory that explains how particular policy network conditions imply particular policy results (eg Kenis and Raab, 2003b; Peterson, 2003).

Lastly, our analysis will be helpful for newcomers to LA21 processes because, by adopting a benchmarking focus, they will be able to proceed faster and with greater guarantees.

The conclusions have been based on: (1) an in-depth literature review concerning the different European LA21 experiences; (2) empirical work regarding the Spanish experience, previously reported in several articles (eg Echebarria et al, 2004), and the Basque Country case, also previously reported in Barrutia et al (2007). This case was the main source of inspiration for developing the connected process. The inductive method was adopted for our study (eg Yin, 1994). According to the inductive method, there is an external reality, an ongoing contemporary phenomenon, which can be reached by collecting observable and unobservable phenomena. Uniquely, the inductive method obviates the necessity of preselecting the context type variables to be included in the research. Instead, the researcher observes the contextual variables impinging on the phenomenon under analysis over a period of time.

To present our contribution we will pursue the following approach. First of all, we synthesise the evolution and current situation of LA21 in Europe. We then come to our core contribution. Under this second heading we develop a new conceptual framework. Under the ensuing headings we discuss the framework using empirical evidence about LA21. We finish with a section that details the conclusions and limitations of our research and future avenues it might explore.

2 LA21 in Europe—an overview

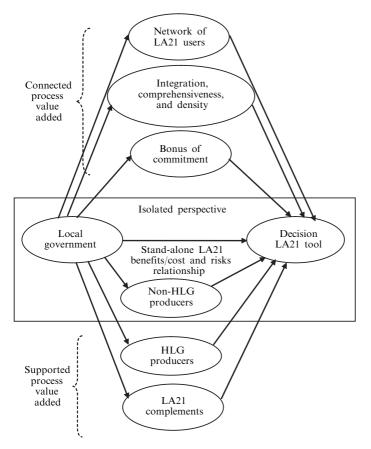
In comparative terms, Europe is the leading continent where LA21 implementation is concerned (ICLEI, 2002), but its focuses and rhythms are proving to be very diverse when different states are compared (Aguado et al, 2006). From the above-mentioned studies by Lafferty, Eckerberg, and Coenen, covering LA21 implementation in Europe and a review of later literature, it was possible to classify countries that are relatively active in this area into three groups, in accordance with the speed and depth of their response. We find the pioneering countries (Sweden, the UK, and the Netherlands), which swiftly responded to the call from the Rio Summit and whose national governments significantly pushed for LA21 processes right from the start. These countries were then followed by the rest of their Scandinavian counterparts (Denmark, Finland, and Norway), which acted as early adopters. Austria and Germany, who took action somewhat later, make up a third group of latecomers, in which LA21 follow-up by local authorities was scant. In last position came the Mediterranean countries (Italy, Portugal, Spain, and France), which, alongside Ireland, adopted the role of laggards, only beginning to show an interest in LA21 at the end of the 1990s.

Nevertheless, in recent years some interesting changes are taking place vis-à-vis the situation reported at the beginning of the new millennium. Evidence suggests that some Mediterranean countries—Spain (Barrutia et al, 2007; Echebarria et al, 2004) and Italy (Sancassiani, 2005), for instance—have learnt from previous experiences and managed to advance faster and more solidly. Germany too has advanced significantly in the last few years (Kern et al, 2004). The progress of some pioneer countries, on the contrary, is declining. Thus, Sweden and the UK emerged as the most prominent of the pioneers. However, in both the UK and Sweden the number of LA21 processes is diminishing, although this does not always necessarily mean that pro-SD processes are being abandoned, but rather that the tool is being mainstreamed (Eckerberg and Dalgren, 2007; Jonas et al, 2004, page 164), responsibility for which is being transferred from the Environmental Department directly to the mayor's office.

