

THE ORGANIZED CIVIL SOCIETY, THE LOCAL KNOWLEDGE, AND THE WATER GOVERNANCE IN THE BRAZILIAN SEMI ARID OF THE 21ST CENTURY

Sidclay Cordeiro Pereira

Universidade de Pernambuco - Campus Petrolina

Orcid: 0000-0002-4916-8969

sidclay.pereira@upe.br

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RESUMO

Os problemas de acesso e uso da água, bem como construção secular dos saberes locais estão constantemente associadas ao debate da convivência com o semiárido. Nesse sentido, o presente texto procura apresentar os saberes locais na construção e desenvolvimento de um modelo de governança associado às ideias de convivência com o semiárido. Para sua construção, foram utilizados autores referência sobre o tema, bem como coleta de dados na Articulação do Semiárido (ASA) e Associação Brasileira de Organizações Não-Governamentais (ABONG) a partir de uma metodologia qualitativa. Como resultados, se têm que a atuação estatal é centralizada em nível federal, comanda as ações em nível regional e normatiza as ações estaduais e locais. Isso também se realiza em conjunto com a sociedade civil organizada de maneira mais intensa a partir dos primeiros anos do presente século tendo como base os saberes locais construídos nos últimos séculos. Entretanto, esse modelo de parceria não foi vivenciado por tempo suficiente, o que permitiria maior aprofundamento nas análises. Contudo, os dados permitem afirmar que é mais eficiente para as populações beneficiadas. Por fim, espera-se que essa contribuição seja positiva no aprofundamento dos estudos sobre o semiárido e o sertão para a sua governança hídrica.

Palavras-Chave: Convivência com o Semiárido, Organizações-Não-Governamentais, Gestão Hídrica.

ABSTRACT

The problems of access and use of water, as well as the secular construction of local knowledge are constantly associated with the debate of coexistence with the semi-arid region. In this sense, the present text seeks to present local knowledge in the construction and development of a governance model associated with the ideas of coexistence with the semiarid region. For its construction, reference authors on the subject were used, as well as data collection in the Articulation of the Semi-Arid (ASA) and the Brazilian Association of Non-Governmental Organizations (ABONG) from a qualitative methodology. As a result, state action is centralized at the federal level, commands actions at the regional level and regulates state and local actions. This is also carried out in conjunction with organized civil society in a more intense way from the early years of this century, based on local knowledge built in recent centuries. However, this partnership model was not experienced long enough, which would allow for a deeper analysis. However, the data allow us to say that it is more efficient for the benefited populations. Finally, it is expected that this contribution will be positive in the deepening of studies on the semi-arid and sertão for their water governance.

Keywords: Living with the Semiarid, Non-Governmental Organizations, Water Management.

INTRODUCTION

The Brazilian semi arid, from the sustainability ideas, stimulates the researches that aim in understanding and deepening the relationship of society and nature, trying to modify it when necessary through the social innovation technologies and the solidarity economy,

that are initiative of associativism and cooperativism. To this, ass the efforts to analyse, criticize and revalidate the state and the organized civil society about sertão, the semiarid and the Northeast region (SILVA, 2006, CARVALHO, 2012; MACIEL and PONTES, 2016). The new rereading of the semi arid region aims on demystifying the idea that the central problem of this space is the lack of water, as well as that their inhabitants need to give up to live in their places, besides, they can improve their coexistence (MOREIRA NETO and LIRA, 2015). In that regard, the Civil Social Organizations (CSO) are unique entities, born from free organization and social participation of people searching for a collective non profit goal (ABONG, 2018).

The theoretical contributions that construct and subsidize the coexistence discourse with the semiarid, the entities practices that work the idea of coexistence and the discourses of the leaderships and the farmers aim on referring to the semi arid as a space of learning. Therefore, “it’s necessary to learn to coexist, adapting to the environment building interaction relations between man and environment” (MOREIRA NETO and LIMA, 2015, p. 173). This idea is defended and centered by social movements, such as Non-governmental organizations (NGOs), family farmers unions and cooperatives (MARQUES *ET AL.*, 2018, p. 52).

