GREEN GOVERNANCE: A PROPOSAL FOR COLLECTIVE GOVERNANCE CONSTRUCTS TOWARDS LOCAL SUSTAINABLE DEVELOPMENT

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Introduction

There is a high degree of interconnection between economic, social and environmental relations in sustainable development - a concept which considers all these spheres as equally relevant. However, there are difficulties in aligning these spheres in both local and global sustainable initiatives. Their coordination is too complex for all aspects to be drawn together with ease. Fragility of consensus and difficulties in coordinating social actors restrict joint action, making the path towards sustainability frequently impracticable. As observed in the Rio+20 Conference (Rio20, 2012) and other events focusing on issues of sustainable development, weaknesses in the structure of collective governance showed the limits to an approach which continues to deal with individual symptoms instead of addressing their inter-relations.

Despite a scenario of inherent difficulties, there are a number of examples of best practice in sustainability at a local level which demonstrate the mobilization capacity of local actors (JACOBI, 2005). The research contributions of Sachs' (1986) and various international conferences and activities culminated in the Agenda 21 proposal.

Agenda 21 was the result of the United Nations Conference on the Environment and Development (UNCED). In 1992, it set out a number of directives in the search for a sustainable path, bringing together various topics into a single agenda for action on the environment for the 21st century.

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Within this context, Local Agenda 21 Forums were established, in which citizens participate and develop a space for discussing and debating topics associated to sustainability. Participants representing public and private organizations, as well as the third sector, are the protagonists in the institutionalization of Agenda 21.

Local Agenda 21 Forums are based on the concept that individual action cannot easily promote the common purpose (OLSON, 1999), particularly in relation to issues that involve contrasting interests such as those relating to sustainability. Therefore, issues associated to collective governance have become increasingly relevant to this area. Starting from studies on so-called green management, focusing on individual organizations (DAVISON, 2001; PANE et al., 2009; MARCUS; FREMETH, 2009; FLOWERY; MOLINA - AZORÍN et al., 2009) and moving towards green governance (DOYLE; DOHERTY, 2006; BIERMANN et al., 2010), which encompasses a wider and more diversified number of actors, the aim of this article is to propose and analyze a set of constructs that characterize collective governance in local sustainable development.

For this purpose, the article is organized in six sections including the introduction. In the following section, section two, the topics of research are contextualized, in particular, local sustainable development and governance. In section three, five constructs, which have been established with the aid of theory, are presented and discussed. Following this, the methodological aspects of this article are set out in detail in section four, indicating the procedures followed for data collection and analysis. In the fifth section, research findings are discussed with an emphasis on the analysis of each construct. In section six, final considerations are presented in relation to the implications and limitations of the study.

Sustainable Development and Agenda 21

As the global economy progresses, the way it interacts with the social and environmental spheres becomes increasingly evident to society. If, however, for a long period the focus of attention has predominantly been economic efficiency, today it could be said that other aspects are taken into account. Issues of collective action have been addressed in studies for a number of decades, from the theory of the tragedy of the commons (HARDIN, 1968), to the theory of the logic of collective action (OLSON, 1999). Ostrom (1990), among others, analyzes the governance of common goods such as water. The United Nations Conference on Human Environment in 1972 emphasized the need to distinguish between different types of economic development, so as to differentiate traditional practices of environmental degradation from procedures which are more conducive to addressing the finite nature of natural resources (BURSZTYN, 2006).

The subject of sustainability permeates this article. Our aim is to provide a theoretical foundation in order to develop governance constructs for groups geared towards collective action. One of the versions of the concept of local sustainable development was established by Ignacy Sachs (1986) when he coined the term

"Ecodevelopment", taking into account economic efficiency, social equity and environmental preservation. Sachs (1986) also valued local experiences and one of the bases of his concept is endogenous development. In 1983, the World Commission on Environment and Development (WCED) was set up by the UN in order to debate environmental issues and examine the relationship between the environment and development. Its aim was also to propose viable ideas to resolve problems related to these issues (MOURA, 2008). By 1987, the WCED published a document entitled "Our Common Future", known as the Brundtland Report, where the concept of sustainable development was presented thus:

> A process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are brought together in harmony and enhance the current and future potentials to meet human needs and aspirations (WCED, 1991, p. 49).

However, even after the publication of the Brundtland Report, according to some authors, such as Nascimento e Vianna (2007), there is still no consensus around the concept of sustainable development. Redclift (2005), for example, argues that sustainable development is an oxymoron which motivates discursive interpretations whereas it needs to move closer to current material realities. According to the author: "during the last eighteen years there have been different discourses on sustainable development, some mutually exclusive" (REDCLIFT, 2005, p. 213).