A recent cross-country report (ARE, 2005) compared the situation of LA21 in the European countries. The Swiss Federal Office for Spatial Development groups countries into three categories: those where more than 65% of their LGs have begun LA21 processes, these being the Nordic countries—Sweden, Norway, Finland, and Denmark—and the UK; those whose local commitment ranges between 11% and 64%—that is, the Netherlands, Germany, Iceland, Belgium, Luxemburg, Italy, and Spain (we have added the last two); and the group that lags furthest behind, in which all the other countries are situated. In conclusion, with the exception of the UK, only in the Nordic countries is there wide, though not across-the-board, dissemination of LA21 processes. As we shall see below, this is explained by the special resources and capacities of these countries.

3 Conceptual framework

Our conceptual framework, which we name the 'isolated, supported, and connected' framework, has its roots in LA21, policy networks, and marketing and management literatures and is summarised in figure 1. A special connection exists with marketing literature (Frels et al, 2003; Sawhney and Parikh, 2001), because we focus on local



Note: HLG-high-level government

Figure 1. The 'isolated, supported, and connected' framework: a new model based upon Local Agenda 21 (LA21) experience (source: authors' own preparation).

authorities' decisions regarding adoption of the LA21 tool. Figure 1 shows the three key antecedents that, in our view, impact on the local authorities' decisions: (1) the new stand-alone-tool perceived performance—in our case, stand-alone LA21 performance; (2) value added by the 'producers' (eg central governments) of 'value complements' (eg methodologies); and (3) the existence of a policy network. Our conceptual framework adopts an initial approach in which only antecedent 1 is considered. Then antecedents 2 and 3 are added.

Following marketing literature (eg Kotler, 1999), within a stand-alone perspective, local authorities adopt a new management tool, such as LA21, when they perceive that the value and/or utility of adoption is greater than the value of other possible options. Value perceived is equal to benefits perceived less costs and risks perceived. Value perceived depends on tool characteristics and particular LG characteristics. For example, as we will see later, government size, environmental and social culture, autonomy and political orientation, among other factors, impact on value assigned to environmental and social tools like LA21.

But elements external to the focal tool can also build additional value and drive its adoption (Frels et al, 2003; Moore, 1999) by creating a compelling reason to adopt it (Moore, 1999, page 115). Some producers, such as suprastate organisations, civil society [including local nongovernmental organisations (NGOs)], and HLG can decide to add value to the tool by offering 'value complements' (eg financial support or training) to the isolated tool. The strength and characteristics of the complements impact on the value perceived by local authorities (Frels et al, 2003). Furthermore, the existence of different producers offers access to a second, alternative, or complementat all or cannot serve it well—for example, a regional government cannot offer financial funding, while a central government can. Producers sometimes compete actively among themselves offering different complements to adopters.

We differentiate between two kinds of producers: (1) HLG (provincial, regional, and state governments); and (2) other producers, including interlocal (horizontal municipality networks functioning at an intracountry or intercountry level), intralocal (eg local NGOs), and suprastate producers (ICLEI and the European Union). We focus on the generalised dissemination target and from this perspective the key role is in the hands of HLG. In our view, producers included in (2) are important elements of LA21 processes. We do not intend to underestimate their contribution. For example, intralocal producers impact significatively on process quality but we cannot expect a generalised bottom-up-driven diffusion. So we focus on HLG policy making. We give the term isolated processes to those in which HLG leaves LA21 implementation solely in the hands of the LG (although other kinds of support may exist), while the term supported process alludes to when LA21 is driven and supported to a degree by HLG.

In general terms, the supported process is superior to the isolated process in terms of the general diffusion target. But, as we shall explain in detail below, using as an illustrative example the case of financing in Sweden, some complements can sometimes go against the objective of disseminating LA21 processes, even though their producers maintain this is not their aim. This happens because the producers do not take the opinion of LG sufficiently into account when they define the value complements, or try to fulfil several objectives. Other weaknesses of the 'supported process' are: (1) lack of comprehensiveness: some important producers (eg regional or provincial governments) may decide not to support the processes; (2) lack of density: there is a weak relationship between the producers and LGs; (3) lack of integration: an excess of some value complements may be produced (eg methodologies), while there may be a dearth of others.