In this sense, State and the CSO’s have built up a relation that materializes in works and actions through the last thirty years. The new engendering that sees in the semi arid a double role as memory space and economic frontier which is base in the hydric management policies and have this as viable, from the environmental point of view, as well as economic.

That said, we understand that the governance refers to the interorganizational coordination forms modelled by networks, specially the auto-organized ones, in other words, the governance refers to the process of coordination, management and social directing and economic (GREGORY *ET AL.*, 2009). The governance is more embracing than governability, referring to a management guide, and at the same time, to a process of economic and social coordination. By this means, involves many non-state actors in the process of negotiation and the decision making. In a more open plan, the governance includes society as a whole (GRAVEL and LAVOIE, 2009; ROSENAU, 2002; GONÇALVES, 2006).

Governance, in water management, proposes alternative theoretical and practical paths that make a real connection between social demands and their dialogue at the governmental level. Generally, the use of the concept includes laws, regulation, and institutions, but it also refers to government policies and actions, local initiatives, and networks of influence, including international markets, the private sector and civil society, which are influenced by the political systems in which they operate (JACOBI, 2009; 2012).

The text presented here is an excerpt from the doctoral thesis entitled "Analysis of a century of territorial representations and water management in the State of Pernambuco, Brazil (1909-2019)" which was defended in November 2019 at the Graduate Program in Geographical Sciences at Université Laval (Québec, QC, Canada). On the occasion, the objective was "to propose a reflection that would contribute to the elaboration of a sustainable water management model for the Brazilian semi-arid region, aiming at a feasible water governance for the actors involved and respecting the social, economic

and cultural characteristics of the region". What is brought here is the contextualization of the understanding of local knowledge in the construction and development of a water governance model that is associated with the ideas of coexistence with the semi-arid region. For its construction, reference authors on the subject were used, such as Silva (2006), Carvalho (2011), Gomes *et al.* (2015), Moreira Neto and Lira (2015), Fortunato and Moreira Neto (2010) and Marques (2018) and as a data source, we had the Semi-Arid Articulation (ASA) and the Brazilian Association of Non-Governmental Organizations (2015).

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The valorization of the practices of what is known by common sense can be starting points to find appropriate solutions to the places, using the entire repertoire of current sciences. Local knowledge refers to locally experiential, based on and orally transmitted knowledge, in contrast to that which is acquired through formal education or learned from books (WILBANKS, 2006). But these knowledges are not mutually exclusive. On the contrary, there is a significant stock of knowledge developed by research institutions in the Region, and that accumulated by family farming in the countryside. One of the main characteristics of non-conventional technologies (intermediate, appropriate, alternative and social) is the appreciation of the place, knowledge and local culture as a basis for the development or adequacy of technological solutions (SILVA, 2018, p. 189).

Traditional ecological knowledge may or may not be indigenous, but it has its roots in the past of a particular place (FABRICIUS, 2006). Guimarães Duque (2004, p. 38) *apud* Silva (2006, p. 189) emphasizes the importance of local knowledge, considering that: "the urgency of needs, the senses sharpened by ecological inductions, the most intimate contact with the difficulties find successes and local solutions".

It is kept in mind that "one of the characteristics of contemporary development policies is to consider local dynamism in terms of innovation, production and transfer of knowledge as one of the keys to regional development, hence the great effort of regions and local authorities in this area (TORRE and WALLET, 2012, p. 60 - my translation)". Therefore, it is clear that this idea does not arrive homogeneously throughout the territory, even the one where such initiatives are intended to be met.

The construction of a culture well adapted to the semi-arid environment is pointed out by Rebouças (1997, p. 15) when he states that "historically, it appears that the Northeast, in the various forms of occupation of the territory, based its economy on taking advantage of the potential located water system, extensively exploiting both agriculture and livestock".

With a colonial origin, the occupation of Brazil followed the process of appropriation of new places with their indigenous populations, their riches and their natural resources. The same applies to the semi-arid region that was occupied following an extensive (from the point of view of space) and intensive (from the point of view of natural resources) land use. The colonization process, specifically, in the semiarid region, provided a wide and intense production of knowledge from the experience of the

colonizers in contact, not always friendly, with the indigenous people (MORAES, 2005).