Authors such as Sen (2000) argue that sustainable development is a necessary search for enriching human capabilities. According to Sachs (2000), therefore, this concept reveals the interdependency between different aspects of social reality and leads us to conclude that this subject matter requires a plural analysis. Therefore, the challenge for sustainable development initiatives is to institutionalize solutions which fit specific local problems, overcoming the gap between the impact of human activities on the physical environment and objectives for protecting it (SCHIMIDT; GUERRA, 2010).

Agenda 21 was set up within this context, involving contributions from governments and civil society organizations from 179 countries, based on the concept of collective action. Each signatory country became responsible for developing its own National Agenda 21 which would be conducted by means of local projects.

In Brazil, discussions continued for a number of years after Rio-92. They consisted of debates and public participation. A document was subsequently drafted which evolved into National Agenda 21. This document was produced with the participation of various organizations and was drafted as a result of the aforementioned debates. It was published in 2000 and entitled "*Agenda 21 Brasileira – Bases para Discussão*" [Brazilian Agenda 21 - Bases for Discussion]. Its proposal for disseminating the agenda focused on empowering communities in all regions by promoting Local Agenda 21 initiatives, as well as fostering integrated and sustainable development (BATISTA, 2003). For this purpose, the government established the Agenda 21 Coordination – a

team capable of assisting the development process of Local Agenda 21 initiatives, under the aegis of the Brazilian National Fund for the Environment (FNMA). Subsequently, in July 2003, a revised edition of the document was launched, "Developing Local Agenda 21 Initiatives", by the Ministry for the Environment (MMA, 2009). The document reaffirmed the promotion of Agenda 21 projects across the country and highlighted the importance of expanding the Agenda to municipalities and citizens at a local level.

During the following years, Agenda 21 was included in the Multi-Annual Plan - MAP 2004/2007. Thus, as a public policy instrument, it gained greater scope, coverage and significance. Given that there are Local Agenda 21 initiatives throughout Brazil, regional networks started to develop with the purpose of exchanging experiences. Many of the Local Agenda 21 initiatives follow the methodology set out by the Ministry for the Environment, entitled "*Passo a Passo da Agenda 21 Local*" [Local Agenda 21 – a Step-by-Step Guide]. It establishes directives so that Forums are able to organize actions and attain proposed objectives.

Twenty years after Eco-92, at the Rio+20 Conference, there was a new round of discussions on sustainable development. It sought renewed political commitment on this subject (Rio+20, 2012). Moreover, it is worth emphasizing that questions debated in 1992 remain pertinent. However, Brazilian Local Agenda 21 initiatives are being stopped, interrupted or cut short with no effective practical results (SCHIMIDT; GUERRA, 2010). In a comparison between 2002 and 2009, Carvalho (2010) highlights a reduction of 37.7% in the total number of Agenda initiatives in Brazil. Analyzing the challenges in sustainable development, Jacobi (2003) observed that: "[...] responses must increasingly contain an element of cooperation and definition of an agenda so as to speed up priorities for sustainability as a new development paradigm [...] (JACOBI, 2003, p. 202).

The prospects for advancing sustainable development initiatives and Agenda 21, therefore, require an understanding of collective governance, a subject which will be discussed in the next section.

Collective Governance for Sustainable Development

During the last three decades, collective governance and related issues have gained significance in the field of applied social sciences (WILLIAMSON, 1985; OSTROM, 1990; THOMPSON, 2003). The concept of governance can be defined in a variety of ways and there is no consensus among academics regarding its core elements (VAN KERSBERGEN and VAN WAARDEN 2004; ADGER and JORDAN, 2009; JORDAN 2008). However, for Biermann *et al.* (2010), in most of the literature the term means:

> [...] new forms of regulation that go beyond traditional hierarchical state activity. It usually implies some form of self-regulation by societal actors, private-public cooperation in the solving of societal problems, and new forms of multilevel policy (BIERMANN *et al.*, 2010, p. 279)

More recently, the study of the governance of collective action has received special attention from authors concerned about sustainable development (BODIN; CRONA, 2009; BEVIR, 2011). However, it was already possible to identify a concern with the collective governance of common goods in the seminal works of Ostrom (1990) and Olson (1999) and in subsequent studies such as those of Pretty (2003) and Dietz *et al.* (2003). From the local to the international level, agency, within the concept of green governance, is not restricted to states and governments, but encompasses the participation of a myriad of public, private and non-state actors (BIERMANN *et al.* 2010). In these studies, elements can be identified which provide the basis for establishing constructs for the collective governance of common goods or, in other words, *green governance*.

