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INFERENCES ON THE BRAZILIAN ENVIRONMENTAL CRIMES LAW IN COMPARISON WITH THE COLOMBIAN CRIMINAL CODE

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ABSTRACT

Environmental topics have not borders, involve the understanding and interpretation of environmental laws in different countries and cultures. The objective of this research was to analyze the interpretative similarities and differences of environmental criminal laws of Brazil and Colombia, through a comparative study of the Brazilian Law of Environmental Crimes and the Colombian Criminal Code. Scientific papers about environmental criminal law of the two countries were consulted on specialized sites, law was consulted on government sites; the main criterion was its updating and validity. Significant results were found in subjects like guilt, responsibility and participation of people in crimes, administrative responsibility, damage to other people's property as aggravating, environmental expertise, responsibility of the legal person, the depth to describe some environmental

features and common issues between the two laws. The research concluded that the Brazilian law is more specific in environmental issues, proving a more efficient coverage for the penalization of environmental crimes compared to the Colombian Criminal Code.

Keywords: Legislation; Environment; Brazil; Colombia.

INFERENCIAS SOBRE LA LEY BRASILERA DE DELITOS AMBIENTALES EN COMPARACIÓN CON EL CÓDIGO PENAL COLOMBIANO

RESUMEN

Los asuntos ambientales no tienen fronteras; implican la comprensión e interpretación de las normas ambientales en los diferentes países y culturas existentes. El objetivo de esta investigación fue analizar las convergencias y divergencias interpretativas de las normas penales ambientales de Brasil y Colombia, por medio de un estudio comparativo entre la Ley de Delitos Ambientales de Brasil y el Código Penal Colombiano. Los artículos científicos sobre derecho penal ambiental de los dos países fueron consultados en sitios de internet especializados; en las páginas oficiales gubernamentales se consultó la legislación, se usó como criterio transversal la actualización y vigencia de las mismas. Dentro de los resultados significativos se encontraron temas como la culpa, la autoría y el concurso de personas en los delitos, la responsabilidad administrativa, el daño a la propiedad ajena como agravante, la pericia ambiental, la responsabilidad de la persona jurídica, la profundidad al describir algunas características ambientales, además de temas comunes entre las dos normas. Se concluyó que la norma brasilera es más específica al abordar las cuestiones ambientales, proporcionando así una cobertura más eficiente en la penalización de delitos ambientales con relación al Código Penal Colombiano.

***Palabras- clave**: Legislación; Medio Ambiente; Brasil; Colombia.*

INTRODUCTION

The concern with the environment protection is not recent, which in turn can be divided into two aspects: the ecosystems protection ant the express legal protection in the rules of diverse countries. The increasing tragedies caused by the non-protection of the environment has been seen in different moments of the humanity history, involving different civilizations from the most diverse geographic spaces in the planet. Fortunately, in the last decades the concern with controlling, mitigating or stopping the environmental chaos has incentivized different actors in the world to be involved in establish different kinds of actions and measures to promote the protection of the ecosystems and the preservation of the natural resources.

In countries such as Germany, England, Japan, United States, and others, the environmental mobilization has been strengthened. A particular characteristic that these countries share is the fact of having suffered important and considerable impacts to their environment and to their natural resources starting from the Industrial Revolution. Thus it seems that this mobilization has been consolidated into a collective learning, a common cause, a global interest.

Currently, the actions for the environmental preservation have gone beyond the frontiers, including at the legal level, noting the trend to establish just one juridical body. This is a trend for the time being because it is still necessary to improve and strengthen the comparative law studies, particularly regarding the environmental issues that have not been widely developed yet.

In this context, Brazil and Colombia share characteristics that impact on their environmental vulnerability. Both are developing countries, much of their territory belongs to the tropical zone, both adopted a historic model of economic development based on the expansion of the agricultural frontier over the forest areas and the extraction of mineral resources. Their industrialization processes were followed by a high rate of urbanization, which resulted in the landscape change and environmental degradation. Therefore, the policies designed for the environmental preservation and protection in these tropical countries need a structure of rules that consider their social, environmental, political, cultural and economic particularities. In a first approach it was noted that the environment protection laws in both countries are abundant which undoubtedly would allow good analyses of this kind.

Therefore, the current study sought to analyze the particular case of the environmental crimes and how they are addressed by the two legal systems, arising the hypothesis of the existence of convergent and divergent points in the legal elements that would enable to establish deductions and conclusions in order to make more efficient the legislation in both countries.

On the other hand, this study intends to contribute with other investigations and studies about the environment and the natural resources protection in order to favor the environmental laws efficiency, as well as the criminalization of the environmental crimes. The purpose of this study was to collaborate with this worldwide effort to create an international juridical organ for environmental issues through the analysis of the Brazil and Colombia environmental criminal law. In turn, its specific aim was to identify spaces not included in the environmental criminal law through the comparative analysis of the Brazil Environmental Crimes Law and the Colombian Penal Code (*Ley de Crímenes Ambientales de Brasil y el Código Penal Colombiano* [CPC]) (*i.e.,* Law 9.605/1998 and Law 599 of 2000, respectively). It is worth to emphasize that in Colombia there is no specific law for the criminalization of the environmental crimes.