The colonizer's knowledge of the region took place in two ways. The first based on the contact and exchange of experiences with the indigenous people who had already been inhabiting the region for centuries, emphasizing that this contact was always conflicting. The second way was the Portuguese experience in the environment. The semi-arid region was considered distant from the coast and government offices due to the little development of transportations and communications. Such configuration resulted in the formation of a society with a strong element of territorial conquest and establishment of relations of coexistence with the environment (CAPISTRANO DE ABREU, 1976; 1988; ANDRADE, 2005; FREIXINHO, 2003). This generated a repertoire of knowledge about space, at the same time that "memories resignify the coexistence of man with the environment in favor of improving the quality of life and the protagonism of the semiarid population" (FORTUNATO and MOREIRA NETO, 2010, p. 57). The colonizer's knowledge of the region took place in two ways. The first based on the contact and exchange of experiences with the indigenous people who had already been inhabiting the region for centuries, emphasizing that this contact was always conflicting. The second way was his own experience in the environment. The semi-arid region was considered distant from the coast and government offices due to the little development of transport and communications, in addition to the climatic and relief conditions, which made travelling difficult. Such configuration resulted in the formation of a society with a strong element of territorial conquest and establishment of relations of coexistence with the environment (CAPISTRANO DE ABREU, 1976; 1988; ANDRADE, 2005; FREIXINHO, 2003). This generated a repertoire of knowledge about space, at the same time that "memories resignify the coexistence of man with the environment in favor of improving the quality of life and the protagonism of the semiarid population" (FORTUNATO and MOREIRA NETO, 2010, p. 57).

The great distances between the interior and the coast, besides the difficulties because of the terrain that is not appropriate to land displacements and high temperatures, as well as the difficulties of communication made the society located in the semiarid region having to remove from its own environment everything that was fundamental to its existence needs. It should be noted that until the beginning of the 20th century, Brazil did not have a consolidated road network between all large cities and the interior, even with the increase in road constructions to replace the paths that were traveled on top of animals until that time. "Only the ports commanded the penetration routes to the hinterland" (ANDRADE, 2005, p. 26). Then, geopolitical strategies began to know, occupy, connect and integrate the interior to the coast, where most of the population and all political-administrative centers were located (SANTOS and SILVEIRA, 2001).

As a result, a diet based on meat and milk, native fruits, beans, fava beans and corn were consolidated, which were normally cultivated on plantations in more humid areas, such as the bases of swamps and river beds. The little contact with the coast also stimulated the abundant use of leather, derived from cattle, in various utensils such as hut doors, beds, ropes, saddlebag, suitcase, backpack, sheaths, among others. The use of plant and animal species are a significant part of the culture, until the present day, the culinary culture arising from this context is strong and remains present, unfortunately, the amount of studies on the subject is scarce. On the other hand, the way of using

leather has become one of the regional symbols, even composing the image of the sertanejo (ANDRADE, 2005; CAPISTRANO DE ABREU, 1976; 1988).

Strategies for water storage, the best time for sowing and the use of native plants have been developed over the centuries. Knowledge about soils, the most favourable period for planting, the use of native plant species, knowledge of the effects of climate dynamics was accumulating and, for the most part, in oral traditions transmitted to future generations (ANDRADE, 2005; CAPISTRANO DE ABRES, 1988; FREIXINHO, 2003). This knowledge is recognized, valued, deepened, perfected and disseminated in the process of living with the semi-arid region. Finally, "this recourse to history or collective memory does not mean that identity is granted to the only historical region that is born of a long past, lived in common by a certain collectivity" (RICQ, 1982, p. 27 - my translation).

At first, as Fortunato and Moreira Neto (2010) attest, the understanding of the semiarid region seeks new ways of saying a region, thinking about it in its specificities, but trying to insert it in a purposeful way in a broader context of society, instituting new knowledge/power relations.

