

AGENDAS 21 IN BRAZIL: ADVANCEMENTS AND SETBACKS*

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ABSTRACT

This paper addresses the issue of environmental governance and the implementation of Agenda 21 in local municipalities of Brazil, focusing on its advancements and setbacks from 2002 to 2009. Taking into account how the institutional framework that gave rise to policies and procedures of environmental management in Brazil is organized, it appears that the organizational framework for environmental policies is consistent and offers considerable room for society's participation in their elaboration. Local Agenda 21 is thus identified as one of the main tools for participatory environmental management. However, one might question the effectiveness of adopted policies by the Brazilian agenda, since data indicate that, as a rule, they have not proved sustainable along that span of time. Only 31.4% of local Agenda 21 existing in 2002 have survived until 2009. It is pointed as a conclusion that one of the main reasons for local Agenda 21 to be sustainable is related to the existence in the municipality of some kind of formal structure in the environmental sector, be it a secretariat or a city environmental council.

Key words: local Agenda 21, local development, environmental governance, public environmental policies, sustainability, municipality.

INTRODUCTION

In Brazil, the achievement of new democratic arrangements has been strengthened by the 1988 Constitution, which opened the way for participatory practices by the civil society. The institution of local Agendas 21¹ stems from the Rio-92 Conference, organized by the United

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¹ Agenda 21 was one of the main documents produced by the United Nations Conference on Environment and Development – UNCED, better known as ECO-92 or RIO-92. It sets commitments to each signatory country to make reflections on the global and local ways by which the many sectors of societies and governments, universities, corporations and NGOs can cooperate in studying solutions for socioenvironmental problems.

Nations in Rio de Janeiro in 1992, with a goal of promoting and implementing strategies and procedures favouring a development standard that takes into account environment sustainability.

An issue to be reflected upon in the implementation process of local Agendas 21 in Brazil concerns the dynamics and mobility of established procedures. With 5,565 municipalities, Brazil was able to record in 2002 about 1,652 local Agendas 21, thus displaying, to some extent, an extraordinary process of multiplication of these procedures at a time when efforts and encouragement by public powers remained unnoticeable. According to data of MUNIC – the Brazilian Geographic and Statistics Institute (IBGE) survey on basic municipalities information, local Agenda 21 was, at that time, a phenomenon geographically restricted to the Northeast region. Northeastern municipalities accounted for 69.2% of local Agendas in Brazil, a concentration basically due to the support by Banco do Nordeste through its Farol do Desenvolvimento (Development Lighthouse) program.

A new survey, carried out in 2009, showed, however, another reality. In spite of the fact that Brazilian Agenda 21 elaboration process was concluded and institutionalized as a public policy, results point out to a reduction of 33% in total local Agendas. This makes evident that a good share of those Agendas were strongly dependent on public support and, as such, not self-sustainable.

This paper attempts to assess the implementation of local Agendas 21 in Brazil taking MUNIC as a data basis for years 2002 and 2009. Evidence is shown that these arrangements were not achieved by means of a mobilization of different sectors in civil society and were rather a practice supported by the State. It is noted that although the number of local Agendas 21 with a Forum – a fundamental institute for Agenda 21 good working – is relatively high, these are mainly ineffectual and scarcely summoned. More recently, local Agendas 21, with a support from the Ministry of Environment and state governments, have been created on new bases. It is to be seen, however, whether the same past risks will be repeated and non-sustainable local Agendas 21 created or this is a renewed start, with an actual participatory operation.

In the first section of the paper, some concepts of environmental governance, sustainability and social participation, with an emphasis on Brazil, are listed. In sequence, guideline foundations for analyzing society's participation through local Agendas 21 are mentioned with resort to IBGE MUNIC 2002 and 2009 surveys. In the end, some ideas that intend to be final considerations are put forward, pointing to the main characteristics of these processes and their present development.

1. ENVIRONMENTAL GOVERNANCE, SUSTAINABILITY AND SOCIAL PARTICIPATION

Environmental governance concerns possibilities of an integral participation of the society in decisions that refer to environment, either by means of civil organizations or government agencies, with a goal to reach “full and unrestricted adhesion” to the project of keeping life on the planet (Esty and Ivanova, 2005). By quoting Viola², Cavalcanti (2004) judges that the problem of environmental governance in Brazil rests on its implementation, since national political system perseveres in its attachment to economic growth, besides being extremely vulnerable to lobbies that haunt public policy making in the country.

Aligning with this judgment, Leff (2006) argues, that even when questioning of conventional economics by ecology is taken into consideration, this drive does not lead to a deconstruction of hegemonic economic rationality; environmental policies would, therefore, continue to be subsidiaries to neo-liberal policies. According to this point of view, connection between social and natural relations has been guided towards an adaptation of ecological and technological to economic theories and policies; an analysis of social conflict and power relationships in strategies of social appropriation of nature is thus excluded. Mellucci (2001, p. 131), in turn, says that “[...] political game never happens in a field open to equal chances”.

In Brazil, institutional framework directed to environmental management features as a starting point Federal Law n. 6938, promulgated on the 31st August, 1981, which set a national environmental policy, creating the National Environment System (SISNAMA), of which the National Environment Council (CONAMA) is a top institution. When creating the SISNAMA, Law n. 6938/81 also ruled over the links and responsibilities at the three levels of government.

Federal 1988 Constitution, in turn, accomplished the endeavors under way since the end seventies in terms of environmental institutionalization, by assimilating many of civil society’s claims. Its article 225 is pioneer in the history of Brazil, by putting forth an exclusive reference to environment, by stating that “[...] all have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life” (Apud Little, 2003, p. 15).

From a historical viewpoint it can be noticed that the accomplishment of new participatory arrangements in Brazil has been continuously strengthened since the approval of the new Constitution, the development of practices that open room for participatory democracy

² Viola, E. O movimento ecológico no Brasil (1974-1986): do ambientalismo à ecopolítica. In J.A.Pádua (org.), **Economia e Política no Brasil**. Rio de Janeiro: Espaço e Tempo, IUPERJ, 1987.

standing out. (Santos, Avritzer³, Dagnino⁴, apud Jacobi, 2003). It can also be said that the precepts embodied in the 1988 Constitution gave birth to a new stage of environmental approach in all levels of government. In the eighties, actually, many procedures of environmental policy were brought into state and municipality administrations. This has contributed to strengthening the federative system and also to society's participation in matters related to environment quality.

In 1989 the Brazilian Institute of Environment and Renewable Natural Resources – IBAMA was created, followed in the next year by the National Fund for the Environment – FNMA, as a part of the National Environment Program directed to funding several environment programs based on requests from Brazilian government and non-government organizations.

At municipality level local agencies in charge of the control and supervision of activities capable of causing environmental damage were established as components of the SISNAMA. With this goal in mind, offices at municipality level concerned with environmental matters were set up, such as departments, municipal secretariats, municipal councils and municipal funds for the environment.

Under such circumstances – democratization of political structures and the establishment of environmental policies – the proposal of creating an Agenda 21 stems from the Rio-92 Conference. It was conceived to make the concept of sustainable development known in the whole planet, as well as to encourage promotion and implementation, by means of engaging society's participation, of strategies and practices that pave the way to sustainability as a development attribute, by means of an integration of socioeconomic, political and institutional, cultural and environmental aspects⁵.

Within Brazilian society a widespread debate and legitimization process took place from 1997 to 2002 regarding the ways of how to interpret this global covenant. In 1997, by constituting a Committee for Policies of Sustainable Development and for a Brazilian Agenda 21 (CPDS), federal government, by way of the Ministry of Environment (MMA), took the leadership of this collective initiative. In spite of the fact that Agenda 21 took shape and became institutionally established from 2003 on, when decision is made to give priority to fostering local Agendas, the already mentioned strategy in global Agenda 21 would come out as the one prevailing in the Brazilian Agenda 21. This decision is formally assumed when specific actions

³ **Para ampliar o Cânone Democrático**, 2002, p. 39-82; available in http://eurozine.com/articles/article_2003-11-03-santos-pt.html.

⁴ Dagnino, E. *Sociedade Civil, Espaços Públicos e a Construção Democrática no Brasil: limites e possibilidades*. In E. Dagnino (org.), **Sociedade Civil e Espaços Públicos no Brasil**. São Paulo: Paz e Terra, 2002, p. 279-301.