This does not happen in the 'connected process'. A comprehensive, dense, and integrated policy network of relevant actors and complements runs as a 'value network' (Bradenburger and Nalebuff, 1996) that offers significant additional value to adopters by generating network externalities (Frels et al, 2003). Policy networks also imply a higher level of commitment from the network drivers and those who take part in them. Furthermore, the number and prestige of the adopters are a main consideration for local authorities. Institutional theory has shown that increased adoption builds legitimacy in the institutional environment, accelerating the rate of adoption of new tools (eg Di Maggio and Powell, 1991). Ultimately, these innovations reach a level of legitimisation where failure to adopt them is seen as irrational and negligent. Network is the key driving factor behind adoption decisions (Katz and Shapiro, 1985). The following sections are devoted to explaining the three forms of policy making and their results.

4 The isolated process

The isolated process departure point is the stand-alone perspective. It focuses on LG and local authority characteristics that make some LGs quickly adopt LA21, even in some countries that, on the whole, react slowly. When local authorities study the suitability of adopting the LA21 tool, they consider the benefits, cost, and risks of LGs embarking on a complex process. A strong awareness of costs and risks, such as the risk of promising citizens actions they might not be able to deliver or the existence of a winners – losers local scenario, has been detected in countries where LGs have very different profiles [see, for example, Barrutia et al (2007) concerning the Spanish context and Eckerberg and Dahlgren (2007) concerning Sweden]. These difficulties have meant that the reaction of European local authorities to the LA21 proposal has neither been swift nor generalised. Nonetheless, some specific LGs did react quickly. In pioneering Sweden, for instance, many LGs adopted the LA21 tool very early on (Eckerberg and Dahlgren, 2007). In other more straggling states such as Germany, certain LGs also adopted LA21 very quickly (Kern et al, 2004).

Following the resources and capacities theory (eg, see Conner, 1991), we believe that, from a stand-alone perspective, local authority value perception depends on local resources and capacities. 'Resources' refers to productive factor stock (financial, physical, human, organisational, and technological) that the organisation—LG, in our case—possesses or controls (Grant, 1992). 'Capacities' refers to knowledge and organisational culture, frequently uncoded, that make an organisation act in a particular way when faced with certain stimuli, such as the LA21 proposal (Teece, 1982). The arguments used to explain the evolution of LA21 processes within a stand-alone perspective are integrated within these two concepts.

Implanting a complex new tool such as LA21 calls for certain minimum human and financial resources in order to get the process going. At least one full-time expert has to be in charge of implementation (eg Eckerberg and Dahlgren, 2007; Kern et al, 2004), plus funding to enable the plan to be drawn up with collaboration from civil society and to develop the actions included in the plan. LG mayors cannot run the risk of passing action plans, with the support of their citizens, which are subsequently not carried out through lack of economic resources (Barrutia et al, 2007). A complex mix of knowledge is also needed (Dalal-Clayton and Bass, 2000), which must include methodology for designing strategies, awareness of the content of environmental, social, and economic departments and their interrelations, and of the functioning of public institutions and their interrelations, as well as the creation and running of forums that encourage participation from civil society. In addition, and this is not easy to find, in order to implant LA21 processes successfully there has to be a sociocultural ability to handle conflicting situations in a consensual style.

The availability of resources and also of certain capacities is generally linked to size. So, a factor repeatedly highlighted by LA21 literature is the size of the LG (eg see Kern et al, 2004; Sancassiani, 2005). In Europe, LG population varies greatly. The municipalities in the Nordic countries are usually the largest. According to the European Union's NUTS database, the average size of LGs in the Nordic countries ranges from Sweden's 30830 inhabitants (the maximum) to Finland's 11673 (the minimum), compared with the European average (EU-25) of 4074.