THE IDEAS OF LIVING WITH THE SEMI-ARID REGION IN BRAZIL

Based on a regional need, combined with the development of sustainability ideas, the actions of organized civil societies in the semiarid region are consolidated. Instead of changing a condition through hydraulic solutions (dams, large dams, and river transposition) with high impact on the territories, they sought to live with the environment and, consequently, with droughts. The actions proposed by the CSOs involved in the development of the semiarid region demonstrate a path, at first, possible to minimize the impacts of periodic droughts, as well as the development of human and social capital.

The action of coexistence with the semiarid has a larger capillarity in the territory than the policies to combat drought. The works are scattered in private and collective properties. They rescued local knowledge at the same time as they entered the economic dynamics. Silva (2006) compiled a myriad of actions and technologies that focus on living with the semi-arid region based on institutional experiences, CSOs and researchers that are shown in the table below.

Table 1: Actions and technologies of coexistence with the semiarid

Actions	Technologies
Alternative water technologies for capturing and storing rainwater for family supply in the Brazilian semi-arid region	Plate cisterns Boardwalk slab cistern Manual water pump Management and treatment of water for human consumption
Alternative water technologies for capturing and storing rainwater for appropriate production in the Brazilian semiarid region	Underground dam Successive dams Trench barrier Barreiro of Salvation Sustainable use of Amazon well water in small irrigation Stone tanks
Agroforestry and sustainable management of the caatinga	Agroforestry or agroforestry clearings in the caatinga biome Combination of production systems

	Level curve planting Stone dam to reduce land losses in rainy seasons In situ rainwater harvesting
Agroecology in the Caatinga Biome	Dry cover (or mulch) at planting in the Caatinga Organic compost for fertilizing swiddens in the Caatinga Use of natural insecticides in agroecological swiddens
Alternative irrigation methods in the semiarid Salvage irrigation	Salvage irrigation Irrigated family production system with micro-sprinkler
Appropriate production in the semi-arid region: the creation of small animals	Goat and sheep farming Hay, silage and animal protein banks Beekeeping and Meliponiculture Pisciculture Poultry (poultry or free-range chicken)
Appropriate production in the semiarid, dry crops	Agroecological cotton and colored cotton Castor bean for the production of biodiesel Organic cashew and chestnut Beneficiation of umbu (<i>Spondias tuberosa</i> Arruda) in the semiarid region Agroecological palm
Solidarity economic initiatives in the semi-arid	Pasture funds Banks and Community Seed Houses Family farming and agroecology fairs Processing and marketing networks and cooperatives
Finanças solidárias no semiárido Solidarity finance in the semi-arid	Solid revolving funds Credit unions
Alternativas de segurança alimentar no semiárido brasileiro Alternatives for food security in the Brazilian semiarid	Organic gardens Productive backyards Mandalas Food for work program
Educação contextualizada e pedagogia da alternância no semiárido brasileiro	
Contextualized education and alternation pedagogy in the Brazilian semiarid region	Training for coexistence with the Brazilian semi-arid region Training for sustainable local development experimenting farmers UniCampo Project (Peasant University)

Source: Silva (2006).

The technologies, actions and initiatives mentioned above give a different dimension and are more adapted to the natural and socio-economic conditions of the semi-arid region (MARQUES, 2018). Silva (2006, p. 249) summarizes as follows:

development with quality of life in the Brazilian semi-arid region requires the combination of a set of cultural and political actions, with the dissemination and affirmation of new values and practices of equality and respect for the dignity of each human being and other living beings. Among these social inclusion policies, the following stand out: access to quality water in sufficient quantity for human consumption and appropriate production; access to contextualized education in the semi-arid region, increasing the level of schooling of the local population and providing adequate knowledge for living with this reality; combating child labor in urban and rural areas, reducing moral, physical and intellectual damage to children who work and drop out of school; the encouragement of appropriate productive activities, agricultural and non-agricultural, capable of improving income and guaranteeing food and nutrition security; and access to basic social services,

which make it possible to meet the fundamental needs of the sertanejo population.

In this sense, sustainability would be directly related to economic and material development without harming the environment. "In these terms, sustainability and coexistence are now considered as the foundations of social programs and actions interested in improving the region's socioeconomic conditions, whether developed by organized civil society or by public authorities" (FORTUNATO and MOREIRA NETO, 2010, p. 56-57).

