

BRASIL'S ENVIRONMENTAL POLICY

AS IT REALLY IS

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ABSTRACT

The paper examines the implementation of environmental programmes by the Brazilian ministry of the environment and federal organizations under its supervision, from 2001 –2009. In Brazil, Congress fixes a limit for expenses in each government programme, but the Executive is free to spend any amount, up to that limit. The budget execution is examined, based on data available in SIGABRASIL, a budget data base managed by the Senate, as well as on the official annual reports of the Executive branch. The paper shows, on a yearly basis, when and on what programmes the appropriations were actually spent and, in this sense, reveals Brazil's real environmental policy. Throughout the period, the environmental programmes' expendable share of the federal Executive's budget fell from 0,47%, in 2001, to 0,29%, in 2009. An increasing proportion of this shrinking share (40% in 2001, to 71% in the final years) was used just for the payment of wages and pensions. The resources geared to the ministry's end goals were dispersed among 51 different programmes, of which 31 lasted four years or less, thus revealing a marked implementation discontinuity. The amount of resources invested in each programme, per year, was irregular and unpredictable, unrelated to the budget as approved by Congress, rendering it nearly impossible to plan and organize programme implementation, a fact aggravated when other organisations were involved. These characteristics make it impossible to predict which actions will truly be implemented, and when, and help to explain the low level of achievement of programmes' goals, some of which were chosen for detailed analyses. The "Sustainable Amazon Programme", created to promote sustainable development of the Amazon region, received financial support from the G-7, plus the Netherlands and the European Union. The paucity of the results lead to the withdrawal of the donators, and the Programme was discontinued, since the Brazilian government showed no interest in financing the Programme by itself. The programme "Urban Solid Waste" depended, for its effectiveness, on the approval of a law defining Brazilian policy, on increased budget allocations and on the regular flow of investment funds. Indeed, a National Solid Waste Policy Law was approved in 2010, but programme implementation continues to be dependent on the regular flow of greater budget funds, which so far has not happened. Some new laws have been claimed, in some of Executive branch's official annual reports, as important results achieved by some programmes. The analysis of such laws show that they lack clear implementation criteria, and they also fail to define either positive or negative incentives to promote their explicit goals. Among these are the "Economic and Ecological Zoning of the Amazon Region", for which there was a Decree n. 7.378/2010, and the National Climate Change Policy Law (Law n. 12.187, of December 2009). The first contains a 200 pages discussion on the characteristics of land use in the Amazon, but no clear guidelines, much less incentives or constraints designed to change the observed land use patterns. The National Law on Climate Change, though incorporating voluntary GHG emissions reduction goals, leaves for future sector plans the definitions of issues like what will be done in each sector, how, when and financed by whom. The financial provisions contained in the law are vague and do not provide clear perspectives on actual amounts to be available. The prospects for achieving its goals, thus, are not very high. Thus, the legal norms analysed, as well as the programmes implemented, lack a real capacity to induce the social and economic transformations envisaged. In short, the paper shows that Brazilian environmental policy tends to detour real problems, seems to avoid challenging the *status quo* and, thus, turns the environmental policy, as it actually is, rather ineffective.

Key words: Environment; Budget; Government Programme; Brazil, Environmental Policy.

1 - Introduction

The issue of policy implementation, and of the factors that promote or hinder the efficacy of public programmes, is a recurrent one, in the academy, in government and in international organizations. Along this line, this paper analyses the budget implementation of the Environment Ministry, and affiliated organizations, from 2001 to 2009. The goal is to identify how much money was spent on which programmes, how these programmes were implemented, and which results were obtained. This is what we call the real, actual environmental policy in Brazil, for it reveals how the federal government prioritizes the allocation of budgetary funds related to environment policy. The results of the programmes were identified, not in the field, but based solely on the annual official reports of the Executive branch, a source that cannot be taken to understate whichever “positive” results might have been achieved.