State institutions are established and developed according to a hierarchical and sectorial conception and are usually inadequate for addressing problems (SCHMIDT; GUERRA, 2010). Therefore, in contexts such as those of Agenda 21, the actions of a group of actors geared towards local sustainable development must be steered by the common good and induce collective commitment (SCHERER-WARREN, 1996). This commitment is established through collective action, which requires a number of social actors, who are sometimes multi-faceted, to work together to define a construct which can be referred to as *common objectives*. Objectives emerge as friction and conflicts reduce, and by taking into account the complex and heterogeneous nature of society (JACOBI, 2003). According to Shirky (2010), a common objective is a sort of promise: it is the most "basic reason" for uniting actors and drawing together contributions for the group as a whole. Olson (1999) associates common objectives with collective benefit, that is, a common objective is that which members of a group hope to attain by coming together. Thus, it is possible to understand that common objectives shared between actors facilitate collective governance (BALESTRIN; VERSCHOORE, 2008).

A second construct of relevance to *green governance* are *norms*. Norms explain clearly to individuals how they must behave and what to expect from others. They are established to reduce uncertainty and contribute to a definition of "how things should be" within a particular group (PORTUGAL, 2007). According to Therborn (2002), norms can be divided into three different types: constitutive norms - define a system of action and an actor's participation in that particular system; regulative norms – govern expected contributions by actors to the system; and distributive norms - define how rewards, costs and risks should be distributed. According to Therborn, these three types have different levels of importance and a different dynamic. Thus, a set of norms can be understood as the rules of a game, making clear what can be expected from others and what they, in turn, can expect (SHIRKY, 2010).

Another construct which complements the concept of *green governance* is that of *involvement*, that is, the integration of actors in the decisions and actions of a group. Barabási (2009) argues that involvement is the basis of all collective action, and according to Shirky (2011, p. 171), "each individual has different motivations to do things, and these motivations generate different types of participation". Relevant to

this discussion is the fact that during the 1970s a set of hypotheses known as self-determination theory (DECI, 1971) emerged. This theory differentiates between two types of motivations: intrinsic and extrinsic. According to the author, intrinsic motivations are those where the activity in itself provides rewards, whereas extrinsic motivations are those that originate from something external to the activity itself (DECI, 1971). When there is no financial remuneration for members, governance must propose actions which promote involvement through non-financial means.

The group must also ensure that its structure is viable, as actors need to have enough resources to support themselves, whether these come from the members themselves or from outside organizations. Without resources groups cannot exist (SHIRKY, 2010) and each action performed leads the coordination to expend some of its limited resources, whether time, attention or money. According to Olson (1999), any group which has to become organized to obtain collective benefits will discover that there is a minimum organizational cost that must be met, regardless of whether the group has a low-level of formal organization or an informal agreement. Understood thus, collective governance is a process which secures resources in order to establish and support (and perhaps even close) a group of people holding the same objectives (PROVAN; SYDOW, 2008). Thus, groups which tend to last longer coordinate their actions so that their structure is viable in terms of the costs involved (OSTROM, 1990).

Finally, in addition to the *green governance* constructs already discussed, another must be stressed, *communication*, understood as a set of platforms that allows for the exchange of information between actors. It is by means of rapid and effective communication that actions occur within a group. Communication assists in the processes of decision-making and deliberation, drawing together and facilitating actions which are part of the development project drafted by participants (KISSLER; HEIDEMANN, 2006). In his research, Castells (2009) shows that traditionally, vertical and hierarchical structures were considered to be superior to horizontal structures because of technological restrictions. However, given cultural and technological changes, information and communication via networks has resulted in horizontal communication becoming faster and more effective, fostering collective governance (CASTELLS, 2009).

In Chart 1, the five established *green governance* constructs are synthesized, with their respective descriptions and theoretical references, so as to guide the analyses of the results in this article.