⁵ This approach is what Sachs refers to as a multidimensional concept of sustainability (Sachs, 2007).

necessary to make it effective are designed and find their place in the Federal 2004 Pluriannual Plan and in subsequent years.

In what regards local Agenda 21, it is referred as an agreement on building a sustainable standard of development brought into effect by all social and governmental players in a local space – this one defined, for example, as a municipality, a cluster of municipalities or a watershed basin, according to a Local Plan for Sustainable Development (Nascimento, 2005). It should be noted, however, that environment management at municipality level requires increasing and improving local administrative structures so that shortages in most municipalities to implement environmental policies may be overcome.

The issue of participation has proved relevant to environmental policy and management, particularly in case of local Agendas 21. It should be stressed, however, that in order to an Agenda to be effective, community engagement is required in all stages of the process of designing and managing environmental policies, as well as a general information access, in addition to having power mechanisms for decision making adequately set up. A participatory system of environmental management thus implies that decision making procedures be legitimized beyond a formal administrative and institutional structure (Bursztyn, 2001). It does not suffice to keep population informed, but it is absolutely necessary to have it engaged in discussion and decision making processes as far as environment is concerned. Policies have to be founded on technical and scientific knowledge as much as on people's participation to win more legitimacy, better results, a more efficient use of resources and a higher level of commitment of the population (Siqueira, 2008).

Society's participation is, therefore, pointed out as the link that connects individual sphere to society's sphere (Sayago apud Scardua and Bursztyn, 2003), that is, "(...) a redefinition process of what is private and what is public, aiming at a redistribution of power in favor of social players who usually do not have access to it", and should be understood as "(...) a continuous process of democratization of life at municipality level" (Jacobi apud Scardua and Bursztyn, 2003, p. 294-295).

From its very start, implementation of local Agenda 21 in Brazil faced several problems, among which some deserve particular attention, namely:

- i) the end of the Banco do Nordeste Farol do Desenvolvimento (Development Lighthouse) Program that encouraged creation of Agendas 21 in the Northeast;
- ii) a too short period in which Agendas 21 earned a status of program in the Pluriannual Plan of federal budget. As reported in Scardua and Goldini (2011), in reality, from 2000 to 2011, only in 2004-2007 had Agenda 21 a status of program

in the Brazilian government Pluriannual Plan. In the 2008-2011 Pluriannual Plan, focus was directed to economic growth and the so-called Social Agenda, which explains the Agenda 21 loss of relevance. When they analyzed three among the 21 goals of the Brazilian Agenda 21 – renewable energy, generalization of environmental sanitation and fostering local Agendas 21 – those authors came to conclusion that none “has accomplished a relevant share of its recommendations that might lead to some sort of implementation through public policies” (op. cit., p. 18). It was not possible then to evidence any close relationship between those public policies and Agenda 21;

- iii) from 2001 to 2009 funds for environmental management at the Ministry of Management underwent considerable lack of continuity. Of the 62 implemented programs, only twelve lasted; of these, five are related to support activities (Silva et al., 2011). Agenda 21 is one of those that have not remained as a program.

National environmental policy lacks continuity; availability and investment of money resources are unstable and unpredictable; a substantial share of the resources is allocated to keep the bureaucratic machine and the remaining scattered among a certain number of end programs of questionable effectiveness (Silva et al., 2011, p. 20).

- iv) there is evidence of low representability and little participation of members of civil society in local councils in Brazil (Assis et al., 2010). More often, the representative is chosen for having available time, as it happens to pensioners, and not necessarily because he/she is an actual representative. There also remains a disparity in access to information and in specific knowledge to handle approached subjects with the public sector representatives in a clear advantage regarding those of civil society⁶.
- v) “competition” between institutions directed to participatory democracy, mainly in municipalities with low population. Since there is no room for all of them, some are hollowed out, deactivated or remain to be created in the future, so that room may be given to those, that for some reason, are judged as having more political importance⁷. There is also a “competition” between representations. It often happens, due to shortage of people in conditions to act as representatives of civil

⁶ The text by Assis et al. attends to the reality of Santo André (SP) municipal councils. Santo André is one of the largest Brazilian cities and has a tradition of participatory democracy. Actual conditions in other parts of Brazil concerning councils of participatory democracy, Agenda 21 therein included, are certainly not much better.

⁷ In the case of the state of Rio Grande do Sul, Agenda 21 has not progressed much because state government has given priority to a forum for participatory budget.

institutions, that some of their members multiply roles, that is, the same individual belongs to different councils – even those that take care of distinct matters – and also to Agenda 21, something that impairs the quality of representation⁸. There are by all means deficiencies and difficulties both at government and at civil society levels.

- vi) low relative importance ascribed by the population to environmental issues. A survey led by the Ministry of Environment and Walmart in 2010 in 11 state capitals in Brazil found out that in a list of twelve urban problems, environment ranked 11st in importance. Only 2% of those surveyed judged this item the most important in the list. Top ranked problems were health/hospitals (30%), violence/crime rates (24%) and education (8%) (MMA and Walmart, 2010)⁹.

A permanent challenge in the span of time since the appearance of global Agenda 21, the composition of the Brazilian Agenda 21, its institutionalization and the implementation stage of local Agendas 21 refers to collected statistical data, which exhibit the extent and mobility of implanted procedures¹⁰, an issue dealt with in the next section.

2. BRINGING ENVIRONMENTAL POLICIES TO MUNICIPALITY LEVEL: LOCAL AGENDAS 21 IN BRAZIL

First indicators relative to the extent of implementation of procedures of local Agendas 21 in Brazil were introduced by IBGE, in 2002, in the Environment Supplement of the Survey on Basic Municipalities Information -- MUNIC¹¹. Data of this survey point out that, in 2002, local Agendas 21 were present in 1,652 municipalities. This figure records a multiplication of procedures at a time when there was not yet any initiative and incentive coordinated by public policies. It is justified, to some extent, by the work to make public and to encourage implementation that stemmed from the joint action of non-government organizations in a move

⁸ Information secured through interviewing environment experts of the federal government.

⁹ Even though taking into consideration that environment is a transversal subject and that the survey does not cover whole Brazilian population, the survey results come out meaningfully given the quantitative and qualitative importance of population in main state capitals.

¹⁰ Coordination of Agenda 21 at the Ministry of Environment led in 2009 a National Survey on Local Agendas 21, comprising 177 procedures of Agendas 21, 143 of those at municipal level. The survey showed, among other results, effects of Agenda 21 on education, social organization in the municipalities, sustainable economic activities, the constitution of systems of solid waste management, degree of support to government and non-government projects, influence on public policies and on the creation and strengthening of offices assigned to environmental management (MMA, 2009). It should be noted that surveyed statistical population in this case is small when compared to that of IBGE-MUNIC, which includes 1,105 municipalities that had, in 2008, started to implement Agenda 21.

