



Does the Rural Environmental Registry [RER] Contribute to Regional Sustainability? An Analysis from the Perspective of Actors Involved in the Process: Study in the Municipalities of the Assis-SP Mesoregion

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ABSTRACT: Environmental issues permeate society in its most diverse variants. Beginning with anthropic action in the environment, ranging from the individual / collective level to the corporate, the environment influences and is influenced by man on a daily basis. The aim of the research is to analyze the contribution of the Rural Environmental Registry (RER) to regional sustainability, considering the point of view of some actors directly involved in the process, taking into account the evolution of the registrations in the period from March 23, 2015 to 26 Of July 2015, with an interval of seven days, according to an official publication of the Secretariat of State for the Environment, exclusively for the Assis-SP mesoregion. The research is characterized as exploratory with the use of the mixed method, using secondary data and semi-structured interviews. Of the municipalities that make up the study area, the one in Paraguaçu Paulista stands out with the highest number of registrations made up to the moment of data collection (real estate with up to four fiscal modules and real estate with more than four fiscal modules). In addition, it was found that most respondents believe that RER can contribute to regional sustainability.

Keywords: Regional Sustainability, Mesoregion of Assis-SP, Rural Environmental Registry, Environment, Sustainable Development.

I. INTRODUCTION

Environmental issues permeate society in its most diverse variants. Beginning with anthropogenic action in the environment, varying from the individual / collective level to the corporate, the environment, in some way influences and is influenced by man on a daily basis. It is true that there was a considerable evolution since, in the light of legislation, environmental resources had the sole meaning of an object to be exploited by man in the manner best suited to him, with legal guarantees. Such a conception is justified by the idea of the man / nature relationship at the time, based on the notion of inexhaustibility of natural resources, and the prevailing conviction that the domestication of nature would be a possible task, with a low level of difficulty, without negative indirect effects [1]. Over time, this conception of the binomial man / environment was questioned, and is currently superseded in all fields of knowledge [2]. The Magna Letter of 1988 (Federal Constitution of Brazil) devoted an exclusive chapter (Chapter VI) to address the environmental issue, expressly recognizing that "everyone has the right to an ecologically balanced environment, a common use of the people and essential to a healthy quality of life, imposing on the Public Power and the collective the duty to defend and preserve it for present and future generations" (Article 225) [3].

Under the perspective of law, the protection of the environment is not restricted to the value of natural resources for productive processes. The Constitution itself recognized that environmental balance is an indispensable element for the quality of healthy life. It has also extended the beneficiaries of environmental protection and preservation, since it has explicitly included the next generations [2]. Brazil recently witnessed the intense debate about its Forest Code, whose first edition dates back to 1965. In essence, what is being discussed is the future of the Brazilian flora, with its most diverse implications for human activities, as well as the consequences of Political, economic, social and economic dimensions throughout the national territory and for all society [4]. Subsequently, Law 12.651 of May 25, 2012 was published, which establishes general norms on

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the protection of vegetation, Permanent Preservation areas and Legal Reserve areas; Forest exploitation, supply of forest raw materials, control of the origin of forest products and control and prevention of forest fires, and provides for economic and financial instruments to achieve its objectives (Art. 1-A) [5]. In Chapter VI, Article 29, of the said instrument, the Rural Environmental Registry (RER) is defined as "an electronic public registry of national scope, mandatory for all rural properties, in order to integrate the environmental information of properties and possessions Rural, building a database for control, monitoring, environmental and economic planning and combating deforestation." It presupposes that this is a process of political innovation, whose instruments coexist in a relation of interdependence between the social actors and their effective practices. Therefore, cognitive constructs, ideas or concepts, policy instruments, management tools are only relevant insofar as they are cultivated in practice [6]. From this point we have the most diverse developments, the result of debates, struggles, discussions, reformulations, and finally, a set of actions that are shaping the process of consolidating this premise, as will be seen below.