In Brazil, Congress establishes a limit to what the Executive may spend on any programme, or for certain budget expenditure items, but the latter is free to spend any amount, up to that limit. In this situation, it has become a practice of the Executive branch in the federal, state and municipal levels of government to retain the issuance of the spending authorizations, or budget commitments - a necessary and previous step before any expense is made – until the achievement of some political objectives. These political objectives may be extraneous to a specific programme and, yet, hinder the issuance of spending authorizations that may be crucial to that programme’s implementation and, thus, to reach its goal. Thus, the analysis of budget implementation will reveal the actual priority governments place on obtaining results from specific programmes. It is in this sense that the analysis of the implementation of the budget of the environment ministry reveals Brazil’s real environmental policy, and its centrality, or lack of it.

2 - Methodology

A database called SIGABRASIL, managed by the Senate, provided the information on the budgetary process, all the way from the submission of the budget bill to Congress to the final registry of payments made by any government organization. In the present case, the analysis centres on the “Environmental Management Function - FGA”, a level of aggregation of budget data that encompasses all apportionments, commitments and actual disbursements made

by the environment ministry and affiliated organs¹, informing in which programmes how much money was spent, in which quarter of the year, and whether it was destined to pay for investments, salaries, pensions or other items.

For each year, for each programme, the variables analysed were the initial apportionment and eventual additional credits approved by Congress, the amount committed (*empenhado*), per quarter, (that is, the amount that received the spending authorization issued by the Executive) and the amounts acknowledged by the Executive (amount *liquidado*) and actually paid out, also per quarter. The period analysed was determined by data availability, since 2001 is the initial year of the database used and, when the data was collected there were still no numbers for 2010.

The programmes implemented were grouped according to their theme or function: administrative, biomes, residues, biodiversity, water and “general”, when they encompassed various areas, like environmental education, and some programmes were grouped in “other”, as for example “Green Tourism” and “Science, Nature and Society”. For each programme, the variables mentioned were analysed, and the monetary values were inflation corrected to June 2010.

The results generated by the programmes implemented were identified in official reports issued by the Executive branch, and supplemented by reports from the Federal Accounts Tribunal and internet pages of official organs. Given the research’s goals, this apparent limitation turns, actually, into an advantage, since the paucity of results becomes clear, in spite of the laudatory words sometimes present in the official reports.

3 - General implications of the budget execution process

The “budget execution process” is another name for the process of transferring federal funds to other spheres of government or to the private sector. These transfers are made with the purpose of implementing a public policy, with the goal of transforming reality. They are regulated by law and mediated by the political process and by the managerial procedures of public organizations, and reflect the actual political priorities defined by those in power. Programmes distribute government funds under various titles: salaries, pensions, suppliers’ payments, donations and others.

In this sense, these transfers constitute the budget execution process, which includes the procedures used, in the public organizations, to select, authorize and incur in expenditures; this

¹ These are: IBAMA – Brazilian Institute for the Environment; ICMBio – Chico Mendes Institute for the Biodiversity; JBRJ – Rio de Janeiro’s Botanical Garden; ANA – National Agency for Waters; SFB – National Forest Service; and CODEBAR – Barcarena Development Company.

definition does not limit itself to the verification of adherence to the legal rules governing the use of public money.

In this process, the legislative sphere plays a decisive role. However, in the present paper, we take the legislative stage of the budget process as given and analyse budget execution as it occurs, within the Executive. The reason for this is clear and has been mentioned above: it is the ability, of the Executive, according to Brazilian legislation, to decide when and how much to spend, up to the limit approved by Congress, for each programme or budget item.

There are some expenses – like transfers to the Legislative and to the Judiciary, to states and municipalities, for interest on the public debt, salaries and pensions, and others – which have a different legal status: for these, no impoundment is possible, and they are considered “mandatory, or semi-mandatory expenses”. Thus, except for these, the budget execution process occurs, predominantly, within the Executive. It is how these practices affect programme implementation, as revealed by the budget execution process, which the present work analyses.

