CHALLENGES OF A SUSTAINED AND SUSTAINABLE DEVELOPMENT: A STUDY-CASE

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Abstract

The town of Governador Valadares went through several economic cycles throughout its history which led to the destruction of its forests and the depletion of its soil, causing poverty and stagnation. Socioeconomic indicators point out the actual stage of the town's development. In order to fully understand what its inhabitants think about this reality, two separate researches were conducted: a) with students and teachers of both public and private secondary schools to assess their social awareness regarding the environment, their attitudes, values and social practices towards Rio Doce, as well as the town's natural and cultural heritage; b) with stakeholders, opinion makers and other inhabitants to understand what they think about "the town we have" and their view of a suitable future for Governador Valadares; in other words, "the town we want to have in a near future". The information gathered made it possible to make a SWOT analysis that can serve as an important basis for public policies targeting the town's sustainable development. The final goal of the current study is to make a Master Plan for the Integrated Territory Management – ITM methodology.

Keywords: Territory, Social Perception, Integrated Management, Governance, Sustainability

JEL classification: R58, Q01, 021

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1. Introduction

The municipality of Governador Valadares, with a total area of 2,342.319 km² and an estimated population of 278,363 inhabitants (IBGE, 2015), of which 96% living in the urban area, is currently facing several problems, namely economic stagnation, low levels of employment, social inequality, violence and unsafety, besides an unpayable debt towards nature, due to decades of large-scale extractive activities. The exuberant Atlantic forest that used to cover the region was decimated and the river that flows through it, is degraded and polluted.

Throughout its history, Governador Valadares has experienced cycles of growth and crisis, always caused by the search for riches, regardless of the impact on the territory which has always been considered as a source of endless resources. Territory is here understood as a system composed of mostly non- renewable resources, which calls for an integrated management of its use, according to a development pattern that is both compatible with its preservation and sustainable, depending on the articulation of different and often contradicting perspectives (Oosterbeek, 2012a).

Every territory has necessarily and simultaneously different combinations of a functional and symbolic nature. Its nature is systemic and integrated, which is only disrupted by people's reckless actions. A growth-oriented management based on a developmental creed has been the cause of environmental and social unbalance. Any form of growth which does not create social justice does not guarantee sustainability. Jurisdiction over a territorial space occurs both to perform certain "functions" and to produce "meaningful results". Along with its own cultural imprints, the territory becomes the *locus* of a struggle for recognition and rights. It often gains such relevance, that it equally combines function/resources and identity/symbol (Raffestin, 1993).

The present study-case departed from the concept of territory and territoriality to try and understand the historic path of what is now the town of Governador Valadares and the type of relationship people have established with the territory as well as the process of building their own territoriality. Bibliographical and documentary research was followed by two field researches, in an attempt to know the water social awareness (focussing on River Doce) as well as the perception/awareness of the town that we now have. Results made it possible to make a SWOT analysis, outlining a context that can serve as the basis for setting public policies and making a strategic reflection in view of an alternative future. The main goal is to come up with a Master Plan for Governador Valadares, based on a governing strategy that focus on the Integrated Territorial Management (ITM), a methodology which helps overcome the individuals' and their groups' (stakeholders') alienation, so that it creates a positive approach to the goals set by and for the group.

Choosing the ITM methodology allows that both former contributions and the ones that are being developed come from within civil society alongside with public management. This new model for managing the territory is revolutionising the concept of isolated governance from public authorities; it considers difference as healthy, diversity as rich, and the identification and solving of the problems that affect the territory and its communities as a challenge. The ITM methodology consists of a set of tools that promote diversity and cultural integration of the social, economic, and environmental dimensions, by identifying the dilemmas that one is faced with when trying to find solutions for the territory and its communities. It works with enlarged actions and the integration of all the territories involved in it, based on the assumption that it is not enough to focus on the triple bottom line: economy (growth), society (harmony) and environment (preservation).