In addition to this brief introduction that includes the question of research, the general objective of the study and a brief characterization of the geographic cut, the article presents in section two the bibliographic review; Section three presents the methodology used to reach the proposed goal. In section four, the presentation and analysis of the main results obtained. Section five was reserved for the final considerations of the research, followed by the references that composed the theoretical body of work. Considering the creation and mandatory registration of rural properties and possessions in the Rural Environmental Registry - RER, as well as the evolution of the registers of the municipalities belonging to the mesoregion of Assis,

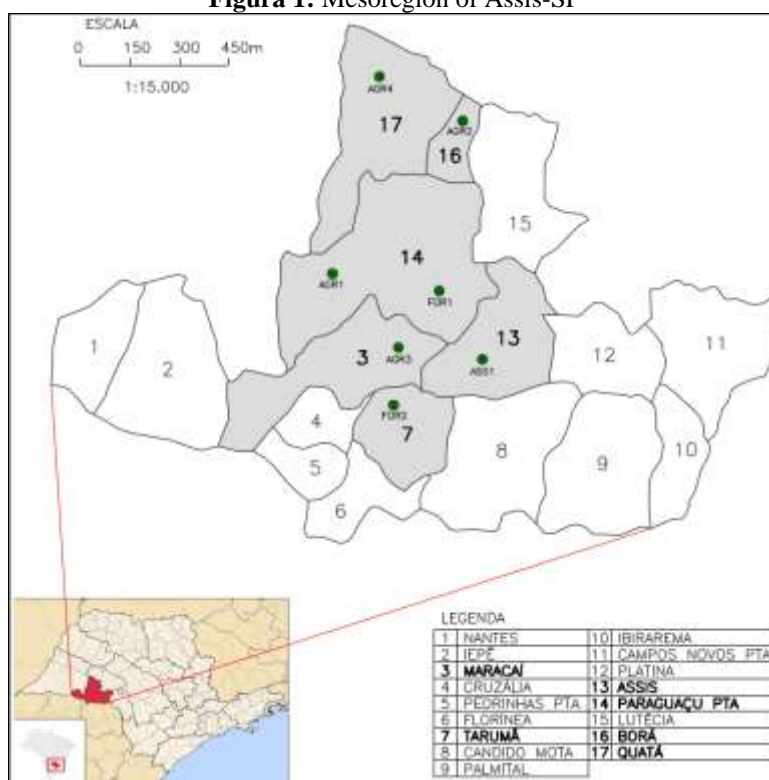
State of São Paulo, this study is based on the following research question: From Which forms the Rural Environmental Registry contributes to regional sustainability from the perspective of actors involved in the process?

Despite a growing interest in environmental issues, it is surprising that so little theoretical and empirical research has been conducted on the topic, specifically with regard to public policy actions that have direct influence on the most diverse stakeholders (public agencies, landowners, NGOs, the academic community, the business sector, and the community in general). To answer the research question, this article aims to analyze the contribution of the Rural Environmental Registry (RER) to regional sustainability, considering the point of view of actors directly involved in the process (public authority, rural owners, technical directors of agricultural planning office), Taking into account the evolution of registrations from March 23, 2015 to July 26, 2015, with an interval of seven days, according to an official publication of the State Secretariat for the Environment, exclusively for the Assis- SP. In spite of the emergence of new studies on the most diverse forms of regional approaches in various parts of the world [7], [8], [9], [10], [11], [12], [13], [14], [15], [16], [17], most recognize that conventional government policies have been insufficient and inadequate to deal with complex development challenges Sustainable development. Public-private engagement should be established in the development of partnerships in the planning process at the most diverse scales [18].

For the purpose of this research, we considered the classical conception of mesoregion, understood as a grouping of bordering municipalities that require integrated planning for its development and regional integration, that presents, cumulatively, characteristics of functional integration of physical-territorial, economic nature -social and administrative [19]. The region has emerged as a substantial focus for researchers, managers of natural resource sustainability, as well as technicians involved with strategic planning to develop and implement monitorable goals [20]. It is one of the mesoregions of the State of São Paulo belonging to the region of Assis, whose population was estimated at 278,220 inhabitants in 2014,

divided into 17 municipalities: Assis, Borá, Campos Novos Paulista, Cândido Mota, Cruzália, Florínia, Ibirarema, Iepê, Lutécia, Maracáí, Nantes, Palmital, Paraguaçu Paulista, Pedrinhas Paulista, Platina, Quatá and Tarumã [21]. Having said that, it is reiterated that the study presented here is limited to the Assis-SP mesoregion, according to the Brazilian Institute of Geography and Statistics [21]. The Fig 1 shows the Assis mesoregion on the map of the State of São Paulo.

Figura 1: Mesoregion of Assis-SP



Source: Oliveira (2015).

The Assis mesoregion assumes characteristics of a mesoregion with polo in the city of Assisi. The region extends through the Paranapanema Valley, from east to west, along the old Sorocabana railroad and the Raposo Tavares highway, bounded on the north by the State of Paraná, in the southwest by the State of São Paulo. Geographic area that qualifies for a strong commercial integration between the municipalities that compose the territory in question. The mesoregion has the potential of a modal pole of transport, which stands out with the expansion of economic activities in the interior of the State of São Paulo [22].

