

Proposed Implementation of Law 11,888: Public Engineering for the Municipality of São Gabriel da Cachoeira, State of Amazonas, Brazil

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Abstract

This paper discusses the importance of applying Brazilian Law No. 11,888/2008, the public and free technical assistance law, to families with incomes up to 3 minimum wages, in the municipality of São Gabriel da Cachoeira, in the interior of Amazonas, revealing a general panorama. With the purpose of disclosing and assisting in the implementation of this legislation, pointing out the existing difficulties and the necessary procedures for the use of public and free technical assistance in this location, due to the precariousness of housing. The municipality of São Gabriel da Cachoeira is

located in the extreme northwest of the state of Amazonas, in the Alto Rio Negro region, bordering Colombia and Venezuela. The municipality is inhabited by 23 ethnic groups, which account for over 90% of its 45.5 thousand inhabitants. The research was divided into three stages, the first stage consisted of a bibliographic and documentary survey, the second stage the delimitation of the case study, and the third stage the analysis of field research data. Based on the field research, we can identify some problems related to the implementation of the Technical Assistance Law (AT) in the municipality of São Gabriel da Cachoeira, such as the lack of structuring of its own sector and technical body for social interest housing (HIS); ignorance of the aforementioned Law; little effectiveness of the instruments that guide the HIS; and specific actions related to TA. In this way, this research may contribute to the development of more dignified and quality housing for indigenous populations, with the possibility of free public engineering in this region.

Keywords: Technical assistance. Public Engineering. Indigenous population. Housing

1. INTRODUCTION

Public and free technical assistance for the design and construction of social interest housing is ensured by Law No. 11,888 (2008), to families with income up to 3 minimum wages, which addresses a public resource fund that makes it possible to contract architecture and civil engineering professionals.

As reported by Ghisleni (2017), technical assistance can range from simple improvements such as opening windows, changing environments, to more complex projects such as structural reinforcement, dimensioning of columns and beams, renovation of electrical and hydraulic projects.

The absence of professional technical assistance at the time of design and execution of the work reveals the difficulties of self-construction, such as poor quality and waste of materials, old problems faced by the population. Currently, it is still regrettable that only a small fraction of citizens can enjoy the work of an architecture and/or engineering professional (GHISLENI, 2017).

According to Anamaco and Latin Panei (2008), it is estimated that annually in Brazil between 1 and 1.5 million new homes are built, where around 70% are built informally. In addition, approximately 14 million renovation and expansion operations are carried out per year, of which approximately 77% are result of self-construction. Another relevant fact is

that housing in need of renovation represents more than 75% of Brazilian housing.

Housing is a social right guaranteed by the Federal Constitution provided for in article 6, as important as the Right to health, education, and social security. It represents a basic need, specified in Line R of item V of the main section of art. 4 of law n° 10.257, of the Statute of Cities, of June 10, 2001, which regulates articles 182 and 183.

The conscious implementation of this law provides a mitigation of the impacts of self-construction. Providing technical assistance from qualified professionals to help with these practices brings benefits and improvements in the regularization and quality of the execution of civil engineering works, with a popular or low construction standard, for the purpose of residential construction, aimed at people with proven low income through a single registry of the federal government in the municipality.

According to Santos (2014), housing is a right of the population, this study is relevant to clarify how this important public policy instrument works and how it is being applied.

Therefore, public policies are actions and programs that are developed by the State to guarantee and put into practice the rights that are provided for in the Federal Constitution and other laws, with measures and programs created by governments dedicated to ensuring the well-being of the population (GHISLENI, 2017).

This paper addresses the importance of applying law n° 11,888/2008 in the municipality of São Gabriel da Cachoeira, inland Amazonas, revealing a general overview. With the purpose of disclosing and assisting in the application of the referred legislation, in this locality, due to the existing precariousness regarding housing.