Nevertheless, the size factor does not seem to be fully explanatory, as many large LGs in Europe have not adopted the LA21 tool or were late in doing so. A second factor emphasised in LA21 literature is the fiscal, legal, and political *autonomy* of LG associated with its disposability of resources and environmental, economic, and social competences. Adolfsson (2000; 2002) and Eckerberg (2000) stress this variable when analysing the case of Sweden. Also, Joas et al (2007) associated a high level of autonomy with successful implementation of LA21. It is interesting that they place more emphasis on the emotional capacities autonomy furnishes than on the actual resources and competences it implies.

The rest of the factors highlighted by LA21 literature are associated with capacities: (1) social and environmental experience and culture; (2) style of governance; (3) key individuals; and (4) political orientation. With regard to the first factor, Eckerberg (2000), 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.

Some capacities relating to style of governance also stand out in LA21 literature, such as the big tradition of participation in the case of pioneering countries, for example, Sweden or Holland (eg Eckerberg, 2000; Gomila, 2000). 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 become adopted and widespread. In the same area, Barrutia et al (2007) explain that the Basque regional government's previous experience of implementing a policy network for the promotion of quality was key in the setting up of a policy network to promote LA21 processes.

Some authors have emphasised the presence in LG of *key individuals* (civil servants or politicians) for driving a local SD process forward (eg Barrutia et al, 2007; Joas et al, 2007). They found many cases where LG mayors were perceived by others as entrepreneurial figures with sufficient charisma and commitment to motivate others and to promote the sustainability agenda.

A final capacity highlighted for LA21 literature is a political orientation favourable to SD philosophy. In Italy, for instance, Sancassiani (2005) found that 72% of LA21 processes were promoted by centre-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 nonsocialist parties.

All these resources and capacities are unlikely to come together in an LG. But in principle one might expect that the simple conjunction of some of these relevant factors should suffice to produce a positive response to the LA21 proposal. Nevertheless, previous literature does not bear this hypothesis out. Cases such as Switzerland (ARE 2005), Germany (Gomila, 2000; Kern et al, 2004), and Austria (Coenen, 2001; Narodoslawsky, 2001) show that, even in countries that comply with a lot of the requirements highlighted above, if there is an absence of added value from HLG, a generalised expansion of LA21 processes is not to be expected.

Consequently, we develop:

Proposition 1: On a stand-alone perspective, a generalised expansion of LA21 processes is not to be expected, because the profile (resources and capacities) of LGs that might be expected to establish the tool is very demanding: (1) large size; (2) autonomy; (3) social and environmental experience and/or culture; (4) a style of governance adapted to principles of good governance; (5) the presence of key individuals; and (6) a left-wing or progressive political orientation.

Value may be added by non-HLG producers. One such is the European Union. It has been said that the Structural Funds have served to incentivate the creation of regional LA21 strategies in some countries where little state backing has been given, as is the case, for instance, of Austria (Narodoslawsky and Grabher, 2001) or Spain (Echebarria et al, 2004) or in specific cases such as the Baltic 21 (Kern and Löffelsend, 2004). There is also another international issue-focused institution, the ICLEI, an international association of LGs that have signed a commitment to SD. The ICLEI contributes value added by developing common methodologies for the implementation of LA21 and by organising regular annual meetings to share experiences. Also, Joas et al (2007) found that the role of international LG networks for SD was clearly important in a number of the case-study towns and cities in the DISCUS project.