However, even by renewing the discourses, with the incorporation of the dimensions of social inclusion and sustainability, the perspective of solving regional problems remains with the implementation of large water works to supply cities and for irrigated production, generally oriented to the external market. The discourse of sustainability assumes contradictory meanings, subordinated to the economic dimension, with the incentive to profitable productive activities, with greater capacity for competitiveness (SILVA, 2006). The consequences of this are a relationship of partnerships between the CSOs and the State, but still the maintenance of criticism regarding the policies to combat drought.

4. Institutionalization of coexistence with the semiarid region

The institutionalization of policies for Coexistence with the Semiarid region began in 1982, when the Brazilian Agricultural Research Corporation (EMBRAPA) and the Brazilian Rural Extension Company (EMBRATER) published a document entitled Coexistence of Man with Drought. For Silva (2006), this proposal appears, albeit timidly, in federal agencies, suggesting an innovative governmental orientation of implantation of systems of exploration of agricultural properties, to assure the coexistence of the man with the drought when experimenting hydric and productive technologies, alternatives and appropriate to the environmental, cultural and socioeconomic reality of the semiarid region.

In 1985 there was the Movimento Muda Nordeste, where its leaders denounced that state interventions did not reduce social inequalities, on the contrary, they increased them. In 1993, there was the Fórum Nordeste movement, built by rural unions, associations, cooperatives and CSOs, which generated the document Permanent Actions for the Development of the Brazilian Northeast/Semi-arid Region (CARVALHO, 2011; FORTUNATO and MOREIRA NETO, 2010). This document defines that

man's coexistence with semi-aridity can be assured. What is lacking are agrarian and agricultural policy measures, appropriate technologies, democratic and decentralized management of water resources and public affairs to correct secular structural distortions, responsible for the perpetuation of misery and poverty in rural areas (FÓRUM NORDESTE, 1993, p. 5).

In 1999, on the 3rd Conference of the Parties to the United Nations Convention to Combat Desertification (COP-3), in Recife (PE), the Parallel Forum of civil organizations in the Northeast was held. In it, the document entitled Declaration of the

Semiárid: Proposals for Articulation in the Brazilian Semiárid for Living with the Semiárid and Combating Desertification is prepared. This document was signed by sixty organizations, considered the first manifestation of the ASA. This statement

is the Foundation Letter for the Articulation in the Brazilian Semiárid Region (ASA), a network that brings together various institutions of civil society, which are committed to mobilizing and articulating 'Coexistence'. From that context, the Brazilian Semiárid region was also triggered, a scale that brings together the objectives of civil society with the actions to combat desertification of the CCD. guidelines and national public policies, no longer linked to policies for the Northeast region (CARVALHO, 2011, p. 67).

Thus, greater horizontality was sought in the management of public policies, in general, and in the dry consequences, in particular. Thus, greater horizontality was sought in the management of public policies, in general, and in the dry consequences, in particular.

THE SEMI ARID ARTICULATION (ASA)

ASA is a network of organizations formed in 1999, during the Civil Society Parallel Forum at COP-3, and currently brings together more than seven hundred organizations operating in the Brazilian semiárid region (GOMES *ET AL.*, 2015).

The 1st National Meeting of ASA (ECONASA) was held in February 2001, in Igarassu/PE, when the "Letter of ASA Principles" was written, expressing its ideas and proposals for sustainable development and coexistence with the semi-árid region. . ASA assumes the identity of "a space for the political articulation of civil society in the Brazilian semi-árid region" (ASA, 2018, p. 1), which mission is to "Strengthen civil society in the construction of participatory processes for sustainable and sustainable development coexistence with the Semi-árid, referenced in cultural values and social justice" (ASA, 2018, p. 1).

Based on ASA's action, various networks of base organizations, associations, unions, women's groups, youth groups and other organizational forms were created that conduct processes based on available needs and resources (ASA, 2018). This network provides support and capillarity to the actions promoted by ASA. Decisions made follow a base-wide listening process. Local experiences are taken into account in all work and, nevertheless, water management solutions are simple, inexpensive and easy to implement.