Chart 1 Synthesis of the five established *green governance* constructs

CONSTRUCT	DESCRIPTION	REFERENCES
Common objectives	They are fundamental for setting up groups and attracting potential members. They promote coordinated action and are shared by all actors.	OLSON (1999); JACOBI (2003); BALESTRIN; VERSCHOORE (2008); SHIRKY (2010); SCHMIDT; GUERRA (2010).
Norms	Formal and legal aspects which permeate relations between members of a group. They establish everyone's rights and duties and prevent opportunistic actions. They occur in both horizontal and vertical relations.	THERBORN (2002); PORTUGAL (2007); SHIRKY (2010).
Involvement	Participation of actors in the decisions and actions of the group. Derived from intrinsic and extrinsic motivations of members and the mobilizing capacity of the project or initiative.	DECI (1971); BARABÁSI (2009); SHIRKY (2011).
Resources	Material resources so that the group's structure is viable. Involve extrinsic motivations of actors.	OSTROM (1990); OLSON (1999); PROVAN; SYDOW (2008); SHIRKY (2010).
Communication	Internal communication allows for information exchange between actors in a group. It facilitates and enhances the strength of deliberations. Both types (internal and external) can be practiced through multiple forms of media.	KISSLER; HEIDEMANN (2006); CASTELLS (2009).

Source: Elaborated by the authors based on theoretical data

After compiling and analyzing the aspects of each *green governance* construct and their respective theoretical references, it is possible to analyze collective governance for sustainable development. In order to do so, the next section describes the methods employed in this study, as well as the procedures used for data collection and analysis.

Methods and Procedures

The research conducted adopted an exploratory perspective, prioritizing qualitative methods. The object of the study was the 21 Agenda, and empirically, it focused on four Local Agenda 21 Forums in the municipalities of São Lourenço do Sul, Gravataí, Ijuí and Vacaria, all located in the state of Rio Grande do Sul, Brazil. These forums were selected because they had been chosen as the locations for the four Local Agenda 21 state-wide meetings in 2007, 2008, 2009 and 2010, respectively.

Firstly, secondary data was collected from documents made available by the four forums selected, in order to identify the representatives involved in the Local Agenda 21 Forums. Thus, all the minutes and the lists of participants in the meetings were collected and the names of participants were typed and classified according to their representation of one of the following social spheres: State, Market or Civil Society. Participants not representing any particular organization were classified as belonging to the Civil Society group. Table 1 shows the distribution of participants in each of the four forums. From the documents it was possible to observe that in all the Forums the lists of representatives were long. However, few representatives attended meetings. Therefore, for the purposes of this research, only actors present in at least 10% of forum meetings were considered participants.

Table 1: Percentage of participation in the four Local Forums divided by social sphere

Social Sphere	São Lourenço do Sul	Gravataí	Ijuí	Vacaria
State	48.48%	57.14%	57.35%	52.63%
Civil Society	39.39%	30.95%	27.94%	31.58%
Market	12.12%	11.90%	14.71%	15.79%

Source: produced by the authors based on collected data

Respondents were selected using the Social Network Analysis (SNA), taking into account participation in the Forums and the balance of one respondent from each social sphere: State, Market and Civil Society. The characteristics which emerged from the quantitative analysis were relevant, since from UCINET calculations it was possible to identify the actors with the greatest number of network connections. A

method for excluding respondents was also employed. As responses became redundant, the need for new interviews was reduced. Thus, there was no need for more than sixteen interviews in total.

The main body of research analysis comprised data collection through interviews, documents and observations. Interviews were individually conducted using a semi-structured script. Interviews with the four Forum representatives were conducted at the headquarters of the Forums or other places chosen by the respondents, between April and July 2011.

At the same time, documents were collected and observed. The observations of Local Agenda Forum 21 meetings allowed the activities of participants in the group to be monitored, since interviews and narratives can only be accessed by means of reports/statements (FLICK, 2009). Four Forum meetings were observed, three in the Forum of Ijuí and one in the Forum of Vacaria. Unfortunately, it was not possible to conduct observations in the other two municipalities as activities were interrupted shortly before data collection started. The documents made available during our contact with the Forums provided another source of data. Researchers were given access to minutes, lists of participants at meetings and legislation related to the Forums studied and Agenda 21.

Content analysis was employed to assess qualitative data. According to Bardin (2008) content analysis is a set of communication analysis techniques involving systematic and objective procedures to describe the content of messages. The *corpus* data enabled us to conduct an in-depth analysis of the governance constructs. Findings are presented and analyzed in detail in the next section.

Results and contributions

This research sought to provide a theoretical and empirical basis to set out and analyse the five constructs of collective governance for sustainable development. In this section, the main findings related to the constructs established are presented in accordance to the literature discussed. Data collected during the observation of meetings and documents made available by the Forums, together with statements produced by interviewees, were employed in the analysis.