When compared to other types of management, ITM presents itself as a plural methodology that takes into account individuality, diversity, and the contradictions that are part of society, using perspective, forward-looking, technological integration and transdisciplinarity. Oosterbeek (2012b) points out some specific features that show the difference between Integrated Territorial Management and traditional forms of Management and Strategic Management as regards: a) Dynamics: processes take place in a network that allows their combination and adaptation to asymmetries within the territorial system and to differences in the rate at which they occur; b) Focus: it acknowledges the individual's new status within society, without giving up the abstract, rational approach; c) Object: individuals and groups, since they display chaotic behaviours which account for social dynamics; d) Values: focusing on values and their dynamics allows one to understand how the individuals' and groups' perceptions regarding the territory influence the choices they make; e) Context: the territory is marked by multiple agendas that are independent and, at the same time, linked by a network that holds them together and ensures their joint evolution; f) Processes: the plural nature of a society, marked by contradictions and in an ongoing transition, calls for diverse and convergent ways that reflect its dynamic character.

Based on this view, the present article proposes an Integrated Territorial Management model for Governador Valadares. It has taken into consideration those aspects which led to its

territorialisation— a place with material resources and means of production, as well as the possibility of building and controlling connections and networks — flows of people, goods and information (HAESBAERT, 2005).

2. Territory, territoriality and sustainable development

Space and territory are not one and the same thing (Haesbaert; Limonad, 2007). The former pre-exists the latter; it is the basis, the raw material of social action, which collectively produces the territory. Space is the original prison, whereas the territory is the prison human beings build for themselves (RAFFESTIN, 1993). Territory is the locus of all relationships and territoriality a process through which relationships are lost and reconstructed. The relational character is part of power references, circulation and communication networks, territorialities, control of natural resources, which show the social relationships between subjects and between these and their place of living, both economically, politically and culturally (Raffestin, 1993).

Territory is a spatial cutout defined by ownership, power and control relationships over resources and flows, based on political, economic and cultural aspects (Haesbaert, 2009; Saquet, 2007; Spósito, 2004). Territoriality is the very contents of territory, which may be designed from the interconnection of multiple power relationships, from economic and political relationships, to the more symbolic power of cultural relationships (HAESBAERT, 2009). It is something abstract, but not in a radical sense, reducing it to an analytical abstraction. It is also an abstraction in the ontological sense; it exists as the image or symbol of a territory and may become an effective political and cultural strategy, even when the territory it refers to is not totally outlined. Because there is such a rigid separation between territory as ownership (material) and as appropriation (symbolic), the complexity and the richness of the "multiterritoriality" in which we are immersed are ignored by many (Haesbaert, 2004). In view of its dynamic nature, territoriality helps create local identity processes. Besides incorporating a strictly political dimension, territoriality also refers to economic and cultural relationships, since it is closely linked to the use people make of the soil, how they organize themselves in the space, and how they value the place (Haesbaert, 2004).

In the late 1990s, the notion that natural resources were endless was replaced by the realization that they were rapidly and inexorably being exhausted, questioning the type of development model adopted by the countries. Until then, terms like development and growth were understood as referring to the same thing and, so far, society has not yet completely given up that assumption, despite lacking arguments to support it. Environmental problems have become more and more obvious and complex, and proven to be likely to change and interfere with the quality of life of millions of people.

Development occurs in a territory from two perspectives: based on official information, which put it in a position to be compared to other territories; or through its citizens' social perception, revealing another outlook, based on cognitive processes, cultural values and expectations. The way human beings act in a given territory (landscape) has its roots in their concepts and values, which, in turn, are culture-bound. We see what we were taught to see, and miss to see what we do not understand.

3. Methodology

The method chosen to carry out the research was the case-study, which, according to Yin, (2001) involves data gathering, field visits and supervision, resorting to a previously selected theoretical basis, which allows one to make a quantitative and qualitative approach to the subject of the research. It observes, registers, analyses and correlates facts or phenomena (variables) without any kind of manipulation, seeking to establish how often a phenomenon takes place, how it relates and is linked to others, its nature and characteristics (Cervo & Bervian, 2007). It is a way to research current phenomena within their own real context, even in situations when it is not always easy to tell phenomena and their context apart.

The methodological procedures that were adopted were the following:

a) Bibliographical and documentary research; it included selecting and reading documents, articles and books on the socioeconomic formation of Governador Valadares,

besides looking into such concepts as Territory, Integrated Territorial Management (ITM) Governance, Social Perception, Sustainability; official statistics of the municipality and of the region. ITM projects developed in other territories were also used as guiding references.

b) Field research I: "The water as a perception factor of the environment".

