Revista ARACÊ
ISSN: 2358-2472

LABOR PROTECTION AND ITS IMPORTANCE FOR THE GENERATION OF BIOFUELS

https://doi.org/10.56238/arev6n3-085

Submitted on: 09/10/2024 **Publication date:** 09/11/2024

Fernando Ramos Bernardes Dias[1] and Alexandre Walmott Borges[2]

ABSTRACT

This article studies the importance of Labor Law from the point of view of fundamental social rights, and how important it is for an adequate environmental policy and the energy matrix of biofuels. The national sustainable energy matrix is dependent on agricultural work, and this must be fair and adequate for energy generation to be truly sustainable. The research has the nature of strategic basic research presenting a possible solution in the regulation of work in the field. As it seeks to describe the labor regulatory system, but also to present a regulatory solution, it has a descriptive and exploratory character. The approach to the work is qualitative, seeking to express, in the end, the positive valuation for the correct respect for labor legislation and how important this is for the generation of clean energy. The research relied on bibliographic and documentary sources for its final draft.

Keywords: Biofuels, Employment contract, Seasonal agricultural crops, Social rights, Rural worker.

[1] Doctorate student in the Graduate Program in Biofuels at the Federal University of Uberlândia
Master in Law from UEMG
Lawyer at Bernardes Advogados Associados
Professor at the University Center of the Cerrado Patrocínio
E-mail: fernando@bernardesadv.com.br
[2] Dr. in Law from UFSC
Dr. in History from UFU
Lead Researcher at LAECC
Professor at UFU of the graduate program in law, UFU
Professor of the Graduate Program in Biofuels, UFU
Visiting Professor of the Graduate Program in Law at UNESP
E-mail: walmott@gmail.com

Revista ARACÊ
ISSN: 2358-2472

INTRODUCTION

LABOR LAW: CONSTITUTIONAL BASES FOR LABOR PROTECTION

The Brazilian Constitution of 1988 brought several provisions related to workers' rights. Numerous novelties came with the new Constitution, which reserved its own article (article 7) only for the expression of labor rights. It should be noted that in other articles of the CF/88 there are also express rights related to the worker. The words of Estefania Barbosa and others about CF 88:

> By incorporating several benefit rights and so many goals and programs to be implemented by the State (such as ensuring full employment, the eradication of poverty and regional and social inequalities, among others), the Brazilian Constitution assumed a clearly guiding profile, determining in advance priority areas for the Government in the social and economic fields. (De Queiroz Barboza & Salomão Leite, 2022, p. 536)

Mallet's text is an example of how the principle of equality in labor law was built with the advent of the CLT. This passage serves to contrast with the equality contemplated in the constitution and that of the CLT, at the beginning of the twentieth century:

> The precept that first draws attention in terms of equality in the labor field, and from which some rich and interesting considerations can be extracted, is article 5 of the CLT, introduced in the general part, with the clear objective of emphasizing the importance of the rule established. The provision states: "For work of equal value, equal pay shall correspond, without distinction of sex". Apart from the different implications of the rule, there are at least two points worth noting in it. On the one hand, the legislator's reference to equality only in terms of remuneration is significant. [...] On the other hand – this is the second point to note in article 5 of the CLT – the reference only to discrimination based on sex is significant, as if this were the only hypothesis of discrimination. (Mallet, 2008, pp. 244–245)

Starting from the principle of equality, one of the pillars of Labor Law, there is the principle of protection, a principle that is structural and governing labor relations, insofar as it reflects their purpose: the realization of social justice established by the Treaty of Versailles, in 1919. (Silva; Bersani, 2020).[3] This principle can be conceptualized as follows:

> The principle of protection is the main one of all the principles peculiar to labor law and all the others are inserted in it, since they are derived from this greater precept,

[3] 'Delgado (2007, p. 88) states that labor law arose from the combination of three specific groups of factors: economic, social and political. The economic factors result from the increase in the productive process through industry, which fostered subordinate work and moved the class of workers and employers in the production of goods and services, generating wealth for the States. The social factors were the concentration of the proletariat in large industrial cities, and the professional identification of the workers around the enterprise. Finally, the political factors stem from the intervention of society and the State, in the sense of regulating labor relations and ensuring rights – and legal certainty, therefore – to employees and employers.' (Araújo & Petri, 2017, p. 147)

Revista ARACÊ
ISSN: 2358-2472

> which is the protection that labor law provides to the worker, considered the most vulnerable party in the labor relationship.
> The principle of protection is based on this unfavorable position in which the worker places himself before the employer, since, when there is a shortage of employment in the labor market, the tendency is for the employee to abdicate rights in exchange for employability. On the contrary, the economic power represented by the employer, when there is a surplus of labor, will also use this mismatch in the law of supply and demand to impose on the employee the waiver of rights in exchange for employment. Thus, and in view of this unfavorable structural framework in the capital/labor relationship, the need for state intervention in the economic and social order and in the labor market emerges to impose brakes on the impulses that lead to the exploitation of labor. (Araújo & Petri, 2017, p. 149)

The novelty of the Constitution was, in addition to expressly giving constitutionality to some labor rights, to give these status of fundamental rights. For this reason, such rights are endowed with the characteristic of immediate applicability, as expressly stated in paragraph 1 of article 5 of the 1988 Constitution. A good summary of this constitutional openness in the text by Estefania Barbosa:

> In order to provide more protection to fundamental rights, the Constitution brought two extremely relevant precepts. The first consists of art. 5, paragraph 1, by which it is determined that the norms defining fundamental rights and guarantees have immediate application. As a consequence, state institutions, including the democratic legislator itself, are bound by fundamental rights and constitutional guidelines related to public and economic policies. Thus, both the actions of the Government that excessively restrict some fundamental right beyond the limits allowed by the Constitution, as well as the omissions that prevent or hinder its exercise, are subject to judicial control. The second precept concerns the wording of article 5, paragraph 2, by which the rights and guarantees expressed in the Constitution do not exclude others arising from the regime and principles adopted by it or from international treaties to which the Federative Republic of Brazil is a party. With this rule, an opening clause is established, making the catalog of fundamental rights (already quite extensive) not exhaustive. The Constitution, therefore, opens up to other normative sources, especially international human rights treaties and conventions, thus composing a robust block of constitutionality. (De Queiroz Barboza & Salomão Leite, 2022, p. 537)

In addition, it transformed labor rights into stony rights, since constitutional amendments tending to abolish such articles cannot even be deliberated by the National Congress, as expressly provided for in article 60, paragraph 4, IV of the Federal Constitution.

Fundamental rights, according to the aforementioned article of our Federal Constitution, cannot even have propositions of amendment deliberated by the national congress. They belong to the so-called rigid core of the Constitution. Some national authors, among them the renowned master José Afonso da Silva, call such clauses stony, given their rigidity. The fact is that legislators decided to ensure that such rights would only

Revista ARACÊ
ISSN: 2358-2472

be changed if a new Constituent Assembly was convened, that is, fundamental rights would only be suppressed in the event of the promulgation of a new constitution (SILVA, 2022). The words of João Pedro Vicente and others on labor and economic policy in the CF:

> In the course of the redemocratization process, numerous social movements reorganized themselves in the last Constituent Assembly, with the aim of affirming social rights (today engraved in art. 6 of the FC/88). Finally, in 1988, a new legal order, based on the Constitution, defines Brazil as a Democratic State of Law (art. 1, CF/88) and proclaims a series of social guarantees. In line with this, the economic and financial order established by the Magna Carta, under the terms of its article 170, arises on the basis of the valorization of human work and free enterprise, observing principles such as private property and free competition. At first glance, it can be seen that the model adopted by the country follows the liberal capitalist concept "Laissez Faire, Laissez Passer" (Let it be done, let it pass), represented by the Scotsman Adam Smith (1723 -1790), whose idea was sheltered in the notion of market freedom and reduction of state interventionism. However, a careful reading of the aforementioned constitutional provision makes it clear that national economic policies, based on the valorization of work, will aim to promote social justice, also observing the social function of property. Thus, despite the encouragement of the free exploitation of economic activity, it cannot be forgotten that the Major Law imposes social limits on business activity. (Vicente & Paixão, 2023, p. 113)

The principles of Labor Law constitute the starting point for the study and application of labor standards. In them we find the source of legitimacy, validity and the reason for the existence of labor laws, as they were constructed. (Silva; Bersani, 2020). The classification of the principles of labor law in Nilson de Araújo's text:

> In the enumeration of the general principles of law applicable to labor law, the following can be identified: the principle of the dignity of the human person, contained in article 1, item III, of the Constitution; the principle of non-discrimination (articles 2, IV, and 5, caput and item I, of the Constitution); the principle of reasonableness and good faith; and the principle of irreversibility of social achievements and guarantees (SCHWARZ, 2011, p. 29-33).
> As for the specific or peculiar principles of labor law, there is a certain consensus about the principle of protection, which, for some scholars, is the only principle inherent to labor law, deriving from it other specificities that are called peculiarities of labor law. However, other principles are also mentioned in doctrine and jurisprudence, such as the principles of non-renounceability, the principle of continuity, the principle of the primacy of reality, the principle of reasonableness, the principle of good faith, the principle of the most favorable norm for the worker, the principle of maintenance of the most favorable condition for the worker, the principle of the imperativeness of labor standards, the principle of unavailability of rights. (Araújo & Petri, 2017, p. 148)

Such constitutional provisions, for example, end up generating new legal/labour norms. An example is the clear constitutional support for gender equality to be fruitful, as

Revista ARACÊ
ISSN: 2358-2472

well as for the eradication of child labor. This can only happen due to the normative force given by the FC. Let's see what Paulo Rogério Marques Carvalho (Carvalho, 2020) says:[4]

> "The World Economic Forum's 2015 Global Gender Gap Report informs that at the pace of progress we are at, world society will take 118 years to achieve economic gender parity, which demonstrates the fruitfulness of gender equality in the workplace."

ENVIRONMENTAL LABOR LAW

Environmental Labor Law aims to protect the work environment. Labor Law, in turn, deals with contractual legal relationships between employee and employer. Environmental Law, on the other hand, aims to protect the environment, linked to sustainability strategies. When thought of together, the benefits encompass both institutes, reducing the commute of employees, collaborating to reduce pollutants and environmental degradants, and also contributing to a more sociable and family life for those who waste less time commuting and gain flexibility in their schedules and more free time. (Martins; Paschoalino; Montal, 2019). About the object of environmental labor law:[5]

[4] Another example of this production of norms. Another point is the right of young people to professionalization, work and income. From the prohibition of child labor, laws such as Law No. 12,852/2013 were enacted, which presents a viable alternative, within the lawful work of minors, even in rural activity: Art. 15. The action of the public authorities in the realization of the right of young people to professionalization, work and income includes the adoption of the following measures: (...) VI – support for young rural workers in the organization of family farming production and rural family enterprises, through the following actions: a) stimulation of production and diversification of products; b) promotion of sustainable production based on agroecology, family agro-industries, integration between crops, livestock and forestry, and sustainable extractivism; c) investment in research into appropriate technologies for family farming and rural family enterprises; d) encouragement of the direct commercialization of family farming production, rural family enterprises and the formation of cooperatives; e) guarantee of basic infrastructure projects for access and flow of production, prioritizing the improvement of roads and transportation; f) promotion of programs that favor access to credit, land and rural technical assistance; (BRAZIL, 2013). The benefits provided by technological development, according to the Education Manual for Sustainable Consumption, is the constant growth in energy consumption (SANTANA JUNIOR, 2016). In other words, a demonstration that work and energy generation (biofuels) are linked.

[5] In this judgment there is a good illustration of the content: INTERLOCUTORY APPEAL. APPEAL ON A POINT OF LAW. PROCEEDING UNDER THE AEGIS OF LAW 13,015/2014 AND PRIOR TO LAW 13,467/2017. 1. COMPENSATION FOR MORAL DAMAGES. OCCUPATIONAL DISEASE. CAUSAL NEXUS. EMPLOYER'S CIVIL LIABILITY. Since it was demonstrated in the interlocutory appeal that the appeal on a point of law met the requirements of article 896 of the CLT, as to the subject matter in question, the interlocutory appeal is granted, for a better analysis of the allegation of violation of article 5, X, of the Federal Constitution, raised in the appeal on a point of law. Interlocutory appeal granted. B) APPEAL ON A POINT OF LAW. PROCEEDING UNDER THE AEGIS OF LAW 13,015/2014 AND PRIOR TO LAW 13,467/2017. 1. COMPENSATION FOR MORAL DAMAGES. OCCUPATIONAL DISEASE. CAUSAL NEXUS. EMPLOYER'S CIVIL LIABILITY. Compensation resulting from an occupational accident and/or occupational or occupational disease presupposes the presence of three requirements: a) occurrence of the event that triggers the damage or the damage itself, which is verified by the fact of the disease or accident, which, by themselves, attack the moral and emotional assets of the worker (in this sense, the moral damage, in such cases, is verified by the very circumstance of the occurrence of the physical or psychic harm); b) causal or concausal nexus, which is evidenced by the fact that the harm occurred in view of the working conditions; c) corporate fault, except in the cases of strict liability. Although fault cannot be presumed in several cases of moral damage - in which the fault must be proven by the plaintiff - in the case

Revista ARACÊ
ISSN: 2358-2472

> Nevertheless, it is worth noting that the work environment, as the primary object of the Environmental Labor Law, was protected by the Constitutional Charter of 1988, expressly, in article 7, when it ensures, among the rights of urban and rural workers, the "reduction of risks inherent to work, through health, hygiene and safety standards" (item XXII), the additional remuneration for painful, unhealthy or dangerous activities, in accordance with the law" (item XXIII) and "insurance against occupational accidents, at the expense of the employer, without excluding the indemnity to which it is obliged, when it incurs intent or fault" (item XXVIII).