II. LITERATURE REVIEW

a) Sustainable Development

The compatibility between economic growth and care for the environment, considered here all its developments, has been the subject of debates among the most diverse institutional actors around the world. From the heart of these unfinished and apparently endless discussions and debates, the proposal of sustainable development arises. The report *Our Common Future* - also known as the Brundtland Report - was responsible for the wide dissemination of the term sustainable development, conceptualizing it as "one that meets the needs of the present without compromising the possibility of future generations attending to their own needs" [23]. The issue of environment and development is transdisciplinary, involving economic, technological, ecological, social, political and ethical aspects. In this regard, decision-makers, particularly at the political level, should develop policies that provide guidance and regulation to stakeholders [24], [25]. Considering the scarcity of information in the literature on this instrument, the next subsection will present the basic aspects of the Rural Environmental Registry - RER, notably as to its operation, purpose and other issues no less important at that time.

b) Rural Environmental Registry - RER: preliminary approaches

In order to support the legal part of the new instrument implemented by the Secretariat of the Environment, the Table 1 presents the main legal frameworks considering from Law 12.651 / 12 to the ordinance that changes the deadline for the mandatory register in the National System of Environmental Registry Rural (SiCAR).

Table 1: Main legal frameworks of the Rural Environmental Registry - RER

Legal Document	Description
Federal law 12.651/2012	Provides for the protection of native vegetation; Amends Laws 6388 of August 31, 1981, 9,393 of December 19, 1996 and 11,428 of December 22, 2006; Revokes Laws No. 4,771, dated September 15, 1965, and 7,754, dated April 14, 1989, and Provisional Measure No. 2,166-67 of August 24, 2001; And makes other arrangements.
Decree 7.830/2012	Provides for the Rural Environmental Registry System, the Rural Environmental Registry, establishes general norms for the Environmental Regularization Programs, which is dealt with in Law 12.651, of May 25, 2012, and makes other provisions.
Decree 59.261/2013	Establishes the Rural Environmental Registry System of the State of São Paulo SICAR-SP, and provides Related.
Decree 60.107/2014	It gives new wording and adds a device to Decree nº 59.261, of June 5, 2013, which establishes the System of Environmental Registry of the State of São Paulo SICAR-SP and gives related measures.
Annex to Decree 60.107/2014	Term of agreement signed by the State of São Paulo, by its Environment Secretariat, and the municipality of (sic), aiming to provide physical space and equipment for rural property registration purposes in the rural environmental registry system of the State of São Paulo - SICAR-SP.
Federal Decree 8.235/2014	It establishes general norms complementary to the Environmental Regularization Programs of the States and the Federal District, which is dealt with in Decree No. 7.830, dated October 17, 2012, establishing the More Environment Brazil Program, and makes other provisions.
Normative instruction MMA 02/2014	It deals with the procedures for the integration, execution and compatibilization of the Rural Environmental Register System - SICAR and defines the general procedures of the Rural Environmental Registry - RER.
State Law 15.684/2015	It deals with the Environmental Regularization Program (PRA) of rural properties and real estate, created by Federal Law No. 12,651, of 2012 and on the application of Federal Complementary Law No. 140, 2011, within the scope of the State of São Paulo
Ordinance CBRN 03/2015	Establishes procedures to be carried out by the Coordination of Biodiversity and Natural Resources - CBRN, in relation to the requirements of approval of the location of Legal Reserve, considering the effective implementation of the Rural Environmental Registry - RER
Ordinance MMA 100/2015	It extends the period established in art. 29, §3 and art. 59, paragraph 2 of Law No. 12,651, of May 25, 2012.

Source: Prepared by the author from SMA / SiCAR (2015).

The RER, whose objective is to identify and integrate the environmental information of rural properties and possessions, aiming at environmental planning, monitoring, combating deforestation and environmental regulation, is mandatory for all rural properties, be they public or private, retirement settlement And areas of traditional peoples and communities that make collective use of their territory. In this sense, it is observed that this instrument presupposes the principle of isonomy for all those who own rural properties, even if they are located in urban areas destined for rural use. It is well known that the transparency of government actions is through the establishment of programs with clear and proper rules, which are available to society, encouraging the participation of citizens. This proposition corroborates the importance of public environmental management, seen from a local perspective, especially its reflection in the context of cities / regions [26].