2. STUDY AREA LOCATION

The municipality of São Gabriel da Cachoeira located in the extreme northwest of the state of Amazonas, on the Alto Rio Negro, bordering Colombia and Venezuela, as shown in figure 1.

São Gabriel da Cachoeira is inhabited by 23 indigenous peoples, who add up to over 90% of the 45.5 thousand inhabitants distributed between the headquarters, larger locations such as Iauareté and Cucuí, and communities that are on the banks of the rivers that form the largest black water basin of the world (IBGE, 2019).



Figure 1 - Map of the municipality of São Gabriel da Cachoeira

Source: Master Plan of São Gabriel da Cachoeira, 2006

The region is inhabited by the following indigenous groups. Arawak Family: Baré, Tariana, Baniwa, Kuripako and Werekena. Eastern Tukano Family: Tukano, Desana, Kubeo, Wanana, Tuyuka, Pira-tapuya, Miriti-Tapuya, Arapaso, Karapanã, Bará, Siriano, Makuna, Tatuyo, Yuruti, Barasana, Taiwan. Maku Family: Yuhupde, Hupda, Dâw, Nadöb.

According to the Master Plan (2006), the municipality is “the most indigenous of Brazilian municipalities, it is also the third largest in the country, with 109,180 km² in length, and borders Japurá and Santa Isabel do Rio Negro, in Amazonas”.

As shown in Figure 2, its territory comprises almost all of the Alto Rio Negro Indigenous Lands, Middle Rio Negro I, Middle Rio Negro II, part of the Yanomami and Rio Téa Indigenous Lands, the Balaio Indigenous Land in the process of demarcation, and the Land Indigenous MarabitanasCuéCué, in the process of identification, totaling almost 90% of the municipality's area. (BRAZIL, 2006)

3. THEORETICAL FOUNDATION

3.1 Brief Overview of Housing in Brazil

The Federal Constitution of 1988 provides the population with a right to decent housing. In the same way as health, education and justice, housing is a fundamental need for life and without decent housing, it becomes more difficult to achieve other rights (GODINHO, 2017).

The lack of housing or the inadequacy of its stock are considered for the Housing Deficit, as policy indicators. To inform society and public authorities about the need to increase the housing stock (LIMA NETO; FURTADO; KRAUSE, 2013).

In addressing the housing deficit in Brazil, it is necessary to consider a quantitative and qualitative analysis of housing in order to try to solve the

problem. Solutions aimed at providing housing for the low-income population, through housing programs developed by the Executive Branch, range from the donation of building materials to financing with subsidies for the acquisition of real estate, as occurs on a large scale in the Minha Casa Minha Program Life (PMCMV)(GODINHO, 2017).

Regarding the qualitative problem of housing, the discussion is about the need to implement technical assistance (TA) of social interest, as it is considered that the lack of technical monitoring in the design and construction of housing has generated very low-quality products, with structural, functional and unhealthy problems (GODINHO, 2017).

According to Costa (2006), the AT is a tool that can be used to promote decent housing for the low-income population, and to promote the democratic management of the city, consolidated by the City Statute and Master Plan.

3.2 The City Statute

Federal Law No. 10,257 of July 10, 2001, known as The City Statute, was created to regulate articles 182 and 183 of the Federal Constitution, which deal with urban development policy and the social function of property (BRASIL, 2001).

The City Statute is an attempt to democratize the management of Brazilian cities through management instruments, among which we can highlight the Master Plan, mandatory for any city with more than twenty thousand inhabitants or urban agglomerations (BRASIL, 2001).

The application of these management instruments brought by the City Statute aims to implement the constitutional principles of popular participation or democratic management of the city and guarantee the social function of property, which constitutes the proposition of a new interpretation for the individualist principle of the Code Civil, among other principles (BRASIL, 2001).

3.3 Master Plan of São Gabriel da Cachoeira

The Master Plan of the municipality of São Gabriel da Cachoeira was established by municipal law No. 209, of November 21, 2006, with the general objective of instituting the territorial development policy in the municipality covering the following sectorial themes: housing, environmental sanitation, mobility, urban, rural development and land tenure regularization, environment and economy (BRASIL, 2006).