The Colombian Criminal Law (*Código Penal Colombiano*) deals with the environmental crimes in the Title XI *"crimes against the natural resources and the environment"* and in the Title XI-A, added the article 5 of the recent law 1774 of 2016 *"Through which the Civil Code, the Law 84 of 1989, the Criminal Code, the Code of Criminal Procedure are amended and other provisions."*

1 METHODOLOGY

For this investigation the hypothesis was considered of the existence of convergent and divergent points between the Brazil Environmental Crimes Law and the Colombian Criminal Code. From the comparative study by means of a survey (SPADOTTO, 2015) an experimental design was prepared based on the exploratory investigation (SEVERINO, 2007; GIL, 2010). As result, it was possible to verify the hypothesis in reference, also allowing the identification of several topics of environmental relevance not included in some of the two laws.

Both in the survey and in the exploratory phases the investigation was classified as qualitative within the current scientific criteria (MACONI;

LAKATOS, 2010; MICHEL, 2015). It was carried out in the period between 04/08/2015 and 05/09/2016. The literature review was carried out after the survey conclusion. The review included scientific articles, books and other publications from the period between 2004 and 2016. For the exploratory investigation the search engines used were as follows: *Google scholar*, *Redylac, Publindex, SciCielo* and *CAPES* journal portal, where the information about environmental criminal law was filtered at the global level, and later at regional and local level, that is, for Colombia and Brazil. The search was carried out in Spanish and Portuguese and included keywords as environmental law, environmental criminal law, environmental crimes, environmental penalty, Colombia Criminal Code, Brazil Act of Environmental Crimes and others. As cross-cutting criterion for the literature review, the current and valid normative material was consulted as well as the prioritization of recent investigations and/or specifically of the environmental law and environmental criminal law related to the two countries. Regarding the updated legal material, the official pages of both countries were consulted (*i.e.,* Senate of the Republic for Colombia and the Portal of legislation of the Federal Government of Brazil, for the latter).

The data collected from the previous investigation stages were organized in three ways, as follows: a) through their greater or lesser connection with the formulated hypothesis b) in chronological order and c) by subject. This organization purpose was to approach the data from three different angles, reducing the probability of stale reading, as a same subject or theme would be approached necessarily by means of three different lenses.

For each law topic analyzed according to the described methodology, we applied in advance the deductive logic, as means of comparison between the Colombian and Brazilian laws. Thus, deduction was the link between the topics selected from the legislation of these two countries, respectively. Once established the common points between the Colombian and the Brazilian legislations there was the need to look for inferences that could lead the analyzes to the final considerations. This process, in turn, was carried through the inductive logic (MEZZAROBA; MONTEIRO, 2014), (SPADOTTO, 2015). At the end, we intended to establish an order through the levels of relevance. A scale of importance was formulated according to the inverse reason of specificity, thus, the larger the coverage of an environmental theme, would this be relevant and serious

2 LITERATURE REVIEW

As detailed in the item Methodology, the literature review included scientific articles, books and other publications from the period between the years 2004 and 2016.

2.1 About the responsibility

In the countries where specific law is applied to the environmental criminal issues, as in Brazil, the civil liability of the agent that caused the damage to the environment is processed through the so called "objective civil liability ", that is, that one that does not require guilt to happen; this is an advance that goes against the conservatism, as it puts the repair on the environment as priority, and puts the agent´s guilt in a second plan. (SOUZA *et al.,* 2015).

According to Medeiros (2016) and Souza *et al.,* (2015), the rule to establish the liability for environmental damages is the application of the objective civil liability that facilitates the repair of the affected environment. Medeiros (2016) complements mentioning Antunes (2004), and says that in Brazil there is difficulty in criminalizing the environmental crimes, as there is still a conservative mentality in the legal area. On the other hand, to determine the liability of a legal person with no presence of guilt seems to be easily understood moving away from the analyses of the criminal law

In the view of Linhares & Oliveira (2015), in Brazil there is a need for different instruments of the classic criminal law that are more efficient to criminalize the legal person for the environmental damages, justifying this position alleging that the Criminal Code is designed for the natural person and this limits its application to the legal person.

In the Colombia case, the jurisprudence on environmental matters both in the civil and the administrative areas is prolific (RUIZ, 2005). However, and according to Ruiz (2005) it is very incipient in criminal matters. Regarding the objective liability, the *Código Penal Colombiano* in its article 12° says "(…) all forms of objective liability have been eradicated". With regards to the environmental sanctioning regulation (*i.e.,* administrative area) Garro & Arrovaye (2011) assert that this legislation establishes that it is known as indirect type.

