

LA HISTORIA DE LA EXTENSIÓN RURAL EN BRASIL: DE LA REPRODUCCIÓN A LA REFLEXIÓN

THE HISTORY OF RURAL EXTENSION IN BRAZIL: FROM REPRODUCTION TO REFLECTION

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Resumen: Este documento pretende comprender cómo se ha configurado las políticas nacionales de asistencia técnica y extensión rural (ATER) en Brasil contemporáneo, buscando los determinantes de su configuración. Para lograr el objetivo se verificó la legislación que regula las políticas públicas ATER - PNATER, PRONATER y ANATER. También se investigaron los eventos relevantes para el servicio de extensión, como la creación de INCRA, CATI, ACAR, EMBRATER y EMBRAPA, además de CNDR, CNDRS y CONDRAF. Las discusiones permitieron verificar que el ATER contemporáneo se basa en el desarrollo rural sostenible, aunque la práctica aún no es una realidad.

Palabras clave: Extensión Rural, ATER, Asistencia técnica, PNATER, Comunicación rural

Abstract: This paper aims to understand how contemporary Technical Assistance and Rural Extension (ATER by its acronym in Portuguese) in Brazil has been shaped, seeking to find the determinants for its configuration. To achieve this objective, the legislation that regulates ATER - PNATER, PRONATER and ANATER public policies - was verified. Relevant events for extension service were also investigated, such as the creation of INCRA, CATI, ACAR, EMBRATER, EMBRAPA,

CNDR, CNDRS and CONDRAF. The discussions, based on documents and literature review, have revealed that contemporary ATER is based on sustainable rural development, although the practice is not yet a reality.

Keywords: Rural Extension, ATER, Technical Assistance, PNATER, Rural communication

Understanding the context of national policies for Technical Assistance and Rural Extension (ATER by its acronym in Portuguese) is fundamental for understanding the history of the rural extension itself in Brazil, since the trajectory of one, is intrinsically related to the entire extension process in the country. At times with a reproductive approach, and in others with a reflexive approach, the rural extension in the country was strongly linked to the State's tutelage and dependent on public policies.

To understand how this historical trajectory takes place, an understanding of the role of the extension worker is necessary, whose function is to help rural producers to help themselves. This assertion reinforces the principle that characterizes rural extension activity, which according to Knapp, author of the established pedagogical principle that recommends teaching to do, by doing. Seaman A. Knapp, a North American

agronomist, considered the father of the extensionist's methodology, was responsible for giving speed to a new method of teaching - the demonstration, considered to date, the basis of the teaching provided by extension workers¹. The method is effective for those who intend to change old habits or develop skills and abilities that stimulate rural development through changes in attitudes².

It is observed throughout history that much of the transfer of knowledge occurred through demonstration. However, it is crucial that the "teach to do, by doing" principle is not just anchored in the reproductive teaching-learning process. For the transfer of information to occur effectively, it is essential that practices be reflexive. It is not enough to reproduce, it is fundamental to understand why so that the educational action becomes concrete and the extension gives the expected results³.

1. THE INITIAL STEPS OF RURAL EXTENSION IN BRAZIL

There are traces of rural extension in Brazil since the imperial period, and attributions of actions of this practice go back to the nineteenth century⁴. For this paper, the 1930s is adopted as the official principle of ATER in the national territory.

Through a historical rescue, it can be inferred that ATER's actions, still in an embryonic form, has begun in Brazil around 1930 with the Farmer's Week, instituted by the Superior School of Agriculture and Veterinary of Viçosa (ESAV), currently Federal University of Viçosa, Minas Gerais⁵.

¹ Ribeiro, José Paulo, *A saga da extensão rural em Minas Gerais*, São Paulo, Annablume, CPP Emater- Empresa de Assistência Técnica e Extensão Rural do estado de Minas Gerais, 2000.

² Olinger, Glauco, *Métodos de extensão rural*, Santa Catarina, EPAGRI, 2001.

³ Freire, Paulo, *Extensão ou Comunicação?*, Tradução Oliveira, R. D. 14ª ed. Rio de Janeiro, Editora Paz e Terra, 2010.

⁴ Peixoto, Marcus, *Extensão rural no Brasil – uma abordagem histórica da legislação*, 2008, available at: www12.senado.leg.br/publicacoes/estudos-legislativos/tipos-de-estudos/textos-para-discussao/td-48-extensao-rural-no-brasil-uma-abordagem-historica-da-legislacao [Consulted on May 5, 2015].

⁵ Schaidhauer, Maurício, *Assistência técnica e extensão no desenvolvimento e promoção do turismo rural*, (Dissertação de Mestrado), Porto Alegre, UFRGS, 2011.

The concretization of the strategy of creating an extensionist service to the nationalism lived between the years of 1945 to 1950⁶. In 1948 official rural extension services began in Brazil, resulting from agreements signed between Brazil and the United States of America. These agreements resulted in a pilot rural extension program in the municipality of Santa Rita do Passa Quatro, located in the state of São Paulo, and the creation of the Association of Credit and Rural Assistance (ACAR by its acronym in Portuguese), based in Minas Gerais⁷.