---

of an occupational or occupational disease or an occupational accident, this fault is presumed, because the employer has control and direction over the structure, dynamics, management and operation of the establishment in which the damage occurred. The Federal Constitution of 1988 ensures that everyone has the right to an ecologically balanced work environment, because it is essential to a healthy quality of life, which is why it is incumbent on the Government and the community, which includes the employer, the duty to defend and preserve it (articles 200, VII, and 225, caput). It is for no other reason that Raimundo Simão de Melo warns that the prevention of environmental risks and/or elimination of occupational risks, through the adoption of collective and individual measures, is essential for the employer to avoid damage to the work environment and the health of the worker. Occupational accidents and/or occupational or occupational diseases, in most cases, "are perfectly predictable and preventable events, since their causes are identifiable and can be neutralized or even eliminated; are, however, unforeseen as to the moment and degree of aggravation for the victim" (MELO, Raimundo Simão de. Environmental labor law and workers' health. 5.ed. São Paulo: Ltr, 2013, p. 316). Both the physical and mental health, including the emotional health, of the human being are fundamental assets of his life, private and public, of his intimacy, of his self-esteem and social affirmation and, to this extent, also of his honor. They are assets, therefore, unquestionably protected, as a general rule, by the Constitution (art. 5, V and X). Thus, when attacked in the face of labor circumstances, they deserve even stronger and more specific protection from the Constitution of the Republic, which is added to the previous generic one (art. 7, XXVIII, CF/88). It is the employer's responsibility, of course, for compensation for moral, material or aesthetic damages, resulting from injuries linked to work misfortune, without prejudice to the payment, by the INSS, of social security. In the case in question, the Court of origin, in spite of the possibility of concausality between the labor services and the disease that affects the Worker (bilateral plantar fasciitis), ratified the sentence in the sense that the occupational nature of the disease was not configured and, consequently, maintained the rejection of the related claims - compensation for moral damage and provisional stability. However, the factual context outlined by the Court of origin allows this Court to proceed with a different legal framework of the issue. As extracted from the judgment under appeal, after the medical expert opinion, the expert reported that the Worker "was affected by bilateral Plantar Fasciitis, an inflammatory disease on the soles of the feet associated with the excessive use of this tissue, diagnosed during the agreement with the Defendant" and that "Excess body weight and orthostatism inherent to his work activity were the risk factors identified in this case, which is why we conclude by establishing the concausation". It is also appropriate to highlight that it was established in the regional judgment that, "With regard to the activities performed in favor of the defendant, during the expert evaluation, the plaintiff reported that 'he worked effectively, for 07 years at the defendant, standing. In front of the table, he welded exhaust parts. I used MIG' (fl. 436)". It is verified, therefore, that the expert stated, in a clear and consistent manner, the possibility that the work activity had acted as a concurrent element to the worsening and worsening of the symptoms, which evidences the occupational nature of the disease that affects the Worker. Since the enactment of Decree 7,036/44, the Brazilian legal system admits the theory of concausation, which is expressly provided for in the current legislation (article 21, I, of Law 8,213/91). In this view, based on the factual premises set out in the contested decision, if the working conditions to which the worker was subjected, although not the sole cause, contributed to the reduction or loss of his working capacity, or produced an injury that requires medical attention for his recovery, he must be assured compensation for the damages suffered. Once the occupational disease, the damage and the causal link are verified, and considering that the employer has control and direction over the structure, dynamics, management and operation of the establishment in which the damage occurred, the premise of the presumed fault of the Respondent emerges and, consequently, the configuration of the elements that give rise to civil liability (damage, causal link and corporate fault) and the duty to indemnify. It should be noted that, in relation to moral damage, the existence of an occupational disease or sequelae of a work accident, by itself, violates the dignity of the human being (limitation of his physical condition, even if temporary), generating indisputable intimate pain, discomfort and sadness. There is no need to prove concrete damage (in this sense, the moral damage, in such cases, is verified by the very circumstance of the occurrence of the physical or psychological harm), because the legal protection, in this case, focuses on an immaterial interest (article 1, III, of the FC). Appeal for review known and granted. ... (TST - RR: 15803920175120025, Rapporteur: Mauricio Godinho Delgado, Judgment Date: 09/09/2020, 3rd Panel, Publication Date: 09/11/2020)

Revista ARACÊ
ISSN: 2358-2472

> It is also observed that the environment (Article 225) and the work environment in particular (Article 200, VIII) received specific constitutional protection in the context of the social order, which "is based on the primacy of work, and as its objective the well-being and social justice" (Article 193 of the Constitutional Charter of 1988).
> Aware that Environmental Labor Law is premised on the defense of a healthy, sustainable, balanced and safe work environment for workers in general, (Carvalho & Franco Rêgo, 2013, p. 228)

The principle of human dignity emphasizes that the environment and the work environment must be interconnected, cooperating for a higher quality and autonomy well-being. It is known that if there is an improvement in the quality of life of employees, they will have greater performance and satisfaction for the performance of their duties, and the main factor is a favorable climate for the creation and production of creative ideas, which flexible hours and increased hours for daily practices can benefit everyone, including the environment. (Picarelli, 2003). Thus, the principle of environmental labor law is the full protection of the worker:[6]

> The principle of full protection of the worker is based on the notion that whatever the work regime, such as formal jobs or atypical employment contracts, the entrepreneur (or service taker) has direct and immediate responsibility to implement preventive measures and protective measures of a collective matrix, to safeguard the healthiness of the work environments.
> Consequently, despite recognizing the essentially coercive and asymmetrical nature of labor relations, with the existence of differentiated processes of provision (outsourcing, quarterization, temporary and transitory contracts), workers must have full protection of their health, regardless of the form that the contract takes. In this regard, whatever the contractual form, the employer must be responsible for the health of its workers, whether they work in the production unit or even in the residential environment. (Rocha, 2002, p. 129)

[6] The evolution of environmental legislation in Brazil: '... c) In 1981, during the dictatorial regime and during the term of the last president-general, Federal Law No. 6,938, which brought the regulation of a "national environmental policy", was enacted. Therefore, despite the dictatorial lines, there was an absorption of the content of environmental discussions into the national normative space. d) The constituent process that developed and resulted in the 1988 Federal Constitution incorporated a broad list of fundamental rights, all the functional and material aspects of the Rule of Law and, as it could not be otherwise, the environmental issue in its content. It should be noted, in attention to the previous item, that in 1981 the dictatorial regime was already in decline and with the need to succeed the civil and democratic regime. e) Gradually, in the 1990s, the Brazilian State began to move towards the incorporation of various documents of international law, and adopted a posture of active change in its participation in international forums, and there was the reception of many treaties, conventions and other human rights documents. The significant milestone of this change was the holding of the ECO 92 conference in the city of Rio de Janeiro. It should be noted that this conference was preceded by a series of negative events. During the 1980s, some significant events brought the environmental issue to the center of political discussions in Brazil: the Cubatão tragedy, predatory practices in the Amazon rainforest, the predation of wild animals and the trafficking of the products of this predation, and the assassination of environmental leader Chico Mendes. f) Throughout the 1980s and early 1990s, several modifications and implementations were made to Law No. 6,938, the 'national environmental policy law'. New state environmental agencies were created, new administrative regulations and the national environmental policy law was supplemented by other environmental laws.' (A. B. de Oliveira et al., 2022, pp. 153–154)

Revista ARACÊ
ISSN: 2358-2472

In other words, it is indissoluble, therefore, to dissociate work from the environment. As will be seen later, the modern corporate world no longer dissociates the work environment from the sustainability strategy. In other words, a business only becomes sustainable and ethically accepted if not only environmental protection standards are observed, but also respect for human rights and workers' rights. The relationship between labor law and environmental law in the protection of workers' rights:

> Now, authors such as Hubert Seillan (1994, p. 37) state that Labor Law and Environmental Law are the results of the failure of the liberal principle of laissé faire, which developed and were formed at different times and under different conditions. The two branches of Law arise due to the consequences produced, respectively, in the health and life of the human being and in nature.
> Furthermore, both Environmental Law and Labor Law, each in its own way, have legislated on the work environment. Rocha (2002, p. 274) states that each of these fields of legal knowledge, by itself, cannot understand the dimension of the work environment. And therefore, a specific legal field would be necessary, with its guiding principles and postular rules to deal with the healthy, safe and sustainable work environment. This field of Law translates into Environmental Labor Law. (Carvalho & Franco Rêgo, 2013, p. 226)

The STF has final decisions establishing the relationship between work, free enterprise, and the transgenerational character of environmental protection. In ADI 6218 there is an example of this:

> Free enterprise (FC, art. 1, IV and 170, caput) does not prove to be an end in itself, but a means to achieve the fundamental objectives of the Republic, including the protection and preservation of the environment for present and future generations (FC, art. 225). [ADI 6.218, rel. min. Nunes Marques, red. of Ac. Min. Rosa Weber, j. 3-7-2023, P, DJE of 21-8-2023.]

Another good example is ADI 3,540. In this judgment, there is a manifestation of the character that crosses generations and the imposition of a programmatic guideline of preservation for future generations:

> The issue of national development (FC, art. 3, II) and the need to preserve the integrity of the environment (FC, art. 225): The principle of sustainable development as a factor for achieving the right balance between the demands of the economy and those of ecology. The principle of sustainable development, in addition to being impregnated with an eminently constitutional character, finds legitimizing support in international commitments assumed by the Brazilian State and represents a factor in obtaining the right balance between the demands of the economy and those of ecology, subordinating, however, the invocation of this postulate, when a situation of conflict between relevant constitutional values occurs, to an inescapable condition, whose observance does not compromise or empty the essential content of one of the most significant fundamental rights: the right to the preservation of the environment, which translates into a good for the common use of the generality of people, to be safeguarded in favor of present and future generations. [ADI 3.540 MC, rel. min. Celso de Mello, j. 1-9-2005, P, DJ of 3-2-2006.]

Revista ARACÊ
ISSN: 2358-2472

As a result of what was enshrined in the judgments above, the mention of the judgment on the nature and quality of environmental law. The decision defines the peculiar nature of environmental law, transversal and belonging to all:

> Environment. Right to the preservation of its integrity (FC, art. 225). Prerogative qualified by its character of meta-individuality. Third-generation (or brand new) right that enshrines the postulate of solidarity. The need to prevent the transgression of this right from erupting intergenerational conflicts within the collectivity. Specially protected territorial spaces (FC, art. 225, § 1, III). Amendment and suppression of the legal regime pertinent to them. Measures subject to the constitutional principle of reservation of law. Suppression of vegetation in a permanent preservation area. Possibility for the public administration, in compliance with the legal requirements, to authorize, license or permit works and/or activities in the protected territorial spaces, provided that the integrity of the attributes justifying the special protection regime is respected. Relations between economy (FC, art. 3, II, c/c art. 170, VI) and ecology (FC, art. 225). Collision of fundamental rights. Criteria for overcoming this state of tension between relevant constitutional values. The basic rights of the human person and the successive generations (phases or dimensions) of rights (RTJ 164/158, 160-161). The question of the precedence of the right to the preservation of the environment: an explicit constitutional limitation to economic activity (FC, art. 170, VI). Decision not endorsed. Consequent rejection of the request for precautionary measure. The preservation of the integrity of the environment: constitutional expression of a fundamental right that assists the generality of people.
> [ADI 3.540 MC, rel. min. Celso de Mello, j. 1º-9-2005, P, DJ de 3-2-2006.]