The mandatory or semi-mandatory expenses are so defined by Constitutional or legal mandate and cannot be impounded; in monetary terms, they represent close to 80% of the budget, a fact that is frequently mentioned as evidence that Brazil’s budget is already too straight jacked and leaves very small discretion to the Executive. However, the implementation of programmes depend on expenditures, beyond those earmarked for personnel, like travel, acquisition of materials and equipment, voluntary transfers, etc., that can only be incurred in after receiving the spending authorization from the political authority with power over the organ’s budget. Thus, during a large part of the year programme managers may be unaware of know how much they will be able to spend, or when, or even on which sub items, even if such expenses are included in the budget. This uncertainty is carried over into the operational process of implementation and has effects on employees, partners and suppliers, affecting the possibility of cooperation between the parts and, therefore, the results obtained.

Among these implications, those supposed to benefit from the programme lose their ability to check its evolution and remain deeply dependent on the whims of the political authorities, a situation that reinforces Brazil’s long lived tradition of patronage and clientele politics.

Thus, the fact that budget implementation is subject to the discretion of the Executive authorities plays a crucial role in the low efficacy of public policy implementation in Brazil. Even if only approximately 20% of the budget has its implementation subject to the discretion of the Executive authorities – the remainder falling into the category of mandatory or semi-mandatory expenses – the implications of the uncertainty institutionally inserted into the budget execution process are much wider.

The present analysis is limited to the programmes implemented by the “environmental function”, or FGA, at the Federal level. However, since the problems pointed derive from

institutional characteristics there are national, the consequences, too, tend to be national and affect programmes in other ministries and government levels.

4 - A general Picture of budget execution in the FGA

A look at the proportion of the budget dedicated to environmental issues is a good starting point to get a picture of the “real” environment policy of the Brazilian federal government.

The environmental function – FGA received, in 2001, a total apportionment of R\$ 2.18 billion², and during the year Congress increased that total to R\$ 2.25. However, the total committed during the year reached only R\$ 1.7 billion. The total apportionments initially approved by Congress were reduced in the two following years and, after 2004 this amount increased every year, reaching R\$ 3.72 in 2009. However, the total committed – which is what was actually spent or used to implement the policies – shows a different picture. After a 25% fall from 2001 to 2003, it slowly increased in the following years and reached, in 2009, the same value of 2001. This happened while the total funds available to the Executive increased substantially. Thus, FGA’s committed budget, relative to the Executive’s committed budget, shrank from 0.47% in 2001 to 0.29% in 2009³. During the nine years, the FGA used a total of R\$ 14.3 billion, or an average of R\$ 1.59 per year.

As mentioned before, the greater part of the federal budget is earmarked, by Constitutional or legal definitions, and can not be used except as dictated by those legal norms; for example, transfers to the states. Thus, they are not “available” to be used in the implementation of federal policies; to analyse the “real” environmental policy, all these “mandatory or semi-mandatory expenses” were excluded from the total federal budget. The proportion mentioned above refers to the Union’s total budget calculated with the exclusion of those “unavailable” expenses.

4.1 – Resources concentrated on administrative matters

The greater part of the committed budget is dedicated to the payment of administrative programmes, mainly concentrated on salaries and retirees. The “administrative” programmes absorbed, in 2001, 49% of the budget resources committed; the following year, that proportion increased to 60%, and reached 76% of the total in 2004, remaining at this level in the following

² In spite of exchange rate fluctuations, a rate of US\$ 1.00 = R\$ 1.75 can be taken as an approximation of the dollar value of references made to the Real.

³ In the FGA’s total budget, an increasing proportion was set aside, year after year, to “contingencies”, which were never used. The fall here pointed considers the sum actually available to the FGA.

years. There was, also, an absolute increase: the total allotted to “administrative support” and to “pensions and retirees” increased from R\$ 677 million in 2001 to R\$ 770 million in the following year, reaching R\$ 1,1 billion in 2006 and R\$ 1,26 billion in 2009. An absolute increase, thus, of 86%.

4.2 - On discontinuity

Throughout the period, the budget resources committed by the FGA were used to implement a total of 62 programmes. Of these, only 12 were active – that is, received budget funds – all the years, and five of them are administrative programmes. Fourteen programmes lasted less than two years, and 26 did not last four years.