This program was developed in the context of the post-war development policy and aimed at promoting the improvement of the living conditions of the rural population and supporting the process of modernization of agriculture, inserting itself in the strategies aimed at the country's industrialization policy⁸.

These events brought important marks to the national extensionist scenario that was transformed under the influence of Professor John B. Greefing, director of the Superior School of Agronomy and Veterinary Medicine of Viçosa and former leader of the American International Association (AIA), a philanthropic institution presided by Rockefeller. Nelson Aldrich Rockefeller (1908-1979), North American missionary and capitalist, was cited in the Juscelino Kubitschek's Goals Program as inspiring the idea of rural credit⁹.

ACAR had as its basic purpose the provision of rural extension services and the elaboration of projects that would provide farmers with access to public subsidized credit - an important agricultural policy instrument that fostered the modernization of the countryside in Brazil¹⁰.

⁶ Peixoto, Marcus, *Extensão rural... op. cit.*

⁷ Fonseca, Maria Teresa Lousa da, *Extensão Rural no Brasil, um projeto educativo para o capital*, São Paulo, Loyola, 1985.

⁸ Brasil, *Política Nacional de Assistência Técnica e Extensão Rural. Ministério do Desenvolvimento Agrário. Versão Final*, Brasília, MDA, maio de 2004.

⁹ Haag, Áureo Leandro, *O desempenho do programa nacional de fortalecimento da agricultura familiar no estado do Rio Grande do Sul*, (Dissertação de mestrado), Uberlândia, UFU.

¹⁰ Hespanhol, Nivaldo, "Agricultura, desenvolvimento e sustentabilidade", en Marafon, Glauco José, Rua, João, Ribeiro, Miguel angelo (org.), *Abordagens teórico-metodológicas em geografia agrária*, Rio de Janeiro, EdUERJ, 2007, pp. 179-198.

ACAR's methodology of action was inspired by the American model, but it was different from that one, whereas the services were not provided directly by the universities, but by the associations.

Supervised credit combined with a rural technical assistance service was an innovation at that time and, after the experience of the state of Minas Gerais, the ACAR model was expanded to other Brazilian states. Until 1974, 23 ACAR units were created, which together with the Brazilian Rural Credit and Assistance Association (ABCAR, by its acronym in Portuguese) formed the Brazilian Rural Extension System (SIBER, by its acronym in Portuguese)¹¹.

In the state of São Paulo, the organization responsible for ATER, created in 1967, was called the Coordination of Integral Technical Assistance (CATI by its acronym in Portuguese). Still active nowadays, but renamed as Coordination of Sustainable Rural Development, the organization maintains 40 Rural Development Offices and permeates the entire state, encompassing the Public Services offered by the Municipal Government, which are present in all the municipalities of the state of São Paulo. Its mission is to "Promote sustainable rural development through participatory programs and actions involving the community, partners, and all segments of the agricultural business"¹². In addition to the mission described, the organization is a member of the Rural Development Councils of the State of São Paulo, in the municipal and regional authorities. These councils are characterized as permanent forums for discussion of the local interests of the Rural Development Policy of the Municipality or Region¹³.

The process of rural extension that has been implemented in Brazil has undergone several phases, as already mentioned in the introductory paragraphs. Some of them prioritized methods that valued the reproduction of knowledge in counterpoint to those that emphasized reflection. Historically, in Brazil, the provision of rural extension service with predominantly technical and reproduction bias was prevalent¹⁴. Brazilian

rural extension model in force in the 1960s and 1970s was based on technicality educational practices, which focused on the diffusions communication model¹⁵. Such a model consisted of a unilateral flow of information, passed through only by reproduction. Such a model was widely criticized¹⁶ because it did not present a stimulus for reflection in the pedagogical process of teaching-learning.

This assertion is passive to be carried out, since the development and intervention strategies employed by the extensionists considered only the technical aspects of agricultural production, without observing the cultural, social and environmental parameters of rural development. In this direction, the rural extension was aimed at increasing productivity. This leads farmers to adopt a productive technique, imposing technological standards on the farmworker, without taking into account their personal and previous professional experiences, interests, experiences, knowledge, desires, and demands.

This process of transferring technology by reproduction disregarded the condition of the farmer and their families, a true cultural invasion taking place, besides not considering that rural extension has to be reflexive and, therefore, an emancipatory educational activity.

The criticism constructed¹⁷ still in the 1960s, stood out when questioning the actions of extension agencies and extensionists. The author points out that the extensionist's work has an educational function and that the educative action must be based on a practice of dialogic communication, offering the possibility of the teaching-learning process to be reflexive. For this, it is necessary to consider the farmer within his concrete and historical reality, as well as to include in the context the meanings that farmers attribute to the elements that integrate their daily

dialógica como fator determinante para os processos de ensino-aprendizagem que ocorrem na capacitação rural: um estudo de caso em um órgão público de extensão localizado no interior do Estado de São Paulo", *Cienc. Rural*, Santa Maria, 41/5 (2011), pp. 917-923.

¹⁵ Freire, Paulo, *Extensão ou Comunicação?* Tradução Oliveira, Rosiska Darcy de, 14ª ed., Rio de Janeiro, Editora Paz e Terra, 2010.