3.4 The Free Technical Assistance Law

Housing is part of the design of cities, imposing several developments in the areas of environmental comfort, safety, health, rationality of space and construction, with consequences for a better quality of life, health, dignity and citizenship (GODOY, 2015).

Within this context, just as citizens are entitled to legal assistance, through public defenders, if they are unable to hire a lawyer or the right to free medical care, with the publication of law n. 11,888/2008, becomes the duty of the State and the citizen's right to free technical assistance for the design and construction of social housing (GODOY, 2015).

3.5 Public Engineering

Law No. 11,888/2008, known as the law of free technical assistance, has been in force since June 2009. The legislation guarantees technical assistance provided by engineers and architects to those who live in the countryside or in the city and want to build, renovate, and expand, or even carry out the land title regularization of houses with up to 60m², located in areas of social interest. This does not mean that the professionals who will work in this segment will not be paid, but that the population will have free access to the service (SANTOS, 2014).

Technical assistance may be provided by professionals linked to city halls, who work in non-profit organizations and independent professionals. Members of academic residency programs in architecture, urbanism, and engineering, as well as university extension programs, through model offices (SENGE, 2018).

3.6 Housing of Social Interest

According to the CEF, Social housing or social interest housing is a type of housing for the population whose income level makes it difficult or prevents access to housing through the normal mechanisms of the real estate market (CAIXA, 2019).

These housing projects are generally a public initiative and aim to reduce the deficit in the supply of low-cost residential properties, equipped with infrastructure such as water supply networks, sewage, electricity and accessibility. Some projects are also aimed at relocating irregular housing or housing built in risky areas. They are usually a government initiative and aim to serve mainly the low-income population (GODINHO, 2018).

At the beginning of Brazil's urbanization, housing for low-income population was a concern of the government only when it was a threat to public health, being a right explained in the Federal Constitution itself “Art. 6th The social rights are education, health, food, work, housing, transport,

leisure, safety, social security, protection of maternity and childhood, assistance to the destitute, in the form of this Constitution" (BRASIL, 1988).

The need for a housing policy is in a context of growing demand for urban reform and democratic access to the city. To build houses is to produce cities. It is essential to discuss the impacts of real estate projects on living conditions, on the institution or dispossession of social rights, on territorial ordering and on the functioning of cities (SANTOS, 2014).

3.7 Low-income families and the Federal Government's Single Registry

The Federal Government's Single Registry is a set of information about Brazilian families in poverty and extreme poverty. This information is used by the Government at the Federal, State and municipal levels to implement public policies capable of promoting an improvement in the quality of life of these families (CAIXA, 2020).

Low-income families, earning up to half the minimum wage per person or earning up to 3 (three) minimum wages of total monthly income must be registered. There are several programs and social benefits of the Federal Government that use the CadastroÚnico as a basis for selecting families, such as the Minha Casa, Minha Vida de Habitação Popular Program. (CASH, 2020).

3.8 Experiences in applying Law No. 11,888/2008 in Brazil

An overview of the initiatives for the application of the Free Technical Assistance Law in Brazil shows, as quoted by Santos, 2014, a greater number of initiatives in the south and southeast region, and in contrast to the northeast region where experiences are much more transient and punctual.

The panel of law enforcement initiatives 11,888/2008, presented by Cunha et al (2007), reveals a concentration of initiatives in the states of São Paulo, Rio de Janeiro, Minas Gerais, and Rio Grande do Sul. However, as for the Northeastern states, more specifically in Alagoas, there is no record of any similar initiative to the Free Technical Assistance program. Despite this, we have another scenario that opposes this reality, which are the housing projects produced by the State and Municipal Governments, which are constantly subjected to processes of expansion and alteration, carried out in a completely autonomous and spontaneous way by their residents, without any kind of assistance provided by the competent public bodies, or due technical monitoring.