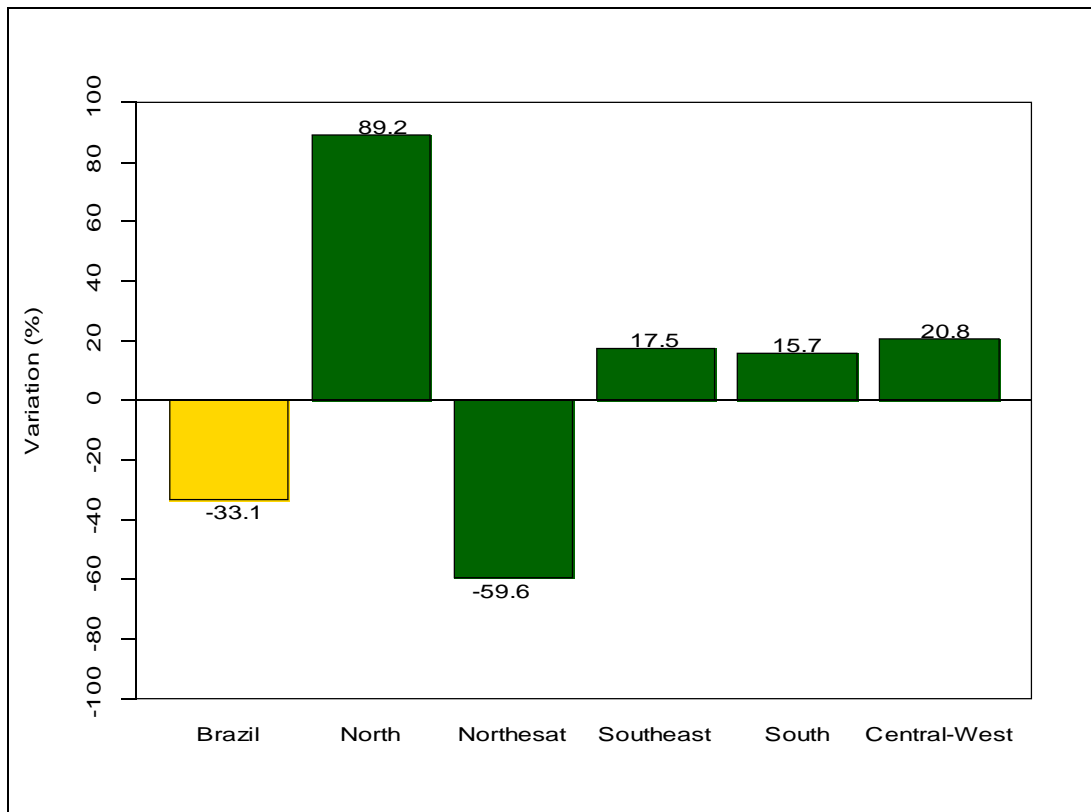
¹¹ MUNIC covers all Brazilian municipalities and collects information at municipality level, with emphasis on those relative to local management.

to publicize and make this idea capillary and widespread through Brazilian society. On the other side, it is also explained by the launching of mobilizations, joint actions and supports achieved – by resort to funds available for making feasible seminars, meetings, workshops and even procedures implementation – to build a Brazilian Agenda 21. A good example is the support given and the role played by Banco do Nordeste in this period, when it set up an encouraging Programa Farol do Desenvolvimento (Development Lighthouse), which explains the high number of local Agendas 21 implemented in the Northeast region.

At this stage local Agendas 21 were welcomed by society as a new and participatory strategy capable of promoting the foundations of a sustainable development, even though this notion was still little internalized then. In addition, there was no idea of what could result from this extremely advanced proposal in terms of collective construction, which lacked previous references that might give shape to a model and a horizon.

A new IBGE survey (MUNIC 2009) reflects another moment as far as local Agendas 21 are concerned: building a Brazilian Agenda 21 was then a concluded and institutionalized course of action as a public policy. Data show, nevertheless, a severe reduction – 33.1% -- of the number of municipalities committed to local Agendas 21 all over the country: they fall from 1,692 in 2002 to 1,105 in 2009 (Graph 1) .

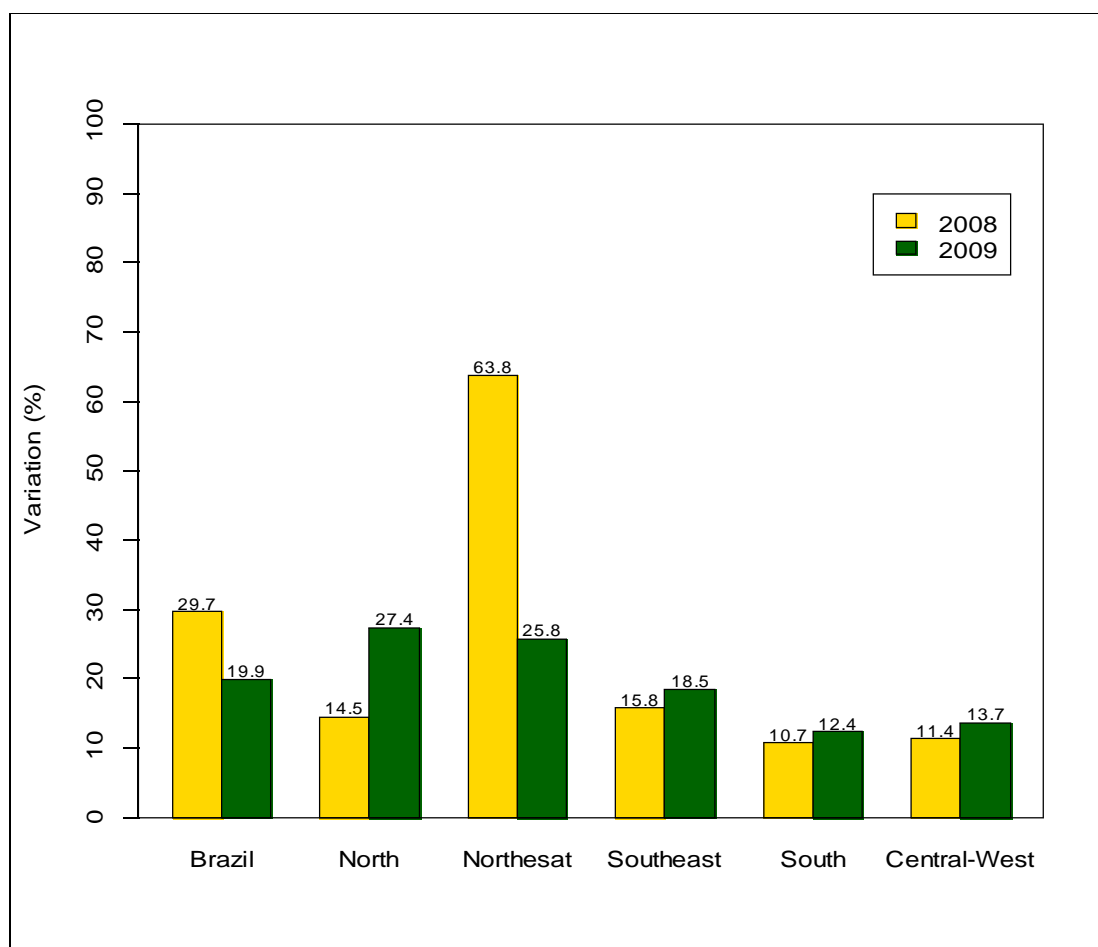
Graph 1 – Municipalities that started procedures of Agenda 21 Changes in % from 2002 to 2009



Source: IBGE – MUNIC 2002 and 2009

This reduction led to a fall in the share of municipalities with local Agendas 21 from 29.7% in 2002 to 19.8% in 2009 (Graph 2). It was basically due to the Northeast region performance (-59.6%), since this was the only region with a reduction in total local Agendas 21, which may be credited to the discontinuity of Farol do Desenvolvimento Program (PFD).

Graph 2 – Municipalities that started procedures of Agenda 21 relatively to total number of municipalities (%) by Great Regions 2002 to 2009