¹⁶ Ibid.

¹⁷ Ibid.

¹¹ Peixoto, Marcus, *Extensão rural... op. cit.*

¹² Coordenadoria de Assistência Técnica Integral, *Institucional*, available at: www.50anos.cati.sp.gov.br/ [Consulted on July 5, 2015].

¹³ Ibid.

¹⁴ Zuin, Luís Fernando Soares; Zuin, Poliana Bruno; Diaz Manrique, Miguel Alejandro, "A comunicação

life, as well as the relations that these subjects establish with the world¹⁸.

The coordination of this teaching-learning process of the national ATER was under the responsibility of the National Institute of Colonization and Agrarian Reform (INCRA by its acronym in Portuguese), created by Decree-Law nº 1,110, of July 9th, 1970, from the merger of the Brazilian Institute of Agrarian Reform (IBRA by its acronym in Portuguese) and the National Institute of Agrarian Development (INDA by its acronym in Portuguese), both created by the Land Statute, in 1964 (Law nº 4,504, from 1964), which also has a chapter dedicated to “Assistance and Protection of the Rural Economy”. The Statute also extinguished the Agrarian Reform Superintendence (SUPRA by its acronym in Portuguese), which had been created in 1962 and which included supplementary measures for technical, financial and educational assistance. SUPRA has been replaced by IBRA and INDA. Therefore, INCRA assumed responsibilities that were previously of its predecessor institutions¹⁹.

Although INCRA had a legal responsibility to coordinate rural extension in Brazil, it could not do it satisfactorily²⁰. The difficulties of coordination resulted in the starting process of transferring responsibility from the federal scope to the states²¹.

In this context, Brazilian Rural Extension System began to be nationalized through Law nº 6,126, of November 6th, 1974. This law authorized the establishment of the Brazilian Company for Technical Assistance and Rural Extension (EMBRATER by its acronym in Portuguese) as a public company, linked to the Ministry of Agriculture, with legal personality of private law and equity. The law also promoted integration with the Brazilian Agricultural Research Corporation (EMBRAPA by its acronym in Portuguese), authorizing them to provide financial support to official state institutions that provide technical assistance, rural extension, and agricultural research.

¹⁸ Zuin, Luís Fernando Soares; Zuin, Poliana Bruno and Diaz Manrique, Miguel Alejandro, “A comunicação dialógica...”, op. cit.

¹⁹ Instituto Nacional de Colonização e Reforma Agrária, *História da Reforma Agrária*, available at: <http://www.incra.gov.br/reformaagrariahistoria> [Consulted on June 15, 2017].

²⁰ Olinger, Glauco, *Ascensão e decadência da extensão rural no Brasil*, Florianópolis, EPAGRI, 1996.

²¹ Peixoto, Marcus, *Extensão rural... op. cit.*

EMBRAPA was officially created to be a technological innovation company focused on the generation of knowledge and technology for Brazilian agriculture, through Law nº 5,851 of December 7, 1972, and Decree nº 72,020 of March 28, 1973, which approves the Statutes of the Brazilian Agricultural Research Corporation and other measures²².

EMBRATER was created by Decree nº 75,373 of February 14, 1975. The ACAR's structures have been absorbed by the states year by year, creating companies or other governmental structures of technical assistance and rural extension (EMATER by its acronym in Portuguese), transforming itself into the Brazilian System of Technical Assistance and Rural Extension (SIBRATER by its acronym in Portuguese), which nowadays also aggregates non-state ATER organizations. EMBRATER's speech was to carry out planning based on education and participation focused on the reality of each region²³.

However, successive economic and fiscal crises, beginning in the 1980s, have reduced the credibility of rural extension public services. These faced resource constraints, which compromised service. The whole critical situation, coupled with unmotivated extension workers, with low qualification and deficient training, led EMBRATER to decline. In this scenario of discredit, EMBRATER was definitively extinguished in 1990, during the Collor de Melo government²⁴.

With the disarticulation of the ATER system, states began to use various strategies to guarantee access to resources, especially financial resources. One of these strategies was the merger of ATER companies with state agricultural research companies. But in some states, they were simply disjointed and extinct. There was also the rise of other forms of organization, such as private companies, the third sector, and non-profit organizations. This plurality of the environment makes

²² Embrapa. *Quem somos*, available at: <https://www.embrapa.br/quem-somos> [Consulted on June 15, 2017].

²³ Caporal, Francisco Roberto, *A Extensão Rural e os limites à prática dos extensionistas do serviço público*, (Dissertação de Mestrado), Santa Maria, Universidade Federal de Santa Maria, 1991.

²⁴ Diesel, Vivien; Froehlich, José Marcos; Neumann III; Pedro Selvino; Silveira, Paulo Roberto Cardoso, “Privatização dos serviços de extensão rural: uma discussão (des)necessária?”, *Rev. Econ. Sociol. Rural*, Brasília, 46/4 (2008), pp. 1.155-1.188.

inter-organizational relationships complex and produces even more damage to the rural community, which is already devoid of technology and assistance in the field²⁵.