INDIVIDUAL LABOR LAW (ARTICLE 7 OF THE 1988 CONSTITUTION)

For the treatment of individual labor law, it is worth emphasizing, once again, the purpose of labor law:

> "The purpose of Labor Law is to ensure better working conditions, but not only these situations, but also social conditions for the worker. Thus, Labor Law is based on improving the working conditions of workers and also their social situations, ensuring that workers can provide their services in a healthy environment, being able, through their salary, to have a dignified life so that they can play their role in society. Labor Law intends to correct the deficiencies found within the company, not only with regard to working conditions, but also to ensure decent remuneration so that the worker can meet the needs of his family in society. Labor Law aims to improve these conditions of the worker" (Silva, 2019, chap. 3)

With regard to labor rights themselves, that is, labor rights related to individual labor law, these are expressed in article 7 of the Constitution. With the suggestive name of social rights, the Constitution, as already mentioned, gives special emphasis to such rights. Basically, this article provides for the rights of the worker in relation to the employment contract.[7]

[7] MOTION FOR CLARIFICATION GOVERNED BY LAW NO. 13,015/2014. PUBLIC CIVIL ACTION. ACTIVE LEGITIMACY OF THE LABOR PUBLIC PROSECUTOR'S OFFICE. REQUEST FOR PAYMENT OF OVERTIME AND REFLEXES. HOMOGENEOUS INDIVIDUAL RIGHT. This is a public civil action filed by the Labor Public Prosecutor's Office with a request for payment of overtime worked and its reflections on other titles, among

Revista ARACÊ
ISSN: 2358-2472

The rights of workers, in the form of article 7 of the CLT, are: the equality between urban and rural workers, the prohibition of arbitrary dismissal, unemployment insurance, the Guarantee Fund for Length of Service, the minimum wage, the wage floor, the irreducibility of wages, the guarantee of the minimum wage, the 13th salary, the night bonus, the prohibition of willful withholding of wages, profit sharing, family wage, 44-hour workweek, reduction of working hours through collective agreements, paid weekly rest, overtime bonus, vacations, maternity and paternity leave, protection of women, children and adolescents, prior notice, occupational safety and medicine, payment of additional for arduous activity, unhealthy and/or dangerous, retirement, collective bargaining agreements, occupational accident insurance, the prohibition of wage differences, the protection of the physically disabled and the extension of some labor rights to domestic workers.

The protective principle is in article 7 of the Federal Constitution, which establishes the improvement of the social condition: "These are the rights of urban and rural workers, in addition to others aimed at improving their social condition" (BRASIL, 1988), and consolidated the understanding that Labor Law deserves state protection. This principle is

---

others. The Panel recognized the legitimacy of the Parquet to file the lawsuit, on the grounds that it is a homogeneous individual right. It is known that the active legitimacy of the Parquet, on the occasion of the filing of a public civil action, in the search for the defense of collective interests lato sensu, is based on the defense of social and individual interests that are inalienable, under the terms provided for in article 127 of the Federal Constitution. It should be noted that the Federal Supreme Court has already settled the understanding that homogeneous interests are a kind of collective interests and this SbDI-1 has already settled the understanding regarding the legitimacy of the Public Prosecutor's Office to file a public civil action for the defense of homogeneous individual interests. In this case, the holder of the right is perfectly identifiable and the object is divisible and fissile, characterized, however, by its common origin (as a result of the same fact), which gives it the character of a collective right lato sensu. Therefore, it seeks the reparation of the rights of several employees due to the company's conduct, which did not comply with its labor obligations, a situation, therefore, uniform for all its employees. It should be noted that the homogeneity that characterizes the right is not in the individual consequences on the assets of each worker, arising from the recognition of this right, but in the single act and collective effects by the employer of non-compliance with the legal rule and in the damage caused to the category of employees, as a whole, who, in this case, no longer have the opportunity to realize the payment of overtime resulting from the non-compliance with the working hours provided for in the Federal Constitution and in the CLT. Thus, once the common origin of the right is configured, in such a way as to legitimize the action of the Parquet, the fact that individualization is necessary to determine the amount due to each employee does not detract from it, since homogeneity concerns the right, and not its quantification, because homogeneous individual rights are not identical individual rights. needing only that they result from a common harmful fact. Thus, verifying that the right whose protection was postulated in this public civil action has a common origin, as it arises from an irregularity practiced by the employer to a group formed by its employees, it is necessary to conclude that it is a homogeneous individual right, under the terms of article 81, sole paragraph, item III, of the CDC. Therefore, in the case of a homogeneous individual right protection, the active legitimacy of the Labor Public Prosecutor's Office to file this public civil action is patent, based on article 83, item III, of Complementary Law No. 75/93, under the terms decided by the Panel, which is why the embargoed decision must be maintained. Motions known and dismissed. (TST - E: 5417620105020042, Rapporteur: Jose Roberto Freire Pimenta, Judgment Date: 02/04/2021, Subsection I Specialized in Individual Disputes, Publication Date: 02/12/2021)

Revista ARACÊ
ISSN: 2358-2472

expressed in three distinct forms: the principle or rule of the most beneficial condition, the principle or rule of the norm most favorable to the worker, and the principle or rule in dubio pro-worker. (SILVA; BERSANI, 2020).[8]

Leite also states that there is a principle that is directly interconnected, the principle of protection of the work environment, which is presented in the CRFB, in article 225 and article 200, VIII. (LEITE, 2019).

In article 7 of the CRFB, items XIII, XIV, XV, XVI and XVII can be extracted, which will deal with the principle of limitation of the duration of work. Item XXVII, principle of protection in the face of automation. Item XXII, principle of reduction of risks inherent to work. And, item XXVIII, which is divided into two, but both with the purpose of the principle of mandatory insurance against work accidents. The first part shows the principle of the employer's civil liability for moral and material damages suffered by the worker. The second part shows the principle of payment of additional remuneration for unhealthy, dangerous or painful activities, which is also found in item XXIII. (LEITE, 2019).

In a Constitutional context, the right to disconnect is treated as a fundamental right, as it reflects directly on the employee's private life and health, this is provided for in article 7, XIII and XV, of the CRFB:

> Article 7 - The rights of urban and rural workers, in addition to others aimed at improving their social condition, are:
> (...)

[8] APPEAL ON A POINT OF LAW. LAWS Nos. 13,015/2014 and 13,467/2017. FOOD ALLOWANCE. LEGAL NATURE. SUBSTANTIVE LAW. EMPLOYMENT CONTRACT IN FORCE AT THE TIME OF THE ENTRY INTO FORCE OF LAW NO. 13,467/17. INTERTEMPORAL LAW. POLITICAL TRANSCENDENCE RECOGNIZED. 1. The discussion of the case revolves around the application of the new wording given to paragraph 2 of article 457 of the CLT to employment contracts in force at the time of the entry into force of Law No. 13,467/2017. 2. It should be noted that the position of this Court is that the change in the legal nature of the food allowance, from salary to indemnity, does not reach employees who already habitually received the benefit, in view of the incorporation of this more beneficial condition into the worker's legal assets (Jurisprudential Guidance No. 413 of SBDI-1 of the TST). 3. It should be added that this Court, with regard to the basis for calculating the hazard pay for electricians, consolidated the understanding that no legislative change prevails for contracts in progress under the terms of item III of Precedent No. 191 of the TST. 3. Considering the institutional role of this Court in standardizing labor jurisprudence, as well as an in-depth analysis of the matter, in the light of intertemporal law, I understand that the amendment given to paragraph 2 of article 457 of the CLT by Law No. 13,467/2017 is inapplicable to employment contracts in progress at the time of its enactment, since the suppression or alteration of a right incorporated into the employee's legal assets, with a reduction in remuneration, it offends the perfect legal act, in accordance with the provisions of arts. 5, XXXVI, and 7, VI, of the Constitution of the Republic and 6 of the LINDB. Previous. 4. In the hypothesis, the Regional Court, by limiting the order to the payment of the food allowance to 11/10/2017, on the grounds that its legal nature became compensatory, in view of the changes given to paragraph 2 of article 457 of the CLT, by Law No. 13,467/2017, violated article 5, XXXVI, of the Constitution of the Republic. Appeal on a point of law that is known and granted. (TST - RR: 00110901120215150136, Rapporteur: Alberto Bastos Balazeiro, Judgment Date: 04/19/2023, 3rd Panel, Publication Date: 04/28/2023)

Revista ARACÊ
ISSN: 2358-2472

> XIII – normal working hours not exceeding eight hours per day and forty-four hours per week, with the possibility of offsetting hours and reducing working hours, by means of a collective bargaining agreement or convention;
> XV – Paid weekly rest, preferably on Sundays. (BRAZIL, 1988)

The Federal Constitution of 1988 also mentions that there must be no abuse or invasion of intimacy, mentioning the following: Article 5, X: "the intimacy, private life, honor and image of people are inviolable, ensuring the right to compensation for material or moral damage resulting from their violation;". The same CRFB/1988 provides as a worker's right (Art. 7, XXVII) the "protection against automation, in the form of the law." (BRAZIL, 1988).[9]

Article 7, XIII, of the CRFB, establishes that urban and rural workers are entitled to "working hours normally not exceeding eight hours per day and forty-four hours per week, with the possibility of compensating hours and reducing the working day, by means of a collective bargaining agreement or agreement". (BRAZIL, 1988).

It should also be noted that there are some items of the aforementioned article that are not, in general, fundamental rights of workers, but rather rules that govern the exercise of these rights, such as the prescription of rights, the differentiation between manual and technical work and workers in the face of the automation of companies.

And, finally, citing article 7, XVI, of the CRFB, the jurisprudence prior to the labor reform already provided for the payment of overtime to teleworkers. Therefore, remote work in the execution system through technological resources, the inspection of the working day becomes indisputable and if there is overtime, overtime needs to be paid.

NORMATIVE FORCE OF CONSTITUTIONAL PROVISIONS RELATING TO LABOR

Since the birth of the 1988 Constitution, the normative force of the constitutional provisions on labor relations has afflicted scholars in the area, to the extent that many of

[9] APPEAL ON A POINT OF LAW. COMPENSATION FOR MORAL DAMAGES. RESTRICTION OF BATHROOM USE. POLITICAL TRANSCENDENCE RECOGNIZED. 1. There is political transcendence when it is found in a preliminary examination that the respondent instance has disrespected the majority jurisprudence, predominant or prevailing in the TST. 2. According to the jurisprudence of this Court, the control exercised by the employer over the use of bathrooms by employees characterizes an unlawful act capable of giving rise to the payment of compensation for moral damages. Precedents of Subsection I Specialized in Individual Disputes - SBDI-I . 3. Pursuant to article 5, X, of the Federal Constitution, the intimacy, private life, honor and image of people are inviolable, and the right to compensation for material or moral damage resulting from their violation is ensured. 4. Therefore, if the elements that give rise to the conviction (damage, causal link and fault of the employer) are present, there is no way to reject the request made by the claimant. Appeal for review known and granted. (TST - RR: 00011132220185090021, Rapporteur: Jose Pedro De Camargo Rodrigues De Souza, Judgment Date: 04/26/2023, 6th Panel, Publication Date: 04/28/2023)

Revista ARACÊ
ISSN: 2358-2472

them depend on full interpretation so that their effectiveness, effectiveness and efficiency can be guaranteed.

The normative force of constitutional provisions has long preoccupied jurists around the world, and more specifically, on April 16, 1862, Ferdinand Lassalle (HESSE, 1991), gave a lecture on the essence of the Constitution in which he stated that "constitutional questions are not legal questions, but political questions". Basically, Lassalle narrated that the Constitution of a country is treated as a simple piece of paper, and must be attentive to reality, and cannot be opposed to it.

Contrary to this idea, Konrad Hesse gave an inaugural lecture at the University of Freiburg-FRG in 1959, invoking the normative force of the legal constitution. Hesse (HESSE, 1991) rightly stated that:

> "(...) The normative force of the Constitution does not reside only in the intelligent adaptation of a given reality. The juridical constitution itself succeeds in becoming an active force, which is based on the singular nature of the present (individuelle Beschaffenheit der Gegenwart). Although the constitution cannot, by itself, accomplish anything, it can impose tasks." (HESSE, 1991).

Therefore, Hesse opposed Lassalle's idea to the extent that the constitution should have full normative force, and it is not admissible to treat it as a simple piece of paper. Based on the authoritative opinions of Hesse and Lassalle, several jurists decided to propose a classification regarding the applicability of constitutional provisions. Paulo Rogério Marques de Carvalho (CARVALHO, 2020), clarifies that:

> "The dialectics on the legal configuration of labor relations, which begin in the context of the debates on the draft of the German Civil Code of 1900, find in Anton Menger von Wolfensgrun (1841-1906) and Otto Friedrich von Gierke (1841-1921) criticisms of a legal-contractual modulation of labor relations based on Roman law and on an approximation of the treatment of labor relations with the sale and lease of things, which resulted in the provision of a duty of protection for the subordinate being provided for in the aforementioned German code and the starting point for the different nuances on the nature of contractual labor relations developed by Heinz Pothof (1875-1945), Hugo Sinzheimer (1875-1945), Wolfgang Siebert (1905-1959), Arthur Nikish (1878-1968), Erich Molitor (1886-1963) and Phillip Lotmar (1850-1922), which integrate the theoretical bases of the regulation of labor phenomenology and the consolidation of its autonomy. It is important to emphasize that the emergence and development of these ideas in the Germanic doctrine were triggered by the Weimar Constitution, which required the standardization of labor regimes, recognized the State's duty of social protection to workers and protection of the collective agreement. Because of this rupture with the method, the labor lawyers were stigmatized as "sociologistic jurists" who created a methodological syncretism." (Monebhurrun, 2020)

The Brazilian Constitution gives fundamental rights prerogatives to have immediate applicability, as can be seen from paragraph 1 of article 5 of the 1988 Constitution, due to

Revista ARACÊ
ISSN: 2358-2472

which, it is presumed, they would have real effectiveness. The immediate applicability of fundamental rights - including the labor rights expressed in article 7 of the Constitution - is an intrinsic condition of fundamental rights, and it is certain that we would return to Lassalle's concept if we did not admit such immediate applicability. José Afonso da Silva, (Silva, 2022), one of the greatest names in national constitutionalism, classifies constitutional provisions by their effectiveness, which he conceptualizes as:[10]

> "(...) Efficacy and applicability of constitutional norms constitute related phenomena, aspects perhaps of the same phenomenon, seen from different perspectives: the one with potentiality; this as realizability, practicality. If the norm does not have all the requirements for its applicability to concrete cases, it lacks effectiveness, it does not have applicability. This is thus revealed as a possibility of application."