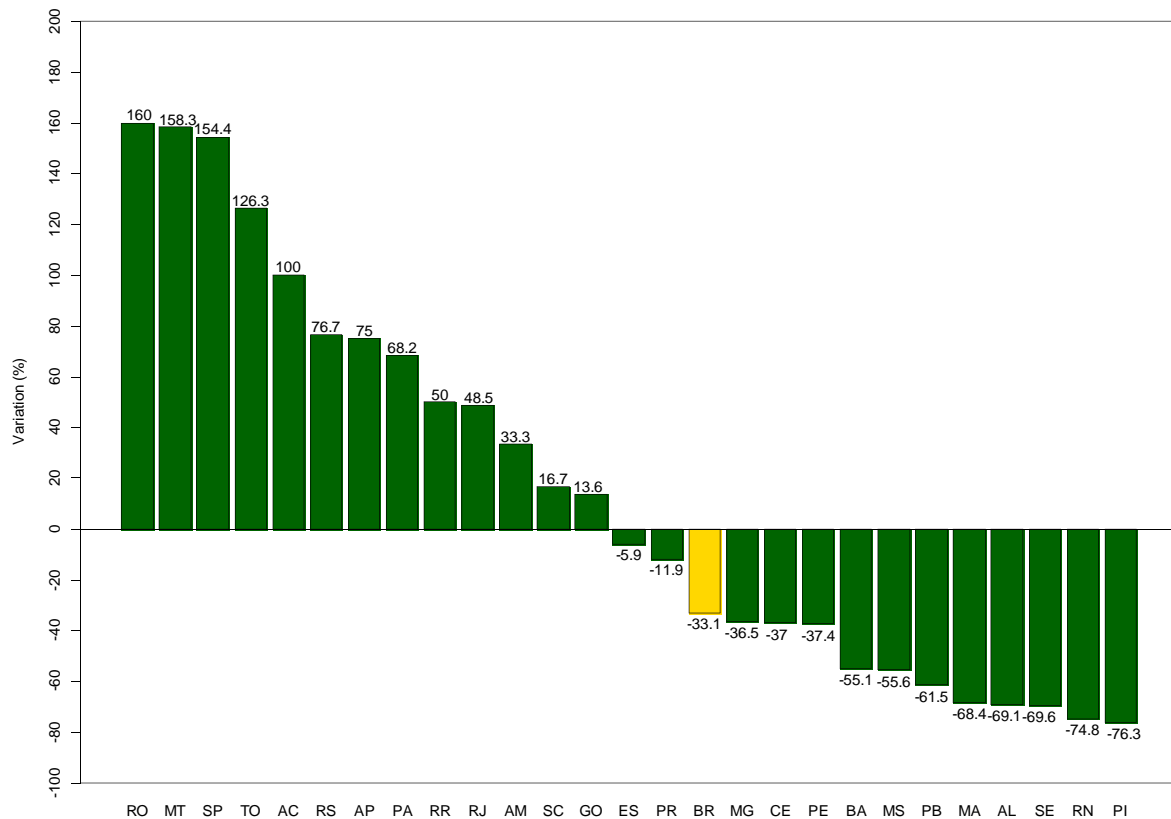


Source: IBGE – MUNIC 2002 and 2009

The above mentioned retrogression may indicate either an attitude of “hibernation” of the whole process in expectation of objective conditions for results to be actually produced or the fact that many local Agendas 21 in the Northeast did not take roots and had only been held with the PFD support. In that region, the largest reductions occurred in the states of Piauí (-76.3%), Rio Grande do Norte (-74.8%), Sergipe (-69.8%) and Alagoas (-69.1%) (Graph 3).

It can be stated that between the surveys carried out by IBGE in 2002 and 2009 a great change in regional distribution of the municipalities that had started the procedures of local Agendas 21 took place.

Graph 3 – Changes in (%) of the number of municipalities that started procedures of Agenda 21 distributed by States of the Federation 2002 to 2009



Source: IBGE – MUNIC 2002 and 2009

In 2002, this movement was basically concentrated in the Northeast region, with 69.2 % of local Agendas. In 2009, it still had a great weight (41.8%) but really outstanding was relative growth from 2002 to 2009 of municipalities with Agendas 21 in the North region: they more than doubled, going from 3.9% in 2002 to 11.1% of total municipalities with a local Agenda 21 (Table 1).

All states in the North region had considerable increases in the number of municipalities with an Agenda 21, mainly Rondônia (an increase of 160.0%), followed by Tocantins (126.3%), Acre (100%) and Amapá (75.0%). This growth can be explained by federal public policy that adopted a priority orientation towards the Amazon biome in this period. This policy had effects on actions of Agenda 21 Program and on finance flows made accessible by the National Fund for the Environment, both of which having made up the support given to local Agendas 21 in 170 municipalities from 2003 on.

Table 1 - Municipalities with Local Agendas 21 Percentual distribution by Great Regions (%) 2002 and 2009

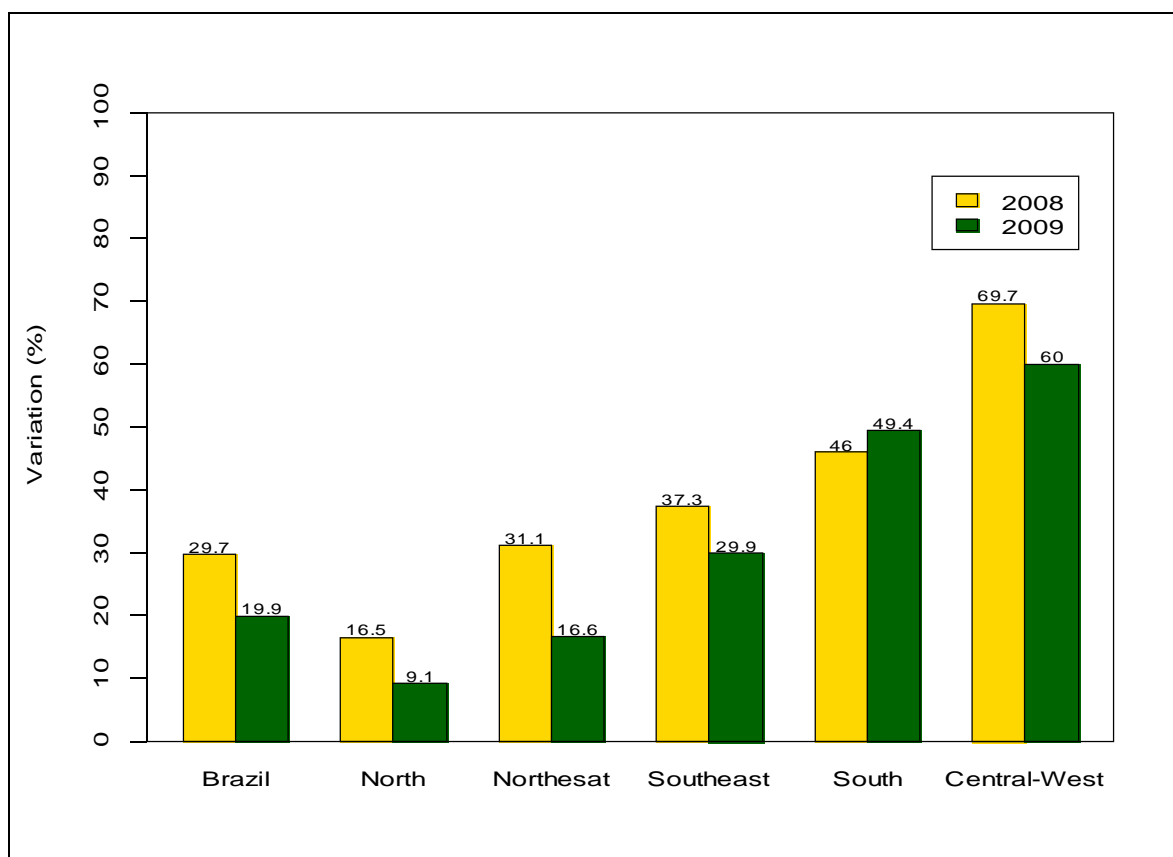
Region	Year	
	2002	2009
Brazil	100,0	100,0
North	3,9	11,1
Northeast	69,2	41,8
Southeast	15,9	28,0
Southeast	7,7	13,3
Central-West	3,2	5,8

Source: IBGE - MUNIC 2002 and 2009.

In addition to North region, Central-West (20.8%), Southeast (17.5%) and South (15.7%) also recorded increases in municipalities with Agendas 21 between 2002 and 2009. Economically important states reached impressive increases, such as Mato Grosso (158.3%), São Paulo (154.4%) and Rio Grande do Sul (76.7%). The share in total municipalities with an Agenda 21 increased, therefore, from 3.2% to 5.8% in Central-West region, from 15.9% to 28.0% in the Southeast and from 7.7% to 13.3% in the South. A more favorable outcome is evidenced by a less concentrated and better distributed regional distribution of local Agendas 21.

In what regards the share of municipalities with a local Agenda 21 relatively to total municipalities, the region with the best performance in 2009 was North region (27.2% compared to 14.5% in 2002) (Graph 2). This position had been previously held by the Northeast region (69.3% in 2002 to 25.8% in 2009). In other regions the share of municipalities with a local Agenda 21 has also grown, but not in a very impressive way. In what concerns classes of population in municipalities, it should be pointed out that the share of those with local Agenda 21 has been reduced for all of them, except for municipalities with a population ranging from 100,001 to 500,000 people, where local Agendas 21 were signaled in 46.0% of the municipalities in 2002, having reached 49.4% of them in 2009. In 2009, as well as in 2002, the higher the population class of the municipality, more numerous were local Agendas 21 (Graph 4).