Figure 2 - Map of Technical Assistance actions in Brazil

Source: Edited by the author. Formulated from Cunha et al.

3.9 The application of Law No. 11,888 in the Municipality of Suzano/SP: A success story

The city of Suzano is in the interior of São Paulo, about 34 km from the capital. According to Santos (2014), the location was successful in applying the law, through complementary law No. 194, of 02/03/2011, "which provides for the Free Technical Assistance Program for the production of affordable housing for low-income families", pursuant to Federal Law No. 11,888, of December 24, 2008.

The municipality created the decree nº 8141/11, which creates the technical assistance program in the municipality, and counts on important partnerships of social movements for housing, representatives of CAU/SP and the Municipal Housing Council.

The decree establishes a simplified procedure for construction, renovation, or regularization of an existing building, with single-family residential purpose, and adopts administrative procedures for the approval of projects and licensing of works in the municipality.

The Municipal Urban Policy Secretariat (SMPU) coordinates the program through the Directorate of Housing Production and Land Regularization (DPHRF), in force since 2011.

According to the SMPU, the municipal law was discussed within the Municipal Housing Council with the participation of entities fighting for housing, which currently help to publicize the program.

Thus, the municipality has ensured a technician to guide and prepare the engineering/architecture project or regularization for the requesting family. A technical survey is also planned to support the adverse possession legal process. The Suzano Association of Engineers and Architects is responsible for the agreement, selecting professionals (engineers and architects) and forwarding them to the city hall to provide project preparation services.

4. METHODOLOGY

Considering that the central proposition of the study was to carry out a survey of how the municipality of São Gabriel da Cachoeira / AM has acted in the applicability of the Free Technical Assistance Law, a study based on qualitative research, which observes the characteristics of the Study of Case. Thus, the research had a qualitative focus, with exploratory, descriptive, and explanatory research design.

According to Denzin and Lincoln (2006), qualitative research involves an interpretive approach to the world, which means that its researchers study things in their natural settings, trying to understand phenomena in terms of the meanings people give to them.

One of the types of qualitative research is the case study which, according to Lüdke and André (1986, p. 17), will study a single case. The case study must be applied when the researcher is interested in researching a singular, situation. The authors further clarify that "the case is always well delimited, and its contours must be clearly defined in the development of the study".

It is a method applied to assess or describe dynamic situations in which the human element is present. With the objective of apprehending the totality of a situation and, describing, understanding, and interpreting the complexity of a concrete case, through a deep and exhausting dive in a delimited object. According to Goode and Hatt (1999, apud LAZZARINI 1995, p.17), the technique is "a way of organizing data in terms of a particular chosen unit".

A case study must be carried out in three phases of its development. Characterized as follows: initially, there is the exploratory phase; in a second moment, there is the delimitation of the study and data collection; and, in a third stage, there is the systematic analysis of these data, culminating in the elaboration of the report (NISBET E WATT, apud LÜDKE E ANDRÉ, 1986).

The research design was set up based on bibliographic and documentary research, data collection through semi-structured interviews and application of questionnaires, consisting of the methodological path for the analysis, as far as possible, in an identification of intersections between the techniques of document analysis, understanding and interpretation of speeches and responses.

The bibliographical research provided the necessary theoretical basis for the discussion of a national panorama of Technical Assistance actions, mapping the relevant experiences in Brazil regarding Technical Assistance.

The documental research included the study of Federal Law No. 11,888/2008. Considering the difficulty of States and Municipalities in

objectifying the right guaranteed by law, existing documents on the challenges for the implementation of TA in the country were also analyzed.

In the stage related to the Case Study, research was carried out “in loco”, through visits to public bodies in the municipality of São Gabriel da Cachoeira/AM, interviews, documental survey and direct observation. A structured questionnaire with 10 questions was applied to the population of the city. The questionnaires were applied by sampling, totaling 10 forms applied to the local population, including residents, local engineers, merchants and civil servants.