Research findings reinforce the theory that it is not enough to gather together a number of people in a group to achieve self-governance and expect groups to organize themselves without resources (SHIRKY, 2010). With this in mind, it was observed how difficult it was to bring members of government and non-governmental organizations and entrepreneurs together. In face of these dilemmas, *common objectives* emerged. They are considered fundamental in order to set up a group working towards collective action. In order to co-ordinate efforts to address issues relating to sustainable development in their municipalities, the Forums analyzed established common objectives. This was considered important in order to bring together actors and their contributions to the group (OLSON, 1999).

During the interviews, when asked about objectives, a respondent replied that "common objectives are those things we believe are best for our municipality, such as

issues related to water, trade, waste, everything together" (E4). Another reply was that common objectives "need to be linked to indicators, in order for there to be a direction, a path to follow" (E14). Therefore, common objectives have to be well set out and there must be targets and indicators, so that they can be more relevant for the development of governance. Results also pointed to the fact that common objectives can be associated to both higher and lower interaction between the sectors involved in the four Forum groups studied.

Amidst discussions about the difficulties of governance regarding interpersonal relations, Ostrom (1990) argues that in groups that manage problems of common resources, shared commitments are regulated through cooperation *norms* which become intrinsic to the group. According to the author, violations of norms are easier to address when they do not even exist. Therefore, it will be of great value to the group, if, through governance, participants can internalize notions of right and wrong (OSTROM, 1990). Empirical data showed that in relation to norms, in addition to contractual and formal aspects, there were also informal aspects, that is, norms which have not yet been formalized.

In relation to formal norms, some points stood out during interviews. Respondents commented that alterations occurred even as meetings were being held. "Initially, we had monthly meetings. Later, people thought there were too many meetings and it was decided they should take place every two months" (E7). Despite the fact that the Forums' internal regulations stated meetings should be monthly, this issue was discussed, and in view of the needs of participants, frequency was changed.

Some authors argue for the establishment of a set of simpler protocols or cooperative working practices "so that skills can be brought together in a fast and dynamic way" (CROOK, 2009: 219). Indeed, it was observed throughout this analysis that norms could assist in resolving disputes. When asked about this matter, one of the interviewees observed that though there had not been any instances of disputes where norms needed to be consulted, "there is no doubt that there would be occasions when norms would be needed to set boundaries and resolve differences" (E13). Relations between people are bound by norms and these are better implemented with the consent of all participants. Bortolaso (2009) therefore suggests that the clarification of procedures is necessary to foster social relations, maintain active participation within the group and generate ideas for the group's development. Hence, they not only serve to regulate a group, but also to defend and protect actors belonging to it.

Results of this research indicate that this type of regulation is important for the effective management of groups. Evidence gathered demonstrates that norms emerge from social relations and that they are eventually formalized by the forums. This formalization can occur, for example, in order to clarify to new participants of the group what they can and cannot do. It also emerges that as working groups grow they tend to require more management. The larger the group, the more likely it is for there to be tension between members and, therefore, the greater the imbalance of power between them (OLSON, 1999).

In this study, the union between participation and motivation resulted in another construct, *involvement*. In theory, a dynamic group is able to encourage its members to be constantly involved. Qualitative research shows that involvement occurs more frequently through intrinsic, rather than extrinsic motivation, wherein the activity itself provides rewards. As stated by one of the interviewees, "at the beginning, you feel euphoric, I think it happens in all Forums" (E11). However, governance mechanisms are also important in order to maintain motivation, particularly because in the Forums "[...] each one has their professional activity, this is voluntary work. But I notice that it's like in any other organization, normally people will participate, but they do not carry the whole burden alone" (E7).

It is worth noting that in addition to representatives of organizations, whether public or private, other participants can also be present and usually are, such as teachers who tend to take an active part in Forum meetings. Furthermore, findings show that for certain situations, such as routine tasks, extrinsic motivation is a must. Nevertheless, in relation to important group activities, when it is not possible to pay members, involvement by means of intrinsic motivation is achieved through procedures established by the group, within the context of collective governance.

The previous analysis revealed that the construct entitled involvement is directly associated to intrinsic motivations. However, it was also shown that this is not the only type of motivation that is required. Often, groups need infrastructure, transport and other forms of material support. There are also a number of daily tasks that need to be carried out. Financial support, or the lack of it, appears to be one of the main obstacles to the development of Latin American Local AG21s (ICLEI, 2002). In most chapters of the official Global Agenda 21 document (AGENDA 21, 2000), for example, there are estimates of resources needed in order to carry out and resolve specific issues.