Over the last decades, ASA has been building an interstate working path, integrating various forums for the proposition of public policies. It has four lines of action that are its main projects: the One Million Cisterns Program (P1MC), the P1+2, the Cisterns in Schools and Seeds in the Semiárid Region. The first three are successful experiences of decentralized management of water resources, since the State and CSOs are in partnership.

One Million Cisterns Program

In April 2000, negotiations began with the Federal Government to prepare the P1MC, resulting in a first agreement, which was signed with the Ministry of the Environment.

In the same year, an ASA meeting was held in Juazeiro (BA), with around 120 participants, to discuss the preparation of the P1MC.

In 2003, the P1MC gained new momentum when it was included in the government's Fome Zero program. This year, the P1MC was institutionalized, under the responsibility of the National Secretariat for Food and Nutrition Security (SESAN), of the Ministry of Social Development and Fight against Hunger (MDS). Through an agreement between the federal government and ASA, the Union started to support and finance programs for the construction of cisterns and training of multipliers (GOMES *ET AL.*, 2015, p. 229).

The P1MC's action seeks to ensure the mobilization and training of families and rural communities as a fundamental axis of the program's action, also seeking community training and social participation that are foreseen in all stages of the program's execution. The mobilization process begins with the articulation of the municipal commission, instances of social control of the ASA programs, responsible for the process of selecting the families, organizing the events and monitoring the constructions with the technical teams of the organizations executing the action. This commission is formed by at least three social organizations operating in the municipality.

The cisterns are built from pre-molded cement slabs, have a cylindrical shape, are covered and are semi-buried next to the families' homes. Its operation provides for the capture of rainwater using the roof of the house, which drains the water through gutters. Its capacity is generally 16,000 liters of water, a volume considered sufficient for families. According to the ASA, "P1MC enables numerous advances not only for families, but for rural communities as a whole, such as increasing school attendance, decreasing the incidence of diseases due to the consumption of contaminated water and of the work overload of women in domestic activities".

One Land and Two Waters Program (P1+2)

Created in 2007, the P1+2 is part of the ASA's Training and Social Mobilization Program for Living with the Semi-Arid Region and also includes the P1MC. It aims to expand the water supply of families, rural communities and traditional populations to meet the needs of plantations and animal husbandry. It is based on the minimum structure that families need to produce, namely, space for planting and animal husbandry; land and water to cultivate.

Municipal and community commissions effectively participate in the registration and selection of families and communities based on pre-established criteria. These commissions also help to identify the water needs and characteristics of the terrain where the water capture and storage technologies will be built. The technologies are: Cistern-sidewalk, Underground dam, Stone tank or cauldron, Popular water pump, Barrier-trench, Weir and Cistern-run.

The first step, before the construction of technologies, is the participation of families in training for coexistence with the semi-arid region, namely: training in Water Management for Food Production (GAPA) and in the Simplified Water Management System (SSMA).). It is also planned to train those who will participate in the technology construction process.

Cisterns in Schools Program

It aims to store rainwater for rural schools, using cisterns with a capacity of 52,000 liters. The project covers schools in the nine semi-arid states, including those located in indigenous villages and quilombola communities, which should be prioritized.

For the selection of schools, three criteria are adopted: communities that do not have regular drinking water supply systems; have a high level of semi-aridity and a high number of children. Once the school is defined, joint work with municipal commissions is sought through a forum made up of at least three local civil society organizations that carry out the social control of ASA's actions. The municipal public power also needs to be involved at this time. Afterwards, workshops and meetings are held with different audiences for the planning, monitoring and evaluation of the project, up to training sessions to discuss principles and strategies of contextualized education. Between 2009 and 2011, 875 school cisterns were built in 143 municipalities in the semiarid region.