To structure the questionnaire, data were collected in the bibliographical and documental research. Thus, the questionnaire addressed three axes, namely, knowledge of the local reality on Technical Assistance (TA), the structure of the AT, and the existence of mechanisms for the implementation, control and inspection of technical assistance actions in Social Interest Housing.

For the study, data analysis was defined through the study of the precise results of a qualitative research survey, to examine the relationships between the variables, in order to answer the questions raised in the discussion. As for the ethical issues, pertinent and necessary to the research process, they were respected by the researcher, considering the protection and confidentiality of information concerning the public institutions involved and the declarations of the researched.

5. RESULTS AND DISCUSSION

Aiming at the best way to analyze the applicability of Law 11,888/2008 in the municipality of São Gabriel da Cachoeira, the questionnaire was divided into three axes, with questioning in a way that allows the exploration of information related to the research, as shown in the table below.

It is important to highlight that “[...] The Technical Assistance Law provides legal and technical support for the resident to change their dwelling with more conditions of habitability and safety” (CAMACHO, 2016).

Table 5 - The three axes of the questionnaire

- 1. Knowledge of the local reality about Technical Assistance**
 1. Is the population aware of free technical assistance in the engineering area?
 2. How does the population understand that the government can help to improve housing?
 3. How is free technical assistance treated by the public authorities?
- 2. The Structure of Free and Technical Assistance**
 4. In the municipality, which sector is responsible for social housing issues (HIS)?
 5. Is there knowledge on the part of the sector that takes care of the HIS, about the

- legislation nº 11,888/2008 that treats free public technical assistance in projects and construction of social interest housing?
6. Does the Municipality have any instrument (law, regulation) for the regularization of social interest housing?
- 3. Mechanisms for the implementation, control and inspection of technical assistance actions in Social Interest Housing.**
7. Does the Municipality have a mechanism for applying Law 11,888/2008?
 8. Does the low-income resident who needs technical assistance instruction regarding housing issues (including design and construction) have any support offered by the municipality?
 9. Is there any type of service provided to citizens to regularize invaded areas in the municipality and housing in irregular areas, such as permanent preservation areas?
 10. Is there any mechanism to supervise and guide the low-income public?

Source: Own Author (2020)

Thus, at first, it was intended to know the local reality about public and free technical assistance in the engineering/architecture area, thus, the population was questioned about their knowledge of actions in this area. 100% of respondents were unaware of any action in this area. It was also asked whether the population understands that the government could help to improve housing, 90% of people said that the city hall could provide support through the provision of professionals, 10% said they did not have support from the city hall. The Municipal Works Department was asked if TA actions are carried out, and the answer was that when they appear, they are carried out.

Graph 2 – Field research results



Source: Own Author (2020)

In the second moment, the objective was to find out if there is any structure in the application of Technical Assistance. According to some technicians from the City Hall, when TA actions appear, they are resolved by the Department of Works and by the land sector. However, these sectors had no knowledge of Law 11,888/2008, 100% of technicians were unaware of the legislation.

Regarding the use of legal instruments to solve problems related to AT, the municipality has only the Master Plan, requiring the regulation of articles related to Housing, through complementary laws.

In the third stage, it was intended to evaluate the mechanisms of implementation, control and inspection of technical assistance actions in Social Interest Housing. As public power technicians, legislators and the population were unaware of the TA legislation, then it is understood that there are no law enforcement mechanisms.

As for low-income residents who need technical assistance instruction on housing issues (including design and construction), according to city hall technicians, when there is this demand, it is met. However, the population that does not have any assistance from the government.

According to city hall technicians, some kind of assistance is provided to citizens to regularize invaded areas in the municipality and housing in irregular areas, such as permanent preservation areas, by the land sector. The municipality has the master plan as a mechanism to provide inspection and guidance to the low-income public.