In face of this observation, one of the aspects that our attention is drawn to is the relation between these two constructs: involvement and resources. Even in groups where most of the work is voluntary, the coming together of people means that, through governance, attention must be paid to operational resources. When Forum interviewees were asked about the source and amount of financial resources, they pointed out that this was always a hot topic of discussion. It is worth noting that some interviewees were members of the Forum coordination or the government. According to them: "we receive financial support from a municipal fund (proceeds from environmental fines) and some things come out of our own pocket" (E16); "expenses are covered with the support of the municipal government, in accordance to the law, and there is also support from private companies" (E13). It was also observed that all Forums studied are dependent upon the financial assistance of the municipal government to keep them going. As established in the legislation of one of the municipalities, Art. 11, "the Executive shall ensure that the Agenda 21 Forum has the necessary material and financial means to carry out its statutory duties" (Ijuí, 2009). However, in two of the Forums, there was no effective participation on the part of the municipal authorities. Thus, there was a significant lack of financial assistance, resulting in members employing their own resources or seeking funds from private companies.

Findings also showed that there are similarities between the Forums in relation to the origin of financial resources. However, during the interviews it was observed that the knowledge of interviewees in relation to costs and resources available to the Forum varied significantly. Many commented that they did not have the necessary funds to plan and carry out all they wished to do. In other cases, it was not a problem, because they had already found ways of resolving this issue. According to one of the interviewees: "Up to now, we have managed to carry out all our actions. When there is a lack of (financial) resources, we study all the possible ways of resolving this issue" (E13). It was observed that material resources are important to the groups, as they are prone to be moved by extrinsic motivations, that is, in some cases they fund one or more participants to carry out routine activities. Without them, these groups would not have a viable structure as their activities entail diverse costs. From the interviews and documents available, it was possible to note that the existence of an operational structure results in social actors becoming more engaged with the objectives of the group.

The employment of virtual platforms for interacting can lead to actors becoming more engaged and establishing bonds. This relates to the *communication* construct: that is, the action of transmitting and receiving messages from group members. It encompasses message exchange via new forms of media. This construct is relevant to the analysis of collective governance because communication is a way of expressing power inside a group (CROOK, 2009). Those who do not possess information are unable to act and contribute to the group. Communication was analyzed by assessing messages which were received and sent, the means by which this occurred, as well as their content.

When interviewees were questioned about their views on communication in their respective Forums and how it occurred, some responses were: "communication is the key to any Forum" (E10); "in an emergency, this might be telephone communication" (E7). Taking this example and statements regarding other situations, it is clear that not all information reaches everyone, and when it does, it is already out of date, as one of the interviewees recalled when he claimed that sometimes there were discrepancies. "Some said that they were not receiving emails. Emails were mainly used to call meetings" (E2). Findings reveal that communication is one of the challenges in the collective governance of groups such as Agenda 21 Forums.

Both during observations of the four Forum meetings and in statements of interviewees, there was a recurring willingness and interest in using new forms of media. There are now technologies and new communication services which are increasingly available, facilitating communication between many people simultaneously We highlight the use of data sharing sites and other interactive platforms as possible solutions for these groups. It is worth recalling that within a context such as Agenda 21 Forums, in which presential meetings are restricted, teleconferences, for example, could allow participants to organize urgent meetings, or perhaps facilitate the participation of those who are not physically present. As already pointed out in relation to resources, groups do not always have either the geographical or financial possibility

of enjoying a physical location. Therefore, communication through new media could foster collective governance.

External communication was another aspect mentioned by Forum participants. In contrast to internal communication between members, external communication involves other local organizations, such as public and private institutions, and other parties interested in sustainable development. Within this context an interviewee stated:

> [...] I believe that the local media (newspapers, radio) is essential in ensuring the Forum's satisfactory performance as it reaches the entire population in our region. People can be mobilized and become engaged with the objectives and the actions of the Forum, because of the media's credibility. It is through the media that the community is also informed about what is going on (E13).

According to this interviewee and the Forum's proposal, in which the group's experiences should be reported to the institutions which participants represent, good internal and external communication mechanisms are important for collective governance. It is clear that the power to communicate provides the opportunity to overcome or diminish group difficulties (SHIRKY, 2010) and that, in a group environment, new media promotes democratization and the sharing of information.

Chart 2 synthesizes results in relation to the analyzed constructs, together with the main findings and their empirical evidence. These results assist in developing a framework of analysis of collective governance for sustainable development, based on established groups such as Local Forums of Agenda 21.