Describing the Brazilian normative evolution, Ribeiro (2001)

indicates that this country environmental crimes law closed the circle that regulates the environmental pollution, because it integrates the criminal, administrative and civil spheres. In addition, he also says that the environmental administrative sanction is materialized by the presence of the police power, and the processes in the three spheres can be developed simultaneously.

On the other hand, Colombian criminal law in environmental matters depends normatively on the environmental administrative law. This means that in order to be efficient the administrative and civil control means must be exhausted in the first instance. This explains why the criminal law applies the penalties for the conduct that threatens the environment or when the damage already exists and in most cases is irreversible (CAÑÓN & ERASSO, 2004). Thus, with regards to the administrative sanction measures Díaz (2015) mentions that the economic reparations in addition to be insufficient in the serious situations, will not be able to repair or to correct not only the soil damages but also the damages caused to the national ecological environment.

Colombian criminal laws in environmental matters are blank (*i.e.,* in the criminal law, the blank rules are those laws that need complement, that is, those main criminal precepts that contain the penalties but do not fully record the specific elements of the factual situation, as the legislator refers to other legal provisions of the same or lower rank), as its essence according to Díaz (2015) is administrative and not criminal, because as the same suggests who receives the cases and direct them is the administrative entity.

This means that in the application of such type of rules the principle of favorability in administrative matters is not implemented because it is a criminal principle. This implies necessarily a greater dynamics of protection of the environmental criminal law in order to achieve effectiveness in the protection of the natural resources and the environment which are protected in the title XI and XI-A of the *Código Penal Colombiano*. According to Moreno (2015) the *Corte Constitucional Colombiana* in the sentence C-595 of 2010 represents the State *Ius puniendi* reflected in the administrative sanctioning power. The same author expresses that as in the criminal law, the contravention law, the correctional law, the right of a political adjunction (*i.e.,* impeachment) and the corrective law or disciplinary, the environmental law has its place as a discipline of the State in order to punish the actions that violate the mandates that protect the legal rights of

the environment and the natural resources. The criminal law is part of the State sanctioning power, which means that it has relevant level of action concerning the asserts legally protected as it can occur deprivation of liberty, while the sanctioning power of administrative kind seeks the administrative organization and functioning, as well as the guarantee of compliance with the state rules, excepting the custodial (MORENO, 2015).

Cañón & Erasso (2004) mention that although the *Código Penal Colombiano* makes evident the characteristics of the legal goods to be protected, there are several provisions in blank (as mentioned previously), which provides some factors in this aspect de *ultima ratio*. On the other hand, they say that the environmental protection is carried out mainly by means of administrative rules. Thus, and in context with Sanchez (2014), it is important and fundamental to deepen the legal, axiological and sociological analysis of the environmental crimes, as well as those of the related administrative and procedural rules.

According to Acevedo (2013), the environmental law, comparing with other lines of law, remained behind in the effective preparation of a legal methodological organ for the determination of the environmental liability and of the commission of infraction, which is the *raison d´être* of the sanctioning administrative act. Thus, it is evident the need for deepening in the structure of the environmental infractions and crimes in order to, on one hand, carry out fair processes, but, on the other hand, guarantee the protection of the collective and environmental rights

In the context with the above, it is essential that studies and research on environmental law, as well as administrative operators and the community in general have access to a serious theory for the determination of environmental responsibility, as well as the imposition of the corresponding sanctions, for which it is prudent to analyze the theories about the crime for applying to the environmental law without ignoring their autonomy, their particularities and of course, in case of Colombia, its administrative relevance (ACEVEDO, 2013).

The Article 225 of the Federal Constitution of Brazil of 1988 addressed the criminal responsibility of the legal person in environmental crimes in a superficial manner however, with the Law 9.605/1998, it was possible to make some progress on the subject, in spite of some criticism to the norm, because it is necessary to establish procedural details to be effective in determining the responsibility of the legal person for environmental crimes (QUEIROZ et al., 2013).

Among the elements necessary to fulfill the requirement quoted in advance are: procedures of interrogation, subpoena and subtraction of the penalty (OLIVEIRA; MENDES, 2014). However, the authors add that possible changes in the Brazilian Environmental Crimes Law can mean changes in other laws. Finally, they say that legal persons should not understood this way of penalty as the violation of the criminal law, but as a special protection for the preservation of the environment.

According to Perreira (2011) the Brazilian law and the principles of environmental law recommend the determination of the liability of the legal persons when these persons have caused damages to the environment or to the natural resources. The author remembers based on the specialized doctrine, that these are the persons that most commit this kind of crimes and therefore they should be duly punished.

As for Colombia, according to Ruiz (2005) the *Código Penal Colombiano* in the mentioned Título XI "the crimes against the environment and the natural resources", guilty is admitted and the criminal responsibility of legal persons is excluded. The criminal responsibility of the legal persons with the possibility of being judged should be extensively revised so that there is coherence and articulation with the current procedural rules It is important to remember that in the countries where there is the law tradition of the Anglo-Saxon *Common Law* it is admitted that legal persons can be active and passive subjects related to the criminal responsibility. On the contrary, in the countries where there is the Latin tradition of the *Civil Law,* in which Colombia is included, it is maintained the Roman law principle *societas delinquere non potest,* society cannot commit crimes (RUIZ, 2005).