Of the 51 programmes directly aimed at the FGA’s “end” goals, only seven were active all nine years, though some had their names changed; three of these are programmes associated with specific pieces of legislation, like the Economic and Ecological Zoning of the Amazon.

The number of different programmes being implemented each year varied from a minimum of 28, in 2001, to a maximum of 43, in 2005.

4.3 - Dispersion of resources

As seen, funds are concentrated in administrative and personnel expenditures. Looking at the programmes funded, though, the picture is one of dispersion. Counting only the programmes aimed at the “end” purposes of the FGA, each one received, in 2001, on average, 2.66% of the funds used. In 2005, the average amount directed to each programme had fallen to 0.77%. No doubt, the demands on the FGA’s funds are diverse and complex, but dispersing resources so thin cripples the FGA’s capacity to effectively transform reality.

To this dispersion, one may add the instability of the “priority” – in budgetary terms – given to each programme. The proportion of the total FGA budget committed to specific programmes varied greatly, from year to year. In 2001, four programmes had, each, more than 5% of the resources committed: “Águas do Brasil” (*Brazilian Waters*): 6.24%; “Brasil Joga Limpo” (*Brazil Plays it Clean*): 5.52%; “Proágua – Gestão” (*Pro-water – Management*): 11.58%; and “Qualidade Ambiental” (*Environment Quality*): 7.82%, totalling 31.16% of the committed budget. In the following years most of these programmes were discontinued, though none of their goals had been reached.

Throughout the period analysed, at least four different programmes concerning water resources management have been implemented, each year. However, water pollution and water related environmental degradation increased, in spite of the National Water Resources Law approved in 1997. This law is praised for having created the legal instrument of charging for water usage; so far, though, only two watersheds in Brazil have actually begun charging for the water used: Paraíba do Sul (2003) and Piracicaba, Capivari and Jundiá (2006).

This resource dispersion implies that programmes receive negligible amounts, with no relation to the dimension of the problems they are supposed to tackle. For example, “Educação Ambiental” (*Environment Education*) never received more than 0.55% of the resources committed by the FGA; on average, each year the programme received a total of R\$ 8.3 million. The Programme “Zoneamento Ecológico e Econômico” (*Ecological and Economic Zoning*), on its turn, every year except for 2008, had less than 0.2% of the resources committed by the FGA. During the nine years, this programme received a total of R\$ 31.8 million, of which R\$ 11.8 million in 2008; on average, it had R\$ 3.5 million, an amount clearly insufficient for the tasks to be completed. As a further and last example, in 2008 the programme to “Combate à Desertificação” (*Fight desertification*) received only R\$ 1.6 million.

A question arises, which will try to be answered in the continuation of this study: why do governments maintain programmes so thin that they become unable to make a difference?

4.4 - Unpredictability and instability of the funds committed

On top of the instability in the flow of resources to implement the programmes, there is a marked irregularity in the issuance of authorizations to spend, relative to the values originally inserted in the budget. This creates even greater problems when the implementation of the programme relies, partially at least, on the cooperation of states, municipalities or even private organizations.

Many examples can be presented. The programme “Sustainable Amazon” was active in eight of the nine years analysed. Each year, though, the amount of funds actually committed varied from 44% to 28% of the initial budget apportionment. Thus, the initial allocation could not be taken, in any of the years, as a credible indicator of the amount of funds that would in fact be made available. The amount committed for the Zoning programme, also relative to the initial allocation, varied from 65%, in 2003, to just 5%, in the three following years.

In the reports filled by programme managers, there are frequent comments on the need to postpone actions because the funds, though allocated in the budget, did not receive the necessary spending authorization. This practice, necessarily, results in implementation discontinuity and reduced efficacy of any programme. It should be remembered, by the way, that this authorization depends, exclusively, on the Executive branch.

4.5 - Spending authorizations upheld until the fourth quarter

There is a clear concentration of spending authorizations in the fourth quarter of each year, except for the administrative programmes. For these, in seven out of the nine years, more than 50% of total volume of commitments occurred in the first quarter and, in 2007, more than

90%. The other programmes, that is, those that more closely relate to the “end goals” of the FGA, there is a great variation. For some, more than 45% of the volume of authorizations happens in the fourth quarter, sometimes even a portion as high as 60%. In some groups of programmes, in some years, 100% of the spending authorizations happened after July.