Chart 2. Synthesis of the analysis of group governance constructs

	Construct/Description	Main Results	Empirical Evidence
Common objectives	They are fundamental for setting up groups and attracting potential members. They promote coordinated action and are shared by all actors.	Clearly defined common objectives facilitate group governance. The better established the objectives, goals and indicators, the more engaged the participants.	"Common objectives are those things we believe are best for our municipality, such as issues related to water, trade, waste, everything together" (E4). "Indicators are necessary, for a direction, a path" (E14).
Norms	Formal and legal aspects which permeate relations between members of a group. They establish everyone's rights and duties and prevent opportunist actions. They occur in both horizontal and vertical relations.	Informal and formal norms are essential for the good management of groups and must include aspects developed by the actors themselves. Formal and informal norms are mechanisms to promote problem resolution. Both emerge from social relations and eventually become formalized.	"There is no doubt, that eventually they will set boundaries and resolve differences" (E13). "Initially, we had monthly meetings. Later people thought that there were too many meetings and decided to conduct them every two months" (E7).
Involvement	Participation of actors in the decisions and actions of the group. Derived from intrinsic and extrinsic motivations of members and the mobilizing capacity of the project or initiative.	Total engagement is very difficult to achieve, therefore, groups need to foster different types of participant involvement. Collective governance must focus on involvement by means of intrinsic motivations.	"At the beginning, you feel euphoric; I think it happens in all Forums" (E11). "[...] Everyone has their professional activity, whereas this is voluntary work. I think it's like in any other organization, normally people will participate, but they do not carry the whole burden alone" (E7).
Resources	It refers to material resources so the structure of the group is viable. They involve extrinsic motivations of actors.	Resources are necessary for groups to function and reach their objectives in the short and long-term. Searching for their own funding is a continuous task, so as not to depend entirely on the financial resources of third parties.	"We receive financial support from a municipal fund (proceeds from environmental fines) and some comes out of our own pockets" (E16). "If there is a lack of (financial) resources, we study all the possible ways of resolving this issue" (E13).

Communication	Internal communication allows for information exchange between actors of a group.	Communication ensures that participants have the opportunity to contribute more to the group.	"Communication is key to any Forum" (E10).
	It facilitates and enhances the strength of deliberations.	Communication flow was a problem in relation to the governance of groups.	"In an emergency, we use the telephone" (E7).
	Both types (internal and external) can be practiced through multiple forms of media.	New media promote the democratization of information.	"Some people said they did not receive emails. Emails were basically used for calling meetings" (E2).

Source: produced by the authors based on theoretical data

The analysis of our results may also contribute to the *Passo a Passo da Agenda 21 Nacional* [National Agenda 21 Step-by-Step] guide. In Brazil, the Agenda 21 program has been developed based on a specific methodology, or a voluntary action plan. Its implementation is dependent upon the political will and mobilization of civil society (Barbieri, 1997). As mentioned above, the methodology employed by Local Agendas comprises six steps: 1 - Mobilize and raise the awareness of government and society; 2 – Establish a Local Agenda 21 Forum; 3 – Draft a participative diagnosis; 4 – Produce a Local Sustainable Development Plan (LSDP); 5 - Implement the LSDP and 6 - Monitor and assess the LSDP.

The National Agenda 21 methodology, encompassing steps from the establishment of the Forum to the final stages of the Local Sustainable Development Plan – LSDP, was employed because it is an established instrument used in the day-to-day management of the groups studied. Results of the research indicate that it may be useful to include a further two steps. A step "0" - "Conceiving a Pre-Local Agenda 21", and a 7th step, a re-assessment of the LSDP. First, with regard to step "0", which should precede the stage of mobilization towards Agenda 21, it is thought that collective governance may be improved if interested parties are able to imagine the future of their Municipality's Local Agenda 21 project. This first step would ensure that all those involved are able to conceive the group as following the whole methodology to the stage when it is finally reassessed in conjunction with the LSDP. Step 7, the LSDP reassessment phase, would incorporate the necessary adjustments and improvements across the whole trajectory of the group.

It is worth recalling that these steps are often carried out in groups, via multi-disciplinary teams, bringing together different forms of knowledge to solve the problem

at hand. In this context, the Local Sustainable Development Plan may be compared to a project with common objectives and results. The purpose of this synthesis is to understand the governance actions of groups, in an attempt to advance beyond the steps already taken, whilst at the same time, contribute to the existing literature. In this way, we can develop constructs which assist in the consolidation process of groups working towards sustainable development. It was observed throughout this study that the Forums following this path will be able to learn from one another, and will move closer to achieving better results. Thus, in addition to some theoretical contributions, we highlight the importance of our empirical findings, together with constructs which may indicate how Forums can employ this methodology. Below the final considerations of this article are presented, together with contributions, implications and suggestions for future studies.