According to Díaz (2015) the Colombian punitive law developed mainly in favor of an individualist conception of the criminal responsibility, as well as of the capacity of action, of guilty and of suffering the penalty, which are results only attributable to the natural person, logically leaving out the possibility to blame the legal persons. On the other hand, there are different authors that consider relevant the criminal responsibility of legal persons, moreover when dealing with the crimes against the environment and the natural resources as it is evident the connection between the development of the human activities at the entrepreneurial or industrial level and several actions with major negative impact on the ecosystems and the natural resources.

Now, if one contemplates the possible evolution of the criminal

law doctrine it is actually necessary the extension of the criminal responsibility to the legal persons, which according to Diaz (2015) also can incur in criminal actions, taking into account that there are several rules applicable to these persons capable of producing results required by the offense. The same author says that it is well known that the legal persons are the main causes of the environment degradation, of the destruction of the ecosystems, as well as for the pollution of water resources, the soil and the air; therefore, it makes sense for them to assume the consequences from these actions.

2.2 On expertise as an instrument in the investigation of the environmental damage

Botteon (2016) informs that the environmental expertise occupies important space in the verification of this kind of disputes. And he highlights the complexity of the events that cause damages to the environment so the environmental expertise would be an interesting procedure to clarify these cases. In turn, Silva (2015), analyzing the environmental crimes, says that the environmental expertise is a fundamental instrument for the accomplishment of the environmental justice. And he reports the Law 9.605/1998, of Brazil, that included environmental expertise as one of the most effective instruments for the punishment of the violators

Oliveira & Calegari (2015) associate the environmental expertise with the scientific expertise, since the expertise report is based in scientific evidence. In this sense, the authors indicate the application of the environmental expertise in complex crimes such as the pollution ones, highlighting this procedure efficiency in the Law 9.605/1998.

2.3 On the specificities of the environmental law

With regard to Brazil, Ribeiro & Silva (2014) point out the need for the Environmental Crimes Law to approach technical issues, that is, the technical environmental matters can be part of the environmental law so as to form a normative body more harmonic, considering the relevance of this protection for the society.

However, when analyzing the pollution issues related to the punishment of its agents Marques (2015) mentions the Law 9.605/1998 and affirms that there are still doubts concerning the noise pollution

criminalization. However, in case of electromagnetic and light pollution he reminds that it is possible the crime configuration, but considers that still there are no enough studies to prove their damages to the environment.

In turn, Prado (2015) highlights that the need for the environmental criminal law protection is still discussed in the criminal law doctrine, however, he indicates that there is a trend to pacify the incrimination in case of environmental pollution. This author refers the *Código Penal de Holanda,* the Dutch Criminal Code, saying that it has received several criticisms when dealing with the criminalization of environmental crimes, particularly related to the pollution crimes present in the code and concludes stating that it is an exaggeration of the criminalization limiting elements, and that this can hinder the application of the criminal norm thus jeopardizing the legal protection.

Although not mentioning explicitly the introduction of animal species in Brazil, Brasil, Maciel & Marques Júnior (2015) consider the relevance of the biodiversity loss in *bioparitary* matters, either carrying species outside the country, or introducing them with no authorization, the damages to the environment can be similar. The authors argue that there is a State inertia regarding the criminalization of the *bioparitary* matters, in detriment of the Brazilian biodiversity, which is corroborated by Rangel *et al*. (2012).

According to Zenni (2016), practical and legal actions from the Government are necessary in order to reduce the introduction of species in Brazil. However, he emphasizes that scientific publications of legal norms have increased significantly which somehow help to control the biological invasions.

On the other hand, according to Leal (2015), the legal protection against water pollution in the Brazilian Criminal Law (*Código Penal Brasileiro*) with relation to the Environmental Crimes Act highlights the public health, as in this sense, states that the penalty for water pollution is more severe in the Code, because the Environmental Crimes Act deals with this matter in a more general way, such as any other kind of pollution.

With regards to the *Código Penal Colombiano*, Rodas (2015) manifests that the *"*condensation*"* of the penalty types against the environment together with the poor written description of these, result in the omission of some criminal situations applicable to this crime, where are found: situations of punitive attenuation or aggravation, other alternative sanctions and measures of ecological damage, and others. The author

proves the non-explicitness of the damages on the goods caused by the crimes against the environment and the natural resources.

Regarding to these and other actions that could affect the environment and the natural resources, Ruiz (2005) says that they should have included in the *Código Penal Colombiano* those related to the cultural heritage, to the management of toxic waste, to the fauna and flora in a more detailed way, and once, reinforcing the suggestions from authors already mentioned, to promote the criminalization and the determination of the responsibility of the legal persons.