Graph 4 – Municipalities that started procedures of Agenda 21 in relation to total municipalities according to classes of population (%) 2002 and 2009.



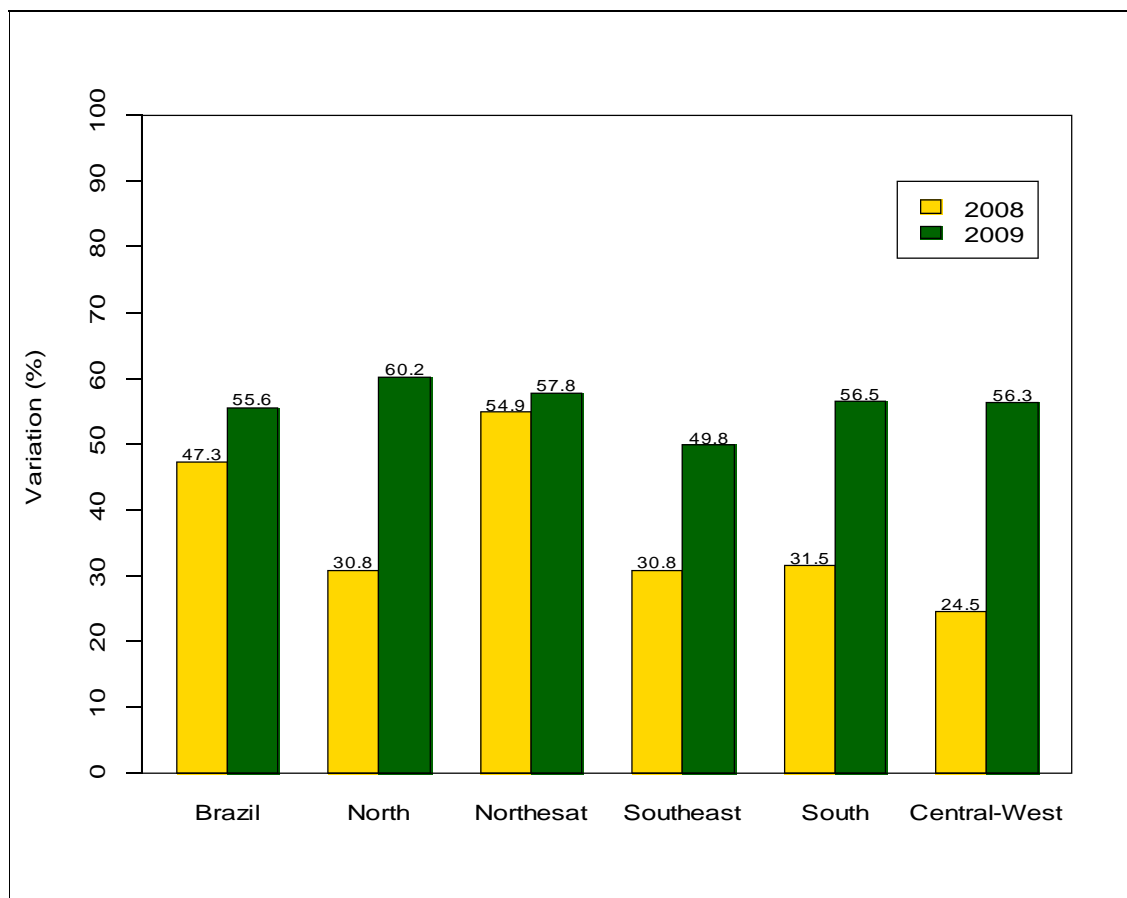
Source: IBGE – MUNIC 2002 and 2009

No one can deny there have been considerable quantitative advancements in the country, except in the Northeast. There have also been qualitative advancements such as the increase in the share of municipalities with an Agenda 21 Forum among those that started the procedures of Agenda 21, which went up from 47.3% in 2002 to 55.6% in 2009 (Graph 5).

Another positive qualitative aspect can be found among the total number of municipalities with an Agenda 21: a fall of the number of municipalities that are at initial stages and an increase of those which are at end stages of implementation/following up - from 15.5% in 2002 to 22.6% in 2009 (Graph 6).

These indicators in a first assessment could point to a “ripening” stage of local Agendas 21. There are more meaningful data, however, that suggest an inverse outcome, as it will now be seen.

Graph 5 – Municipalities with Agenda 21 Share of Agendas with Forum distributed by Great Regions in (%) 2002 and 2009

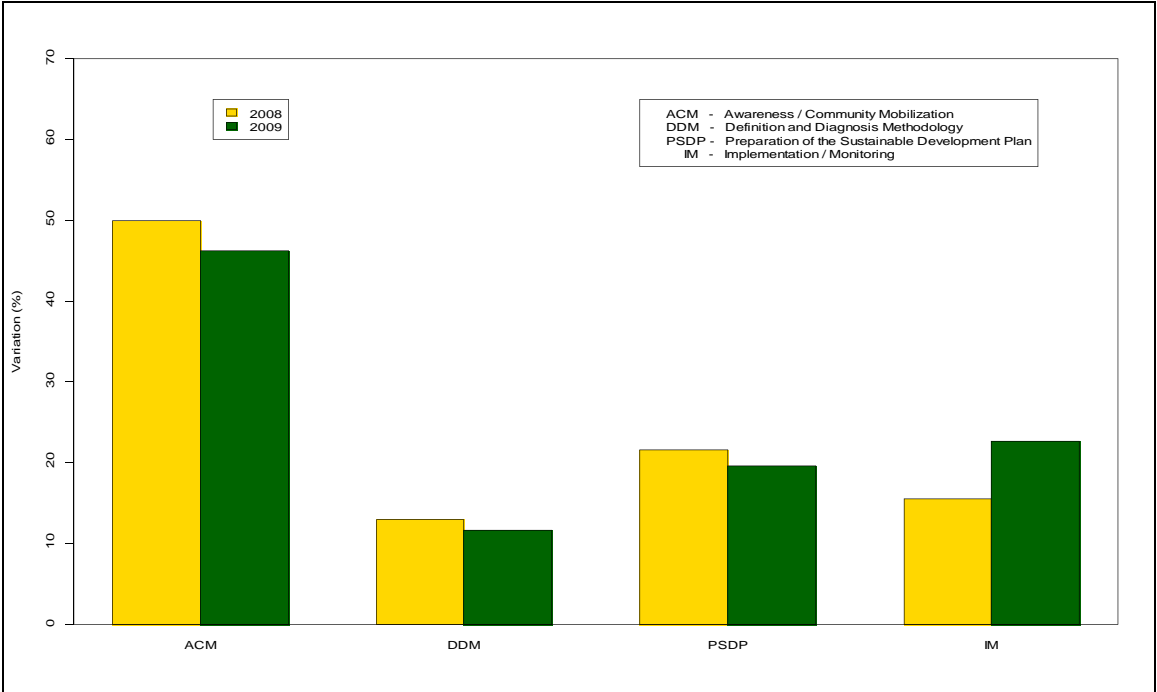


Source: IBGE – MUNIC 2002 and 2009

The existence of a Forum – beyond any dispute a step forward in terms of process internalization – may not necessarily mean, however, a significative advantage. In 71.7% of local Agendas with a Forum the members attended occasional meetings (26.9%) or simply have had no meetings at all in the last 12 months (44.8%). The share of Forums that did not meet reaches 57.7% in the Northeast region and of those who occasionally met is almost half (47.2%) of the existing Forums in the Central-West region. Adding up all regions, the total share of Forums that do not meet or meet only irregularly exceeds 50% (Graph 7). In Roraima and Amapá, 100% of the Forums had not met in the last 12 months. In some Northeastern states this share is also very high as it is the case of Paraíba (80.0%), Rio Grande do Norte (71.4%), Sergipe (63.6%) and Bahia (60.7%). On the opposite side, the lowest percentages of Forums that do not meet are to be found in the states of Santa Catarina (29.2%), Rio Grande do Sul (28.6%), Mato Grosso (23.8%), Rio de Janeiro (22.2%) and Espírito Santo (12.5%). These percentages only

comparatively should be understood as low ones. The fact that a fourth of the Agenda 21 Forums in Rio de Janeiro do not meet is an evidence of a worrying situation.