Sample Universe: students and teachers from secondary schools in Governador Valadares. Sample: 326 students (21% of the sample universe) and 32 teachers (36,8% of the sample universe) from four secondary schools (two public and two private). 56,7% of the students included in the sample attend a public school and 43,3% a private one. The schools are located in two territories: Ilha dos Araújos (Araújos Island, with a population of 8,000 people, approximately) and the centre of Governador Valadares (with an estimated population of 276,000 inhabitants) (IBGE, 2014). Schools were selected according to their size and importance. In order to collect the data, a structured questionnaire was used; it contained 28 questions (both close and open), formulated in such a way as to assess the social perception on the water, concepts and attitudes relating to environmental issues, people's interest for matters pertaining to River Doce, how often these matters are discussed in the classroom, and other related questions. Before the questionnaire had been applied, there was a pre-test, done by the teachers, under the supervision of the researcher and project author.

c) Field research II: "Perception of the town we (now) have and of the town we wish to have in the near future.

Sample Universe: the inhabitants of Governador Valadares; sample: representative stakeholders and opinion makers of the various urban territorial segments. The questionnaire was applied to 128 (hundred and twenty-eight) people, via e-mail, containing a letter with a description of the project and a link where answers could be registered. The number of people who answered the questionnaire totalled 65 (sixty-five). Since it was not possible to have virtual access to other stakeholders and opinion makers, 30 (thirty) questionnaires were applied in person, accounting to 95 (ninety-five) the number of people interviewed. The questionnaire addressed the personal profile: a) gender, age, level of education, occupation, address, social status (social position or leadership); b) questions to assess the citizens' perception as regards public services offer (health, education, culture and leisure infrastructures, quality, urban access and mobility, public transportation and safety); economy (quality of local commerce; job and income creation); environmental policies (preservation of the environment and of River Doce, sewage treatment, waste management); citizenship (follow-up and participation of the community in public actions that concern the citizens, transparency of public management); the town's quality of life and living conditions. Answers were analysed and shown in tables and graphs. The open questions sought to capture the interviewee's perception of the town we have: the challenges; the necessary changes; the participation in civil society; the institutional authorities' role; their opinion about Governador Valadares. The picture is completed by the interviewees' view on the town we wish to have in the near future (in twenty years' time).

d) SWOT analysis – a tool used to study the scenario, that can be applied to any type of situation and is a key-element to a good planning process and to define strategic actions – based on data obtained from field research II.

4. Results

Following the application of the already mentioned methodological procedures, it was possible to obtain the following information:

a) Field research I: Social perception of the water as the main thread to sustainably plan human beings/environment relationships. The information that was obtained revealed a prevailing, somewhat unelaborate environmental perception: the environment continues to be regarded as a space that excludes human beings and social and cultural dimensions — an idea that is conveyed by most interviewees. In their answers, teachers and students from private and public secondary schools showed no discrepancy in terms of attitudes and values regarding the sustainable environment concept. They associate pollution, degradation and abandonment with the river, despite their lack of interest for actions and measures to prevent

it. Although teachers often referred their concern for the environment, only a few address the issue in the classroom, which shows lack of coherence between words and actions.

Despite believing that the river pollution can affect their health, and that it is everybody's responsibility to protect the river and avoid its degradation, half of the students and teachers did nothing whenever they witnessed people polluting the waters, a sort of behaviour that made them feel uncomfortable. Only a few admitted having changed their behaviour patterns, having taken up more positive and environmentally correct attitudes in their daily life. In general, they are not aware of the fact that River Doce is the tenth most polluted river in the whole of Brazil (IBGE, 2014). They also ignore that within the civil society of Governador Valadares there are entities that are engaged in the struggle for protecting and preserving the

In the course of this research, the need or the importance of dealing with environmental education issues have never been identified as a way to prepare responsible citizens, aware of these matters and ready to express a commitment to everybody's life and well-being and to the life and well-being of society in general. Nowadays, that is a great challenge that education professionals, who are still ignorant of environmental responsibility actions, must deal with. Environmental education barely exists in schools, and when it does, its content is not suitable to inform and prepare students to exert a changing (perhaps revolutionary) citizenship, capable of changing people's relationship with the environment in which they live. Therefore, it is necessary that the school, as an institution, reviews its role of forming citizens for the future. It is the public authorities' responsibility to pay attention and supervise the management and preservation of River Doce, for the people's and the town's survival depends on it.