Among the crimes typified in the *Código Penal Colombiano* related to environmental matters, the article 332 that mentions the environmental pollution is the most complete and comprehensive as it includes regulations and characteristics that prevent behavior that is not considered explicitly in other criminal types (RUIZ, 2005). The same author recommends that, according to suggestions given by law experts, the environmental infractions should be typified as more than mere danger to prevent as result to avoiding their impunity, and ends by citing statement by Antonio José Cansino, member of the Code drafting commission:

> (…) the legal controversy is raised regarding the typical behavior, to know if there is a type of mere danger or result, as when the legislator uses the term "the one that contaminates" remains the doubt if it is necessary or not, for the improvement of the illicit, that the harmful effects of pollution occur.

In Colombia, as Cadavid shows (2008), the legal good of the environment is a complex set of subsystems that integrate "the material object of impact" and which by means of its own orientation explicit the disturbance of the legal good itself. Likewise, the actor says that in the *Código Penal Colombiano* it is not possible to determine if the penalties of the environmental crimes are or not conditioned to the generation of risks to fundamental goods such as life and health.

According to Sánchez (2014), with regards to the article 338 the *Código Penal Colombiano* reflects the ecocentric posture where the protection to the environment and the natural resources is explicit by itself. However, it includes their functionality for the development of human life and ends suggesting that despite this ecocentric orientation it is not necessary an anthropocentric posture.

However, in relation to the legal good of public health, Ruiz

(2012) mentions that it refers to the interest of the individuals and the society in general not to have their health threatened. The same author cites: "the general health of the country is the generic objective of the involvement in situations of risk and danger, and it is not required that the legal good must be damaged, but hardly endangered."

To be considered a collective legal good, health needs components to guarantee its adequate functioning. (*i.e.,* physical psychical, emotional, etc.), that is, to consider the lesivity of the legal good, one must consider the impact on any of the health components of the individuals (PABÓN, 2005). The legal good of the public health in the Colombian doctrine consists of the conditions that serve the population and the individuals to maintain physical and mental health. It is said that this legal right is collective because it affects or refers to a specific group of people (RUIZ, 2012).

2.4 On the common points between the norms

It is noted that in the Law of Environmental Crimes of Brazil, as well as in the Colombian Penal Code (i.e., Law 9605/1998 and Law 599 of 2000, respectively), some subjects analyzed are treated in a similar way. Some topics present in the mentioned legislations are as follows: the impact on the health as an aggravating factor on an environmental crime, the consideration of the offender's economic situation and education level, the typification of the introduction of an animal species without the due authorization, the typification of animal abuse, the destruction of cultural heritage, the production of toxic substances, the pollution, and others.

The Brazilian law gives details with more clarification, in the article 2nd, about the identification of the probable agents of environmental crimes, where in addition the auditor is explicitly included, which does not occur in the *Código Penal Colombiano* in relation with the same environmental criminal types. About agents´ concurrence in environmental crimes, both norms approach the matter objectively

3 RESULTS

The results were a large amount of data, which were included in a table, according to the methodology described. The results are summarized below for the discussion.

The Colombian Criminal Code (*Código Penal Boliviano*), Law 599/2000, as well as the Brazilian Environmental Crimes Law, Law 9.605/1998 treat clearly the need of guilt for the attribution of an environmental crime. However, in the Colombian law, in the article 12° one notes expressly denied the possibility of application of the objective responsibility, which, on the contrary, is allowed in the Brazilian law for the attribution of the legal person, when admits the responsibility in the criminal, administrative and civil spheres, at the same time. Despite the doctrinaire discussion about this matter, there is indication that the legal person responsibility in environmental crimes does not depend on the guilt.

With regards to the identification of the possible authors of the environmental crimes the Brazilian law gives details in the article 2nd, including the figure of the auditor, which is not approached in the Colombian law.

Concerning the concurrence of people, both laws approach the matter objectively (*i.e.,* people concurrence is defined as when two or more people participate jointly in committing a crime).

The administrative responsibility related to this issue is not treated in the Law 599/2000, it is approached by other norms (*i.e.,* the Environmental Sanctioning Regime, Law 1333 / 2009). On the contrary, the Law 9.605/1998, in the article 3rd provides the issue indicating that "the legal people shall be administratively, civilly and criminally liable under the provisions in this law (…)".

The Brazilian Environmental Criminal, on the contrary, the *Código Penal Colombiano* does not include this in the criminal aggravating circumstances mentioned in the Titles XI and XI-A.

The environmental expertise is treated clear and explicitly in the Brazilian norm, not mentioned in the Colombian ones. In the Law 9.605/1998 the environmental expertise is considered as a relevant instrument to determinate the responsibility for environmental crimes.

With regards to the legal person responsibility in environmental crimes, the Law 9.605/1998 in the article 21st leaves no doubts about the possibility of the attribution to this person. In turn, in the *Código Penal Colombiano*, although the article 29th treats the criminalization of the natural person linked to a legal person, there is no corresponding punishment for this figure.