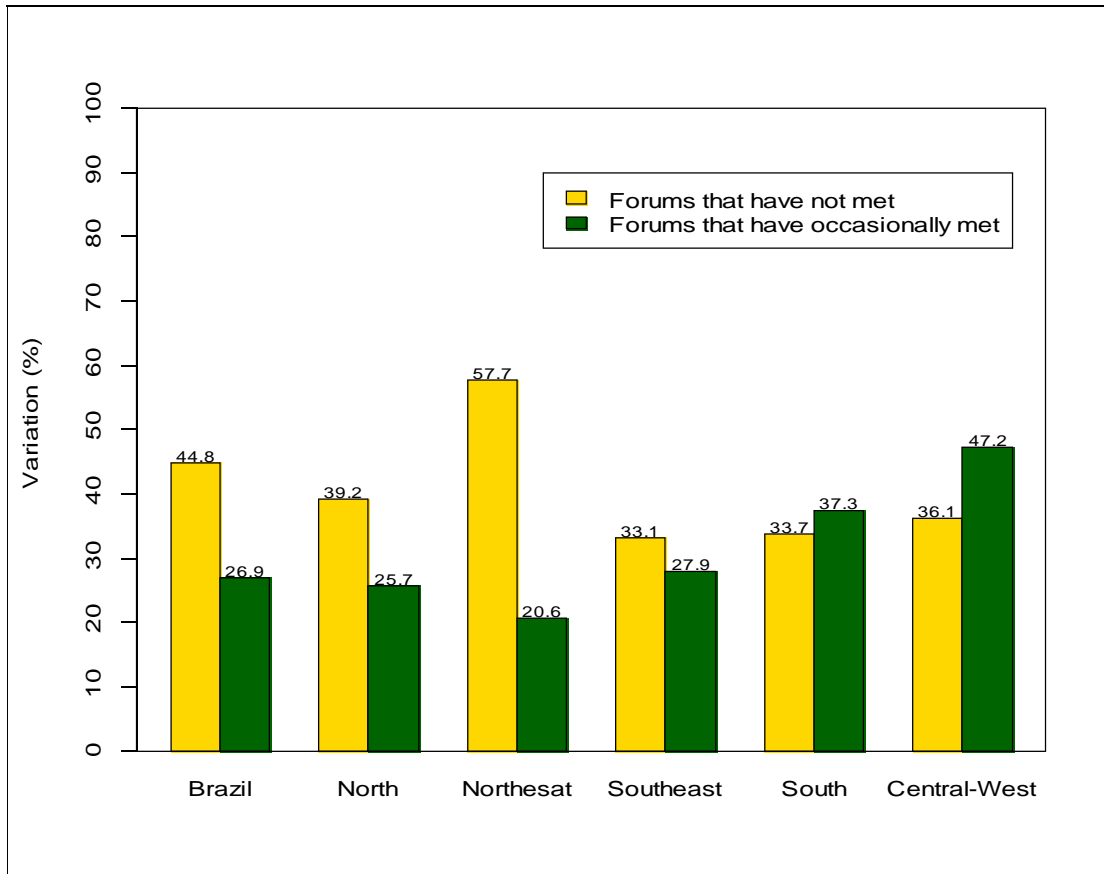
Graph 6 - Municipalities with an Agenda 21 according to present stage of the procedures in (%) 2002 and 2009



Source: IBGE – MUNIC 2002 and 2009

One should expect that at least among local Agendas 21 in a stage of implementation of public policies actions the percentage of active Forums (those who have met at least once in the last twelve months) would be high. This percentage stays, nevertheless, below 50.0% in Brazil as a whole (44.8%), in the Northeast (34.7%) and even in the Southeast (48.1%). In the South it reaches 50.0%, in the North 53.3%, the Central-West region remaining with the best score, 66.7%. Since in Brazil only 44.8% of the municipalities in the end stage of Agenda 21 have active Forums, this means that in the remaining 55.2%, Forums are not active or, even worse, do not exist at all (Graph 8).

Graph 7 – Municipalities with an Agenda 21 Forum – Percentage of Forums that have not met or have met only occasionally in the last 12 months, distributed by Great Regions in 2009

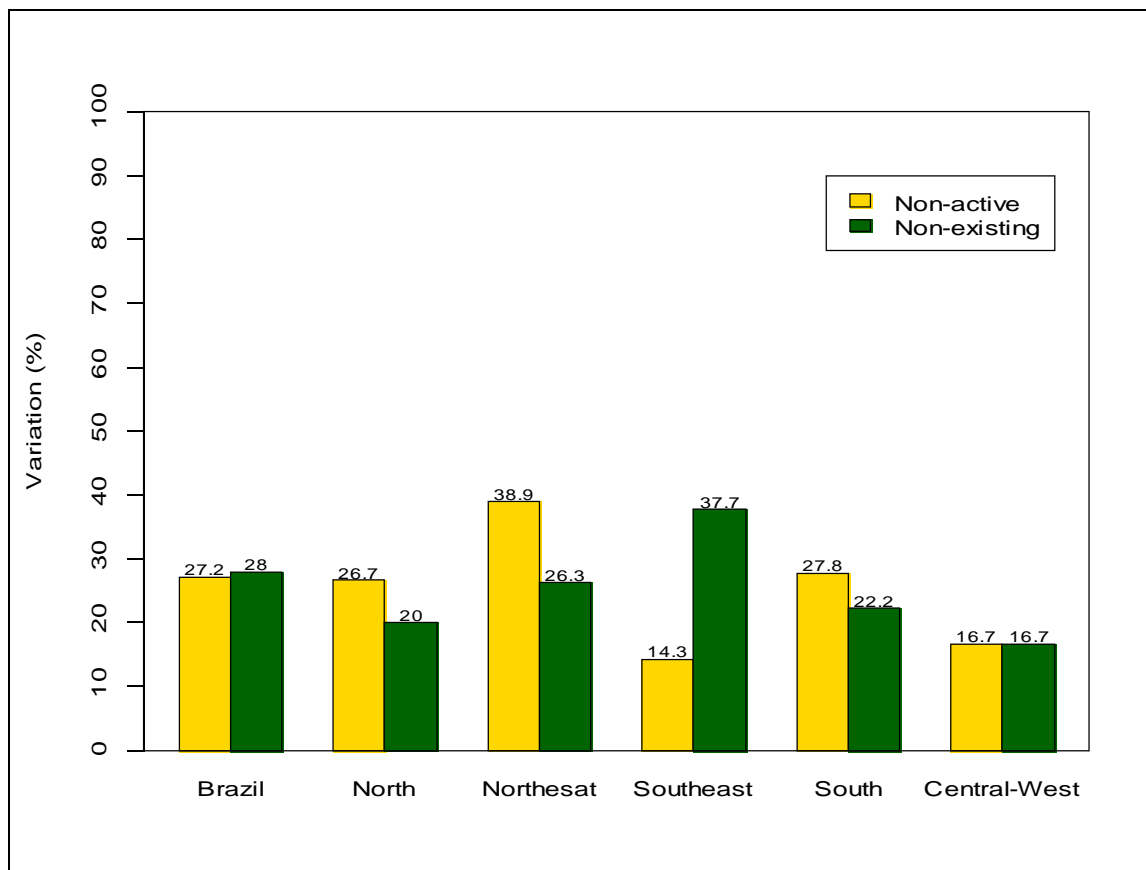


Source: IBGE – MUNIC 2009

Negative qualitative results are also noticeable which show retrogression in relation to initial expectations that the whole process would move forward in a sustainable way. Of 1,652 municipalities which had an Agenda 21 in 2002, only 518 were in this position seven years later¹², which means a survival rate (total of Agendas 21 present in 2009 divided by the total Agendas in 2002) of only 31.4%. In no region this percentage exceeded 40%; the best performance being that of North region with a survival rate of 36.9%.

¹² For this paper purposes, it is assumed that if a municipality had an Agenda 21 in 2002 and 2009, it held it during 2002-2009 period. There is however a possibility that it might be closed and later recreated in another municipality.