5 - The transfer of funds to states, municipalities and non-governmental organizations - NGOs

The information on these voluntary transfers – grants, actually – is only available for the years 2004, 2005 and 2006. In these years, the total thus transferred amounted to R\$ 235.6 million, making this the second most important “budget programme” for the FGA (BRASIL, 2005a; BRASIL, 2006a; BRASIL, 2007a). Of this total, 49% went to states, 31% to NGOs and 20% to municipalities. In 2004, the only year for which the number of municipalities that received these transfers is informed, seventy one units, out of the 5,561 that exists in Brazil, received these funds, totalling R\$ 13.2 million. In 2005, the amount transferred was cut in half, to R\$ 5.5 million, and in 2006 it went up to R\$ 26.0 million. Also for the states the amount transferred oscillated markedly: R\$ 29.9, R\$ 51.5 and R\$ 27.7, in the sequence of the years.

From the point of view of governors or mayors, this picture means that they cannot count on such transfers; thus, no planning is possible, and the money will end up being used for topic actions. The same can be said about the transfers to NGOs. A hypothesis can be proposed: access to these funds depends basically on political proximity to the decision makers, and not on the expected environmental results of the grants given.

For the years 2004 and 2006 there is information about the programmes to which transfers were made. It is not possible, though, to associate the destinies of the resources to characteristics of the programmes. For example, in 2004, fourteen states received money from the programme “Management of the Environmental Policy”; the state of Pernambuco received R\$ 33.95 thousand, while Rio de Janeiro received R\$ 2.7 million! Nothing explains the difference. Another programme, “Viver sem Contaminação” (*Living without Contamination*), contemplated only one state and eight municipalities, three of which in that same state.

Many other examples could be listed, but the point should already have been made: there is a clear imbalance in the geographical distribution of the resources transferred, and no explanation as to the possible reasons for this imbalance. The only regularity that can be inferred is that the richest states received more transferred money than the poorest ones.

The possible explanation for this apparent randomness of the distribution of funds rests on the discretionary power of the authority to decide which funds are and which are not to be spent; given this ability of the political authority, it is no surprise that said authority will turn the spending authorization into a leverage to influence political disputes, for which details are not registered in official documents. The hypothesis, then, is that it is these political variables that

determine the allocation of the spending authorities. Though a formal demonstration of this hypothesis requires information not available in official published documents, frequently the press brings data on the concentration of public disbursements on the states from which the ministers come from and maintain their political base (Fernandez, 2012). The consequence, clearly, is a negative effect on the efficacy with which public money is used in the implementation of programmes.

6 - The implementation of programmes: effects of the budgetary process

Given the large number of different programmes implemented by the FGA, it was necessary to choose which would be analysed in detail in order to identify their impacts and be able to answer which was, actually, the real environment policy in Brazil, in the period. Here, results are presented for the following programmes, all of which deal with central environmental issues: “Amazônia Sustentável” (*Sustainable Amazon*), “Resíduos Sólidos Urbanos” (*Urban Solid Waste*) and “Zoneamento Ecológico e Econômico” (*Economic and Ecological Zoning*).

6.1 - “Sustainable Amazon” (*Amazônia Sustentável*) Programme

6.1.1 - General Situation

The Amazon is the main source of wood from native forests in Brazil: in 2008, it contributed 83.5% of Brazilian log production. (COSTA, 2010). Wood, agriculture, cattle raising and charcoal for pig iron production have contributed to the deforestation and subsequent degradation of soil and rivers. The Environment Ministry estimates that 12.5% of the original forest area has been altered through human action. (BRASIL, 2011). Nevertheless, starting from 2004, important efforts have been made, towards the reduction of deforestation, which had led, in 2011, to a reduction of 77% in the annual area deforested (BARRETO, 2012). This effort, though, is not directly linked to the “sustainable Amazon” programme.