Local civil society (ie citizens, NGOs, businesses, etc) has an important conceptual capacity for encouraging LA21 processes. However, although bottom-up perspective has a prominent place in literature, in quantitative terms at a European level it is more the exception than the rule. Sweden has been the most commonly quoted example, although to date no more than 9% of its municipalities reported that the initiative in LA21 resides with groups outside the municipal organisation, which confirms that the bottom-up perspective of LA21 has decreased (Eckerberg and Dahlgren, 2007). In qualitative terms it is key for local civil society to participate right from the start of an LA21 process to achieve SD policy effectiveness (Buttel, 2000, page 63; Joas et al, 2007). But this paper focuses on dissemination and we cannot expect a generalised expansion of LA21 processes from a bottom-up perspective.

All producers have a role to play. But, in our view, to obtain a generalised diffusion of LA21, the key producers are the HLG in each state. On the one hand, the direct impact of supranational institutional policy making on the average value perceived by LGs is not significant and, on the other hand, input from NGOs and civil society, although crucial, can only be expected in specific contexts. In countries where the ground conditions are wanting and HLG are not producing value complements, as is the case in Portugal, LA21 processes are virtually nonexistent.

Consequently, we develop:

Proposition 2: Value created by non-HGL producers is not enough to expect a generalised expansion of LA21 processes.

5 The supported process

Political support from HLG has a decisive role to play as it encourages and stimulates local authorities to set up and implement the LA21 tool (ARE, 2005). The importance of support from central governments, often shared with LG associations, has been strongly emphasised in different contexts, such as in Sweden (Lindström and Johnsson, 2003), Denmark (Gram-Hanssen, 2000), the Netherlands (Coenen, 2001), or, more recently, Italy (Lorenzo et al, 2004). On other occasions, substate governments have led the drive for LA21 processes. In Germany it was the länders that took on LA21 diffusion in the face of the lack of leadership shown by the federal government

(Gomila, 2000; Kern et al, 2004). The same happened in Spain (Echebarria et al, 2004). In these cases the result was a big difference in the degree of implementation of LA21 processes from region to region. The cases of Germany (Gomila, 2000; Kern et al, 2004), Spain (Echebarria et al, 2004), and Switzerland (ARE, 2005) are very illustrative.

Sometimes support from both central and substate governments coexists. On occasion this coexistence, rather than happening within the framework of a cohesive strategy, occurs in an atmosphere of competition where central and substate governments fight to attract LGs towards them (eg see Aguado et al, 2007), within the 'sustainability market' (Kern and Löffelsend, 2004). It is verifiable that lack of support constitutes an important factor in putting the brake on LA21 processes in countries such as Switzerland (ARE, 2005), France (Larrue et al, 2001), and Portugal (Carter et al, 2000).

The first value-added complement that higher levels of government ought to contribute to LA21 processes is clear *leadership* and *long-term commitment*, with the aim of reducing local authorities' perceptions of uncertainty and fears. It is important that this commitment should be shown through a long-term institutional commitment to sign up to an SD or LA21 process or to incorporate LA21 as a priority area within a long-term SD strategy (ARE, 2005; Barrutia et al, 2007), because such a commitment demonstrates that political will exists, and draws a clear line to be followed by LGs and the different departments of the actual government.

Leadership needs to come with other complements to LGs' resources and capacities. Accordingly, central and regional governments have contributed with financial resources for conducting the process of developing and implementing LA21 strategies. It is also vital to create incentives for potential LA21 losers (Eckerberg and Dahlgren, 2007). LA21 literature has shown the relevance of just the existence of financial support in itself, even when the funding received by LGs covers only a small part of the total project budget [eg see Coenen (2001) in the Netherlands; Larrue et al (2001) in France; Mullally (2001) in Ireland; and Sancassiani (2005) in Italy]. Demand for more funding is a constant (ARE, 2005), even in the countries that offer greater resources, such as Sweden (Eckerberg and Dahlgren, 2007), or others where there is relatively wide diffusion of LA21, such as Finland (Frank et al, 2000) or the UK (Patterson and Theobald, 1996). In Italy, when municipalities are asked about the main obstacles to LA21 implementation, the first to be mentioned is lack of financing, which is singled out by 55% of LGs (Sancassiani, 2005).