In the context of the state reform process beginning in the 1980s, decentralization of the government gained focus, especially when considering factors such as the democratization of political relations, as well as increased efficiency in public management processes. Actions correlated with the environment acquired public policy character insofar as it came to be considered a public good [27]. Registration in the CAR is the first step for the property to be considered environmentally regularized, followed by the investigation by the competent state environmental agency, in order to guarantee that the property, object of the registry, does not present an environmental liability related to the Legal Reserve (RL), Area of Permanent Preservation (APP) and Area of Restricted Use (AUR).

The property will obtain the status of "in the process of environmental regularization", after the competent environmental body has established that: i) there is an environmental liability and the owner or landowner has signed a commitment to recover the damage caused, and may join the Environmental Regularization Program (FOR); ii) while fulfilling the obligations established previously with the environmental agency. Another issue of common occurrence is the fact that a rural property has perimeter in more than one entity of the Federation. In this case, the enrollment will be held in the municipality that contemplates the highest percentage of their areas, in hectares. Initially, It is possible to point out some direct benefits derived from the RER: a) potential instrument for rural property planning; B) access to the Environmental Regularization Program (ERP); C) marketing of Environmental Reserve Quotas (ERQ); D) facilitation of access to agricultural credit. It should be noted that, according to Law no. 12.651 / 2012, after five years of its publication, in this case, from May 28, 2017, financial institutions will not be able to grant agricultural credit to

farmers who do not have the RER (Art. 78-A). The Table 2 lists other advantages of RER membership for rural landowners and environmental agencies.

Table 2: Advantages of registration in the National System of Rural Environmental Registry.

Rural Owners	Environmental Agencies
<ul style="list-style-type: none"> • Proof of environmental regularity • Legal certainty • Suspension of possible sanctions • Easier access to credit • Access to environmental regularization programs • Rural area planning and its positive developments • Conquest and / or maintenance of market certifications 	<ul style="list-style-type: none"> • Clear distinction between legal and illegal deforestation • Facilitating monitoring and combating deforestation • Licensing support • Planning instrument for sectorial policies • Public policy planning tool • Improvement of environmental management in rural areas

The RER can be considered as one of the main positive points of the new Forest Code, capable of promoting the regularization of 5.2 million rural properties, as well as initiating the process of rural environmental recovery foreseen in the legislation. The lack of environmental regularization contributes to the country being less competitive, favoring the illegality and maintenance of legal uncertainty. The authors exhort that the regulation of the Brazilian Forestry Law and the implementation of the RER will contribute to the union of agribusiness, rural owners, public power and environmentalists in the elaboration of a shared sustainable positive agenda [28].

III. METHODOLOGY

For this study, the mixed methods approach was used, which includes at least one quantitative method (intended to collect numbers) and a qualitative method (intended to collect words), and no method is inherently linked to some specific research paradigm [29]. Mixed methods research can be as "one in which the researcher collects and analyzes the data, integrates the findings, and draws inferences using qualitative and quantitative approaches or methods in a single study or research program" [30] and other studies corroborate this methodological proposal that emerges in the field of applied social sciences [31], [32], [33], [34], with emphasis on the use of the triangulation technique [35]. As this is a preliminary proposal for examining a topic that has not yet been explored, the research has an exploratory character [36], [37], [38].

In the first stage, secondary data provided by the State Department of the Environment (SDE) were used, through the Rural Environmental Registry System (SiCAR), making it possible to map the municipalities that compose the study region. The collection of these data was limited to the period from March 22, 2015 to July 26, 2015 (SDE's latest publication until the closure of field research). In the second stage, semi-structured interviews were conducted with the director of the Environment Secretariat of Paraguaçu Paulista, as well as a technician (agronomist) of the Coordination of Integral Technical Assistance (CITA), an agency linked to the State Secretariat of Agriculture and Supply Sao Paulo. In order to corroborate some of the data collected, visits were scheduled to three technical consulting offices and agricultural and livestock projects located in the municipality of Paraguaçu Paulista, which serve the entire region. In addition, 02 rural landowners were interviewed. Thus, we conducted semi-structured interviews [39] with the actors directly involved in the process, in an attempt to understand their perceptions about how RER can contribute to regional sustainable development.

The technical team of SiCAR / SDE was also contacted in order to resolve some of the issues, and this part of the collection was carried out via telephone e-mail. The interviews followed the proposal presented by authors with consolidated studies in the area of research methods [40], [41] [42].

Table 3 presents the list of interviewees for this work, duly codified.

Table 3: Interviewees and their categories / position / function.

