

Environmental protection in the new Chinese Civil Code

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Abstract. China, in recent decades, has achieved high levels of economic and social development; however, it came with the cost of high environmental degradation, which has been putting the advancements in jeopardy. To change this perspective, the country has been investing its legislative capacity to create a well-developed environmental protection system. The Civil Code is the latest instrument of this tendency and was responsible for bringing essential innovations, including a new general principle and the expansion of civil liability rules for environmental damage. The Green Principle comes not only to align the new legislative instrument to the concept of ecological civilization (*shengtai wenming* 生态文明) but also in an attempt to guide the conduct of private individuals in the direction of conservation, turning sustainable development a possible objective. Parallel, the Code has reaffirmed and expanded the rules on civil liability, furnishing the state and private entities with tools to repair/compensate for the damage and punish the tortfeasors. This paper intends to present and analyze this new approach of China through a systematic analysis of the Code and the most recent doctrine.

Keywords. Green principle, sustainable development, environmental responsibility

1. Introduction

"Building an ecological civilization is vital to sustaining the Chinese nation's development (...) We need to cherish the environment as we cherish our own lives" this quote from President Xi Jinping perfectly represents the Chinese position on environmental and natural resources protection in the past years.

The "pollute first, control later" doctrine has made China's environmental condition deteriorate to a level where the living conditions of its citizens were placed in jeopardy. As claimed by ZHANG et al. when analyzing World Health Organisation data [1], in 2009, more than 2 million Chinese died due to diseases related to environmental risks. The effects are also seen in the economic field, such as the high desertification rates that threaten agricultural production capacity [2].

As a response, the Chinese government is stimulating and imposing changes on the private and public sectors to achieve more sustainable development capable of reducing harmful environmental effects. These efforts come through the integration of sustainable development into the objectives of strategic plans and the revision of the legislation on environmental protection.

Traditionally the protective rules were based on administrative and regulatory legislation; however, this practice has received another perspective with the new General part of the Chinese Civil Code. The modification is due to an innovative principle inserted in article 9, the so-called green principle, with the following redaction "When conducting a civil activity, a person of the civil law shall act in a manner that facilitates conservation of resources and protection of the ecological environment." [3].

The Code also plays an essential role in consolidating and expanding the tort law system for environmental damage. Not only are reaffirmed necessary instruments of liability present in the previous Civil liability law, but new mechanisms such as punitive damages and the duty to repair by the tortfeasor will play an important role in the conservation objective.

2. Methodology:

The main objective of this paper is to introduce and analyze the environmental provisions of the new Chinese Civil Code, especially the Green Principle and the rules on civil liability for environmental damage. Moreover, sustain that the innovations brought by the new legal instrument represented an important advancement in the enforcement of environmental protection.

A qualitative analysis of the Code and previous legislative instruments was applied to achieve that scope and furnish an actualized overview of the theme. Furthermore, a bibliographical revision was made on the leading juridical science platforms: Elsevier, HeinOnline, and GoogleScholar.

3. Chinese environmental problem:

Modern Chinese society has been undergoing a continuous process of change. From the position of dominance in Asia, through subordination to occidental empires, China arrived at a communist revolution, which transformed the entire economic and social system. Even the socialist system was subjected to significant changes with the gradual economic opening initiated by Deng Xiaoping (邓小平) in 1978, maintained and extended by successive presidents. The opening reforms spurred Chinese development and created a unique economic system, what the Chinese Constitution [4] has called Market Socialism with Chinese characteristics.

Other than the economic development brought by the economic reforms, considerable improvements in the population's living conditions have been recorded, especially with poverty reduction. According to the Chinese government [5] and the World Bank China [6], 100 million people have been lifted from poverty in the past ten years and 800 million since the communist revolution. As we can see, the developments are undeniable, but they have come at the cost of high levels of environmental degradation, with an increasing worsening of air, water, and soil conditions.

One of the significant problems in this area is the production of polluting gases, generated mainly by energy and industrial production [7]. Air pollution has grown exponentially with the growing energy and consumer goods demand. According to the World Bank [8], China's quantity of these gases has increased by 220% between 1992 and 2012. The result is that in 2019, according to the Organization for Economic Cooperation and Development (OCDE) [9], 994 people per million died from health problems related to air pollution, while the world average was 275 per million.