The Brazilian law exposes the environment physical and

biological details for the identification of the environmental crimes, of the ecosystem recovery condition and of the punishment. An example about it: article 38th "To destroy and damage primary or secondary vegetation, in advanced state or on recovery, of the biome Mata Atlantica (…)". The Brazilian law even considers the primary or secondary vegetation for this punishment type, in no case the *Código Penal Colombiano* establishes any similar specifications related to the environment (*i.e.,* kind of biome, ecological relevance, to consider aggravating circumstance for a crime that it deals of a strategical ecosystem, recovery conditions, and others).

As mentioned before, regarding the criminalization of the environmental crimes and natural resources, common issues were identified both in the Environmental Crimes Law of Brazil and in the Colombian Criminal Code (*i.e.,* Law 9.605/1998 and Law 599/2000, respectively). These issues have similar legal treatment, which, which represents no detriment in terms of environmental protection.

4 DISCUSSION

Only in the period from 1990 to 2014 the urban population of Brazil and Colombia has grown from 74% to 85% and from 68% to 76%, with the tendency to achieve in 2050 up to 91% and 84%, respectively, which contributes significantly to the increasing incidence of environmental crimes in the two countries (UNITED NATIONS, 2014).

In Brazil there is the Law 9.605/98, or the Environmental Crimes Law, to deal with the crimes against the environment; in Colombia this issue is regulated by the *Código Penal Colombiano*, Law 599/2000 itself.

4.1 On the responsibility

The objective responsibility is independent from the guilt, therefore could not be applied in the criminal sphere. The rule or the shortest road for the duly recovery of the environmental damage is the objective responsibility according observed by Medeiros (2016), but as clarified by Linhares & Oliveira (2015), this responsibility modality does not fit the classic criminal law. In Colombia, according to Ruiz (2005) the application of criminal penalties proportional to the environmental crimes is still barely perceptible.

In turn, the Brazilian Environmental Crimes Law (*Ley de Delitos*

Ambientales Brasilera), from the jurisprudential point of view, indicates a way for the application of the objective responsibility when there is the occurrence of an environmental crime by a legal person. It is not a matter of applying the premise of the objective criminal responsibility to the natural or juridical person, but just that the person does not possess the. Before, this could not be related to the *Código Penal Colombiano* that in the article 12° eradicates all forms of objective liability. The legal person criminal liability consecrated in the Brazilian law in addition to being an advance in the control of environmental crimes complies with the provisions in the article 225, incise 3rd of the Brazil Federal Constitution.

As for Brazil, the Law 9.695/1998 specifies this kind of liability. In a recent study Ribeiro (2016) analyses the inclusion of the administrative objective liability in this law, emphasizing that it is exercised through the public administration "police power", and he goes on his report affirming that the objective liability can occur jointly with the civil and criminal spheres, always seeking the most adequate ways to repair the environmental damage.

With regard to Colombia, due to its criminal nature, the Law 599/2000 does not treat the administrative liability, which in the environmental case is approached through other norms, including the *Régimen Sancionatorio Ambiental* (*i.e.,* Ley 1333/2009). The Colombian normative logic differs from that applied in the Brazilian law, as there is no specific law for environmental crimes which integrates the administrative, civil and criminal spheres, as it happens in Brazil, then it seeks to exhaust the civil and administrative means before entering the criminal area.

An observation was made by Cañón & Erasso (2004), recently reinforced by Díaz (2015), who emphasized about the possible irreversibility of the environmental damages even if the civil and administrative liabilities were implemented efficiently. This is so, as it is reasonable that it is more effective the jointly or simultaneous application of the three liabilities: civil, administrative and criminal, in the case of crimes against the environment, as due to their complexity, structure and dynamics, the isolated sanctions end by being insufficient to compensate and/or to repair the consequences derived from these events. All this shows that the environmental criminal law in Colombia, incapable to articulate the three spheres, ends up by turning the criminal system into a set of blank norms.

Moreno (2015) mentions the State punitive capacity with regard to the administrative sphere, included in the environmental area,

linking the administrative issue to the *ius puniendi*, that is, the State has the prerogative to punish administratively. The same author makes up an interesting position for the punitive actions in the administrative sphere for the public entity which is the discretional action. It is through this action that the public officer takes the attitude within the legal limits; in this sense it is worth to emphasize that when the Law 9.605/1998 links the criminal liability to the administrative saying that both can act jointly, it also accepts the public officers1 "discretional power".

It agrees with the previously mentioned author, it is pertinent to emphasize that one should not confuse, in the finalistic aspect, the administrative with the criminal sphere, as the first is related with the State administration, while the second is related to the deprivation of the individual´s liberty through more complex processes, included with alternative penalties. So it is meritorious to mention Sanchez (2014) that agrees with the need to adopt in Colombia a more holistic vision about the issue of the environmental liability, a vision that could integrate the juridical point of view with the social axiological. In context, Acevedo (2013) recognizes the relevance of the environmental administrative responsibility, and suggests that it must be widely developed in the Colombian legal order, in order not to incur in the injustice and impunity, on the contrary, to turn more effective the environment and the natural resources protection.