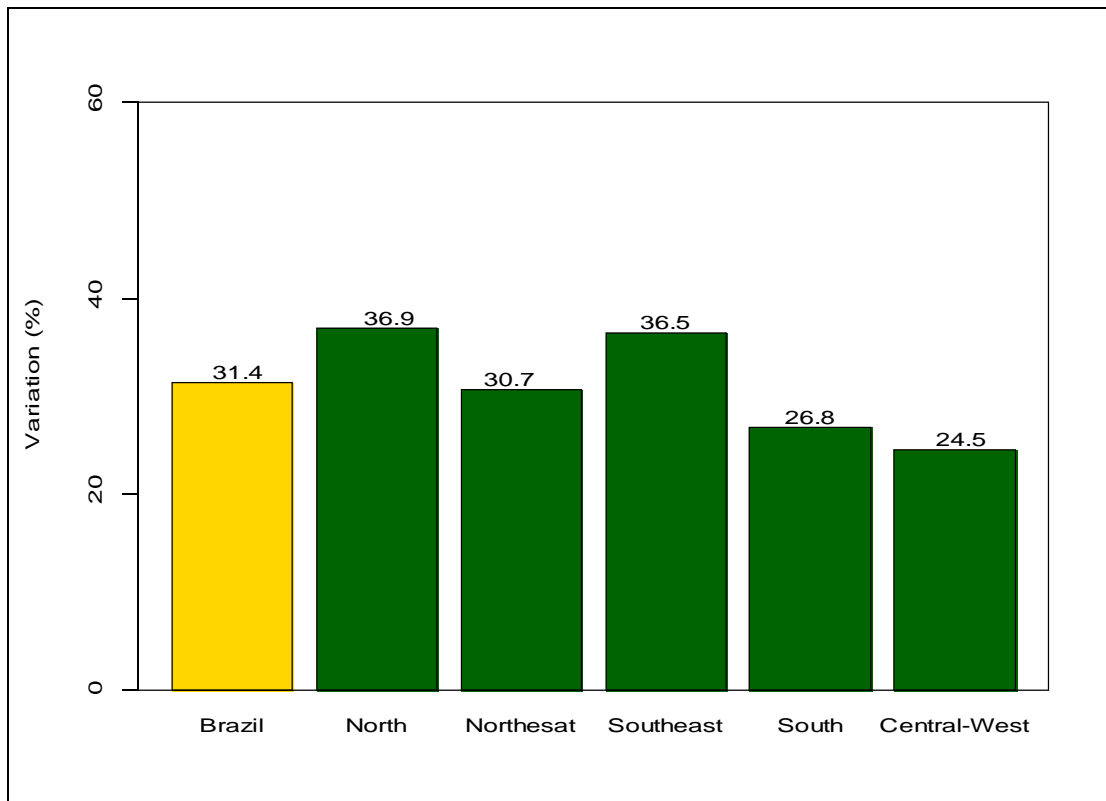
Graph 8 – Municipalities with an Agenda 21 in stage of implementation of public policies actions, classified according to existence of a non-active or a non-existing Forum distributed by Great Regions in (%) in 2009



Source: IBGE – MUNIC 2009

The lowest survival rate was not that of the Northeast region (30.7%), as it should be expected, due to the substantial reduction of total Agendas 21, but in the Central-West region (24.5%) (Graph 9). Survival rate was particularly low in the states of Piauí (12.7%), Paraná (19.4%) and Sergipe (19.6%), with the best performance found in Acre (75.0%), Rio de Janeiro (63.9%) and Pernambuco (52.8%). These data make evident that Agendas have mostly proved non-sustainable.

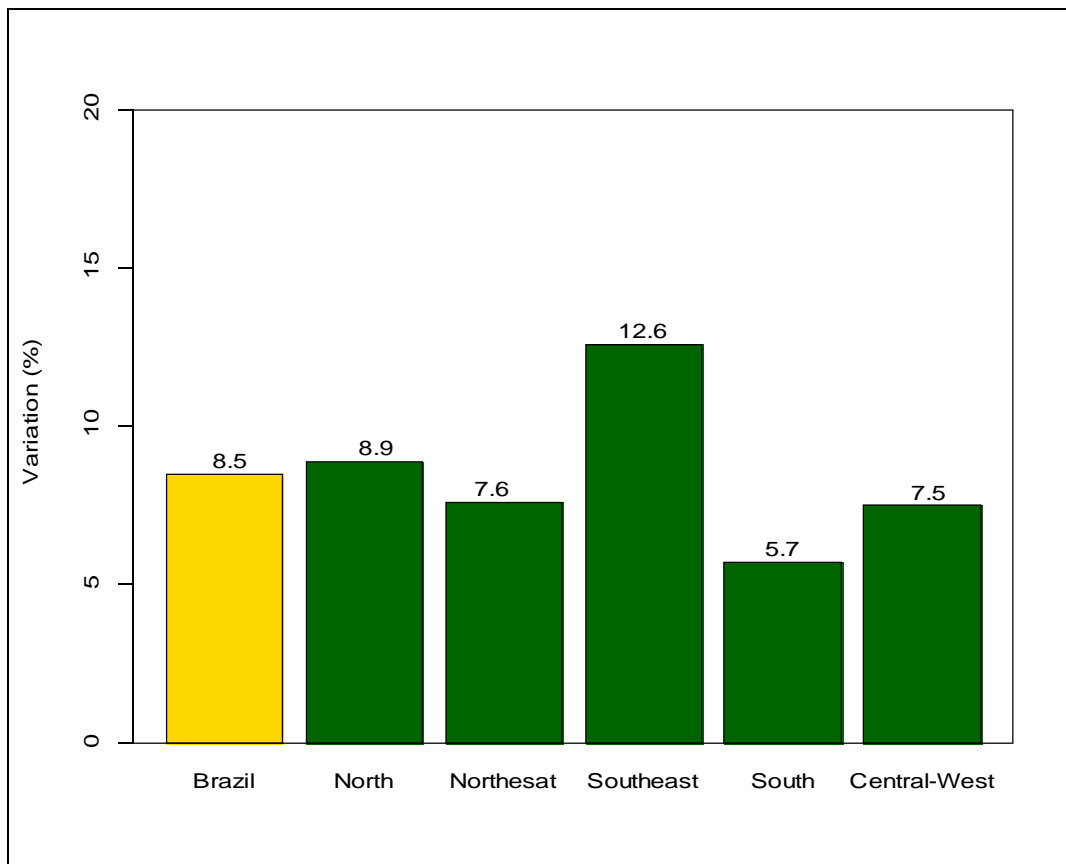
Graph 9 – Municipalities with an Agenda 21 in 2009 compared to total municipalities with an Agenda 21 in 2002 (survival rate in %) distributed by Great Regions



Source: IBGE – MUNIC 2002 and 2009

Few Agendas 21 have survived, but the question is: those who have survived have progressed? Evidence does not point to this direction. From those municipalities that held their local Agenda 21, among the ones which had no Forum by 2002, only 8.5% moved forward to have an active Forum in 2009 (Graph 10).

Graph 10 – Municipalities with an Agenda 21 in 2002 and 2009, Municipalities with no Forum in 2002 but with an active Forum in 2009 compared to Municipalities with no Forum 2002 (advancement rate in %), distributed by Great Regions