Other forms of environmental impact can also be detected. In the third National Communication on Climate Change [10], other situations of environmental imbalance to which the Chinese population has been subjected are reported. Extreme climatic events have increased in number and frequency, such as rain, tropical cyclones, shallows, windstorms, floods, and desertification [11].

Even though environmental protection became an institutional goal already in 1983, only in the 90s China started to give more importance to the ecological problem. The decade is characterized by the vital legislation aggregated into the legal system, which tried to provide a new perspective on development[12].

In 2007, the idea of ecological civilization (*shengtai wenming* 生态文明) emerged in the institutional discourse. The concept refers to the ideas of "spiritual civilization" (*jingshen wenming* 精神文明) and "material civilization" (*wuzhi wenming* 物质文明) used by Deng Xiaoping in the 1980s to reaffirm that economic development must also bring a social and political concern, establishing reforms that guarantee

the improvement in the living conditions of the population [13]. From this point, the Chinese state not only defines the need to adopt repressive conduct but strengthens the idea of environmental preservation as one of the foundations of society development.

Although the regulatory system has been strengthened, the central government finds it challenging to apply these legal norms effectively and balanced. The imbalance is based on local protectionism, in which the norm fails to be fully applied due to local economic interests, especially in those areas where a specific economic agent or economic activity plays an important role [14].

From this legal, economic, environmental, and social context, the Chinese legal system begins a new trend in its environmental law, such as the consolidation and expansion of environmental protection into private law. Although some movements in this direction have already been observed - such as chapter 8 of the Civil Liability law, which provided for liability for environmental pollution [15] - the trend is consolidated only with the publication of the General Part of the Civil Code Chinese

4. Chinese Civil Code and the Green Principle:

The Civil Code enacted in 2020 finally accomplished the intent of socialist China to codify its private/civil laws. Since 1998 the Standing Committee of the National People's Congress has been giving attention to the codifying problem and has been unifying and drafting the new civil code [16]. The enacting of the present Code was divided into two parts, following the German BGB system: first was released the General Part, approved by the State Council on May 15, 2017; and then the special part, approved by the State Council on May 28, 2020.

The General Part is responsible for presenting the guiding principles of private law and the conditions of existence, validity, and effectiveness of the juristic act. In the specific part, which is divided into seven books, are brought the rules for each branch of civil law: rights *in rem*, contracts, civil liability, succession, rights of personality, marriage, and family.

The green principle entered the list of general principles of the General Part, together with the principles of voluntariness, good faith, fairness, equity, public order, and morality. This list has an explicit function of harmonizing the legal system, working as a reference model for the acting of private subjects. Li Xin [17] divides the general principles into those who recognize private rights, such as equity, will, and fairness, and those who restrict the exercise of these private rights due to other legal assets, such as public order, morality, and now the green principle.

In the specific case of the green principle, what it pretends is to, in a certain way, recover Confucius's idea of harmony between men and nature [18]. There is an attempt to balance private interests, generally economical, with the personal and collective interests of a sustainable environment and access to natural resources. From now on, private actors must have

environmental conservation as a boundary of their conduct.

Another significant effect is the materialization of the concepts of sustainable development and ecological civilization as guiding principles of private law. These ideas reportedly represent an important element of China's internal and external development policy. Private legal transactions in an ecological society project must not only take into consideration traditional formal elements, such as good faith, fairness, and will; its forecasts must go in the same direction as the macro plan, that is, in the direction of conservation and ecological protection.

Moreover, as the green principle has sustainable development as a basis, it can be argued that one of the roles it will perform is to harmonize the interests of the present and future generations. Not only does it intend to protect the rights of the present subjects, but the existence of a future right to be enjoyed by the generations to come - a subject now indeterminate - the right to a future and a sustainable environment. And this future right is expressed in two forms: preservation of options; conservation of the environment. [19]

Besides those general effects that play a role in a more abstract field of policies, the green principle is responsible for two other functions in the Civil Code. Firstly it works as a parameter of interpretation and unification of the Code, in a sense that concrete rules must be interpreted and applied so that private actions do not harm the environment. Second, the green principle has directly influenced the writing of some articles, cases in which the necessity of environmental conservation is explicitly present in the concrete rule, for example, in article 509 [20].