Based on the definition of effectiveness, it proposes that the norms be classified as full effectiveness (which have produced practical legal effects since their entry into force), contained effectiveness (that the legislator restricts their effectiveness to restrictive action by the public power) and limited effectiveness (which depend on a specific law to achieve their full effectiveness). In this sense, in the words of José Afonso da Silva, the normative force of the Constitution is limited only to the effectiveness of constitutional norms.[11] (Silva, 2022)

[10] Extradition and the need to observe the parameters of due process, the rule of law and respect for human rights. Constitution of Brazil, arts. 5, § 1, and 60, § 4. (...) Obligation of the STF to maintain and observe the parameters of due process, the rule of law and human rights. Information published in the media about the suspension of the appointment of ministers of the Supreme Court of Justice of Bolivia and possible interference by the Executive Branch in the Judiciary of that country. Need to ensure basic fundamental rights to the extradited person. Fundamental rights and guarantees must be immediately effective (cf. art. 5, § 1); the direct binding of state organs to these rights must oblige the State to observe them [Ext 986, rel. min. Eros Grau, j. 15-8-2007, P, DJ of 5-10-2007.] See Ext 1.428, rel. min. Gilmar Mendes, j. on 5-7-2019, 2nd T, Dje of 8-17-2020.

[11] TAX PRESCRIPTION AND DECAY. MATTERS RESERVED TO COMPLEMENTARY LAW. DISCIPLINE IN THE NATIONAL TAX CODE. TAX NATURE OF SOCIAL SECURITY CONTRIBUTIONS. UNCONSTITUTIONALITY OF ARTS. 45 AND 46 OF LAW 8.212/91 AND OF THE SOLE PARAGRAPH OF ART. 5 OF DECREE-LAW 1,569/77. EXTRAORDINARY APPEAL NOT GRANTED. MODULATION OF THE EFFECTS OF THE DECLARATION OF UNCONSTITUTIONALITY. I. TAX PRESCRIPTION AND DECAY. RESERVATION OF COMPLEMENTARY LAW. The rules relating to tax prescription and decay have the nature of general rules of tax law, whose discipline is reserved to complementary law, both under the previous Constitution (article 18, paragraph 1, of the 1967/69 Federal Constitution) and under the current Constitution (article 146, b, III, of the 1988 Federal Constitution). An interpretation that preserves the normative force of the Constitution, which provides for homogeneous discipline, at the national level, of the statute of limitations, decay, tax obligations and credits. Allowing different regulation on these topics, by the various entities of the federation, would harm the prohibition of unequal treatment between taxpayers in an equivalent situation and legal certainty. II. DISCIPLINE PROVIDED FOR IN THE NATIONAL TAX CODE. The National Tax Code (Law 5,172/1966), enacted as an ordinary law and received as a complementary law by the Constitutions of 1967/69 and 1988, regulates the statute of limitations and tax decay. III. TAX NATURE OF THE CONTRIBUTIONS. Contributions, including social security contributions, are tax in nature and are subject to the legal-tax regime provided for in the Constitution. Interpretation of article 149 of the 1988 Federal Constitution. Previous. IV. EXTRAORDINARY APPEAL NOT GRANTED. Unconstitutionality of arts. 45 and 46 of Law 8,212/91, for violation of article 146, III,

Revista ARACÊ
ISSN: 2358-2472

Although there are some different classifications, Brazilian constitutionalism has basically adopted the teachings of José Afonso da Silva. However, the guarantor theory adopted by some Brazilian jurists, but which has its exponent in the Spanish author José Luiz Serrano, deserves a better appreciation. Unlike Silva, Serrano does not summarize the normative force of constitutional provisions as effectiveness, but rather in different concepts such as effectiveness of sanction and compliance, efficiency and effectiveness.[12]

Simple are the concepts brought by Serrano (1999), in which the effectiveness of the sanction would be the effectiveness of the norm that brings a sanction in the face of its non-compliance, and the effectiveness of compliance by which a norm would only be effective if its addressees comply with it. However, the concepts brought by Serrano that best deserve appreciation are the concepts of effectiveness and efficiency.[13]

A norm is said to be effective if a norm achieves the ends for which it is proposed. Efficiency, on the other hand, goes beyond the concept of effectiveness, and would be linked to the cost-benefit ratio of a standard. That is, if the norm achieves the ends it proposes through a reasonable cost. (SERRANO, 1999).

---

b, of the 1988 Constitution, and of the sole paragraph of article 5 of Decree-Law 1,569/77, in view of paragraph 1 of article 18 of the 1967/69 Constitution. V. MODULATION OF THE EFFECTS OF THE DECISION. LEGAL CERTAINTY. Payments made within the deadlines provided for in arts. 45 and 46 of Law 8.212/91 and not challenged before the date of conclusion of this trial. (STF - RE: 556664 RS, Rapporteur: Justice GILMAR MENDES, Judgment Date: 06/12/2008, Full Court, Publication Date: GENERAL REPERCUSSION - MERITS)

[12] "The interpreter of the Constitution is committed to carrying out his interpretative task (i) in order to avoid contradictions (antinomies, antagonisms) between the constitutional norms (principle of the unity of the Constitution); (ii) giving priority to criteria or points of view that favor political and social integration and the strengthening of political unity (principle of the integrating effect); (iii) attributing to the constitutional norm the meaning that gives it the greatest effectiveness (principle of maximum effectiveness); (iv) coordinating and combining the conflicting legal assets in order to avoid the total sacrifice of some in relation to others (principle of practical agreement or harmonisation) and, finally, (v) giving precedence to the points of view that, taking into account the assumptions of the (normative) constitution, contribute to the optimal effectiveness of the Fundamental Law (principle of the normative force of the constitution)." (Clève, 2015)

[13] "To do so, it is necessary, first, to keep in mind that the constitutional text has normative force, radiating effectiveness and legislative command to all those who are under its jurisdiction. In this way, we have that item IV of article 8 of the Federal Constitution establishes that the general assembly of trade unions may set "the contribution that, in the case of a professional category, will be deducted from the payroll, to fund the confederation system of the respective union representation, regardless of the contribution provided for by law". See, then, that this constitutional provision contains two commands. By the first, the Constitution authorizes that trade unions, by resolution of their general assembly, may create a contribution to fund the confederation system. This contribution, as defined by the STF in its Precedent 666, can only be required from union members. Therefore, it is a revenue instituted by the interested party itself (union entity), through deliberation of its members. And, it should be said, for this purpose (adopting the prevailing understanding in the STF), this constitutional command was not even necessary, since any association can create a benefit to be paid by the member (monthly fee, extra fee, etc.), giving him the purpose he wishes (for his own use or for donation to a third party). And if the member does not agree with this provision, he is free to disaffiliate from the union entity, as well as any person in relation to the association of another nature to which he has joined. Either it pays the benefits provided for in the statutes or established by the members' assembly, or it withdraws from the entity or does not join it. And here the association and the individual act within the scope of their autonomy of will." (Meireles, 08/31/2018)

Revista ARACÊ
ISSN: 2358-2472

Through all the classifications proposed by the jurists exposed above, I have that the best is the one that can verify the normative force of a given constitutional norm, its effectiveness and efficiency, being certain that a norm can be efficient and effective, effective and inefficient, but never ineffective and efficient, since the concept of efficiency comes from the effectiveness of a norm.

Thus, for a constitutional rule, especially those related to labor provisions, to have real normative force, it is necessary that they be effective and efficient.

EFFECTIVENESS AND EFFICIENCY OF WORKERS' RIGHTS EXPRESSED IN THE CONSTITUTION

With regard to the normative force of the labor rights set forth above, it is first necessary to emphasize that the labor rights set forth in the 1988 Constitution are fundamental rights, in the sense that fundamental rights are considered "those rights of the human being recognized and affirmed in the sphere of the positive constitutional law of a given State". (SARLET, 2019)

For a consideration of ineffectiveness, see the excerpt below:

> In Brazil, the main components of the Democratic Rule of Law, born from the 1986-1988 constituent process, are still awaiting its implementation. Old paradigms of law cause deviations in the understanding of the meaning of the Constitution and the role of constitutional jurisdiction. Old theories about the Constitution and legislation still populate the imagination of jurists, based on the division between "constitutional jurisdiction" and "ordinary jurisdiction", between "constitutionality" and "legality", as if they were distinct worlds, metaphysically separable. Such splits, as will be demonstrated throughout the work, stem from what in hermeneutic phenomenology we call the "forgetting of ontological difference." (Streck, 2014, item 1 – constitution and constitutionalism)

Thus, the condition of labor rights (so-called social) as a fundamental right is undeniable, since they are in positive norms recognized by our Constitution. It should be noted that the importance of knowing whether or not a norm is considered a norm of fundamental right lies in at least two facts: that they have immediate applicability and are stony clauses.

It is concluded, therefore, that constitutional provisions of a labor nature already have a great normative force, since they must have immediate applicability and cannot be subject to constitutional amendments that tend to abolish them, as explained in article 60, paragraph 4, IV of the Federal Constitution of 1988.

Revista ARACÊ
ISSN: 2358-2472

Interesting, in fact, is the thought of Ingo Wolfgang Sarlet (PEDRA, 2006) on the subject:

> In fact, for Ingo Wolfgang Sarlet (2003b, p. 679), the stony clauses, which protect the set of constitutional goods essential to the preservation of the identity of the Constitution, necessarily include fundamental social rights, either by virtue of Article 60, §4, IV, of the CR, or in the condition of an implicit limit, since, for the purposes of recognizing their protection against possible amendment, especially by the Judiciary, the situations are virtually equivalent.

Just by the two issues raised above, the importance of this type of right can already be seen. However, for them to have full normative force, it is necessary that they enjoy effectiveness and efficiency. In this sense:

> "Hence, the effectiveness of constitutional norms requires a redimensioning of the role of the jurist and the Judiciary (especially constitutional justice) in this complex game of forces, to the extent that the following paradox arises: a Constitution rich in rights (individual, collective and social) and a legal-judicial practice that, repeatedly, (only) denies the application of such rights, especially in terms of benefit rights and freedom rights.
>
> Since the Brazilian Constitution, therefore, is a social, directing and binding Constitution – according to the concept that the (authentic) tradition has bequeathed to us – it is absolutely possible to affirm that its content is directed/directed to the rescue of the (unfulfilled) promises of modernity ("promises" understood as "rights engraved in democratically produced legal texts").
>
> Hence, law, as a legacy of modernity – not least because we have (formally) a democratic Constitution – must be seen, today, as a necessary field of struggle for the implementation of modern promises (equality, social justice, respect for fundamental rights, etc.). Thus, taking into account the relevant circumstance that law acquires the age of majority in this period of history, it should immediately be clear that one cannot confuse positive law with positivism, legal dogmatics with dogmatism, and neither can one fall into the error of opposing criticism (or critical discourse) to legal dogmatics." (Streck, 2014, item 1 – constitution and constitutionalism)

As already mentioned, a norm is said to be effective when it meets the ends it proposes, and are efficient when such ends are achieved at a reasonable cost. It is known that there are many labor rights expressed in the Constitution that enjoy effectiveness, others efficiency, but there are others that are ineffective and, consequently, inefficient, and others that are inefficient, but effective. Let us exemplify them on a case-by-case basis.[14]

[14] "The expression autonomy of law is not yet the object of a semantic agreement around which there are no controversies. Likewise, it is not the intention of the work to present a definitive theorization about the concept. By the autonomy of law we imagine the notion of Empire of Law or legal system. More precisely, a democratic environment in which legal discourse has autonomy and is functionally differentiated from politics, ethics, and morals, through the action of its institutions. In the autonomy of law, it is the normative dimension that gives validity to politics and not the other way around. Hence the notion of normative force of the Constitution." (Abboud, 2024)