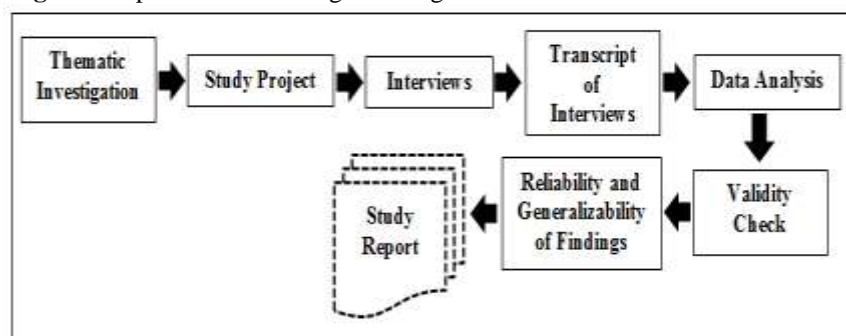
Interviewee	Category	Occupation
PFD1	Municipal Public Authority	Director of Environment
MRC2	State Public Authority	Agronomist Engineer - Technical Manager
AMS3	Consulting and Agricultural Projects	Agronomist Engineer - Business Director
ACM4	Agricultural Projects / Technical Consulting	Agronomist Engineer - Business Director
HSM5	Consulting, Topography and Earthmoving	Agronomic Engineer - Owner Partner

JCP6	Rural Owner	Rural Producer
MT7	Rural Owner	Rural Producer

Source: Research Data

Figure 2 presents the unique methodological design for the interview, as a data collection instrument, as proposed by the authors mentioned above.

Figure 2: Specific methodological design for the interview as a mode of data collection.



In the next topic, the main findings of the research will be presented, as well as an analysis of the main results obtained.

IV. DATA ANALYSIS AND RESULT

Data from the Ministry of the Environment (ME), reference June / 2015, show that the North has the highest percentage ever recorded. Of the 94.8 million registered area, 76.52% were already registered until the last survey. Then, the Center-West region, with 53.82% of the total of 129.9 million area registered. It occupies the third position in the Southeast region, with 26.7 million hectares of area already registered (48.72%). The Northeast region soon follows with a 23.01% already registered area of a total of 76.1 million hectares. Finally, the South region, with 41.7 million hectares of registered area, presents 19.87% already registered. One of the possible reasons why the North region occupies the first place in the national scenario in terms of areas already registered, considering that it has the second largest area of the country, is due to the size of the properties, that is, there are less owners Holders of larger areas (in hectares). In the specific case of the Southeast region, it is known that this is characterized by a situation opposite to the North region. A large number of owners of small modules predominate, a factor that generates more delays in registration.

Table 4 presents this information for the five Brazilian regions.

Table 4: General extract of the areas registered in the national territory.

	Region				
	North	Midwest	Southeast	Northeast	South
Registered Area (million hectares)	94.8	129.9	54.9	76.1	41.7
Area actually registered (million hectares)	72.6	69.9	26.7	17.5	8.3
Area actually registered (%)	76.52	53.82	48.72	23.01	18.87

Source: Data from the Brazilian Ministry of the Environment (2015).

According to Law No. 8,629 / 1993, in relation to the size of the area, rural properties are classified as smallholdings; Small property; Average property and large property. Table 5 presents the characteristics of each of the classifications.

Table 5: Classification of rural properties

Classification of rural properties	Characteristics
Smallholding	Rural property with an area less than 1 (one) fiscal module
Small property	Property with area between 1 (one) and 4 (four) tax modules
Average property	Rural property with an area of more than four (4) and up to fifteen (15) tax modules
Great property	Rural property with an area of more than 15 (fifteen) fiscal modules

Source: Brazil (1993) [43]

Fiscal module is an agrarian unit of measure that represents the minimum area required for rural properties to be considered economically viable [44]. Table 6 shows the cadastral situation of the municipalities studied. It is observed that only the municipalities of Iepê and Nantes have a fiscal module of 24 hectares, with 20 hectares for the other municipalities.

Table 6: Registration status of the municipalities that are part of the mesoregion of Assis-SP.