This derives from a pilot Programme for the Protection of Brazilian Tropical Forests (PPG-7), created in the early 1990s, with the aim to “stop the wave of deforestation, conserve biodiversity, experiment with productive innovations and become an example of international cooperation” (ABDALA, 2007; p. 16).

The programme began with an agreement between the Brazilian government and the G-7 governments, plus Holland and the European Commission. It would support projects aiming at the sustainable use of natural resources from the Amazon and the Atlantic Forest (PROGRAMA, 2009). As a counterpart, the Brazilian government included PPG-7 projects in the “Amazônia Sustentável” (*Sustainable Amazon*) programme, which is implemented by the ministries of the Environment, of Science and Technology and of Justice.

Initially, the Programme included 10 different lines of action; among them, Training for Sustainable Development, Environmental Urban Development, Expansion and Structuring of Protected Areas, Support to Projects for Environmental Management and Protection of Tropical Forests. The target beneficiaries were communities, indigenous people, associations and cooperatives, the private sector and the Amazonian scientific community. According to the 2001 Evaluation Report (BRASIL, 2001), the programme needed a monitoring system and more precise definition of its goals and lines of action.

The results achieved, according to the same report, include the renewal of the cooperation with the developed countries and multilateral organizations, the increase of international donations to demonstration projects in indigenous people's areas, "increased participation of local population in decisions regarding resource allocation" and the "consolidation of Mato Grosso state's system of deforestation licensing as a model for the other Amazonian states". Another result pointed is the creation of "more than 5 million ha of conservation units", the supply of material and the training of personnel (BRASIL, 2002).

In the reports of the following years, frequent references are made about deficiencies in the abilities of the human resources implementing the programme; there are no references, though, about training programmes geared to remedy this situation. The 2005 report mentions as important results of that year's work the "better understanding of the dynamics of deforestation in the Amazon, the testing of the final version of the Integrated System for Monitoring the Log Production in the Amazon, and the extension to other conservation units of the management plan for the Tapajós National Forest". It also mentions the publication of studies proposing the creation of conservation units and the support for 30 graduate students. Still another result cited is the transfer of approximately R\$ 14 million to communal organizations, forestry training and support to community forest management projects. Such transfers benefitted, according to the report, approximately 2.600 individuals, and 1.000 families. No results that could directly or perceptibly promote changes in the Amazon reality are pointed.

Two concrete results are mentioned: the creation of the Forest Management National Support Centre – CENAFLO, and of the Centre for the Research and Management of Aquatic Biodiversity and Continental Fishery Resources of the Amazon – CEPAM. No reference is made, though, in that or in the subsequent yearly reports, to the results produced by these organizations then created.

By now, it should have become clear that the results presented are, by and large, subjective, or cannot be measured or even identified objectively. These, it should be remembered, are results pointed in official reports that have no tendency to underestimate the "benefits" derived from the programmes implemented.

The reports mentioned also register that the indicator "Area of original ecosystem adequately managed - ha" should have reached, at the end of the programme, a total of 3.6

million ha; however, the result actually reached represented 4.19% of that goal. The criteria to define an area as “adequately managed” were not made clear.

The reports analysed mention lack of budget resources or their impoundments as obstacles to the implementation of the programme. The proportion of budget funds that did receive spending authorization, relative to the total allocated by Congress to the Programme, never reached more than 44.7%, which happened in 2001. In the last year of the programme, 2007, the total spending authorizations reached approximately 10% of the total spent in 2002.

The programme was suspended in 2008. Two years earlier the countries supporting the PPG-7, except for Germany, had stopped the transfer of funds to the Brazilian government, for they judged the results achieved unsatisfactory (AMORIM, 2007). Without the foreign support, the Brazilian government decided to cancel the programme.

6.2 - Urban Solid Waste Programme (*Brasil Joga Limpo e Resíduos Sólidos Urbanos*)

6.2.1 General Situation

Garbage collection and treatment are among the main environmental problems in Brazil. Though there have been some improvements, in 2008 there were still 2.824 municipalities, out of 5,561 existing in the country, where all garbage was disposed of untreated in flooded areas or in open spaces (ARAÚJO; JURAS, 2011).