The consequence of this process of moving away from the State and the reduction of ATER's public services supply to rural areas and agriculture was evidenced by the insufficiency of these services to meet the demand of family farming and other farmers who live and work in rural areas. As a result, the possibilities of access to knowledge by rural families, the results of agricultural research and public policies, in general, were restricted, which contributed to the expansion of social exclusion in the countryside.

However, it should be noted that both the 1988 Federal Constitution and the 1991 Farm Bill required the Union to maintain ATER services for small farmers free and public²⁶.

2. PARAMETERS OF CONTEMPORARY ATER

A movement towards the construction of reflexive knowledge about the contemporary public policies of ATER, with the inclusion of sustainability parameters in the national rural scene, is observed close to the 2000s.

Decree nº 3,200, of October 6, 1999, established the National Council for Rural Development (CNDR by its acronym in Portuguese) and linked to the Office of the Extraordinary Minister of Land Policy. And, later, Decree nº 3,508, of June 14, 2000, transformed the CNDR into a National Council for Sustainable Rural Development (CNDRS by its acronym in Portuguese), incorporating the concept of sustainability into the name of the Council²⁷.

The change from acronym CNDRS to National Council for Sustainable Rural Development and Solidarity (CONDRAF by its acronym in Portuguese) occurred through Decree nº 4,854, of October 8, 2003²⁸. This fact indicated that sustainability in the field was a matter for reflection on the part of the State since there was no escape from this discussion due to the numerous internatio-

nal agendas that had been debating this issue. It is notorious that over the years there has been an attempt to improve ATER in the search for a more sustainable bias, seeking to take over the inclusion of a process of sustainable rural development.

In this sense, the debate arises²⁹:

“[...] the rural extension will contribute directly to the constitution of a new rural development profile, especially with the use of methods and techniques that allowed farmers to increase their productive potential, to know and cultivate new agricultural varieties, in addition to gradually acting to improve the quality of life with the adoption of practices aimed at the sustainability of the rural environment.”

After the gap left by the extinction of EMBRATER in 1990, ATER services were again coordinated by the Federal government in the early 2000s, under political changes taking place in Brazil. One of the mechanisms created for this coordination was the National Policy of Technical Assistance and Rural Extension (PNATER by its acronym in Portuguese), which defined, from 2004: mission, beneficiary public, methodology and technological paradigm for ATER services³⁰.

PNATER, which emerged after a broad national participatory process of discussion and consultation with society, was established and implemented by the Ministry of Agrarian Development (MDA by its acronym in Portuguese), through the Department of Technical Assistance and Rural Extension (DATER by its acronym in Portuguese), linked to the Department of Family Agriculture (SAF by its acronym in Portuguese).

PNATER guides the actions of the federal government and aims at the qualification, reorganization, and strengthening of ATER services in Brazil. Based on these principles, Caporal and Ramos (2006, p.03) report that, in agreement with PNATER, the rural extension should contribute to the promotion of sustainable development in rural areas “with emphasis on processes of endogenous development, adopting a systemic and

²⁵ Capristano, Milena Oliveira Werneck, Souza, Renato Santos, *As organizações frente a políticas em extensão rural no Brasil*, 51º Congresso Sociedade Brasileira de Economia, Administração e Sociologia Rural (2013).

²⁶ Brasil, *Política Nacional...*, op. cit.

²⁷ Peixoto, Marcus, *Extensão rural...* op. cit.

²⁸ Ibid.

²⁹ Feliciano, Antonio Marcos, *Extensão rural: criação, estratégias de uso e retenção do conhecimento*, (Tese de doutorado), Florianópolis, Universidade Federal de Santa Catarina, 2013.

³⁰ Capristano, Milena Oliveira Werneck, Souza, Renato Santos, *As organizações frente...*, op. cit.

multidisciplinary approach, using participatory methods and a technological paradigm based on the principles of Agroecology³¹.

PNATER contributes to the improvement of social management since it is configured as an educational process, permanent and continuous, that must be based on a dialogical practice and a constructivist pedagogy³². The authors also consider that rural extension should contribute to a better relationship between urban and rural environments; to improve the quality of life; for the strengthening of citizenship and for the production of healthy foods.

In this movement that seeks to harmonize the farmer's welfare and the incentive food production, produced primarily with agroecological management, the new form of ATER is based on the demands arising from the critical analysis of the negative results of the Green Revolution. It is also driven from the problems already evidenced by studies of conventional models of technical assistance and rural extension, based exclusively on diffusionism. Only in this way could the State offer a truly innovative instrument capable of contributing decisively to the construction of other models of rural development and agriculture which, in addition to being sustainable, can ensure a qualified production of food and better living conditions for the rural and urban population³³.

Primarying an ATER based on reflexive actions, PNATER emphasizes a proposal of sustainable development, totally different from the principles of diffusionism, which characterized the period known as the Green Revolution³⁴.

³¹ Agroecology is the field of knowledge that provides the scientific bases of the transition process from the conventional agriculture model to ecological and sustainable agriculture management, with rational use of natural resources.

³² Caporal, Francisco Roberto; Ramos, Ladjane de Fátima, "Da extensão rural convencional à extensão rural para o desenvolvimento sustentável: enfrentar desafios para romper a inércia", en Monteiro, D. M. C.; Monteiro, M. A. *Desafios na Amazônia: uma nova assistência técnica e extensão rural*, Belém, UFPA/NAEA, 2006, pp. 27-50.