Although the civil liability for environmental damage has not been an innovation of the Code or a direct impact of the green principle, the system's dispositions and complexity were incremented by the new Code. The inclusion of a general principle of environmental conservation helps in constructing a private duty of preservation and protection, furnishing a hermeneutical fundament for the expansion of liability. The result is the addition of new instruments of responsabilization, such as punitive damages and the duty of environmental compensation for the tortfeasor.

5. Environmental liability in the Chinese Civil Code:

After putting the general part of the Civil Code into action, China began to discuss the specific part of the Code. The State Council approved the latest draft on May 28, 2020, and it came into force on January 1, 2021. The new part is divided into seven books: real rights, contracts, civil liability, succession, personality rights, marriage, and family.

Civil liability is introduced in general terms in articles 120 e 1165. In the environmental field, the provision is contained in article 1229: "*A tortfeasor who has polluted the environment or harmed the ecological system and thus causes damage to others shall bear tort liability.*"

Initially, it is necessary to define which damages are capable of creating the duty to repair or compensate. According to chapter II of book VII, the damage can be characterized when the victim suffers an injury to his physical or mental integrity (articles 1179 and 1183), to one of his properties (article 1182), or to a legitimate right or interest (article 1182). Therefore, in the situation that the conduct of a private agent generates environmental or ecological damage, and this damage injures one of the following legal assets: physical integrity, mental integrity, property, right or legitimate interest of another person; we can speak in civil liability.

The second important element of article 1229 is the definition that liability for pollution or ecological damage does not depend on the verification of the will of the accused agent, configuring what the doctrine calls strict liability. The accused agent will be held accountable for causing the damage independent of the existence of a will. The responsibility is declared if it is possible to establish a causal *nexus* between the activity of the accused and the environmental damage that harm the right of another private agent.

Although causation occupies a vital role in the tort liability system, the Code does not provide a clear concept or indicate which theory of causation is adopted in Chinese law. YU [21] suggests that the juridical branch and the doctrine tend to adopt the necessity theory (必然因果关系说), in which the causation is "an inner, intrinsic and inevitable link (内在的、本质的、必然的联系) between the injurious act and damage, where the movement from the injurious act to damage indicates a trend that is inevitable and absolutely certain according to objective natural law."

Therefore, the central point of the relationship of responsibility is the definition of the causal link. And here, another relevant topic of the law arises, in compliance with article 1230, the burden of proof rests with the accused, characterizing what the doctrine has called reversal of the burden of proof, a situation in which the maxim "*auctori incumbit onus probandi*" is reversed. Thus it will be up to the accused to prove the non-existence of the link or any of the conditions of breaking the causal link: force majeure, a force of naturalness, concurrent fault, or third party fault.

Articles 1231 and 1233 introduce the idea of joint liability for environmental damage, following the general model of articles 178 and 1171. When more than one person causes the damage, the responsibility will be shared between them to the extent that each conduct contributed to the harmful result.

Other than the reparation of the damage, it is possible for the agent bearing the injured right to request the interruption of the harmful conduct in the terms of articles 179 and 1167. The measure can be requested as a preliminary injunction in a civil liability action or as the main request of a **cessation** action.

5.1 Punitive Damages

The first element that must be emphasized in article 1232 is the abandonment of the idea of strict liability. To be convicted of punitive damages, the accused must

have acted with a will. And being a requirement, it must be an object of proof.

The punitive damages created in the common law system foresee a modification in the classical idea of civil liability. Traditionally, the person declared responsible must repair and compensate for the damage he had caused, to the extent the victim has suffered, at the risk of generating unjustified enrichment. However, in the concept of punitive damages formulated in the doctrine and jurisprudence of the United States, compensation has not only this character of reparation and compensation but also a punitive character, based on the idea of deterring harmful conduct [22].

In this sense, punitive damages fulfill an essential role. They must prevent the recurrence of harmful conduct by increasing the *quantum* of the indemnity so that the economic balance moves towards protecting the rights of private agents and collective interests. In defense of the punitive damages for environmental liability, Kelley [23] sustained that its implementation in Chinese law could advance the environmental protection system since previous civil and penal laws were insufficient to deter polluting agents.