It was observed that the lack of knowledge about the subject can be the cause of the lack of relevant actions in the area, since the implementation of a policy starts from its knowledge and strategy for development.

As reported in the study by Souza (2003), research in public policy can start from the mapping of the main problems, these in turn obviously do not mean that it is difficult to solve, many of them stem from the growth of the discipline among us. the first problem identified in the work is the scarce accumulation of knowledge in the area.

Public policies have political and technical aspects, the political will must consider certain actions outside the discussions, as the technicians must be facilitators under viable and efficient recommendations, both in planning and in the execution of the policy (COHEN; FRANCO, 1993).

The implementation of a public policy corresponds to the execution of this, and must necessarily be contained in normative documents, involves the governmental bodies responsible for achieving its objectives, and may take place directly or even indirectly, through philanthropic entities, non-governmental organizations, among others (SILVA NETO; SERRA, 2007).

It is noteworthy that it is the responsibility and attribution of managers to coordinate the System and incorporate practices and mechanisms that allow for the planning, monitoring and evaluation of the results achieved by the actions and impacts of policies in improving the quality of life of users. In this sense, specific regulations, in the case of housing, determine its organization through Councils, Funds and Management Plans (CUNHA; CUNHA, 2002).

It is important to note that in the absence of a regiment structure, there is little or no type of action, which may be the case of the absence of Housing Councils; limitations to access the resources of the National Social Interest Housing System, or even lack of knowledge about it, reflecting on the questioning about knowledge about the law on free public technical assistance.

In analyzing the data collected, we can identify some problems related to the implementation of the Technical Assistance Law in the municipality of São Gabriel da Cachoeira, such as the lack of structuring of its own sector and technical staff for housing of social interest; lack of knowledge regarding Law 11,888/2008; little effectiveness of the instruments that guide the HIS; and specific actions related to TA.

6. CONCLUSION

The survey regarding the applicability of Law 11,888/2008 in the municipality of São Gabriel da Cachoeira, fhi of fundamental importance for the development of this work. Field research was carried out with professionals in the area, public agencies and residents of the city, to support the understanding of the local reality.

Despite the research results being evident that the lack of information is an obstacle to the implementation of Technical Assistance in the municipality. It would be wrong to say, and identify it with the only problem faced. In the development of the work, it was demonstrated that there are other issues and developments involved.

Thus, it is emphasized that the lack of information is not the only challenge to be overcome for the law to become effective. There are several factors that have a great contribution regarding this issue, such as: the political will for implementation, in the creation of a specific law to make its application viable; technical teams trained for technical assistance actions, the training of the team is provided for in the law; the interaction between states and municipalities; the difficulty of accessing federal resources; and the lack of articulation between the professional architectural and engineering councils in the three spheres of government.

The practice of self-construction is evident in the municipality, without proper technical assistance, and as this is the focus of the program's implementation, it is faced with the need to create or reformulate municipal housing legislation. The Master Plan and the Municipal Housing Plan must provide the necessary support for the most effective use of public engineering.

This proposal for the implementation of Law 11,888/2008, in the municipality of São Gabriel da Cachoeira, may be provided by professionals

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linked to the city hall, who work in non-profit organizations and liberal professionals to create a registry or sector responsible for qualified professionals in the area in the municipality to put the case study into practice. And finally, to be able to contribute to the regular and social development of indigenous populations who, in addition, need the services and application of this law in their region.