³³ Brasil, *Política Nacional...*, op. cit.

³⁴ Callou, Angelo Brás Fernandes, Silva, Maria Luiza Lins, Leitão, Maria Rosário Andrade, Santos, Maria Salett Tauk, "O estado da arte do ensino da extensão rural no Brasil", *Revista Extensão Rural*, 15/16 (2008), pp. 84-116.

In the context of some underdeveloped countries, there is no denying the enormous impact that the Green Revolution presented, especially when considering the increase in production and productivity of cereals important for the population's nutrition³⁵. "Nonetheless, it has also raised the problems of equity and failure to achieve stability and sustainability of production".

The intensive use of synthetic chemical inputs and the introduction of high yield varieties, in search of an evolutionary trajectory with the participation of multinational agro-industrial capital, maintained the intention to control and modify the biological processes, in order to ignore the principles of sustainability³⁶.

Among PNATER's strategic guidelines, the emphasis on multidisciplinary and interdisciplinary is an innovative model with a systemic overview. In this way, it is necessary to operationalize a collaborative approach that weaves a new profile in the national rural extension. This is based on the dialogue established through a more efficient communication process in search of sustainable values, such as (i) sustainable rural development; (ii) gratuity, quality and accessibility to ATER services; (iii) adoption of participatory methodology, with a multi, interdisciplinary and intercultural approach; (iv) principles of organic farming on a preferential basis; (v) equity in gender, generation and ethnic relations; (vi) contribution to food and nutritional security and sovereignty³⁷.

These new orientations oppose the old historical practice of rural extension that sees the farmer as a deposit of knowledge and formulas generated by the researches, most of the time, with contents that were unsuitable for the specificities of their activities and the agro-systems they manage³⁸.

PNATER seeks to incorporate a set of elements discussed in the period called "Rethinking rural extension" with a focus on sustainable development, valuing the knowledge and cultures of traditional communities, participatory methodo-

³⁵ Costabeber, José Antônio, *Transição agroecológica: do produtivismo à ecologização, Sustentabilidade e cidadania: o papel da extensão rural*, Porto Alegre, Emater/RS, 1999, pp. 67-120.

³⁶ Ibid.

³⁷ Brasil, *Política Nacional de Assistência...*, op. cit.

³⁸ Caporal, Francisco Roberto; Ramos, Ladjane de Fátima, "Da extensão rural...", op. cit.

logies, among others³⁹. However, this objective is questionable, either because of its failure to materialize or because of the understanding of being a model of salvation compared to previous models. In this sense⁴⁰ the PNATER text uses a discursive pattern linked to duality, showing a new model replacing the old model, using the agroecological extension instead of the conventional extension. The author warns of the fact that this discourse that aims to promote sustainability occurs only through the agroecological transition path, which is not real.

ATER Law nº 12,188/2010, regulated by Decree nº 7,215/2010 and sanctioned on January 11, 2010, establishes the National Policy of ATER - PNATER and the National Program of Technical Assistance and Rural Extension in Family Agriculture and Agrarian Reform - PRONATER, changing Law nº 8,666 of June 21, 1993⁴¹.

PRONATER reinforces that ATER is aimed at family farmers who fall under Law nº 11,326 of June 24, 2006, and farmers from areas of agrarian reform and specific communities. The 2006 Law establishes framework parameters for the family farmer and rural family entrepreneur⁴².

PRONATER aims to support and strengthen the actions of Technical Assistance and Rural Extension to implement the National ATER Policy. Its guidelines are: (i) the priority of social inclusion; (ii) transition to ecologically-based agriculture; (iii) the articulation of ATER-research-teaching, gender, generation, race and ethnicity, generation of occupations and income and performance in networks; and (iv) management⁴³.

The implementation of ATER requires the interrelationship between teaching and research, aiming at generating knowledge and technologies appropriate to the needs of family farmers. It also requires the training of technical staff to act

in accordance with the demand from the rural environment.

In contrast, rural extension teaching in Brazil and scientific research related to agribusiness are confronted with the contemporary conception of rural extension. The pillars of Brazilian public universities - teaching, research, and extension - "do not develop the desired symbiosis. However, it is appropriate to analyze whether these aspects are related to the incipience or comprehensiveness with which the research and extension projects are being developed"⁴⁴

ATER is constantly being drawn up and tends to be expanded with the creation of the National Agency for Technical Assistance and Rural Extension (ANATER by its acronym in Portuguese). ANATER, authorized by Law nº 12,897/2013 and instituted by means of Decree nº 8,252, of May 26, 2014, seeks to increase the offer of technical assistance, having as a priority, besides family farmers, which fall under Law nº 11,326/2006, the inclusion of the midsize rural farmers that, despite its importance in the national productive scenario, was still not met by ATER's public policy. However, as will be seen later, this expectation is not met. On the contrary, there has been a reduction in the ATER services offered.

EMBRAPA's integrated performance in this process appears as a "catalytic phenomenon" in all stages of the productive chains and provides the link between agribusiness research and technical assistance, collaborating for the development of national public ATER, focusing on the sustainable development of agribusiness⁴⁵.