However, it is important to highlight that article 1232 establishes the necessity that the damages supported by the infringed person have a substantial level of gravity, which means that the punitive damages must be reserved for cases where the consequences of the conduct of the tortfeasor impose severe damages. Nevertheless, the law does not give a clear definition or level of gravity; the judge shall interpret the aspect.

Judges have a growing role in the system. That is because a judicial process is the only one capable of attributing punitive damages [24]. Its attribution highly depends on the interpretation made by the magistrate, once Article 1232 does not provide a list of situations in which it will be applied, just establish the two conditions to its application: the gravity of the damage and will. Therefore, not only is it incumbent on the judge to verify the need for punitive damages, as well as the attribution of the *quantum* of compensation, to be established through the weighting of damages and the principles of proportionality and reasonableness.

5.2 Reparation of the degraded environment

The other innovation concerns the possibility of environmental reparation, introduced in article 1234. Here we are not talking about the reparation/compensation of the victim's right or interest but the reparation of the environment as a common good, which is why this legal measure can only be requested by the public administration or certain private organizations.

The administration will determine that the pollutant must bear the duty to repair the environmental or ecological damage it has caused in cases where possible. This duty should be performed within a specified and reasonable time. If the private agent fails to do so, the public administration or authorized organizations will be able to assume responsibility, but the private agent will bear the project's cost.

This provision plays an essential role in the restoration of the environment; however, it brings a problem that, in some cases, is of complex resolution, which is the measuring of the extension of the environmental damage since some biological parameters and conditions can not be calculated. This problem can also be seen in the compensation evaluation; the authorities will need a long and extensive analysis to conclude that the ecological and environmental conditions were restored to the levels they were before the damaging conduct. In reality, the compensation will depend on the Environmental Protection Bureaus, since they are the organs with the expertise to promote the evaluation of those levels. And this could lead to the same enforcement problems present in the administrative system.

6. Conclusion

China has been a symbol of economic and social development for the past 20 years. Record-breaking economic growth has lifted the country from an agrarian economy to an industrial giant, spearheading the new technologi-

cal revolution. In parallel, expressive improvements have been achieved in the population's living conditions, such as the extinction of extreme poverty. However, another label has been attributed to the Chinese, the image of a disturbing country with little interest in the serious environmental problems it faces.

Implementing a sustainable development system in a country is of difficult realization, and in the Chinese context, it has not been any different. Therefore, China's government has been investing a lot of its legislative capacities to create norms that intend to guide society in the direction of ecological civilization. And the objective of this paper was to present some aspects of the new legislative instrument adopted in China, the Civil Code.

The country has recognized its position of environmental fragility so that from the 1990s, it began the structuring of an extensive environmental protection system, which has the civil Code as its last expression. Introduced by the idea of ecological civilization and sustainable development, the Code developed the green principle as one of the governing principles of private relations. And the result was the insertion of a general duty of conservation of the environment and natural resources.

But, as referred, due to its nature of general principles, the green principle does not have strong normative power; therefore, it plays a role in the integration and interpretation of the concrete rules of the Code. Other than that, the principle influenced the insertion of concrete rules of environmental protection, of which we focused on the ones about civil liability for environmental damage.

The Code extended the rules on civil liability, strengthening environmental control among private individuals and introducing state environmental control in the civil sphere. The general rules of liability have been reaffirmed, such as the general duty of reparation/compensation and the reversal of the burden of proof and the formation of joint liability. Standards that aim to facilitate the compensation/repair of the damage.

The punitive damages represented an important innovation in the civil liability system, as it represents a string instrument for deterring damaging conduct, especially for tortfeasors with great economic and political power. However, as article 1234 did not bring further explanations on the application of the punitive damages, limiting itself to present the conditions of conduct fault and consequences with gravity, its application depends strongly on the magistrate's interpretation.

Reparation of the environmental and ecological damages also represented an important innovation of the Code, as it developed a normally administrative activity in private law. The duty to repair brings the problem of evaluation on the extension of the damage and the reparation since they are objects of difficult measurement, which causes the necessity of intense participation of the regional environmental protection organs.

In a general way, in expanding the green content of the Civil Code, the legislator has attempted not only to frame it within the parameters given by the idea of ecological civilization but also to idealize a new approach to the environmental protection system. This article wanted to demonstrate that with the Code, the Chinese environmental control, repair, and compensation systems have been extended to combat the ineffectiveness found in some parts of the administrative system.

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