Revista ARACÊ
ISSN: 2358-2472

WORK AND SEASONALITY. APPLICATION TO THE REALITY OF SEASONAL CROPS AND ENERGY MATRIX

THE UNIVERSE OF WORK AND NATIONAL AGRICULTURAL PRODUCTION

The theme of the thesis fits into the broad discussion of bioeconomy. The theme of the very short-term contract is presented as the legal discussion of the regulation of human labor in the bioeconomy scenario:[15]

> The bioeconomy has a broad concept and is defined by some authors as the fourth wave of technological revolution. The appropriate definition for this study is to relate the interaction between the bioeconomy and agriculture with the use of renewable resources, including economic growth driven by the development of biological resources and biotechnology for the production of sustainable products, employment and income. […] The bioeconomy should play an increasing role in society, as rapid population growth creates possibilities for new markets for biotechnology, both in agriculture and industry. Thus, it will be necessary to set up research centers in developing countries to solve the problems of the population, including the growing need for low-carbon energy, clean water and the high yield of agricultural crops that can withstand environmental changes such as drought and heat. (K. C. de Oliveira & Zanin, 2015, pp. 23–24)

Therefore, dignified and environmentally appropriate work, in the thesis proposal, can be regulated by very short-term contracts. These contracts may be inserted into the universe of agrarian work in Brazil. It should be noted that agrarian work in Brazil is, percentage-wise, the sector of activity/work with the highest informality. For an initial idea about the universe of work in Brazil, the 2022 IBGE data. Here are the data for people over 14 years old according to the type of occupation:

[15] The relationship of the energy matrix with the environment and climate justice: 'In this sense, the development of the ideas of Climate Justice and energy justice,1 seem to be more appropriate to the necessary responses to the severity of the climate crisis experienced today, as they introduce means of jurisdictional coercive protection to the realization of GHG emission goals and policies used by civil society, in addition to reparations, against Governments and against Transnational Corporations, which are the ones who profit the most from out-of-control or underreported GHG emissions responsible for the climate crisis. Today, the energy transition presents itself as a turning point (Capra, 2012) or inflection point in human history and for its success, energies cannot only be renewable (sustainable), they need above all to be low CO2 and GGE emission, with a low carbon footprint in their production chain, that is, in addition to being renewable, they need to be clean, with a low carbon footprint.' (Assis et al., 2024, p. 344)

Revista ARACÊ
ISSN: 2358-2472

Total	96 982 x 1000
Agricultural	**8 507**
Industry	12 327
Construction	7 253
Trade and repair	18 661
Public administration, education, health and service. Social	17 163
Transport, storage and mailing	5 227
Accommodation and food	5 287
Information, financial and other activities. Professionals	11 489
Domestic services	5 751
Other services	5 284

(IBGE, 2022)[16]

In addition to the data above, you can also see the characteristics of work in Brazil. It should be noted that informality is pronounced in the universe of work in Brazil and in Brazil of agricultural work. Along with construction, it is the sector with the highest informality of the workforce:[17]

		Formal	Informal
Total	96 982	59,1	40,9
Economic activity group (3)			
Agricultural	8 507	32,5	67,5
Industry	12 327	74,6	25,4
Construction	7 253	37,3	62,7
Trade and repair	18 661	63,3	36,7
Public administration, education, health and service. Social	17 163	76,2	23,8
Transport, storage and mailing	5 227	57,4	42,6
Accommodation and food	5 287	46,0	54,0
Information, financial and other activities. Professionals	11 489	75,7	24,3
Domestic services	5 751	25,4	74,6
Other services	5 284	40,7	59,3

(IBGE, 2022)

This reality of informality can be contrasted with the data on work in the world of green energy:

> The sugar-energy chain stands out in the context of agribusiness and the Brazilian economy, having an important contribution to the generation of income and jobs. According to information from Cepea1, 3.2% of the total number of persons employed in agribusiness in 2017 were in the activities of the sugar-energy chain (involved in the production of sugarcane, sugar and ethanol). The activity also has a high level of formalization within agribusiness, covering 8% of all jobs with a formal contract in the sector in the same year. As a comparison, while in the agricultural activity of

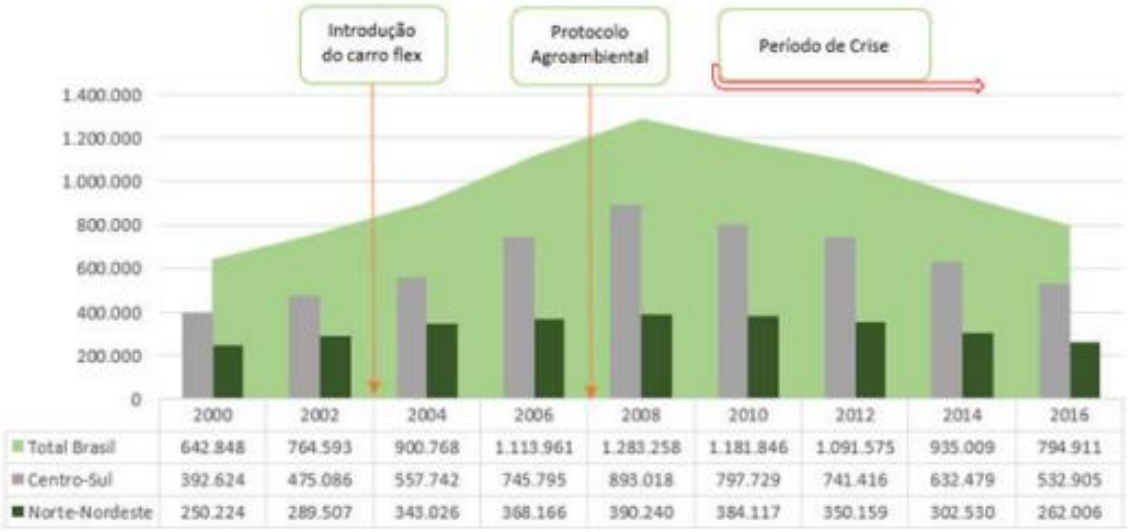
[16] For direct access: https://www.ibge.gov.br/estatisticas/sociais/trabalho/9221-sintese-de-indicadores-sociais.html

[17]

Revista ARACÊ
ISSN: 2358-2472

> sugarcane cultivation 80% of the employed persons are employed with a formal contract, for Brazilian agriculture in general this rate is only 17%. In the sugarcane agroindustry (sugar and ethanol mills), 95% of the employed are employed with a formal contract, while for the agroindustry in general this percentage is 58. In agribusiness as a whole, only 36% of the information compiled by Cepea based on microdata from PNAD-Continua and information from RAIS. occupied people have a formal contract. (Geraldo Sant'Ana de Camargo Barros, 2016 p. 03)

In the case of Brazil, and the production of biofuels, these workers are closely associated with the sugar-alcohol sector. Below the figure shows the design of production in this sector. The market had a period of installation and construction of plants followed, nowadays, by maintenance of structures and use of the capacity already installed:[18]

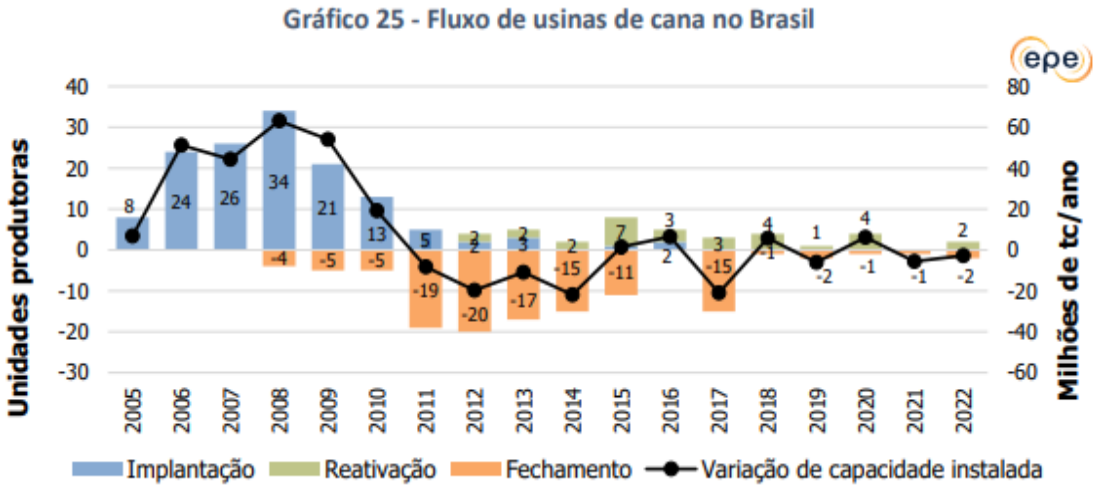


	2000	2002	2004	2006	2008	2010	2012	2014	2016
Total Brasil	642.848	764.593	900.768	1.113.961	1.283.258	1.181.846	1.091.575	935.009	794.911
Centro-Sul	392.624	475.086	557.742	745.795	893.018	797.729	741.416	632.479	532.905
Norte-Nordeste	250.224	289.507	343.026	368.166	390.240	384.117	350.159	302.530	262.006

Figura 1. Evolução do número de empregos formais no Brasil e regiões de 2000 a 2016, no setor sucroenergético.

[18] According to the ANP, in December 2022, 358 units were able to sell anhydrous and hydrous ethanol27, whose production capacities were 136 thousand m³/day and 251 thousand m³/day, respectively. In addition, there were 21 requests28 for the construction of new plants, which will add a capacity of 3.8 thousand m³/day of anhydrous and 6.1 thousand m³/day of hydrous. There were also 51 units with an indication of expansion of the production capacity of these biofuels. (EPE, 2022)

Revista ARACÊ
ISSN: 2358-2472



(EPE, 2022)

And the figure below shows the numbers of work in the crops that are a source of energy and biofuels, especially ethanol:

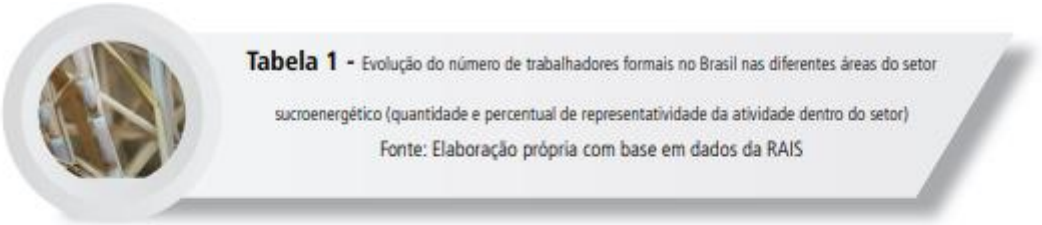


Tabela 1 - Evolução do número de trabalhadores formais no Brasil nas diferentes áreas do setor sucroenergético (quantidade e percentual de representatividade da atividade dentro do setor)
Fonte: Elaboração própria com base em dados da RAIS

	Indústria		Agrícola		Administrativo/outros	
	Quantidade	(%)	Quantidade	(%)	Quantidade	(%)
2000	64.454	10,0%	513.416	79,9%	64.978	10,1%
2004	88.807	9,9%	726.005	80,6%	85.956	9,5%
2008	132.923	10,4%	1.023.814	79,8%	126.521	9,9%
2012	146.125	13,4%	804.279	73,7%	141.171	12,9%
2016	126.172	15,9%	555.929	69,9%	112.810	14,2%

(Geraldo Sant'Ana de Camargo Barros, 2016 p. 06)

Another piece of information that deserves to be highlighted is that mechanization has impacted the sector. There is a reduction in the number of employees. There is also a change in the profile of employees in the sector:

> In the second period analyzed (between 2008 and 2016), which includes the advance of mechanization and also the moment of crisis in the sector, the total number of jobs in the sector in Brazil decreased by 38%. This reduction was intense, especially for employees with up to 5 years of schooling, but it was also observed for the 6 to 9 years category. Contrary to this trend, the number of formal jobs grew 19% for workers with between 10 and 13 years of schooling and a significant 39% for workers with more than 13 years of schooling. In the same period, with the exception of the

Revista ARACÊ
ISSN: 2358-2472

> category of employees over 13 years of age, for all the others there were average real wage gains, with variations in the range of 20 to 31%. (Geraldo Sant'Ana de Camargo Barros, 2016 p. 09)

RENEWABLE ENERGIES IN BRAZIL

Regarding renewable energies, Brazil stands out in the generation of solar energy, wind energy, using biomass, hydroelectric plants. A classification exploration is important to situate biomass energies and the relationship that these energies have with agricultural production.

A general point in common with all the energies and sources listed above is that they can be considered renewable energies, that is, they are energies that contrast with fossil fuels and the possibilities of neutralizing the effects of carbon release, or even methane, are quite palpable.

It should be clear that by using the possibilities of carbon neutralization, renewable energies are potentially capable of providing an 'environmentally friendly' energy matrix. However, such environmental capacity also depends on facing the socio-environmental impacts of these sources.