- Field research II: Interviews to Governador Valadares dwellers have shown that they are aware of the weaknesses and threats preventing the town from being competitive, as well as of the strengths and opportunities that may help it become more dynamic and sustainable again. This awareness can be seen in the SWOT analysis that follows:
 - SWOT analysis based on research II:
 - WEAKNESSES (factors that somehow internally hinder and/or prevent the creation of competitive advantages): public education; sanitation; urban infrastructures and mobility; public transportation; sustainability.
 - STRENGTHS (internal elements that generate benefit): strategic location; regional cluster; growth potential; a transparent public management; the fact that it is a friendly town.
 - THREATS (external forces with a negative impact on the town's effort to once again be dynamic): discontinuity in public policies; ethics and individualism; level of investment and employment; public safety.
 - OPPORTUNITIES (external forces with a positive impact, over which one has no control): alternation of power; citizen participation.

The awareness of the weaknesses and threats, strengths and opportunities emerging from the "town we have" and from the "town we wish to have" may help develop new governance dynamics, in a conscious, participating way.

From the data that were obtained, the present study proposes to set up a Master Plan for the territory of Governador Valadares, based on ITM-oriented governance strategies in order to try and overcome individuals' and groups' alienation, leading them to make proposals regarding the goals established for and by the group. In fact, that is the way to the integrated and sustainable development of Governador Valadares.

5. Discussion: there is a way

Proposing a sustainable development model was an important step to reduce the negative impacts of the disastrous production mode adopted by modern society. The great crisis that has been affecting the globalised 21st century world and still makes the headlines cannot be looked into as it used to be in the past, in light of classic economic tenets that account for it in terms of overproduction, excessive savings or structural unemployment. The concept of development has become broader and more integrated, understood as: development of the people (through the increase of their potential, of a better access to education, training, healthcare, housing, environment and food); for the people (which means that development is not an end in itself, but rather economic growth results in better living conditions); by the people (meaning that they are not only the recipients of the development process, but they are actually part of it, responsible for the decisions that influence their lives (Pungs, 1999).

This new management model of the territory gives a whole new dimension to the concept of public power, according to which authorities act alone, and uses the principles of sustainable development. It is a set of tools that promotes diversity and cultural integration of the social, economic and environmental dimensions, starting by identifying the dilemmas one faces when looking for solutions for both the territory and the communities living in it. Implementing it includes a training programme at various levels, focussing on very important resources such as human capital, territorial matrix, territorial consortiums and communication – the latter being considered the spinal cord of all activities for its multiplying effect. According to the new model, government, firms, civil society organizations, educational institutions, and regional authorities become partners in creating sustainable solutions to promote development. The idea is that a place may become a tool to sustainably promote economic development. (Scheunemann, 2012, p. 54). To be successful, it must be an integrated and harmonious set, contributing to territorial management, by focussing on quality and global sustainability (Oosterbeek, 2012b).

The Integrated Territorial Management proposes to look for sustainable solutions in terms of development, by creating synergies between the public power, the private initiative, the civil society organizations, local and regional authorities and educational institutions. It does not dismiss traditional methods, but rather incorporates new tools, focusing on reaching a type of development that is based on territorial dynamics, on valuing human as well as social capital, and on a society that is fully aware of its role as part of the planning process and as an agent of change. So that it can be applied, two complementary components are required: qualification of human resources, in a logic of social capital formation and fight against all forms of alienation, and the creation of a supervision model, internalised by the community it is meant for, that favours a culture of quality and critical reflection. The ITM model allows one to prepare the group to go through the "area reconnaissance" stage and reach the "area identification" one, overcoming individual alienation and becoming aware of the fact that diversity and contradiction do exist within society and, as such, they cannot be neither ignored nor avoided, but rather thought of and organised.