Given this difficult situation, the support of federal programmes is necessary. The “Brasil Joga Limpo” programme was part of Brazil’s four year Plan 2000-2003, with the purpose of “reducing garbage production, increasing recycling and reuse, and assuring adequate final garbage disposal”.

From 2000 to 2002, the programme supported 342 municipalities (BRASIL, 2002). In 2003, another 14, in four states (BRASIL, 2004a). In the four year Plans 2004-2007 and 2008-2011, the programme had its name changed to Urban Solid Waste, maintaining the same purposes and explicitly focusing on the poorest part of the urban population. The results pointed include support to install various garbage processing units in 16 municipalities, while other 179 municipalities received environmental sanitation benefits, with no exact explanation about what these benefits were.

Among the main results presented for the following years are the support for projects in 127 municipalities, the establishment of a National Network for Training in environmental sanitation (BRASIL, 2007), and studies to implement a regionalization of solid waste management (BRASIL, 2008).

As with other programmes, the flow of financial resources was insufficient and irregular, and disturbed the implementation process. Along the years considered, there was a reduction in the total funds committed to the programme from R\$ 94 million to just R\$ 7

million. On top of this reduction, in five out of nine years, more than 70% of the funds only received a spending authorization in the fourth quarter of the year.

The effectiveness of the programme was dependent, according to its managers, on the approval a Law on solid waste and the definition of a national policy determining greater investments and a regular flow of funds. In August 2010, after 21 years of debates in Congress, Law n. 12.305 was approved, defining said policy. Among its provisions there is a prohibition of open air deployment of garbage, by 2012, but no financial or other mechanism to help the municipalities reach that goal, nor sanctions for those that do not comply.

6.3 - Economic and Ecological Zoning – ZEE (*Zoneamento Econômico e Ecológico da Amazônia*)

6.3.1 - General Situation

In 1981, Law 6.938/81 created the National Policy on the Environment and defined the economic and ecological zoning as one of its fundamental instruments. Nine years later, the government, recognizing the importance of a zoning instrument for the development of the Amazon, created the Programme on the Economic and Ecological Zoning of the Amazon (Decreets n. 99.193/90 and n. 99.540/90). In 2010, or nearly thirty years after the original Law, another Decree (n. 7.378, of December the first, 2010) established the Macro Zoning of the Amazon, and is mentioned in the official reports as a landmark, the most important result of the national efforts to implement an economic and ecological zoning (BRASIL, 2010b, DEL PRETTE; MATTEO, 2006; p. 9). This Decree will be commented below.

A zoning instrument has, necessarily, two components: a map of the existing and of the desired environmental and socio and economic characteristics of the area, and a set of rules and norms that create incentives to promote land use according to the “desired” situation, and sanctions for land uses not compliant. That is the idea behind the use of said instrument as a tool to reach “economic development” and “respect for the environment”. The management of this instrument requires that all levels of government take on their responsibilities. Its efficacy will depend, moreover, on the existence of clear and objective definitions of both desired land use and instruments to reach this *desideratum*.

The task of planning and controlling land use, in Brazil, is a very difficult one: one important characteristic of the country is that in large and small cities, in urban and in rural areas, in rich and in poor areas, the illegal occupation of the soil is pervasive and already secular. This might help explain the feeble results achieved, as will be shown.

In 2001, shortly after the programme had been transferred to the environment ministry, the official report mentions that, than, the most important result would be the definition of a national zoning methodology and “the revival of motivation of those involved, especially in the

states”. This, because then the programme consisted of “a series of disconnected and dispersed projects”, and the priority was to integrate them. (BRASIL, 2002; p. 1655).

Though information is not clear about the proportion of Brazilian territory duly mapped, in 2008 an official report (BRASIL, 2009a; [Document with no page number]), mentions that 80% of the national territory was mapped on the 1:1000.000 scale.