The discussion of this thesis, about a new bond, or new type of contract, seeks to meet the demand for socio-environmental balance, more focused on biomass. The benefits and even trade-offs of using renewable energy must be shared. There is talk of compensation because many of the renewable energy matrices do have an environmental impact.

It should be noted that agricultural production, for example, and as was sustained in the topics on environmental labor law, must be done with the consideration of the national environmental policy, with the water legislation, with the forest code and, as is the objective of this thesis, with respect for fundamental social rights. Renewable energies lose their power of affection for the environment if there is no respect for fair work and environmental standards.

Another element is the sustainability aspect. Although it may seem, at first glance, something unequivocal when talking about renewable energies in sustainability, see, as an example, the various situations of hydroelectric plants that do not have production conditions, today, or carry out production in an inconstant way, or even carry out production in such a way as to account for various environmental problems.

Revista ARACÊ
ISSN: 2358-2472

In the case of solar energy, territorial and social challenges must be taken into account. The installation, although there is a real possibility of production distributed by homes, industries and others, generation involves the occupation of large areas of land. This can lead to competition with animals, traditional communities, and ways of life. Large areas of solar energy generation impact the ecosystem. And solar panels have a lifespan of less than 1/2 century. There is also the limiter of partial generation, at certain times, dependent on insolation, or, with future development, storage outside insolation hours.

Wind energy also has territorial and ecosystem impacts that cannot be disregarded. Obedience to good fundamental planning is necessary for the sustainability and ambientness of this generation.

Hydroelectric plants also have environmental challenges. Today, they are still the source of almost 3/5 of the country's electricity. The first factor that becomes crucial in hydroelectric plants is good water management. Climate change has been considerably relevant in this generation.[19] The large dam projects are installed and were built before the new environmental legislation was taken. This means a great impact on the territory, on water resources, on communities and, paradoxically, in some cases, the generation of greenhouse gases (by the decomposition of flooded vegetation cover. River, lake and stream ecosystems are affected.

Generation from biomass includes the use of solid waste, sanitary sewage, crop residues, and the production itself derived from crops - as seen, ethanol, biodiesel, etc. In a different way from the previous ones, sustainable agricultural production can generate less competition for territories. The agricultural area that is now consolidated is sufficient for production. More than that, agrosilvopastoral production can be a factor in the recovery of degraded soils and the recovery of biodiversity.

Some policies must be implemented, such as the combination and perhaps even the limitation of monocultures. The use of national species such as macaúba, buriti, babassu has the potential to generate wealth and the preservation and sustainable exploitation of biomes. Another necessary point is that agricultural production focused on biomass, biofuels, is compatible with the use of water resources.

[19] In twenty years, from the beginning of the century, the country suffered 3 severe droughts with restrictions on hydroelectric power generation: 2001, 2015, 2021.

Revista ARACÊ
ISSN: 2358-2472

BIOFUELS: SPECIFICITIES AND SEASONAL CROPS

Initially, it is important to describe what can be understood by agricultural seasonality. Among agricultural crops, it is important to differentiate between those crops considered permanent or perennial and those considered temporary. Seasonality, regardless of whether the crop is permanent or temporary.

Below, the production data, in tons, by the main agricultural products – for the year 2024:

Rice	Corn (1st Crop)	Corn (2nd Crop)	Soy	Arabica coffee	Sugar cane
10.282.517	27.738.515	103.346.496	151.963.045	2.367.777	713.293.700

(IBGE, 2024)[20]

With the table above, it can be seen that the main products have the possibility of being used as an energy matrix, as biomass, with emphasis on sugarcane cultivation. Other crops also take advantage of energy production.

Permanent agricultural crops are those in which the planting is of plant species with a long vegetative cycle. Thus, successive harvests are extracted from the same plant, without the need for new planting at each harvest. That is, the harvest is made, but the plant continues to produce for a new future harvest. Harvest cycles in permanent crops can even be longer than 12 months. Coffee, apple, pear, grape, orange and other cultivars can be cited as an example.

Temporary agricultural crops, on the other hand, are those in which the vegetative cycle is short or medium. With each harvest, a new cycle begins after a new planting of the crop. Normally, the vegetative cycle is less than 12 months, and in most cases they last a few months. We can cite as an example of temporary crop the cultivation of sugarcane, corn, soybeans, sorghum, castor beans, among others. Brazil produces a variety of crops, but with special attention to temporary crops, including emphasis on the production of biofuels.

What can be observed, therefore, is that the temporary crop dominates agricultural production in Brazil. This comes from the productive yield of the temporary crop. In turn, the

[20] The world's largest corn producers: 1. USA: 389.69 million tons; 2. China: 288.84 million tons; 3. Brazil: 122 million tons; 4. European Union: 61.45 million tons; 5. Argentina: 50 million tons; 6. India: 37.5 million tons; 7. Ukraine: 32.5 million tons; 8. Mexico: 22.7 million tons; 9. Russia: 16.6 million tons; 10. Canada: 15.42 million tons. (AGROSUSTENTAR, 2024)

Revista ARACÊ
ISSN: 2358-2472

permanent crop has a higher added value, that is, normally, the ton of permanent crop production has a value several times higher than the ton of temporary crop production.

Seasonality, on the other hand, does not necessarily come from perenniality or non-culture. In fact, every agricultural culture presupposes seasonality in its most varied stages, from planting to harvesting.

Generically, the entire productive period of the crop is called harvest. Thus, the harvest period would be the period in which there are ideal conditions for cultivation, with the off-season being the idle period, that is, when it is not planted or even the plant does not require intense care. (Bento & Teles, 2013).

The harvest and off-season period is what is usually called the "agricultural year". The agricultural period varies from one crop to another and even depends on the water potential of the rural property, or even if there are irrigation systems that allow, for example, several plantings during the same year.

For example, in Brazil, in crops such as soybeans, corn and beans, the harvest varies from October to March. In coffee growing, the harvest period is from May to September. All this depends on the culture and location of agricultural production. The harvest and off-season scenario is what causes seasonality in agricultural production in the country.

According to Santos (BENTO & TELES, 2013), seasonality is caused by several reasons and has several consequences in the agricultural environment:

> - the variation in climatic patterns that occurs over the course of a year in any region of the world (more marked in temperate regions and less in tropical regions) means that most agricultural production is markedly seasonal, producing in each season of the year the products that best take advantage of the climatic characteristics that prevail in that period;
> - Advances in production technologies, in the fields of irrigation, drainage, greenhouses, the emergence of varieties tolerant or resistant to certain phenomena (translated into changes in the respective production functions), which increase the farmer's control over some of the climate and soil variables, have made it possible to reduce some of this seasonality. It is also this seasonality that makes the opportunity cost of many technical operations very high, which often conditions the option for certain investments.

There are several strategies of rural producers and the agroindustry itself to adapt to agricultural seasonality. Many of them involve investment in technology, mechanization and the qualification of the workforce. However, it is exactly the seasonality in the use of labor that makes the proposal of this thesis important. Thus, a better study of the seasonality of

Revista ARACÊ
ISSN: 2358-2472

agricultural crops required for the production of biofuels is necessary. The concept of biofuels can be summarized in the excerpt below from Viegas:

> In general, biofuels encompass fuels produced through biological processes, such as agriculture and anaerobic digestion, rather than produced from geological processes, such as those required for the formation of fossil fuels. This includes biodiesel (produced from organic oils and fats) and bioethanol (alcohol produced through microbial fermentation of sugars, followed by distillation and dehydration), which will be the main focus of this article. Two major advantages are presented as motivators for the use of biofuels: unlimited sources of renewable raw materials, unlike fossil fuels, which depend on existing geological reserves; In addition, for the production of these biofuels, the raw material mostly comes from agriculture and waste, making its carbon footprint neutral (the carbon dioxide released during its combustion is equal to the amount assimilated during photosynthesis). (2018, p. 02)

There are several agricultural crops that can be biofuel generators. In addition to the one usually used, several others have been developed for this purpose. The use of these crops must be seen within two universes, renewable energies and biofuels:[21]

> ... Renewable energy will not only address the constraints associated with current energy consumption patterns and provide the much-needed modernization of the energy sector, but will also promote sustainable development goals.
> In this sense, it is understood that the search for the rational and multifunctional use of natural resources is one of the main motivations for the approximation between the agribusiness, energy and chemical sectors, opening new possibilities for the development of renewable wealth and promoting the formation of networks among all the sectors involved (K. C. de Oliveira & Zanin, 2015, p. 25)

Regarding biofuels, it is possible to establish a differentiation between the different types. This differentiation also helps to understand the importance for environmental policy:

> Low-carbon transport fuels are one of the fastest alternatives to reduce the emissions intensity of the transport sector, before the fleet, infrastructure and technology change

[21] As stated initially, Pró-Alcool was created to stimulate ethanol production and mainly to reduce Brazil's dependence on oil. Today, the reasons for adopting ethanol go beyond this dependence. There is a worldwide search for conscious consumption, resource use reduction, and greenhouse gas emission reduction. These concerns lead to global events to discuss these issues. One of them was the COP 21 that occurred in December 2015. COP 21 (21st Conference of the Parties) is a Framework Convention on Climate Change, which seeks to understand and find solutions to climate change. The Conference of the Parties is the principal decision-making body of the United Nations Framework Convention on Climate Change (UNFCCC). During the event, 195 participating countries signed agreements (iNDC - Intended Nationally Determined Contribution), where each country committed themselves reducing greenhouse gases and setting clear targets for this reduction. In this regard, Brazil has also reached an agreement, in which it proposes to reduce greenhouse gas emissions, mainly by increasing the share of renewable energy and bioenergy in its energy matrix. The commitments made by Brazil at COP 21 to increase the share of renewable energy will imply an increase in the demand for sustainable electricity and biofuels. In this scenario, the sugar-energy sector is placed as an important pillar of this growth since it offers ethanol, which is the biofuel produced from sugarcane, and bioelectricity generated in the industrial units using by-products of sugar and ethanol production. The challenges of reducing dependence on oil use in the 1970s, coupled with the current challenges of sustainable production and clean energy, and the Brazilian commitment made at COP21, once again bring the focus to the sugarcane industry and, consequently, sugarcane growers of Brazil. (RAFAEL BORDONAL KALAKI, 2021, p. 179)

Revista ARACÊ
ISSN: 2358-2472

> more comprehensively. Ethanol, for example, is an immediately applicable solution and is a type of agroenergy that uses products
> derived from biomass produced in agricultural activities to generate transport, electricity and heat, depending on three main factors: availability of land, water, nutrients; plant suitable for climatic conditions; and a lot of solar energy, it's practically liquid sun. Like all biofuels, ethanol is produced from renewable sources, which in the case of Brazil, has been sugarcane, and emit fewer greenhouse gases than fossil fuels. It is estimated that the emissions of these gases when ethanol is used are approximately a quarter of those that would be if petroleum products were used6 7. They also generate fewer toxic gases that are residual from combustion, in terms of quantity and harm to health8. In addition, the mixture of ethanol with gasoline can replace the use of additives that are highly toxic, such as lead-tetraethyl and MTBE (methyl-terciobyl-ester), which cause serious lung and environmental problems, including acid rain and contamination of aquifers (Denny, 2020, p. 02)

The cultivation of biomass for biofuels is not just a choice between matrices. It means transformation and commitment to an environmental pact:

> For this reason, at the limit, the energy transition must be thought of as a societal transition, restructuring the forms of relationship between man and man and man with nature, that is, how humanity integrates and how it relates to each other and to nature, and fundamentally, to understand itself as part of nature in the great ecosystem that makes existence on this planet possible. Thus, there is a criticism of Cartesian science and its analytical and fragmentary view of society and the disconnection between areas of knowledge in the face of the necessary hyperspecialization developed by scientific understanding, which makes it impossible to see the general picture, the whole, which is lost in the hyperfragmentation of objects, being the systemic, holistic reading of the problem in the totality of its determinations, fundamental for an adequate response from a scientific point of view, from a technical point of view, or from a political point of view (Capra, 2012).
> And in this sense, the energy transition, carried out only as a transition of the energy matrix, from fossil energy to electricity, does not change the way we relate to nature and to each other, but rather maintains a predatory form of relationship with nature, with the maintenance of the same economic structure of relationship, and it is noteworthy that in this sense, this transition model will not be able to meet the GHG emissions targets, with the reductions in water and soil pollution levels, that is, with a real confrontation of climate change.
> In this way, thinking and reflecting on the energy transition is also a reflection on the relationship of the human in its singular context, but also in a framework of totality, because collective and individual actions must be guided by an understanding that either the problem is faced in its radical causes or humanity will be doomed to self-destruction. (Assis et al., 2024, p. 345)

The production of biofuels in Brazil has a good supply of biomass. Agricultural production, or even extractivism, has a good number of options for the production of green

Revista ARACÊ
ISSN: 2358-2472

fuels.[22] Below, a summary report of what is possible to use and produce taking biodiesel as an example:[23]