GEOGRAPHICAL UNIT		MOD. FISCAL (ha)	REGISTRATION STATUS		SUPER. TERRIT. (Km2)
MUNICIPAL CODE	COUNTY		PROPERTIES	AREA (ha)	
3504008	Assis	20	1.036	42.991,7	460,3
3507209	Borá	20	97	9.824,20	118,5
3509809	Campos N Paulista	20	544	49.160,2	484,0
3510005	Cândido Mota	20	1.555	57.351,6	596,2
3513306	Cruzália	20	361	14.930,3	149,1
3516101	Florínia	20	279	22.172,9	225,6
3519501	Ibirarema	20	501	25.199,4	228,3
3519907	Iepê	24	450	45.354,9	595,5
3527900	Lutécia	20	354	44.986,2	474,9
3528809	Maracáí	20	806	48.350,0	533,9
3532157	Nantes	24	135	26.928,3	286,2
3535309	Palmital	20	1.470	51.122,1	547,8
3535507	Paraguaçu Paulista	20	1.411	103.211,6	1.001,3
3537156	Pedrinhas Paulista	20	315	9.734,0	152,5
3539707	Platina	20	400	31.044,2	326,7
3541703	Quatá	20	564	62.862,6	650,4
3553955	Tarumã	20	343	26.369,9	303,2
		TOTAL	10.621	671.594,1	7.134,4

Source: Research Data

Table 7 presents the weekly registration numbers registered by the Department of the Environment (DE) for rural properties with up to four area fiscal modules. Initially, it was observed that, in May, there was no publication of data for day 24, breaking the pattern of weekly publications. According to DE, there was no registration and disclosure of the data for technical reasons. This fact is also observed in real estate with more than four area fiscal modules (Table 8). Another specificity is contained on May 10 and 17 for the municipality of Florínia, when there is an involution in two registers (from 70 to 68), a fact that occurs again on July 5 and 12 for the municipality of Ibirarema (from 136 to 134). According to explanations from the SDE / SiCAR technical team, when asked about this occurrence, the following response was obtained:

"On the alleged involution of the number of subscribers can occur if any register changes or is canceled, since the report only brings the number of real estate effectively registered. Thus it is common that there is a fluctuation in the number of properties registered by municipality."

Although the explanation is plausible, however, the question remains as to the reason (s) that may lead to the cancellation of the registration. Contrary to this, the explanatory section of the SiCAR team states that "[...] since the report only brings the number of properties effectively registered". If the report published officially on the institutional website of the Environment Department brings "only the number of properties registered", it thus returns to the starting point, leaving an explanation that is not complete. Table 7 presents the evolution of real estate registrations with up to 4 area fiscal modules for the municipalities that make up the study mesoregion.

Table 7: Registration performed by municipality for real estate with up to 4 area fiscal modules.

Counties	Year 2015																	
	Total Subscribers by Municipality - deadlines																	
	Properties with up to 4 fiscal area modules																	
	March			April			May			June			July					
	22	29	05	12	19	26	03	10	17	31	07	14	21	28	05	12	19	26
Assis	126	139	145	162	178	204	268	330	356	370	370	379	385	395	402	408	415	416
Borá	7	7	10	10	10	14	20	22	24	24	24	26	26	26	26	29	30	30
Campos N Paulista	42	43	43	47	62	107	139	145	147	149	151	152	153	153	156	156	160	160
Cândido Mota	108	119	135	147	218	315	445	492	500	523	532	536	551	555	566	570	579	581
Cruzália	20	23	24	31	36	46	61	66	69	70	70	74	75	78	78	80	83	83
Florânia	27	27	27	28	30	40	64	70	68	69	71	71	71	71	71	71	72	72
Ibirarema	39	39	40	48	58	72	109	128	129	132	133	133	134	135	136	134	138	139
Iepê	35	47	51	60	74	112	174	191	194	200	200	208	206	206	206	207	210	210
Lutécia	43	50	50	54	64	77	91	102	105	108	108	108	108	108	108	108	109	109
Maracá	88	96	98	116	143	194	235	250	258	282	289	311	322	338	351	351	359	365
Nantes	10	12	13	14	15	20	35	40	40	40	41	41	41	41	41	41	41	42
Palmital	158	167	173	203	250	315	394	431	452	469	478	491	498	512	520	530	547	555
Paraguaçu Paulista	214	273	297	340	362	430	534	587	614	639	646	652	661	669	672	675	680	693
Pedrinhas Paulista	85	86	88	94	124	128	153	157	163	168	168	168	169	172	173	173	173	173
Platina	30	34	45	53	70	89	128	157	160	166	168	193	173	181	187	188	200	202
Quatã	85	99	111	119	161	183	204	227	231	244	252	255	256	256	256	259	263	263
Tarumã	27	31	32	37	52	68	121	124	124	128	128	128	131	131	131	133	135	135

Source: Research Data

The municipality of Paraguaçu Paulista presents the highest number of average records recorded in the period, followed by the municipalities of Candido Mota and Palmital. However, if the coefficient of variation (standard deviation expressed as a percentage of the mean) is taken into account, the municipality of Pedrinhas Paulista, with 20.8%, has the lowest coefficient, followed by the municipalities of Lutécia (23.8%) and Paraguaçu Paulista (26.7%). The coefficient of variation (CV) is interpreted as a measure of variability of the data in relation to the mean. Therefore, the lower the CV, the more homogeneous the data set [45]. The quantitative variables consist of variables that can be measured on a quantitative scale, that is, they present numerical values that express some meaning [46].