Training and Social Mobilization Program for Living with the Semiarid Region: Agrobiodiversity Management – Seeds of the Semiarid Region

Launched in 2015, this program seeks to reinforce the culture of seed stock. In addition to infrastructure to capture and store water for consumption and production, as mentioned earlier, families also have support to store the seeds known as creoles. Depending on the semiarid region, creole seeds are also known as Seeds of Passion, Resistance, People, Plenty, and Life. Various names that symbolize the relationship of affection of farming families and traditional populations for the seeds that accompany them for generations (ASA, 2018). This initiative is based on the numerous experiences of community action in a network, which have been gestated from the P1MC and the P1+2. The process of choosing the beneficiaries follows the qualifications: Techniques; of the Municipal Commissions; Community Management of Seed Diversity; Inventory Management at Community Seed Banks; Territorial Training on Selection; Production and Multiplication of Seeds and, finally, Regional Team Formation (ASA, 2018).

DECENTRALIZATION AND COEXISTENCE WITH THE SEMIARID

The actions exposed above, alone, do not yet guarantee the well-being of the population. Being adapted to the semiarid does not mean that all problems are solved. There is a deeper complexity than the understanding that with coexistence policies, problems cease.

The configuration of a political discourse on coexistence can be evidenced in several actions as pointed out above. In this sense, we are moving towards a decentralization and democratization of the management and use of water resources that "emerge from the speeches in a dominant way, as an artifact that not only brings water, but also the autonomy of families in relation to the political groups that for decades enslaved the population with the use of water trucks and other public alms" (MOREIRA NETO and LIRA, 2015, p. 174-175). And this discourse is present in several institutions that deal directly or indirectly with coexistence.

The growth of the performance of CSOs is visible and measurable. Among presents, in the graph below, the significant growth of CSOs since the beginning of this century.

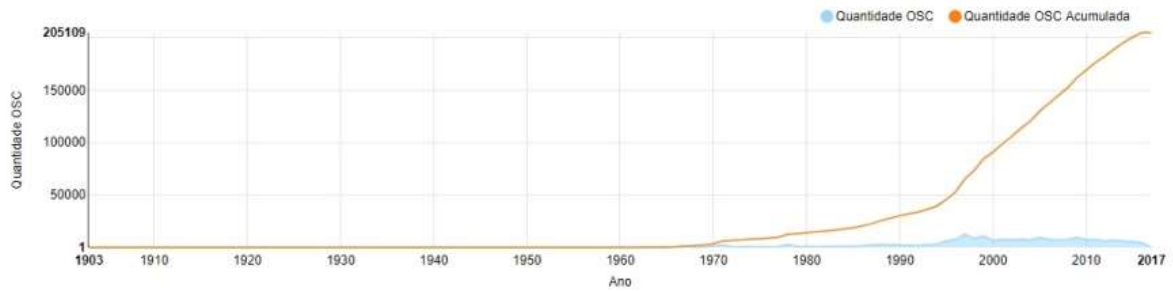


Figure 1: Evolution- quantity of CSO's by year of foundation
Source: Abong (2019).

The relationship between CSOs and the Federal State is evident in the chart below. The relationship of partnerships, especially in the first half of the current decade, is evident in the federal transfers, which stood at around BRL 23,708,545,669.41 (ABONG, 2019).

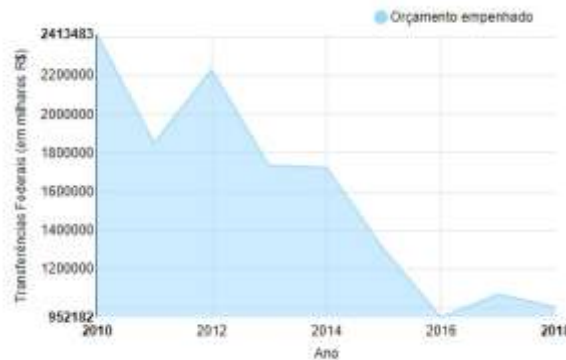


Figure 2: Federal Transfers
Fonte: Abong (2019).

Abong (2019) reports that Brazil has, between 2010 and 2018, 205,182 CSOs, with 310,512 workers. 6,434 projects were developed and a total of BRL 14,287,876,465.13 as federal transfers (2010-2018). For the Northeast there are 208,182, of which 28,709 CSOs operate in Pernambuco and there are 5,960 in the semi-arid region with the most diverse profiles of action and objectives. Northeast has 50.3% of CSOs working in Development and advocacy, while the national average percentage of CSOs in this category is 39.91% (ABONG, 2019).