Final considerations

Recent economic, social and environmental crises lead us to question our ability to find solutions at a global level. By researching cases which address *green governance* collectively, the purpose of this article is to propose and analyze a set of constructs relating to the collective governance of local sustainable development in the municipalities of São Lourenço do Sul, Gravataí, Ijuí and Vacaria. During the data analysis of the quantitative and qualitative stages, five constructs for governance were established. Results of their analysis were compiled in a chart synthesizing the main findings and empirical evidence. The synthesis presented contributed both empirically and theoretically to the definition of governance constructs, which may be used by the Agenda 21 Forums themselves and other organizations.

The analysis made in this article brings to the fore new elements to foster future studies and suggests improvements in the governance of Local Agenda 21 Forums. Issues such as power may be discussed and studied in further research, as it clearly does not fall within the remit of this article. By way of conclusion, it is suggested that similar studies are carried out in Forums in other Brazilian states. The results of this study could then be compared at a national level. It is also suggested that the applicability of the constructs studied be analyzed in groups with different remits. However, these studies should focus on the way group governance is assessed, employing indicators and comparing results from multiple analyses.

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GREEN GOVERNANCE: A PROPOSAL FOR COLLECTIVE GOVERNANCE CONSTRUCTS TOWARDS LOCAL SUSTAINABLE DEVELOPMENT

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Resumo: O desenvolvimento sustentável é um objetivo fundamentalmente coletivo, no qual ações isoladas surtem poucos efeitos. Por conseguinte, projetos de âmbito mundial visam o alinhamento de múltiplas ações isoladas em ações coletivas. Propostas, como a da Agenda 21, pretendem potencializar esforços com a participação de atores sociais. Sabe-se, todavia, que a governança da ação coletiva é um desafio, tanto para gestores, quanto para pesquisadores. O presente artigo tem como objetivo propor e analisar um conjunto de construtos que caracterize a governança coletiva do desenvolvimento sustentável local. É uma pesquisa exploratória que utiliza o método de estudo de multicasos. Seu campo empírico foi formado por quatro Fóruns do estado do RS, localizados nas cidades de São Lourenço do Sul, Gravataí, Ijuí e Vacaria. Os dados coletados levaram a cinco construtos: objetivos comuns, normas, envolvimento, recursos e comunicação. Tais resultados possibilitaram o aprimoramento da metodologia da Agenda 21 Nacional.

Palavras-chave: Governança. Desenvolvimento Sustentável. Agenda 21.

Abstract: Sustainable development is a collective goal in which isolated actions have little effect. Therefore, the aim of projects across the globe is to align multiple isolated actions into collective action. Proposals such as Agenda 21 aim to build on efforts to improve social participation. It is known, however, that the governance of collective action is a challenge to both managers and researchers. The object of this paper is to propose and analyze a set of constructs which characterize collective governance in local sustainable development. This is an exploratory research employing multi-case studies. The empirical field encompasses four local forums in the state of Rio Grande do Sul, Brazil, located in the municipalities of São Lourenço do Sul, Gravataí, Ijuí and Vacaria. Data collection pointed to five constructs: common goals, norms, involvement, communication and resources. Findings may also contribute towards improving the methodology employed by the National Agenda 21.

Key words: Governance. Sustainable Development. Agenda 21.

Resumen: El desarrollo sostenible es un objetivo fundamentalmente colectivo, en el cual las acciones aisladas alcanzan pocos efectos. Debido a esta situación proyectos en nivel mundial buscan la alineación de acciones aisladas múltiples en acciones colectivas. Propuestas como la "Agenda 21", quieren potencializar esfuerzos con la participación de actores sociales. La gobernanza de la acción colectiva es un desafío, tanto para los gestores como para los investigadores. Este articulo se propone analizar constructos que vengan a caracterizar la gobernanza colectiva del desarrollo sustentable local. Es un estudio exploratório y utiliza para esto el método de estudio de casos múltiplos. Se constituye su campo empírico cuatro Foros del departamento de RS, en las ciudades de San Lorenzo del Sur, Gravataí, Ijuí y Vacaria. Los datos llevaran a cinco constructos: objetivos comunes, normas, participación, recursos y comunicación. Tales resultados permitieron la contribución a la mejora de la metodologia de la "Agenda 21" nacional.

Palabras clave: Gobernanza. Desarrollo Sostenible. Agenda 21.