According to the statement from PFD1, "RER is the greatest tool created to show rural producers that production is necessary, since agribusiness is Brazil's 'flagship', but also that they protect and not allow all resources. It is very important, it is there the materialization of the contribution of the rural producers in the sustainable development." The understanding of the interviewed AMS3 goes in the same direction. According to him the RER

[...] can help as a tool to locate the critical points and to direct the environmental organs so that they can elaborate projects of recovery of springs that supply springs. [...] I only hope that the system will not only be used as a punishment and fines tool to increase the collection. In addition ... there is the question of forests [sic] that will be recovered with the aim of protecting the fauna and flora [...]. It all depends on the corridors that will make the connections between the reserves [...].

In the same direction, the interviewee HSM5 states. According to him "RER can assist in regional sustainability, [...] when the owner makes the RER, [...] he is responsible for the information contained therein, and has to keep that true information on his property [...]], If he has more area than is required in the legislation he cannot withdraw [...], because he is above, he has to maintain, preserve, if he does not have the necessary area, he has to regularize (recompose, plant) Of the environmental regularization program".

Unlike the previous two, the rural landowner MT7 does not believe that RER can contribute to sustainability, even classifying it as "a governmental obstacle [...], for some time now it already exists, with the name of DAF". The interviewee refers to the Statement of Aptitude to FEAP / BANAGRO (Paulista Agribusiness Expansion Fund). However, the DAF does not compare to RER, since it refers to a statement made to a fund of the São Paulo State Government (Bank do Agribusiness Familiar) with the objective of strengthening and supporting the development of rural producers, artisanal fishermen, their cooperatives and associations, through credit lines for various agricultural activities [47]. In order to clarify the observations made by the rural producer MT7, clarification was sought from CATI, where it was possible to hear the technician MRC2, who stated

"not the same procedure. [...] The DAF is directly related to financing, while the RER to the aspect of environmental regulation".

Despite this, it should be stressed that even for financing purposes, the government seeks to verify the environmental regularity of the property, minimizing the risk of not subsidizing properties that are irregular with environmental aspects [48]. Strong and forceful denunciations were made by the interviewed MRC2, especially regarding the conduct of some players related to the sugarcane agro-industry regarding the burial of springs. Another serious occurrence concerns owners who, when carrying out the RER, omit information from some springs, characterizing bad faith, which leaves room for an unfolding of criminal conduct, notably related to some sugarcane planters in the region. A study carried out in the same region [26] found a regular conduct of the six agroindustries surveyed, mostly undertaking actions beyond what is required by legislation. However, the region is wide and there are many other ventures of this sector that act in this geographic cut. Practices of this nature, whether by the private enterprise or the rural landowners, must be fiscally enforced and punished by the government, strictly within the law. It is unacceptable that, especially in times of water scarcity such as the present, such conduct should be tolerated. Table 8 shows the number of registrations made during the study period for real estate with more than 4 tax modules.

Table 8: Registration realized by municipality for real estate with more than 4 fiscal modules of area.

Counties	Year 2015																	
	Total Subscribers by Municipality - deadlines																	
	Properties with more than 4 fiscal modules of area																	
	March		April			May				June			July					
	22	29	05	12	19	26	03	10	17	31	07	14	21	28	05	12	19	26
Assis	14	14	14	17	17	19	24	27	31	32	32	32	32	32	32	32	33	34
Borá	10	10	10	12	13	13	15	16	16	17	17	17	17	17	17	17	17	17
Campos N Paulista	11	11	11	16	21	29	45	53	57	59	59	59	59	59	60	60	60	60
Cândido Mota	17	18	18	23	24	27	40	44	46	48	48	48	49	49	48	48	50	49
Cruzália	6	6	6	9	9	9	9	9	9	9	9	9	9	9	9	10	10	10
Florínia	10	10	10	11	14	14	14	16	18	19	19	19	19	19	19	19	19	19
Ibirarema	4	4	4	4	8	17	17	19	19	20	20	20	20	20	21	21	21	21
Jepê	29	32	32	32	36	42	56	60	61	62	63	66	67	67	67	67	67	68
Lutécia	44	47	47	49	55	64	72	80	84	85	86	86	86	88	89	89	89	89
Maracá	16	17	17	23	27	39	45	51	51	52	53	53	53	53	53	53	52	52
Nantes	20	20	20	20	20	20	21	21	21	21	23	23	23	23	23	23	23	23
Palmatal	5	6	6	8	10	14	18	18	19	19	20	21	21	21	20	21	22	22
Paraguaçu Paulista	65	79	79	91	100	115	130	141	148	153	154	156	156	157	157	158	160	160
Pedrinhas Paulista	2	2	2	2	2	2	5	5	5	5	5	5	5	5	5	5	5	5
Platina	12	12	12	12	13	17	18	22	23	23	23	23	23	23	23	23	24	24
Quatá	43	48	48	59	67	77	85	91	89	91	91	92	92	92	92	92	93	93
Tarumã	12	13	13	16	18	17	26	27	33	33	33	33	33	33	33	33	34	34