Figure 3: Resources transfers
Source: Abong (2019).

The Northeast is the third in terms of transfers of funds to CSOs, with an average of R\$106,539,181.05 per year. The national average for transfer of funds is R\$ 472,982.58. In addition to federal transfers, the most declared category of resources was Public resources with 14.19% of the total" (ABONG, 2019).

It is worth noting that this new attitude towards water management faces numerous challenges in its implementation, since it significantly changes the focus on the sector and opposes historically established practices, such as: the culture of "privatizing" the use of water ; government decisions taken centrally; the assistance actions that characterize the drought periods; and the lack of interest and lack of initiative from users and society in the search for alternatives for sustainable management of water resources (CASTRO, 2012).

To Moreira Neto and Lira (2015, p. 181),

In short, the idea of coexistence with the Semiarid, even gaining space in intellectual debate and social dialogue, is not expressed, in practice, as a totalizing and unifying idea. It suffers from tensions and contradictions in its operation. However, it is essential to realize that this dialogue that has been taking place in numerous NGOs is responsible for the production of a political-pedagogical understanding that seeks to emphasize the coexistence with the semiarid region as essential to think about the different possibilities of reproduction of the existing ways of life.

Thus, in the discourse of coexistence, the assumption of sustainability is referred to as essential for the re-elaboration of power-knowledge relationships that, moving away from the traditional discourse of dependence, seek to generate new possibilities for the semiarid space, anchored in the reflection of issues such as respect for diversity, solidarity, collectivity, networking, self-management, etc (FORTUNATO and MOREIRA NETO, 2010).

The actions of CSOs in the process of understanding coexistence with the semi-arid region are more efficient and lasting, since they articulate local solutions as being globally efficient (OGUNSEITAN, 2003). It is also noteworthy that "in continental and very unequal countries, such as Brazil, it is very important to discuss mechanisms of articulation between local actors. Moving from the centralized model of the past to an atomized decentralization [...] Coordinated decentralization seems to be the model to be pursued by local actors in a country like Brazil. And efforts in this direction are still very incipient.

CONCLUSION

The strong repression of social movements allied to a representative democracy that, with few exceptions, did not value the knowledge and desires of the poorest, led Brazil to have a society that was not used to seeking or sharing a leading role in decision-making. In fact, despite being a country considered violent, Brazilians are commonly prostrate when government actions with rare moments of insurgency, especially fueled by the interests of the elites that control the media.

Citizen participation, although encouraged from an institutional point of view through their official contacts, is not consolidated, since they are not prepared over time to take ownership of discussions on water and, especially, its role in decision-making. In perspective, they are seen as important, but knowing that their participation will be minimal or, in some cases, innocuous. The participation of the population, which does not always dominate the lexicon of discussions, is below what can be expected from shared management. The actions of CSOs have been gradually changing this reality.

It is worth mentioning that in continental and very unequal countries, such as Brazil, it is very important to discuss mechanisms of articulation between local actors. The process of decentralizing water management has grown in the last two decades. Joint actions between the State and organized civil society are examples. Coordinated decentralization seems to be the model to be pursued by local actors in a country like Brazil.

However, it brings up the reflection that the ideas of combating drought were a paradigm of the time, still in the beginning of the 20th century. It is noteworthy that, at the time of its construction, the physical conditions of the environment were not deeply known, from a technical-scientific point of view, so experiences considered successful were sought outside to be implemented in Brazil. Added to this is the culture of not valuing local knowledge and excluding the population from decision-making. In fact, in much of the pre-coexistence with the semi-arid region, there was the perception of the population as victims and not as active in the process of recording and sharing knowledge.

Finally, the debate that associates local knowledge and water governance for the Brazilian semi-arid region needs to be deepened. The objective here was not to exhaust the topic, rather, to bring it to the fore and point out ways so that we can, perennially, advance with the discussion. The gaps are huge and need to be constantly researched.

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