> According to Câmara (2006), there are many raw materials of potential use for biodiesel production in Brazil, which can be divided by classes of renewable sources: a) Vegetable oils: liquids at room temperature, such as soybean, cotton, peanut, babassu, canola, palm oil, sunflower, castor oil; b) Animal fats: pasty or solid at room temperature, such as beef tallow, fish oil, lard, mocotó oil; c) Residual oils and fats: raw materials related to the urban environment, such as residual oils originating from domestic and industrial kitchens (frying oil); sewage supernatant fat (scum); waste oils from industrial processing. Due to its vast territorial extension, Brazil has a great diversity of raw materials of plant origin for the production of biodiesel. However, the viability of each raw material will depend on its technical properties, its economic competitiveness and its socio-environmental benefits, including aspects such as: oil content; agricultural productivity. (Sallet & Alvim, 2011, p. 04)

Specifically, ethanol (for a long time commercially called ethyl alcohol) is an organic compound belonging to the chemical function of alcohol, which is colorless and highly flammable. Precisely because of such flammable power that it is widely used as an automotive fuel, and, because it is derived from vegetable sources, it is considered a biofuel and a renewable energy source. (Lima, 2024).[24]

Ethanol is a biofuel and has many advantages as a substitute for fossil fuels, such as gasoline. Ethanol emits less polluting and greenhouse gases compared to fuels from non-renewable sources. In Brazil, due to the high supply of sugarcane, the cost of generating

[22] As for biogas, this edition brings a more detailed analysis. Its installed capacity in distributed generation reached 105 MW, of which 22 MW was added in 2022, using agro-industrial, animal and urban waste as input. In addition, its share in the domestic energy supply reached 438 thousand toe (0.14%), with an increase of 18% p.a. in the last five years. With regard to biomethane, there is an increase in operation and construction registrations at the ANP, in addition to greater participation in RenovaBio. The initiatives at the federal level instituted in 2022 are registered, including biomethane in REIDI and instituting the Federal Strategy to Encourage the Sustainable Use of Biogas and Biomethane. (EPE, 2022)

[23] 'Pro-álcool was not the only attempt by the Brazilian government to develop renewable fuels, these efforts began in the 20s and were boosted during World War II due to the risk of interruption in oil imports. In 1975 the government created the Plan for the Production of Vegetable Oils for Energy Purposes which was transformed in 1983 into the National Program of Vegetable Oils for Energy Production, also known as Pro-oleo. This program had as its main objective the development of biodiesel from cotton, babassu, canola, sunflower, castor bean, fodder turnip among others, to mix it with petroleum diesel'. (Sallet & Alvim, 2011, p. 26)

[24] 'Another tool created to increase the competitiveness of renewables are the various laws requiring the blending of anhydrous ethanol in gasoline, which are currently present in 64 countries (see Annex IV) 25 that have adopted these policies both to reduce their emissions and also to protect the health of their population with better air quality. Brazil wins with whatever the blending mandate is and if any country starts to adopt or commit to increasing its blend. We can sell anhydrous ethanol directly, or we can sell, for example, corn if the country uses its grains to produce fuels. Therefore, renewables in Brazil, in addition to being an environmental agenda, also generate jobs and income in various agricultural activities. But for that you need laws, policies, standards and practices to ensure that production is sustainable'. (Denny, 2020, p. 04)

Revista ARACÊ
ISSN: 2358-2472

ethanol is considered relatively low compared to the steps involved in the production of other petroleum-derived fuels. (Lima, 2024)[25]

Despite common sense, today, the biofuel Ethanol is not only linked to corn or sugarcane, but to other crops that are not so traditional. This comes from technological development that seeks to generate ethanol by other methods. Basically, scholars have classified the generation of Ethanol by two generations, that is, First Generation Ethanol and Second Generation Ethanol. (Pacheco, 2011)[26] element. Below is an illustration of the production of ethanol from sugarcane and corn:[27]

[25] 'In addition to bringing benefits for being renewable energy, and generating economic development, ethanol can be used for carbon sequestration. A recent study 26 showed that using degraded land for sugarcane plantations increases soil quality and carbon absorption. Undoubtedly, this cannot be done in routed areas, only where and as the law allows, following the good practices that have already been used by most Brazilian producers: harvesting without burning, reduced soil preparation, rational management of sugarcane straw, good fertilization practices and use of organic residues (such as vinasse for fertigation)'. (Denny, 2020, p. 05)

(EPE, 2022)

[26] The emissions avoided by the use of first-generation ethanol from sugarcane and corn, biodiesel, and bioelectricity from sugarcane in 2022 were 52.8 MtCO2eq, 18.3 MtCO2eq, and 1.4 MtCO2eq, respectively, adding up to 71.1 MtCO2eq. (EPE, 2022)

[27] In general, the production process of ethanol from corn brings some differences from ethanol from sugarcane, because the molecule predominantly present in corn is starch, a long-chain polysaccharide. On the other hand, sugarcane is mostly made up of sucrose-type disaccharides. In this way, the ethanol in sugarcane is produced as a byproduct of fermentation, while that in corn needs to be hydrolyzed beforehand. Unlike the production process, the final product – ethanol – does not present any difference in either of the two processes, because it does not depend on the source, since the physicochemical properties of ethanol remain the same. (PROPEQ, 2021). Another passage: In 11 harvests, corn ethanol production in the Center-South jumped from 37 million liters to 6.27 billion liters. In the 23/24 cycle, grain biofuel accounted for 18.7% of the total ethanol volume against 17% in the 22/23 harvest. With a production focus on the states of Mato Grosso (72%), Mato Grosso do Sul (16%) and Goiás (11%), states that increase the competitiveness of ethanol where this scenario was previously unthinkable. Like sugarcane, the corn ethanol production process is part of a circular economic chain, where the entire potential of the grain is transformed into bioenergy and food. For the production of biofuel, only starch is used, so at the end of the industrial cycle, proteins and fibers are transformed into DDG (intended for animal nutrition) and oil. Encouraging the development of other rural activities, such as feedlot livestock and poultry breeding. Another link driven by corn ethanol is the production of biomass, such as eucalyptus forests, used to generate electricity consumed by the unit. In Brazil, the production of corn ethanol differs from other countries by the use of second crop corn. The grain is cultivated after the production, mainly, of soybeans. In this way, there is no competition between biofuels and food. Brazil is the third largest producer of corn in the world, with more than 150 million tons. (UNICA, 2024) (EPE, 2022)

Revista ARACÊ
ISSN: 2358-2472

Gráfico 7 - Produção brasileira de etanol de milho

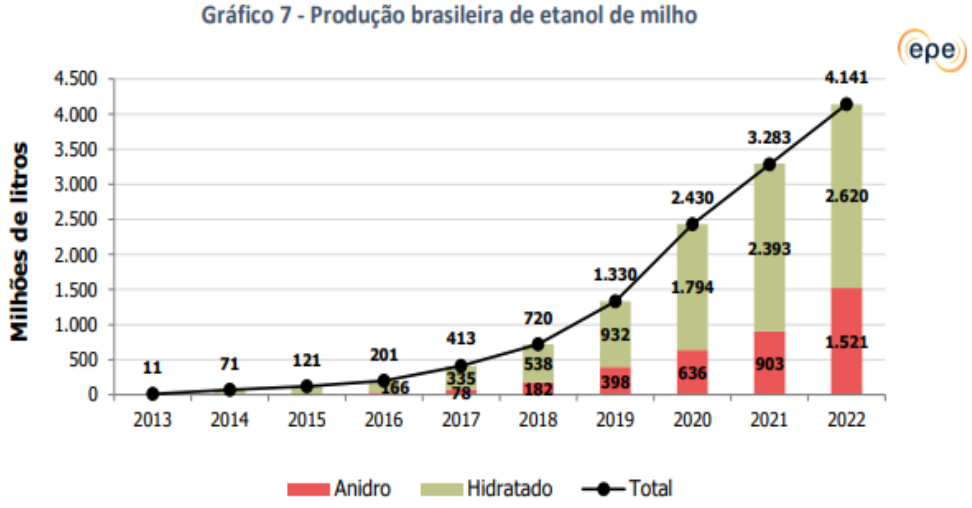
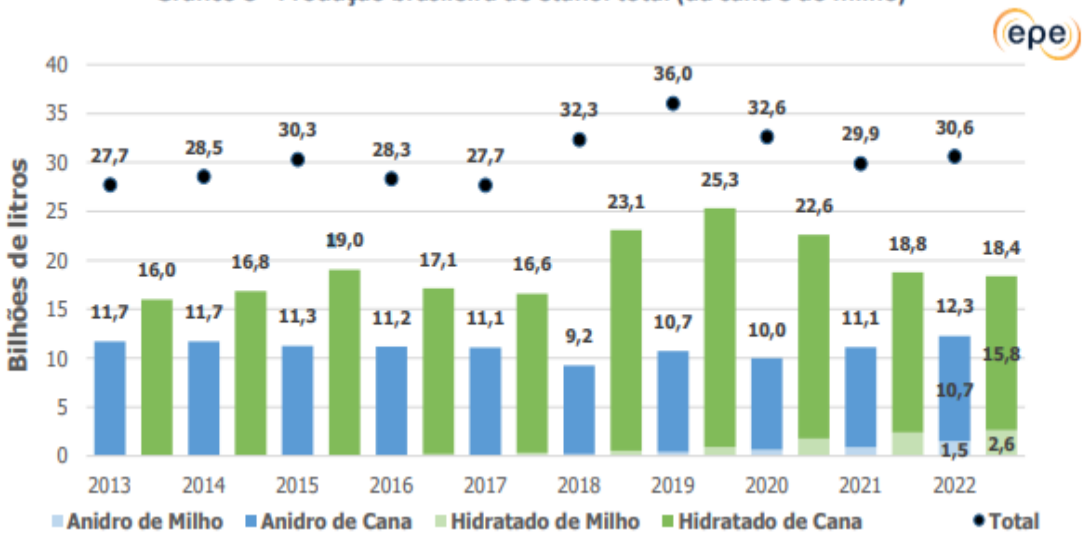


Gráfico 8 - Produção brasileira de etanol total (da cana e do milho)



(EPE, 2022)

First Generation Ethanol is an Ethanol produced from sucrose, a process that, despite being very well developed worldwide, still requires investments for better production efficiency. It is estimated that the production of ethanol from sugarcane requires less than 1% of Brazil's arable land, which could lead to the conclusion that it can easily be expanded without representing competition with food production. (Pacheco, 2011). About ethanol and sugarcane cultivation:

> The total of processed sugarcane reached 595 million tons in 2022, 2.4% higher than in 2021. Sugar production grew 3.4%, totaling 36.3 million tons (12.5% lower than the historical record of 2020) and its export was 28.3 million tons. Regarding sugarcane ethanol, 26.5 billion liters were produced, which added to the share of biofuel from corn of 4.1 billion liters (growth of 26%), reached 30.6 billion liters (2.5% higher than

Revista ARACÊ
ISSN: 2358-2472

> 2021). The allocation of the mix to ethanol decreased 1.3%, with anhydrous gaining share in the total. The country increased the positive balance in the international trade of ethanol (net export of 2.2 billion liters), raising export levels and reducing import levels. (EPE, 2022)

Thus, in First Generation Ethanol, only the sucrose obtained by grinding the agricultural product is used, discarding the milling residue for the generation of Ethanol. Such waste is usually reused for other purposes such as bioelectricity generation and animal nutrition.[28]

Second Generation Ethanol represents an alternative for the energy use of biomass, generating Ethanol from lignocellulose, present in waste of vegetable origin. Thus, Brazil would have competitive advantages in relation to other countries also in second-generation ethanol due to the large amount of raw material, especially in view of the possibility of using sugarcane bagasse and straw in these new processes. The estimate is that the use of bagasse and part of the straw and tips of sugarcane will increase the production of alcohol by 30 to 40%, for the same planted area. (Pacheco, 2011)[29]

In other words, in Second Generation Ethanol, the idea is to use sugars produced with biomass, which goes through a process called cellulose hydrolysis. In other words, by Second Generation Ethanol, the waste discarded for the generation of First Generation Ethanol would be used for the generation of biofuels. The great advantage would be the reduction of the environmental impact and the logistical gain (the product is already in the mill).