Source: Research Data

Commonly, the quantity of real estate with more than four tax modules is characteristically smaller in the municipalities, and the mesoregion, geographic cut of this study, does not escape the rule. The municipality of Paraguaçu Paulista stands out with the highest average number of registered properties, followed by the municipalities of Quatá and Lutécia. Similar to the previous analysis, if the Coefficient of Variation (CV) is considered, the municipalities that present the greatest homogeneity in the data set are the municipalities of Nantes, Cruzália and Borá, with 6.6%, 14.3% and 16, 7%, respectively. By systematizing the opinions of the interviewees regarding the RER contribution to sustainability, Table 9 presents more expressive sections of the testimonies.

Table 9: Statements on RER's contribution to regional sustainability.

Interviewee	Interview Excerpts
PFD1	"In my point of view, this contribution will exist in the medium and long term. [...] RER is the greatest tool created to show rural producers that production is necessary, since agribusiness is Brazil's 'flagship', but also that protecting and not allowing all resources to end is very important, There is the materialization of the contribution of the rural producers in the sustainable development."
AMS3	"Yes. I believe it can help as a tool to locate the critical points and direct the environmental organs so that they can design projects to recover springs that supply water sources."
ACM4	"Yes, I believe that RER will favor equity / ownership. Provided, everyone will truthfully state what they actually have in their areas. Environmental regularization is the first step to taking chances in the market competition. Proof of this assertion is that, increasingly, credit lines and certain markets require the producer to be appropriate to socio-environmental legislation."
HSM5	"I believe that RER can help in regional sustainability, because when the owner makes the

	RER, he is responsible for the information contained therein."
JCP6	"[...] in environmental sustainability, I think so. Because the RER will automatically trigger the Environmental Regularization Program, which will represent implementation of reforestation actions, isolation of areas for natural regeneration (preservation of what already exists), soil conservation measures, preservation and natural recovery of fauna and flora, among others Actions."
MT7	"No, this to me is just another" government clutter ". Well, it's been a while since that, with DAF's name."

Source: Research Data

Therefore, it is observed that only one of the interviewees of the *rural landowner* category sees the RER proposal with some skepticism, although their observations contributed to the interview with the CATI technician, bringing further clarification about their criticism.

V. CONCLUSION

The objective of this research was to analyze the contribution of the Rural Environmental Registry (RER) to regional sustainability, considering the point of view of some actors directly involved in the process (public authorities, rural owners, technical directors of the agricultural planning office). (September 23, 2015 to July 26, 2015), with an interval of seven days, according to an official publication of the Secretariat of State for the Environment, through the Rural Environmental Registry System (SiCAR). The quantitative analysis of the secondary data describes the Assis-SP mesoregion with a total area of 7,134.40 km², an area of 671,594.10 hectares, distributed in 10,621 rural properties. The municipality of Paraguaçu Paulista stands out with the largest number of registrations carried out up to the deadline of the calculation, both for properties with up to four tax modules, and for those with more than four tax modules.

As for the qualitative analysis of the study, especially regarding the opinion of the various actors involved with the RER, there was some symmetry in the opinions about the possibility of RER contributing in some way to regional sustainability. The vast majority believe that RER can be an important management tool for environmental improvement, especially in reforestation, maintenance of PPAs, preservation of springs, among others. The main limitation of this research is the fact that it remains confined to a single region of the State, the mesoregion of Assis-SP, although it is a predominantly agricultural area. For future work, it is suggested to expand the area of geographical coverage, mainly incorporating the Center-South region of Brazil, as an important region focused especially on sugar cane agribusiness.

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