BIBLIOGRAPHIC REFERENCES

- BRAZIL. Law no. 11,888, of December 24, 2008. Ensures public and free technical assistance to low-income families for the design and construction of housing and social interest, and amends Law no. 11.124, of June 16, 2005. Brasília, Casa Civil.
- BRAZIL. Law no. 10,257, of July 24, 2001. Regulates arts. 182 and 183 of the Federal Constitution, establishes general guidelines for urban policy and other measures. Brasília, Civil House.
- BRAZIL. Law no. 209, of November 21, 2006. Provides for the participatory master plan for the municipality of São Gabriel da Cachoeira and other measures. São Gabriel da Cachoeira, Civil House.
- BRAZIL. Ministry of Cities. Urban Land Regularization: how to apply Federal Law No. 11,977/2009 - Ministry of Cities, National Housing Secretariat and National Secretariat for Urban Programs. Brasília, 2010.
- Caixa Econômica Federal, Social Interest Housing. Available at: <http://www1.caixa.gov.br/gov/gov_social/municipal/programas_de_repasso_do_OG_U/habitacao_interesse_social.asp> accessed on 05/05/2019.
- Caixa Econômica Federal, Single Registry. Available at: <<http://www.caixa.gov.br/cadastrados/cadastro-unico/Paginas/default.aspx>> accessed on 05/04/2020
- CAMACHO, Nádia de Oliveira. Use of Law No. 11,888/2008 – Public and Free Technical Assistance Law – in the Minha Casa Minha Vida Program: limits and possibilities in post-occupancy of housing units. Dissertation (academic master's) at the Federal University of Juiz de Fora- Faculty of Engineering, Postgraduate Program in Built Environment, 2016.
- WEDGE, P; ARRUDA, AM V; MEDEIROS, Y. (Org.). Experiences in social housing in Brazil. Brasília: MinistryofCities, NationalHousingSecretariat, 2007.
- CUNHA, Edite da Penha; CUNHA, Eleonora Schettini M. Social Public Policies. Challenges of Public Policy Municipalization. In: CARVALHO, Alysson et al. (Orgs.). Belo Horizonte: Ed. UFMG; Proex, 2002.
- DENZIN, N.K.; LINCOLN, YS Introduction: the discipline and practice of qualitative research. In: DENZIN, NK and LINCOLN, YS(Orgs). Qualitative research planning: theory and approaches. 2nd ed. Porto Alegre: Artmed, 2006. P 15-41.
- GHISLENI, Camila. The law of technical assistance and the social importance of architecture. 2017
- GODINHO, Iris Marinho Ávila, Analysis of the implementation of public and free technical assistance in social housing in the municipality of Alfenas - MG / Iris Marinho Ávila Godinho. – Viçosa, MG, 2017.
- IBGE, Brazilian Institute of Geography and Statistics, Census, 2019. Available at: <<https://cidades.ibge.gov.br/brasil/al/arapiraca/panorama>> accessed on 03/04/2020;
- LUDKE, Menga; ANDRÉ, Marli EDA Research in education: qualitative approaches. São Paulo: EPU, 1986.
- SANTOS, JS Public and Free Technical Assistance Law: An Application Study for Municipalities of Paraíba. Dissertation (Post Graduation in Architecture and Urbanism) – Technology Center - UFPP - João Pessoa, 2014.

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SANTOS, Pereira Ubiratan Félix - Engineering and Public Architecture a Systemic Vision of the National Policy for Technical Assistance in Social Interest Housing, 2018; Available at: <<https://terradedireitos.org.br/acervo/artigos/engenharia-e-arquitetura-publica-umavisao-sistemica-da-politica-nacional-de-assistencia-tecnica-para-habitacao-deinteresse-social/> 22908> accessed on 03/03/2020.

SENGE-MG, Union of Engineers in the State of Minas Gerais, Primer Engineering and Public Architecture, 2018 Available at: <http://www.sengeng.com.br/downloads/cartilha_eng_arg_publicas.pdf> accessed from; 03/05/2020

SILVA NETO, AV; SERRA, MA Transport policies in Paraná: an analysis of the Lerner Government- 1995-2002. Curitiba: Revista Paranaense de Desenvolvimento, n.113.129-145, 2007.

SOUZA, Celina. Estado do Campo: fromresearchintopublic policies in Brazil. BrazilianJournalof Social Sciences, v.18, n.31, 2003