ANATER was officialized in 2014 and is described in this article as one of the contemporary ATER policies, whereby autonomous social service is instituted, "[...]legal entity of private law, non-profit, of collective interest and public interest", as provided in article 1º of Law nº 12,897 of December 18, 2013⁴⁶.

³⁹ Zarnott, Alisson Vicente; Dalbianco, Vinicius Piccin; Neumann, Pedro Selvino; Fialho, Marco Antonio Verrardi, *Avanços e retrocessos nas políticas de extensão rural: análise crítica sobre a Anater*, 53º Congresso da Sociedade Brasileira de Economia, Administração e Sociologia Rural (2015).

⁴⁰ Gerhardt, Cleyton, *Tautologia e retórica messiânica da "transição agroecológica" na "nova extensão rural"*, *Extensão Rural*, 21/3, (2014).

⁴¹ Brasil, *Lei 12.188 de 11 de janeiro de 2010*.

⁴² Brasil, *Lei 11.326 de 24 de julho de 2006*.

⁴³ Ibid.

⁴⁴ Callou, Angelo Brás Fernandes, Silva, Maria Luiza Lins, Leitão, Maria Rosário Andrade, Santos, Maria Salett Tauk, "O estado da arte...", op. cit.

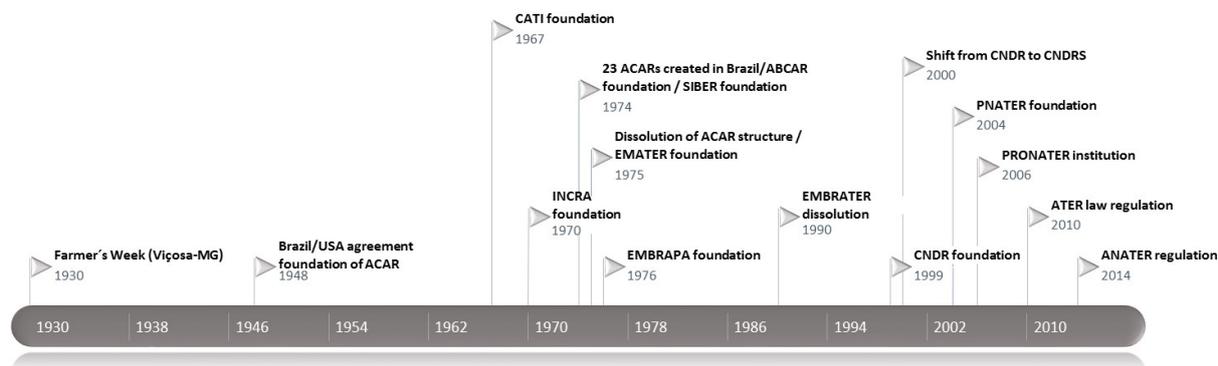
⁴⁵ Bernardo, Cristiane Hengler Corrêa; Vieira, Silvia Cristina; Lourenzani, Ana Elisa Bressan Smith; Sato-lo, Eduardo Guilherme, "O papel do extensionista na sociedade atual: ultrapassando as barreiras de comunicação", 53º Congresso da Sociedade Brasileira de Economia, Administração e Sociologia Rural (2015).

⁴⁶ Brasil, *Decreto nº 8.252, de 26 de maio de 2014*. ANATER.

In order to visualize this historical trajectory of ATER in Brazil, a timeline was drawn (Figure 1),

characterizing the main historical landmarks described.

Figure 1. ATER's timeline in Brazil



Legend:

ABCAR - Brazilian Rural Credit and Assistance Association

ACAR - Association of Credit and Rural Assistance

ANATER - National Agency for Technical Assistance and Rural Extension

ATER - Technical Assistance and Rural Extension

CATI - Coordination of Integral Technical Assistance

CNDR - National Council for Rural Development

CNDRS - National Council for Sustainable Rural Development

EMATER - Technical Assistance and Rural Extension Company

EMBRAPA - Brazilian Agricultural Research Corporation

EMBRATER - Brazilian Company for Technical Assistance and Rural Extension

INCRA - National Institute of Colonization and Agrarian Reform

PNATER - National Policy of Technical Assistance and Rural Extension

PRONATER - National Program of Technical Assistance and Rural Extension in Family Agriculture and Agrarian Reform

SIBER - Brazilian Rural Extension System

SIBRATER - Brazilian System of Technical Assistance and Rural Extension

Source: Elaborated by the authors.

Considering the contemporary public policies of ATER, including PNATER, PRONATER, and ANATER, the service for differentiated audiences in different segments of agribusiness is configured as a more comprehensive policy than the previous ones.

Changes were observed in the way ATER was understood in Brazil. Moving from initial conception, centered on the transfer of technology, to one that intensifies actions aimed at “the organization of farmers, management of participatory processes, marketing support and inter-institu-

tional coordination from a territorial perspective, all in the context of a strong environmental concern” and the priority focus on family farming⁴⁷.

For this paper, the occurrences that are part of the context of the legislation as of the year 2004 were classified in Table 1, as Public Policies of contemporary ATER.