Another way in which higher levels of government have created value added has been through the contribution of *human resources* in the shape of supporting technicians who contract or create structures whose purpose is to answer enquiries from LGs. The significance of the existence of human resources geared specifically to LA21 has been broadly commented on by different authors. The case of Norway is particularly illustrative (see Aall, 2001; Bjørnæs and Norland, 2002). The relevance of there being an LA21 coordinator has also been confirmed in other countries, such as Sweden (see, for example, Eckerberg and Dahlgren, 2007) or Germany, where Kern et al (2004) found a strong relationship between LA21 implementation and the existence of 'agenda officers' or 'agenda offices'.

Another way to create value added is by providing *information* and/or *knowledge* by means of platforms for sharing methodologies and best practices and for answering enquiries about LA21. LA21 is a complex tool for small LGs. This is why the ARE report of 2005 concludes that good, well-coordinated, communication and the dissemination of good practice are useful principles that are likely to prove effective. Evans et al (2006) pointed to the high levels of investment in sustainability training, for both officers and politicians, which are needed for successful LA21 implementation.

The diffusion of LA21 is also influenced by the presence of transfer institutions. Transfer institutions are usually state or regional-driven organisations. Governmentdriven organisations have been demonstrated to be key in countries such as the UK (Lafferty and Coenen, 2001) and Germany (Kern et al, 2004). These agencies act as a platform for dialogue and as a service provider for all those involved in the Agenda process and for the media, multipliers, and other interested parties.

In conclusion, the supported model suggests that various kinds of HLG support are fundamental for disseminating LA21 processes. As pointed out by Carter et al (2000), in relation to Portugal, there is no clear support from the government of the republic, and no funding for councils to promote the process has ever been established. As a consequence, the majority of municipalities are not developing LA21.

But, in many countries where support for LA21 processes exists there is evidence showing a lack of comprehensiveness, density, and integration. The Swedish case is particularly illustrative. Financial support (local investment programme for ecologically SD) is important volumewise and is growing. But this was geared to financing projects, not long-term local SD strategies, as required by LA21 (Eckerberg and Dahlgren, 2007). Some negative results of this lack of integration have been: (1) more physical investment profile projects and less strategic planning (LA21) processes; and (2) a growing number of municipalities with no activities to involve their citizens in, which decreases the bottom-up element of LA21 (Baker and Eckerberg, 2007).

On many occasions, too, producers compete with one another in their attempts to attract LGs, instead of cooperating, so that there is an excess of some complements and a dearth of others. In Spain, for example, some local, regional, and provincial governments, as well as the state government, are working separately to create their own local SD indicators, leading to duplication and a wasting of resources (Aguado et al, 2007). In others the drive of some producers is not matched by that of others, so their efforts are diluted. There are instances in Spain where the energy expended by the provincial government in supporting LGs is not sufficiently corresponded by regional and central government: Barcelona is a case in point (Echebarria et al, 2004).

Consequently, the presence of various producers of LA21 value-added complements could increase local authorities' perception of benefits and reduce their perception of costs and risks. This causes an increase in the number of LGs that decide to go for LA21 implementation. But European evidence has demonstrated that the 'supported process' is not enough to ensure that LA21 processes become widespread, fundamentally in countries where LGs do not boast a high starting level of resources and capacities, far less with sufficient capacity to guarantee their continuity in time. Only Sweden, which possesses excellent ground conditions and can count on important support from other actors, such as the association of municipalities, could report that, by the end of the 1990s, its LGs had achieved almost across-the-board implementation of LA21 (Eckerberg and Dahlgren, 2007). Nevertheless, substantial doubt has been expressed as to whether in many cases a new working methodology was being applied, in line with the LA21 proposal, or whether there was a relabelling of actions that were already previously being carried out, this time under the rubric of LA21. Furthermore, after a recent survey Eckerberg and Dahlgren (2007) pointed out that there was a retreat in the degree of implantation of LA21. Some municipalities mentioned that LA21 had been integrated into regular municipal work and/or wider sustainability activities, whilst others had abandoned LA21.