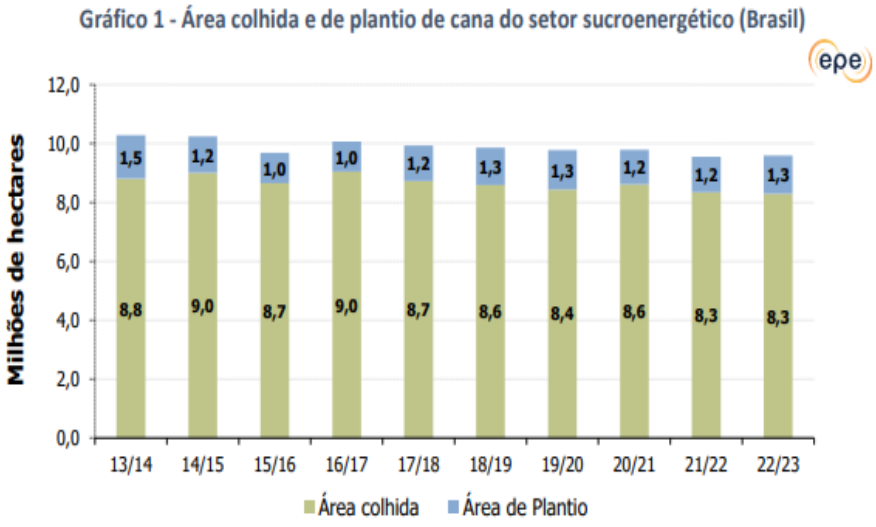
In other words, there is no chemical differentiation of the ethanol produced, but only and only in its form of production. In addition, the industry highlights the low carbon footprint

[28] The differences between anhydrous ethanol and hydrous ethanol: HYDROUS ETHANOL. This type of fuel takes its name because it contains up to 7.5% water in its composition. It is the biofuel sold at the fuel pumps. Compared to gasoline, hydrous ethanol emits up to 90% less CO2. In addition to the environmental benefits, running on ethanol improves power and keeps the engine cleaner and closer to the new throughout the life cycle. ANHYDROUS ETHANOL. Pure or absolute ethanol, anhydrous ethanol has only 0.7% water in its composition. Since 2015, Brazilian legislation has provided for a 27% blend in type C gasoline. Biofuel improves the octane rating of gasoline, reducing emissions of polluting gases – this level of blending reduces CO2 emissions by 15% per kilometer driven, reducing pollution and contributing to the fight against climate change. (UNICA, 2024)

[29] Second-generation ethanol, or cellulosic ethanol, is generated from the by-products of ethanol and sugar production (straw and bagasse) and enables an increase in biofuel production, without increasing the cultivated area. In the conventional process, only one third of the sucrose found in sugarcane, concentrated in the juice and molasses, is used. The rest is retained in bagasse and straw. Thus, with the development of new technologies, it has become possible to use this energy to produce ethanol. The biofuel resulting from this process is known as 2G or cellulosic ethanol. With the expansion of production, cellulosic ethanol has the potential to increase the volume of biofuel produced on the same amount of land by up to 50%. (PROPEQ, 2021)

Revista ARACÊ
ISSN: 2358-2472

of Ethanol in the Second Round. The "carbon footprint" would be the "measure that evaluates how much carbon (CO2) or other equivalent gas an equivalent emits into the atmosphere a production process." Thus, second-generation ethanol would have a 30% lower carbon footprint when compared to first-generation ethanol, and up to 80% lower when compared to fossil fuels, such as gasoline.[30]



Another point that deserves to be considered is that Second Generation Ethanol would use exactly the same planted area already used for the generation of First Generation Ethanol, since it uses the residue for its generation. In other words, there would be no increase in planted area, generating only an increase in production.

Elephant grass, brachiaria, panicuns and fast-growing trees can also be used as raw material for the generation of Second Generation Ethanol.

CONCLUSION

The whole scenario presented shows that the Brazilian biomass energy matrix is dependent on agricultural production. In turn, these crops have been impacted by automation and the use of labor in harvesting becomes more limited in time, for a short

[30] Among the new biofuels, HVO (Hydrotreated Vegetable Oil) and Sustainable Aviation Fuels (SAF) deserve to be highlighted, with unit projects being envisioned in the medium term. In the case of HVO, the characteristics that can influence the penetration of the Brazilian fuel market are presented. As for the SAF, the industrial and economic challenges are pointed out so that it can be competitive against aviation kerosene of fossil origin, in Brazil and in the world. Hydrogen is a future bet, with several projects being launched around the world, in a consortium of energy companies.' (EPE, 2022)

Revista ARACÊ
ISSN: 2358-2472

period of harvesting. Thus, the intensive use of labor in the field has decreased and is restricted to a few processes and in a short period of time.

The work for the production of this clean, green, sustainable energy matrix is one of the components of environmental correction. Only dignified, fair work, in suitable conditions can make a fuel environmentally adequate. The proposal of the very short-term contract has the intention of protecting work in dignified conditions linked to sustainability.

Revista ARACÊ
ISSN: 2358-2472

REFERENCES

1. Abboud, G. (2024). Parte I. Paradigma da Degeneração. In G. Abboud, Direito Constitucional Pós-Moderno (Ed. 2024). São Paulo, SP: Editora Revista dos Tribunais. Disponível em: https://www.jusbrasil.com.br/doutrina/direito-constitucional-pos-moderno-ed-2024/2485203886. Acesso em: 22 out. 2024.

2. Bastos, B., & Cioffi, L. (2019). A efetividade do direito fundamental de negociação coletiva de trabalho e o problema do critério da prevalência da negociação individual. Revista de Direito do Trabalho, 09. Disponível em: https://www.jusbrasil.com.br/doutrina/revista-de-direito-do-trabalho-09-2019/1188256676. Acesso em: 22 out. 2024.

3. Batista, H. (2021). Direito do trabalho aplicado: Teoria geral de direito do trabalho e do direito sindical. São Paulo, SP: Editora Revista dos Tribunais. Disponível em: https://www.jusbrasil.com.br/doutrina/direito-do-trabalho-aplicado-teoria-geral-de-direito-do-trabalho-e-do-direito-sindical/1394701247. Acesso em: 1 out. 2024.

4. Benatto, P. (2019). A internet nos contratos de trabalho e no teletrabalho. Revista de Direito do Trabalho, 08. Disponível em: https://www.jusbrasil.com.br/doutrina/revista-de-direito-do-trabalho-08-2019/1188255844. Acesso em: 22 out. 2024.

5. Brasil. (1988). Constituição da República Federativa do Brasil de 1988. Disponível em: http://www.planalto.gov.br/ccivil_03/constituicao/constituicaocompilado.htm. Acesso em: jul. 2021.

6. Cassar, V. B. (2020). Direito do trabalho: de acordo com a reforma trabalhista (17. ed.). Rio de Janeiro: Forense; São Paulo: Método.

7. Cassar, V. B. (2020). O sistema único de assistência social no combate ao trabalho escravo e ao tráfico de pessoas. Ministério da Cidadania. Brasília, DF. Disponível em: http://blog.mds.gov.br/redesuas/wp-content/uploads/2020/06/Combate_Trabalho_Escravo_01.06.pdf. Acesso em: fev. 2022.

8. Clève, C. (2015). Força normativa da Constituição. In C. Clève, Direito Constitucional: Ações Constitucionais. São Paulo, SP: Editora Revista dos Tribunais. Disponível em: https://www.jusbrasil.com.br/doutrina/direito-constitucional-acoes-constitucionais/1341523885. Acesso em: 22 out. 2024.

9. Frediani, Y. (2018). A subordinação estrutural nos contratos de trabalho: A experiência brasileira. Revista de Direito do Trabalho, 06. Disponível em: https://www.jusbrasil.com.br/doutrina/revista-de-direito-do-trabalho-06-2018/1188258216. Acesso em: 22 out. 2024.

10. Gradvohl, M. A. B. L. (2018). A norma implícita de orçamento impositivo na concretização de direitos fundamentais sociais. Revista Controle, 16(1). Disponível em: https://revistacontrole.tce.ce.gov.br/index.php/RCDA/article/view/387. Acesso em: set. 2021.

Revista ARACÊ
ISSN: 2358-2472

11. Luz, M. (2020). O contrato de trabalho entre ideologia e existencialidade. Revista de Direito do Trabalho, 08. Disponível em: https://www.jusbrasil.com.br/doutrina/revista-de-direito-do-trabalho-08-2020/1188256819. Acesso em: 22 out. 2024.

12. Meireles, E. (2018). Contribuição sindical e a força normativa da Constituição: Inconstitucionalidade da lei que cria uma situação de inconstitucionalidade por omissão superveniente. Revista de Direito do Trabalho, 08. Disponível em: https://www.jusbrasil.com.br/doutrina/revista-de-direito-do-trabalho-08-2018/1188258447. Acesso em: 22 out. 2024.

13. Melo, H. N. M. C. (2009). A redução de trabalhadores à condição análoga à de escravos como fator de descumprimento da função social da propriedade rural. Dissertação de mestrado, Universidade Federal do Pará, Belém.

14. Molina, A. A. (2015). Dano existencial por jornada de trabalho excessiva: Critérios objetivos (horizontais e verticais) de configuração. Revista de Direito do Trabalho, 164.

15. Nascimento, A. M., & Nascimento, S. M. (2014). Curso de direito do trabalho: História e teoria geral do direito do trabalho: Relações individuais e coletivas do trabalho (29. ed.). São Paulo: Saraiva.

16. Rizzardo, A. (2015). O trabalho rural e incidência do Estatuto - LXXIV – Estatuto do Trabalhador Rural. In A. Rizzardo, Curso de Direito Agrário. São Paulo, SP: Editora Revista dos Tribunais. Disponível em: https://www.jusbrasil.com.br/doutrina/curso-de-direito-agrario/1302633425. Acesso em: 22 out. 2024.

17. Rodrigues, D. (2021). Informalidade volta a subir; país tem 38 mi de trabalhadores sem vínculos. Poder 360. Disponível em: https://www.poder360.com.br/economia/informalidade-volta-a-subir-pais-tem-38-mi-de-trabalhadores-sem-vinculos/. Acesso em: dez. 2022.

18. Santana Junior, H. (2016). O consumo na estratégia de desenvolvimento sustentável brasileira. Dissertação de Mestrado, Universidade de Brasília, DF.

19. Sarlet, I. W. (2004). A eficácia dos direitos fundamentais (4. ed.). Porto Alegre: Livraria do Advogado.

20. Serrano, J. L. (1999). Validez y vigência. Madrid: Trotta.

21. Silva, J. A., & Bersani, H. (2020). A essência do direito do trabalho e a Lei nº 13.467/2017: Uma análise histórico-jurídica em resistência ao retrocesso social. Revista da Escola Judiciária do TRT4, 2(4), 149–172. Disponível em: https://rejtrt4.emnuvens.com.br/revistaejud4/article/view/95/69. Acesso em: jul. 2021.

22. Silva, J. A. (1998). Aplicabilidade das normas constitucionais (3. ed.). São Paulo: Malheiros.

23. Silva, V., Carlos, V., & Prata, G. (2019). Conceito de direito do trabalho. In V. Silva, V. Carlos, & G. Prata, Guia Prático de Direito do Trabalho (Ed. 2019). São Paulo, SP:

Revista ARACÊ
ISSN: 2358-2472

Editora 24. Revista dos Tribunais. Disponível em: https://www.jusbrasil.com.br/doutrina/guia-pratico-de-direito-do-trabalho-ed-2019/1672937236. Acesso em: 1 out. 2024.

25. Araújo, N. F. de, & Petri, M. C. (2017). Os princípios jurídicos no estado democrático de direito e o princípio trabalhista da proteção: Uma análise das funções informativa, normativa e interpretativa do princípio da proteção. Revista do Direito do Trabalho e Meio Ambiente do Trabalho, 2(2). Disponível em: https://doi.org/10.21902/2525-9857/2016.v2i2.1237.

26. Assis, N. dos S. de, Borges, A. W., & Squeff, T. de A. F. R. C. (2024). Biofuels and energy transition policy in Brazil: Contributions, limits and possibilities given the need for climate justice in the Capitalocene. Concilium, 24(2). Disponível em: https://doi.org/10.53660/clm-2792-24b42.

27. Borges, A. W., & Macedo, L. C. M. (2020). A concretização dos direitos sociais do trabalho no campo na vigência da Constituição de 1946: Análise da ação legisladora de concretização no período democrático de 1946 a 1964. Revista Brasileira de História do Direito, 6(1). Disponível em: https://doi.org/10.26668/indexlawjournals/2526-009x/2020.v6i1.6626.

28. Borges, A. W., Romeu, L. C., & Rocha, A. P. da. (2012). Análise da jurisprudência do STF sobre a forma de incorporação dos documentos de direito internacional. Revista de Direito Brasileira, 3(2). Disponível em: https://doi.org/10.5585/rdb.v3i2.30.

29. Carvalho, I. G. S., & Franco Rêgo, R. de C. (2013). Direito ambiental do trabalho e a saúde dos trabalhadores da pesca artesanal: Estudo de caso. Cadernos Ibero-Americanos de Direito Sanitário, 2(2). Disponível em: https://doi.org/10.17566/ciads.v2i2.79.

30. De Queiroz Barboza, E. M., & Salomão Leite, G. (2022). Entre o entusiasmo e o mal-estar constitucional. Revista Brasileira de Direitos Fundamentais & Justiça, 15(45). Disponível em: https://doi.org/10.30899/dfj.v15i45.1042.