Throughout the whole period, the total spending authorizations amounted to R\$ 33.7 million, of which 35% was spent in 2008. In all other years, the total spending authorized varied between R\$ 3.8 million (2001) and R\$ 0.9 million (2003). Every year, the proportion of the budget funds authorized by Congress and the actual spending authorization varied between 5.4%, in 2003, to 97%, in 2006. In other words, in any of the years it would have been impossible, to the managers of the programme, to know exactly how much money they could count on to implement the programme. Since this is a programme jointly implemented by the federal and state’s governments, the resulting difficulties to coordinate efforts become evident. In fact, taken as an yearly average, per state, the total spending authorized amounted to only R\$ 150.000,00, clearly insufficient for the tasks that should be done (analysis of satellite images, field work, reconnaissance flights, supporting land vehicles, etc.).

This fact is aggravated by the delayed and uncertain flow of the spending authorizations: 90% of authorizations were delayed until the fourth quarter in 2002 and 2003; in 2007 and 2008 more than 66% occurred in the last quarter, and nearly 45% received the spending authorization also in the fourth quarter in 2004 and 2009. Uncertainty is, therefore, the rule.

6.3.2 - The macrozoning of the Amazon

As mentioned before, Decree n. 7.378, issued in 01/12/2010, defined the Macro Zoning of the Amazon and is appointed as one of the main results of the Zoning programme. Back in 2002, Decree 4.297, issued in 10/07/02, had defined the contents and function of a zoning instrument on which to base land use policy.

Decree n. 4.297/02 defined zoning as mandatory, necessarily adhered to in the implementation of public and private plans, works and activities (art. 2º) and that its purpose was to organize, in a bounded way, the decisions of public and private agents, defining prohibitions, restrictions and the alternative possibilities for the exploration of the territory (art. 3º).

The situation is quite different when one looks at the more recent (2010) Decree that approved the Macro zoning of the Amazon on the last month of Lula’s presidential mandate. Art. 1st of the Decree approves the Macro zoning, as defined in its annex, and says that this annex will be an instrument to guide the formulation of plans and policies on the part of the public and private agents. In art. 5 the Decree defines the proposals in the Annex as strategies

for the whole Amazon, which “shall be considered in the plans, programmes and actions of the public federal organizations, including the definition of fiscal incentives and credits from official financial agencies”. The Decree goes on to say that such proposals “might include economic and financial instruments”, which shall be defined by the National Monetary Council (arts. 9° and 10).

Summing up, all references to the mandatory character of the zoning instrument, which existed in the Decree issued in 2002, were stripped from the one issued in 2010, defining the Macro zoning of the Amazon. This more recent Decree, thus, becomes rather void of authority to actually influence the land use process in the Amazon.

On its turn, the annex is a 200 page document with general comments on, among other aspects, the historical occupation of the Amazon. The strategies suggested therein are very general and do not define restrictions nor incentives. To exemplify, one of the “territories” mentioned should “stimulate the diversification of the production systems, including the development of a plan to restore degraded areas, focusing on cattle raising”; “promote the fruit production chain (with indigenous fruits)”; and “organize the production of wood logs and promote agricultural practices that have less impact on the environment”. Certainly, no one could disagree with such proposals; the issue, though, is the lack of clear measures to transform words into facts.

It seems, thus, that the likelihood that the zoning of the Amazon will bring a perceptible change in the area’s land use patterns are very limited.

7 - CONCLUSIONS

Though environmental policy, as any other policy, may include even symbolic acts on the part of government, the actual disbursement of budget funds to implement related programmes is a fundamental aspect of any policy. Here, only this last perspective was considered.

Most of the budget funds were used for administrative purposes. Remaining funds were dispersed among a large number of programmes, each one receiving an amount clearly insufficient to actually make a difference. Moreover, the supply of funds was irregular and unpredictable. Given these characteristics, it is no surprise that results were meager, even when evaluated based solely on official government reports.

The root causes of this inefficiency seem to be the basic rules governing budget implementation: given the discretionary power over budget spending given to the political authorities in charge of the Executive agencies, spending authorizations become dependent on politics, and not on policies. The consequences, as seen, are a paucity of results from government programmes implementation, and a tendency of laws, defining policy, to be devoid of actual instruments to transform reality.

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