So we develop:

Proposition 3: When LA21 processes are driven by HLG through the production of value-added complements, such as (1) leadership and clear long-term commitment, (2) the provision of human and financial resources, and (3) the provision of knowledge in relation to the new tool, this helps to diffuse the processes among LGs that do not meet the demanding profile defined in the isolated process. But all these fragmented and sometimes redundant and contradictory instances of support, taken as a whole, have not been sufficient to achieve generalised dissemination of LA21 processes, even in the most advanced countries.

6 The networking perspective

A policy network is a new form of governance which allows governments to mobilise political resources and capacities in situations where they are widely dispersed between public and private actors (eg see Le Galès, 1995). Our thesis is that a policy network is more powerful and able to create a perception in municipalities of more benefits than costs and risks, even in the eyes of LGs and countries that find themselves a long way from possessing the necessary resources and capacities. We focus on intrastate multilevel networks. Previous LA21 research includes very interesting cases labelled as policy networks. Some of the most widely reported are the Baltic 21, a common Agenda 21 whose mission is the protection of the Baltic Sea as a common good (Kern and Löffelsend, 2004), and the network of ecomunicipalities in Sweden (Eckerberg and Dahlgren, 2007). But they do not come within the remit of our main interests. Baltic 21 is an interesting non-generalisable case, based on an interstate agreement prompted by the European Union, and we focus on generalised expansion of LA21 processes. The ecomunicipality association is a horizontal voluntary network of municipalities and as such has limited capacity for creating value complements. Key producers are not included in the network.

We focus on multilevel intrastate policy networks which are also connected at an international level. We argue that these kinds of policy networks incorporate a bonus of commitment from the governmental level in charge of leading it and from those who participate in them; that they are comprehensive because they incorporate all the relevant actors; that they are dense because they establish relations that are strong and frequent between their members and weaker where third parties are concerned; and that they are integrated because the value complements, defined through consensus, are geared to the aims of the policy network. And, as a consequence, we maintain that policy networks are more efficient in terms of generalised diffusion and sustaining LA21 processes over time, as against other forms of policy making. To support our hypothesis we focus on the case of the Basque Country, in Spain [fully reported in Barrutia et al (2007)]. The Basque Country presents an especially negative profile for LA21 diffusion. In particular, its municipalities are, on average, small (8515 inhabitants; more than 75% of the 250 municipalities have less than 3000 inhabitants) and their SD experience and tradition is pretty slim. Moreover, state government support for LA21 processes is virtually nonexistent.

Nevertheless, what has been achieved is the almost generalised dissemination of LA21 processes within a period of four years. In 2002 the presence of LA21 in the Basque Country was anecdotal, with just 1% of Basque municipalities involved in the implantation stage of actions included in LA21. By 2006, after four years, 55% of the municipalities are at the implantation stage of the previously designed strategy, including all those with more than 5000 inhabitants. A further 34% of municipalities are at the design phase. The remaining municipalities find themselves in the preliminary phases of information and training.

The Basque policy network has contributed value to LGs through comprehensiveness, density, integration, a bonus of commitments and the effect produced by growing numbers of users. Comprehensiveness implies that all actors with resources and capacities for reaching SD are included in a formal policy network: the municipalities, the Basque association of municipalities (EUDEL), the provincial councils, SD experts, and civil society. Each partner provides, in accordance with its abilities, one of the ingredients vital to the successful functioning of the network. The municipalities contribute in-depth knowledge about their own reality, of key importance for defining plans that can be put into operation effectively. A transfer publicly owned institution that works in the field of environmental protection and management, IHOBE, gives thrust to the process, providing information, training, administrative management, coordination, and knowledge. The consultants offer experience in making diagnoses and drawing up action plans and in the establishment of citizen communication channels. The provincial councils and the Basque government participate in the top leadership of the process and provide the economic resources required for implementing the initiatives contained in the action plans.