⁴⁷ Landini, Fernando Pablo, “Problemas enfrentados por extensionistas rurais brasileiros e sua relação com suas concepções de extensão rural”, *Ciência Rural*, 45/2 (2015), pp. 371–377.

Table 1 - ATER's contemporary public policies

ATER PUBLIC POLICIES	LEGISLATION	PUBLIC ATTENDED	DEFINITION
PNATER 2004		“family farmers defined by agrarian reform programs, extractive, riparian, indigenous, quilombolas, artisanal fishers and aquaculture, forest peoples, rubber tappers, and other groups defined as beneficiaries of MDA/SAF program”.	National Policy of Technical Assistance and Rural Extension
PNATER and PRONATER 2010	Law nº 12,188 of January 2010 changes the law nº 8,666 of June 21, 1993 Decree nº 7,215 of June 15, 2010	Family farmers that fall under Law 11,326 of July 24, 2006; Recently updated with Decree nº 9,064 of May 31, 2017*	National Program of Technical Assistance and Rural Extension in Family Agriculture and Agrarian Reform
ANATER	Law nº 12,897 of December 18, 2013 Decree nº 8,252 of May 26, 2014	Family farmers and midsize farmers	National Agency for Technical Assistance and Rural Extension

*More information available at: Decree nº 9,064 of May 31, 2017. Provides for the Family Unit for Agricultural Production, establishes the National Family Agriculture Registry and regulates Law nº 11,326 of July 24, 2006.

Source: Updated from Vieira, Silvia Cristina, *O papel do extensionista no fluxo...* op. cit.

ATER's contemporary public policies need new horizons from the perspective of consolidating an efficient dialogical process between researchers and agribusiness extension workers, with family farmers, small and medium rural farmers. However, the facts demonstrate just the opposite. Right after the inauguration of the Temer Government, in 2016, agrarian policies that were no longer doing well in the Dilma Government, suffer a new impact with the extinction of the Ministry of Agrarian Development (MDA), by Provisional Measure No. 726, of May 12, 2016, whose guidelines should meet the demands of social movements in family farming and land reform. Such attributions were transferred to the Ministry of Social Development (MDS) and to the Casa Civil⁴⁸. In this sense, both environmental policies have suffered setbacks, and rural social actors, involving family farmers, landless wor-

kers, indigenous peoples and traditional peoples and communities have been neglected^{49 50}.

Since then, ATER has also suffered from the policies implemented in 2016⁵¹. Budget cuts, the emptying of strategies that aimed at strengthening ATER, disintegrating the assistance policies of other policies, such as rural credit, are examples of the service disintegration process.

In order to promote an innovative model based on systemic view, such public policies should strengthen the interaction between

⁴⁸ Escher, Fabiano, Schneider, Sergio, “Capitalismo, agricultura e desenvolvimento no Brasil: uma contribuição para o debate atual”, en Sauer, Sérgio, *Desenvolvimento e transformações agrárias: BRICS, competição e cooperação no Sul Global*, 2019, pp. 71-103.

⁴⁹ Leite, Acastio Zuniga, Tubino, Nilton Luís Godoy, Sauer, Sérgio, “Políticas públicas para terra e território: um olhar prospectivo sobre os próximos quatro anos no campo brasileiro”, en *Brasil: incertezas e submissão?*, São Paulo, Fundação Perseu Abramo, 2019, pp. 171-190.

⁵⁰ Mattei, Lauro, “A política agrária e rural do governo Temer”, en Maluf, Renato, Flexor, Georges, *Questões agrárias, agrícolas e rurais: conjunturas e políticas públicas*, Rio de Janeiro, E-Papers, 2017, pp. 169-177.

⁵¹ Mattos, Luciano Mansor de, *Austeridade fiscal e desestruturação das políticas públicas voltadas à agricultura familiar brasileira*, São Paulo, Fundação Friedrich Ebert Stiftung, 2017.

research-teaching-extension, focusing on the formation of inter-institutional cooperation networks, sharing knowledge between research and rural farmers, and the extensionist as the link of this dialogical relationship⁵². In this way, the goal is to implement actions aimed at sustainable rural development, respecting the specificities of agrifood systems and individuals living in the rural area, expanding the boundaries of responsibility.

Faced with the new challenges posed by sustainable rural development, public extension instruments must transform their conventional practice and introduce other institutional changes so that they can meet the demands of rural society regarding the applicability of the extension⁵³.

Supported by the ATER's national public policies, sustainability permeates the entire agribusiness chain and seeks to mitigate anthropogenic effects in an attempt to meet the challenges imposed by the need to implement cleaner agricultural production strategies that are compatible with the ideals of rural development⁵⁴.

There are implicit challenges in ATER's work, such as: "the reorganization of work and production within an optics of associative/cooperative and solidarity economy; social inequalities associated with gender, ethnicity, and generation"⁵⁵.

It is expected that, after all this trajectory that configured the Brazilian rural extension as it is today constituted, there could be a contribution to the confrontation of the socio-environmental crisis, resulting from the models of development and conventional agriculture widely adopted in the last decades⁵⁶. However, institutional alignment and consistency of guidelines are essential

for the successful implementation of the ATER policy in Brazil.