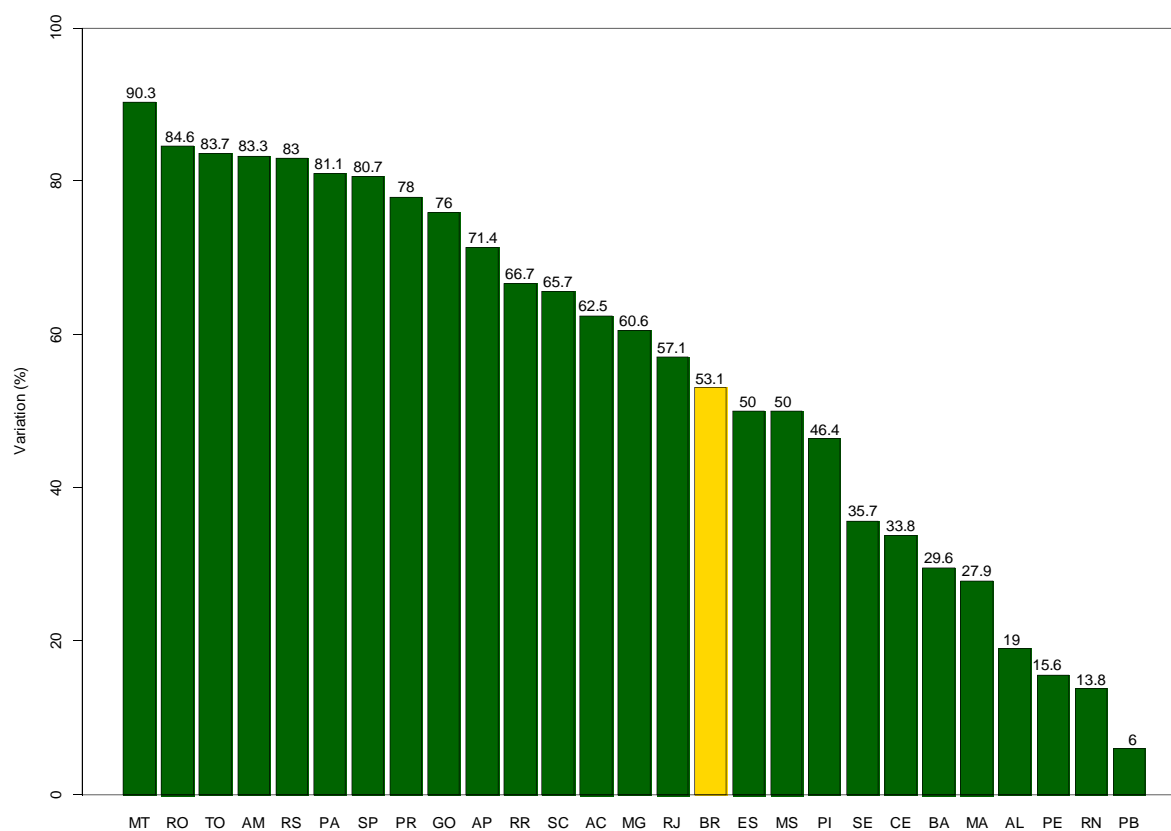


Source: IBGE – MUNIC 2002 and 2009

A high rate of renewal (53.1%) comes up as a reflection of this situation, meaning the total number of Agendas 21 only recorded in 2009 (i.e., non-existent in 2002) relatively to total number of Agendas 21 in 2009. In seven states of the country rate of renewal stayed over 80%, with Mato Grosso (90.3%) attaining a distinguished performance (Graph 11). Whatever high is the rate of renewal, would those Agendas 21 be sustainable or excessively dependent on State actions, as shown by the experience concerning the Farol do Desenvolvimento Program?

Which factors contribute to make an Agenda 21 sustainable? This point still deserves more investigation but it is possible to anticipate that population size of the city and the institutionalizations of some kind of governance in environmental matters make a positive contribution. Among the municipalities that have kept their Agenda 21, 62.9% of them had some environmental law by 2002. Among those who had no more any Agenda 21 in 2009, this percentage falls to 44.9%. Survival rate also tends to increase the higher the number of inhabitants in the municipality.

Graph 11 – Rate of Renewal: Municipalities with (new) Agendas 21 only recorded in 2009 compared to Total Municipalities with an Agenda 21 in 2009 by States of Brazilian Federation in (%)



Source: IBGE – MUNIC 2002 and 2009

To provide some accuracy to the analysis of factors leading to existence and survival of a local Agenda 21, logistic regressions tested some of the explanatory variables, all of them from MUNIC itself¹³. Dependent variables were three in different regressions, namely: existence of an Agenda 21 in 2002, existence of an Agenda 21 in 2009 and existence of an Agenda 21 in both years of 2002 and 2009.

The selected explanatory/independent variables were: class of municipality population (according to number of inhabitants) in 2002 and 2009; Municipal Human Development Index (IDH-M) in 2000¹⁴ - total and partial (education, income and life expectancy) -; existence of any kind of environmental administration in the city hall organization (2002 and 2009); existence of a secretariat of environment (2002 and 2009); level of education of the responsible for the environmental management institution – whether above or equal to finished high school in 2009;

¹³ Due to lack of space in this paper regression results will not be detailed.

¹⁴ The last available Municipal Human Development Index is of 2000.

existence of a city environment council (2002 and 2009); existence of an active city environment council (one that has at least once met in the last twelve months) in 2002 and 2009; capability of the municipality to bring into effect an environmental licensing of local impacts (2002 and 2009); existence in the municipality of a cooperation instrument in environmental matters with the state government (2002 and 2009); availability of specific municipal provisions for environmental issues (2002 and 2009); degree of municipality's participation in a Watershed Committee (2002 and 2009); degree of municipality's participation in any consortium or partnership with environmental institutions or as a recipient of their support (2002 and 2009); the city mayor's political party (2002 and 2009); and existence in the municipality of any rural, native people or environmental education project (in 2009).

The model is, therefore, specified according to three main groups (vectors) of dependent variables: characteristics of the municipality (HDI); characteristics of municipal administration (school level of the environmental manager, existence of environmental structures in the administration, environment council, environmental licensing, cooperation in environmental matters, environmental law, watershed committee, consortium/partnership/support and environmental education) and the city mayor's political party.

Regression results illustrate that contributive to the existence of a local Agenda 21 in 2002 and 2009 are (in order of their relevance) the variables environment structure or secretariat of environment; an Environment Council (only in 2002) or an active Environment Council; a cooperation instrument; specific environmental law; higher population; to be located in the South, Southeast and Central-West, rather than in the North and Northeast (only in 2009 and with a negative sign, indicative of the weight of these regions); to be located in the Northeast (only in 2002 and with a positive sign, indicative of the weight of the Northeast then), compared to other regions; and HDI-M (only in 2002 and with a negative sign, indicative of the weight of poor Northeastern municipalities), with a coefficient of determination¹⁵ R^2 a little above 10% in 2009 and a little above 25% in 2002. A higher R^2 in 2002 can be explained by the great weight of the Northeast and of municipalities with a large population.

Approximately the same variables explain the survival of local Agendas 21. In these regressions, differently from the previous ones, both 2002 and 2009 variables were tested and a specific regression for the municipalities in Legal Amazon region calculated. In this case, R^2 remained around 10%. For Legal Amazon, there were changes in the explanatory variables, which is partly credited to the fact that the region variable was excluded and the size of municipality population is meaningless, since there are few municipalities in the region. As a

¹⁵ Statistics that measure the explanatory capacity of the model.

consequence, R^2 remained low, which indicates that relevant explanatory variables had been kept out of the model.

3. CONCLUDING REMARKS

In this study, the importance of environmental governance was given special emphasis, pointing to the major and central role played by the State in planning and orchestrating the social covenant for implementation of actions aiming at sustainability. It is noted that the institutional framework concerning environment in Brazil has featured characteristics of consistency and a considerable room for social participation in its elaboration and direction from the seventies on, having reached its apex in the eighties, when Law n.6938/81 and the 1988 Federal Constitution were promulgated.

Since local Agendas 21 are a chief tool for a participatory environmental management, it is possible, on the other hand, to question the efficiency of adopted policies in the country, because evidence shows that, in general, they have not proved sustainable.

Many reasons are identified for this lack of success, in particular those concerning the end of the Farol do Desenvolvimento Program, the short period when Agenda 21 had a program status in the federal government Pluriannual Plan, low priority and lack of continuity in governance programs under the Ministry of Environment, low representativeness of civil society in institutions of democratic participation, such as the environment councils and the little relevance ascribed by population to environmental problems.

There are, however, other reasons for the non-sustainability of local Agendas 21 and to sort them out requires further investigations. Data definitely show, nevertheless, that the existence of some administrative structure concerning environment matters in a municipality organization positively contribute to existence and sustainability of local Agendas 21.

It is noted that, when environmental government institutions appear to lack strength, all other involved sectors concerning environment also look feeble. On the other hand, it is to be reminded that the creation and expansion of local Agendas 21 is part of an official commitment assumed by Brazil at Rio-92 Conference and confirmed in ensuing United Nations meetings on environment.

Having in mind, therefore, the coming UNO conference to assess and promote issues related to sustainability at global level, Rio+20, it seems to be urgent that this instrument, the Agenda 21, be definitely implemented in order to ensure continuity and permanence of environmental governance in Brazil.

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