ITM is not a recipe; nevertheless, some common methodological steps and procedures must be observed, if the model is to be implemented (Oosterbeek, 2014): a) Territorial Diagnosis: to define the territory in detail, specifying its stakeholders, dynamics of interests and traditions that may serve as guidelines for establishing a Master Plan; b) Territorial Matrix: to establish the territory's organic fabric, with places of remembrance, forums for discussion and dialogue dynamics for governance; c) Planning: to identify the dilemmas to be tackled; d) Integrating Areas: to identify potentially strategic axes in the territory, defined by means of forward planning, to build consortium projects (articulated and elaborated by integrated work groups), always bearing in mind governance issues (without excluding any of the interested parties) as well as scale projects (always expanding in a globalisation perspective); e) Human capital formation: basic and advanced training on ITM for formal and informal authorities, firm personnel and members of the community, giving them a better understanding of dilemmas and of how to plan ahead; f) Communication: definition of a communication plan to support ITM actions; g) Debate: Setting up forums to transversally discuss relevant subjects; h) Territorial Governance: following the creation of a Centre for Knowledge, which is a locus of articulation between stakeholders and project development; i) Territorial monitoring: it guides future actions within the territory, by structuring a permanent observatory.

ITM is a process and not a specific policy. If it is to be implemented, it requires that contradiction be accepted as something positive, capable of generating dynamism, and not as something that must be overcome.

6. Final remarks

The Integrated Territorial Management - ITM model is, then, revolutionary, for it breaks with public authorities' tendency to act alone and welcomes difference, regards diversity as rich, and accepts identifying dilemmas and looking for solutions for both the territory and the communities as a challenge. It comprehends a set of tools that promote diversity and make it possible to integrate the social, economic, and environmental dimensions within culture, beginning with the identification of the dilemmas in need of a solution that affect the territory and the communities living in it.

By associating culture with the triple bottom line — economy, society and environment — , ITM provides a holistic view of a reality that is plural, integrated, systemic and undivided. This type of participating governance model looks for sustainable solutions compatible with the sustainable development of any given territory, through a synergetic process, involving public authorities, the private initiative, civil society organizations, local and regional authorities, and educational institutions. It includes all the aspects of a territory (economy, environment, society and culture), in a transversal, integrated manner, thus contributing to the governance of a given territory. In traditional management, these factors are looked into from a unilateral, segmented perspective that has no relationship with the bigger picture, thus compromising its chances of success.

The Integrated Territorial Management provides knowledge and solutions, which allows one to go beyond an horizontal, non-integrated view of sustainability. The ITM methodology is related to territorial identity, governance and sustainability. In this new management model, government, firms, civil society organisations, educational institutions, and regional authorities become partners in providing sustainable solutions that enhance development.

The proposal to create a Masterplan for Governador Valadares, based on a ITM, approach may help the town and the region grow in a balanced, integrated and sustainable way, overcoming the challenges posed by the imbalances brought about by an exclusively economic view. Setting up a plan based on the ITM model calls for a strategic view, flexible proposals, as well as management. In that sense, towns have no alternative but to radically become new permanent education territories or face the risk of turning into spaces where nature, people and their dreams will be decimated.

Main challenges and difficulties to overcome by Integrated Territorial Management approach:

the purely naturalistic view of the concept of environment (as a set of plants, animals, water and air);

the absence of a holistic view of the reality (which is plural and indivisible);

the individualism that characterizes society (apart from alienation);

the absolute lack of collective sense of people;

the absence of involvement of the different social stakeholders in the proposals and in the monitoring of local public policies;

the traditional, segmented and crystallized management of the Brazilian public sector:

the lack of transparency in public management, although Federal Law No. 12527 of November 18, 2011 regulates the constitutional right of citizens' access to public information.

The main limitation to the proposal of Integrated Management of Territory lies in the current moment of transition of Brazilian society - the rupture from the old order based on practices of reclaiming (of social movements) to a modern management, based on the propositional practices. From another perspective, at the same time as this transition process introduces limitations, it opens the way for new proposals for future work. The transitory of the change can also be a tool of transformation.

In this line of research, new observations will focus on each change - as a window of opportunity-, asking what are their limits and possibilities. To do so, it is necessary to recognize that:

- a) the conflict is something constitutive of social relations and must be assumed, in this perspective, in the process of building a strategic vision of the city, where citizens are the real protagonists;
- b) the basis of social support for a new development project is the participation of active citizenship and the construction of public spaces of negotiation where all the stakeholders involved in the production and reproduction of life in the cities are present;
- c) we must be aware of the possibility of building new collective references, redefining territorial alliances, reworking the bases of its economy, of its ties of solidarity, the basis of its culture and its sense of identity.

Although one cannot foresee the future, one must build alternative scenarios following accurate models. The ITM model that has been proposed for Governador Valadares may be replicated in other towns of the River Doce Basin, serving as a basis to reach sustainable development.

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