Sustainable management methods are presented as a broad multidimensional proposition, involving not only technical-agronomic aspects but also the social, cultural, economic and environmental dimensions. Thus, a dispute arises for the legitimacy of development models and agriculture⁵⁷.

In addition to an action based on methods and techniques that stimulate stakeholder participation, a new ATER model must be truly an educational, democratic and participatory action⁵⁸. That calls for the importance of the extensionist's role, through ATER's interrelation with communication, aiming at rural development⁵⁹. In this context, the current situation requires that Technical Assistance and Rural Extension take on the challenge of serving as an instrument for rural development in Brazil⁶⁰. This continues to be a challenge to be overcome as evidenced by Santos and Almeida (2014).

However, fifteen years after the creation of PNA-TER (now 17 years), the political and economic context, as well as the laws that regulate the technical assistance and rural extension service in Brazil, are unfavorable to the current policy proposal itself⁶¹. What limits the renewal of an extension practice aimed at "adopting participatory methodologies, by the principles of agroecology, by exclusivity in serving marginalized social groups and by promoting a development model that is, in fact, ecologically sustainable, economically viable and socially fair".

⁵² Vieira, Silvia Cristina, *O papel do extensionista no fluxo bilateral de informações entre pesquisadores do agronegócio e produtores rurais* (Dissertação de Mestrado), Tupã, Faculdade de Ciências e Engenharia – UNESP, 2016.

⁵³ Caporal, Francisco Roberto, *A Extensão Rural...* op. cit.

⁵⁴ Bernardo, Cristiane Hengler Corrêa, Vieira, Silvia Cristina, Lourenzani, Ana Elisa Bressan Smith, Satolo, Eduardo Guilherme, "O papel do extensionista..." op. cit.

⁵⁵ Callou, Angelo Brás Fernandes, Silva, Maria Luiza Lins, Leitão, Maria Rosário Andrade, Santos, Maria Salett Tauk, "O estado da arte..." op. cit.

⁵⁶ Caporal, Francisco Roberto; Ramos, Ladjane de Fátima, "Da extensão rural..." op. cit.

⁵⁷ Coelho, Vanessa Pfeifer, Silveira, Cristiane Amaro, "Agroecologia e a Política Nacional de Assistência Técnica e Extensão Rural, legitimando modelos de agricultura e de desenvolvimento rural?", 47º Congresso da Sociedade Brasileira de Economia, Administração e Sociologia Rural, 2015.

⁵⁸ Caporal, Francisco Roberto; Ramos, Ladjane de Fátima, "Da extensão rural..." op. cit.

⁵⁹ Peixoto, Marcus, *Extensão rural...* op. cit.

⁶⁰ Caporal, Francisco Roberto; Ramos, Ladjane de Fátima, "Da extensão rural..." op. cit.

⁶¹ Diniz, Raphael Fernando; Hespanhol, Antonio Nivaldo. "Reestruturação, reorientação e renovação do serviço extensionista no Brasil: a (difícil) implementação da Política Nacional de Assistência Técnica e Extensão Rural (PNATER)", *Extensão Rural*, 25/2 (2018), pp. 7-30.

FINAL CONSIDERATIONS

Since 1930, from the Farmer's Week to nowadays, ATER has undergone structural and conjunctural changes that resulted in the current constitution that shapes the public policies of technical assistance and rural extension in Brazil.

Theoretically, ATER should cease to be merely an instrument for reproducing techniques, in which the rural farmers only imitates the extensionists, without understanding the reasons for the adoption of a certain technology, for an activity mediated by reflection, dialogue followed by monitoring on the effectiveness of practice. However, not everything that is conceptually advocated concretizes itself in extensionist practice. This is a phenomenon that is present in many fields that involve the teaching-learning process and, to the extent, this is not different.

It is considered that the contents that are addressed by the current public policies of technical assistance and rural extension, especially in what indicates the need for sustainable production, reflect the social, environmental and even economic demands of global society. However, this is not what has been happening in Brazil. Despite the discourse on the sustainability of rural production, as a reflection of the demands of society, as seen in the so-called new ATER, from 2016 to the present day, current public policies have not guaranteed such assumptions, either through the immense budget cuts or for policies and actions (or lack of actions) resulting in unsustainable exploitation of Brazilian natural resources.

In this context, the role of the extension agent, as the ATER agent, gains an even greater relevance. Through the structure provided by the extension agencies, as well as the incomes derived from public policies, it will be up to the extensionist to make the process of technology transfer to the field occur with the necessary sustainability that guides the discourses on rural development.

It is important to emphasize that this rural development is not restricted to economic issues, which were the focus in the past decades. Current rural development, which is promoted on the basis of various actions and public policies, is based on social, cultural and environmental issues that will legitimize the models adopted for its promotion.

Therefore, ATER's models for promoting contemporary rural development and ATER's public policies have been built historically over more than eight decades and carry at every stage the marks of their own time and culminate with the demands of today's society.

However, these marks are often restricted to concepts. Taking them out of the conceptual field requires alignment of public policy, effective actions by all agents involved in the process of technology transfer, technical structure and development in order to build a new reality.