In Brazil, the legal person responsibility for environmental crimes has already been developed in the civil and administrative spheres, however, there are discussions about the effectiveness in the criminal sense. The Law 9.605/1998 in the article 21st is clear when attributes the legal person liability, while the *Código Penal Colombiano* leaves a gap about this aspect.

In Brazil, the determination of the legal person liability in these crimes is in the 1988 Federal Constitution; however, this has not prevented the doctrinaire criticism. In relation to it, Oliveira & Mendes (2014) point out that for the correct application of the environmental criminal law it would be necessary the Law 9.605/1998 compliance with the typical criminal procedure requirements in the environment, that is, interrogation, subpoena and penalty subtraction and this does not occur. The same authors say that the advance in the environmental liability doctrine in the criminal sphere can be extended in the future to other environmental disciplines.

It is evident that there are doubts and gaps related to the

effectiveness of the Brazilian law application in the extension of the criminal liability for the legal person environmental crimes. As says Perreira Neto (2011), if the companies commit many crimes against the environment in Brazil, they should not remain apart from an effective punishment. Agreeing with this, Linhares & Oliveira (2015) allude to the Brazilian legislation and to the environmental law principles so as to make effective the separation between those and the classic criminal law, in order to be more effective in the criminalization of the legal person that commit crimes against the environment.

On the contrary, in Ruiz (2005) one sees that in the *Código Penal Colombiano* there is no possibility of this separation from the guilt to become effective. According to the author this difficulty in the application of the liability to a legal person would be linked to the Brazilian and Colombian legal systems, which are framed within the *Civil Law* system; if it was a *Common Law* system applied to the two countries the application of the legal person responsibility would be easier. Thus it is seen that there is a strong connection between the need for the *animus* in the determination of the criminal responsibility, and a company has no soul.

Díaz (2015) warns about the need for evolution in the criminal law with basis on the legal person´s capacity of action, in this sense, intending that the criminal liability individualistic conception is surpassed based on the doctrinaire position understanding that there is a modern corporative disposition or cooperation. It is an interesting position, as if a legal person can do actions in order to produce criminal type results likewise an individual (natural person), that person can also be punished like the latter.

4.2 On expertise as an instrument in the investigation of the environmental damage

In the practice of the environmental damage determination, the environmental expertise is fundamental, as being complex and dynamic the environment requires the preparation of technical information that justify given actions by the justice. The Brazilian environmental criminal law presents the expertise as a relevant element for the application of the environmental criminal sanctions, as it is seen in the article 19th, where setting fine and bail depend on it, in addition the same article indicates that the expertise in the civil context can be valid in the criminal sphere.

Studying the environmental crimes, Silva (2015) admitted that the Brazilian Environmental Crimes Law is effective in the crimes punishment, as it possesses as an instrument the possibility of realizing the expertise. In context, Oliveira & Calegari (2015) state that in the cases of pollution crimes the expertise is extremely important, thus, emphasizing the environment complexity previously mentioned, Ribeiro & Silva (2014) declare the need for a more technical approach when dealing with environmental crimes, included to consolidate a more harmonic normative body The environmental expertise plays a much relevant role in the follows up and punishment of the crimes against the environment (BOTTEON, 2016). This author admits this position as he considers that the environment is composed from many variables over which it is not possible to have good control, in this sense the Brazilian law has advanced in a very important way.

4.3 On the two norms specificities

As the purpose of the Brazil Law 9.605/1998 is dealing with the crimes against the environment, its structure seems to be better founded to perform this function than the Law 599/2000 (*i.e., Código Penal Colombiano*). The analysis of the specificities of the norms on the environmental issues with the aim to effectively protect this legal good, gives proof that a more detailed norm seems to mean greater effectiveness. For instance, while the Brazilian law goes to detail the kind of progress in the vegetation regeneration processes or to include the damage in the other people´s property as aggravating element in these criminal types, in the *Código Penal Colombiano* there are no similar details included.

The Brazil Environmental Crimes Law presents some aggravating elements for the criminal actions against the environment. This particular typification emerges from a law made to act on the environment complexity. Regarding to this, Ribeiro & Silva (2014) indicate the need to approach technical topics to face the difficulties for protecting the environment in its several aspects. Rodas (2005) corroborates this, affirming that in the *Código Penal Colombiano* it is still necessary to expressly include aggravating or mitigating measures, sanctions, restoration measures, and others. The doctrine both in Brazil and Colombia seems to converge in the need to include and deepen technical topics within the environment protective norms.

In Brazil, Ribeiro & Silva (2014), mentioned above, emphasize the harmony in the legal organ with bases on the technical details; Marques (2015), Prado (2015) allude to the pollution difficult typification when the norms do not contain technical details. In Colombia, some aspects that could be included for the environmental crimes typification could include damages in the cultural heritage, the inadequate final disposition of solid and liquid residuals, the exclusion of the exceptions in the typification of animal abuse, the damages to the strategic ecosystems, and others associated to fauna and flora, among others.