Integration implies that the network structure and initiatives are agreed by consensus with all the actors and integrated with a view to extending LA21 processes. The basic idea behind policy network literature is mutual benefit (eg Pongsiri, 2002). It would not be easy to promote a collaborative process in which not all the stakeholders win (eg Bagchi and Paik, 2001). This is why all the steps for the creation of the network were subject from the beginning to consensus from the LGs, the association of municipalities (EUDEL), and the provincial councils, so that they felt themselves to be owners of the process and perceived the value of their incorporation into the network.

Density implies that the policy network is structured so that close links are established between its members and also weaker relations vis-à-vis third parties. The policy network structure is a central element in the Basque experience. Each actor must have a role that is clear and in tune with its capacities as established by policy network literature (eg Bagchi and Paik, 2001).

However, municipalities associate a policy network with a bonus of an HLG commitment level. Creating a policy network is a much more complex and committed enterprise than simply designing a parcel of funding for LGs, and bears with it a bonus of commitment which is perceived by LGs. It is a clear signal of long-term orientation. Other key elements to create a perception of additional commitment are:

(1) Leadership (eg Waddock, 1988): in this sense a first relevant step was the 'commitment to sustainability' signed by the Basque President in 2001. This commitment was followed by the Basque SD strategy for 2002-20.

(2) Economic effort (eg Rosenau, 1999): in the case of the Basque Country, a clear, significant, transparent economic commitment from the Basque government and the provincial councils was crucial to reducing risk and uncertainty perceived by municipalities.

The conceptual relevance of the number of users in order to attract new users has been discussed above. In the case of the Basque Country the prestige effect of belonging to the network was increased due to the involvement of the President of the Basque government. Every year town and city councils that have finished the design phase of their LA21 receive an award from the regional minister for land planning and environment, at a regional government act presided over by the Basque President. After presentation of the award the President personally greets each mayor from the municipalities and shares with them his concerns about the LA21 process. So we develop:

Proposition 4: To achieve generalised dissemination of the LA21 tool, a suitable form of policy making involves the creation of specific integrated multilevel *regional* and/or national policy networks that incorporate the relevant actors (comprehensive) right from the start, establishing strong links between them (dense) and weaker links vis-à-vis third parties, and in which all their members take on clear long-term commitments with an orientation towards mutual benefit.

7 Conclusions, limitations, and future avenues of research

Our research supports the conclusion that policy networks are superior in terms of LA21 process dissemination. Our investigation suggests that generalised LA21 dissemination can only be achieved with comprehensive dense policy networks created ad hoc within national and/or regional spheres.

Our investigation has some limitations. The first is that our direct empirical evidence on policy networks is based on a single case, that of the Basque Country. But this case is supported by some conclusions that have been accepted from a conceptual perspective over recent years in policy network literature and serves, at the same time, to corroborate them from an empirical perspective. More research is needed for our conclusions to be supported or rejected, if similar cases to that of the Basque Country arise in other contexts. Other limitations are linked with the research targets and the methodology used. The analysis relating to the rest of the European countries was based on the literature review and not on a direct empirical study. We have tried to make up for this limitation by following prestigious researchers who have been working for many years on LA21 in their respective countries, and we have selected conclusions about which there appears to be no controversy. It must be added that a model synthesises the key elements of reality by collecting researchers' ethic conclusions and does not explain it in its entirety. Specifically, it is very difficult to incorporate process dynamic into the model.

It is necessary to progress towards a scientific quantitative study at an international level. We have attempted to take a first step by establishing some order in LA21 literature, identifying and organising the principal factors that affect LA21 dissemination and highlighting three types of differentiated process: isolated, supported, and connected. A future research study could consist of defining scales with which to measure these factors.

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