In context, Ruiz (2005) reminds that for the improvement of the definition of an environmental crime it may be necessary to distinguish a mere danger from an environmental crime, and cites as example, the environmental pollution as a critical factor in the definition of harmful conducts. In dealing with the biodiversity loss and biopiracy, Maciel & Marques Júnior (2015) and Zenni (2016) converge to the same point, that is, the State inertia in setting clear norms. The risk of loss of the biodiversity balance can bring incalculable and irreversible ecological damage. Thus, the danger is not only the exit of species from Brazil, but also the introduction of species that could break the ecological balance in several regions in the planet.

One of the necessary specifications for an effective environmental protection based on the criminalization of harmful actions against it, would be in the association of the water protection with the public health. Leal (2015) suggest that it would be relevant to study the severity with which is criminalized the water pollution with the effects of it on the public health.

Colombia, also is rich in doctrines that approach the need to include technical specifications in the title that protects the environment in the *Código Penal Colombiano*, as well as in other environmental protective norms. In Pabón (2005), we found the interesting understanding that the health is a collective good in environmental scenery. Cadavid (2008) agrees and adds that the environment is directly linked with the health and the life. From Ruiz (2012) it is identified that the legal good public health is associated to an understanding of a social good, therefore it could be said that it has a socio-environmental nature.

However, not all the Colombian doctrinaire position on the environment links it to the collective health. An ecocentric position reported by Sanchez (2014) when emphasizing that in the *Código Penal Colombiano* the legislator had this vision, as when referring to the environment did it in

the sense of self protection, but not for the services and their relevance for the human life. Although the contrary positions related to the ecocentric vision, it is correct that for the effective environment protection one cannot adopt the opposition to the anthropometric, maybe that inclination manages to highlight the environment relevance and complexity not only for our survival, but for all forms of life.

Ruiz (2012), for instance, approaches the legal good of public health detailing its susceptibility and complexity; within this logic it is reasonable to link this susceptibility of something inherent to life, with the environment susceptibility.

On the other hand, it can be said that the specificities belong to each norm and not necessarily because they are not explicitly equal to the other they do not involve a criminal behavior, although this gap of course will make difficult the punishment. The Law 9.605/1998, for instance, in the article 2nd, include the auditor as someone that could be liable for an environmental crime, which for instance is not specified in the *Código Penal Colombiano*, however, eventually this punishment norm could reach this professional.

4.4 On the common points between the two norms

The common points between the two norms probably are explained by the fact that the Brazil Environmental Criminal Law, Law 9.605/1998, had its origins in the Brazil Criminal Code. Therefore, the law between the Brazilian Laws and the Law 599/2000, or the Colombian Criminal Law (*Código Penal Colombiano*), is in their criminal nature. The concurrence of criminal agents, for instance, is a topic approached in the two norms.

Thus, it is interesting to note that the *Código Penal Colombiano* has changed over time, including in its articles environmental aspects, and even, recently, the criminalization of some kinds of animal abuse. Some pertinent issues that could be established would be: "How long can the Colombian Penal Code include environmental aspects without contradicting legal harmony?" and "What could be being lost in terms of environmental protection if the Colombian Environmental Code continues without including technical specificities?"

CONCLUSIONS

Different from the Brazilian Environmental Crimes Law, which since is sanction has sought to bring several specificities related to the environment, the *Código Penal Colombiano* has incorporated environmental issues over time. An improvement in the typification of animal abuse was included with the Title XI-A added by the article 5th of the recent law 1774 /2016 "By means of which the Civil Code, the Law 84 of 1989, the Penal Code, the Code of Criminal Procedure and other provisions are modified".

The slow incorporation of legal environmental aspects within the *Código Penal Colombiano* can mean harmony in the national legal system. On the contrary, the Brazilian law did it quickly, which could cause some conceptual losses, that is why it should be important to carry out more related studies.

The environment is a complex system and deserves to be treated accordingly, therefore, the environmental crimes definition requires the consideration of the environment technical aspects, as well as the pertinent administrative sanctions.

In this sense, there are advantages of the Law 9.605/1998 of Brazil compared with the *Código Penal Colombiano*, in the environment criminal protection, possibly related to the details that the environmental norm possesses. However, the possibility that the regulatory gaps mentioned above in relation to environmental crimes cannot be addressed cannot be ruled out (*i.e.*, in a way not proportional to the damage caused) by other legal processes distinct from the criminal sphere.

One possible reason for the legislator to have maintained the environmental crimes within the *Código Penal Colombiano* and not in as specific law whether for the need to optimize the legal system and avoid legal and administrative erosion. However, for the better protection of the environment and natural resources and more effective punishment of the conducts that could affect them, it is necessary the insertion of several harmful actions that have not been defined yet.

It is important that the Colombian environmental criminal legislation move towards the real articulation of the administrative, civil and criminal systems, since environmental effects by their very nature cannot be conceived without a holistic and interdisciplinary analysis, as well as corresponding sanctions and punishments.

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