## Exploring the Application of Restorative Justice in Environmental Crime Governance: Insights from China and Canada

### Li Zhang

Lanzhou University School of Law, Lanzhou, 730000, China Email: lizhang@lzu.edu.cn

#### Keywords:

Environmental crime Restorative justice Ecological restoration Canada exprience

Abstract: At present, there is still a lack of clear legal provisions regarding the application of restorative justice in the field of environmental crimes in China. Existing guidelines and judicial interpretations suffer from narrow coverage and weak operability. However, with the increasing number of environmental crimes and the absence of specific legislative provisions, the judicial practice of restorative justice in China faces several challenges, such as insufficient legal basis, unclear nature, overly narrow scope of application, and inadequate conceptual awareness. Against this backdrop, this paper reviews the current theoretical and practical status of restorative justice in environmental crimes and conducts an in-depth analysis of the problems and their underlying causes. Drawing on Canada's practical experience, such as the Environmental Enforcement Act and restorative justice circle models, the paper proposes recommendations to improve the application of restorative justice in China. These include supplementing legal norms, clarifying the nature of application, expanding the scope of application, and reshaping concepts and awareness. By integrating innovative practices from Canada's environmental crime governance with China's judicial reforms, this study aims to provide theoretical support and practical guidance for addressing environmental crimes and ecological protection in China, thereby contributing to the rule of law in ecological civilization construction.

#### 1 An overview of research on the application of restorative justice to environmental crimes

#### 1.1 Theoretical research on the application of restorative justice in environmental crimes

The term "restorative justice" was first coined by the American scholar Barnett in his 1970 article entitled "Reparations: A New Paradigm in Criminal Justice". The concept of restorative justice is mainly proposed to solve the limitations of traditional criminal justice concepts in dealing with practical problems such as rising crime rates and shortage of judicial resources. American professor Albert Eyeglass believes that criminal justice is divided into three categories: retributive justice, individual justice, and restorativejustice1. At the international level, in April 2002, the United Nations Commission on Crime Prevention and Criminal Justice, in its Basic Principles on the Use of Restorative Justice Programmes in Criminal Matters, also clarified the concept of restorative justice and defined the restorative justice process more completely, namely:



"Restorative justice process means the victim, the offender and any other individual or community member affected by the crime, with the help of a mediator, Actively participate in the process of solving problems caused by crime. Specific to the field of environmental crimes, with the development of restorative justice theory and practice, Western countries have recognized the importance of ecological environment restoration in dealing with environmental crime cases. Preston Brian highlighted restorative justice as a useful complement to traditional criminal justice, particularly critical when dealing with environmental crime, and called for its wider and more frequent application in practice. Aiden Stark takes the same position, advocating for offenders to take responsibility for restoring the damaged environment as an alternative to or commutation of prison sentences or fines, and to include restorative justice in the criminal sanctions system for environmental crimes. With the deepening of research, scholars in various fields have also joined in the discussion of the application of restorative justice. Brunilda Pali, Miranda Forsyth, and Felicity Tepper in their book, The Palgrave Handbook of Environmental Restorative Justice/Sexplores new areas of environmental restorative justice, with authors from different disciplines discussing how the principles and practices of restorative justice can be used to address the threats and harms facing the environment today.

Compared with the West, the theoretical research on the application of restorative justice to environmental crimes in China has only been gradually enriched in the past decade. In terms of theory, most scholars focus on the definition and characteristics of restorative justice, whether restorative justice is applicable to China, whether it is applicable to crimes in the field of environmental resources, and the theoretical basis of restorative justice for environmental crimes.

The beginning of the modern practice of restorative justice as a model distinct from traditional punitive justice is often traced back to the Elmira Case in Ontario, Canada, in 1974. First introduced by youth probation officer Mark Yantzi, the case centered on reconciliation and reparation between perpetrator and victim through direct dialogue, a practice that became an important prototype for restorative justice theory (Zehr, 1990). Although similar notions of restoration were already present in indigenous cultures and practices, the Elmira case is symbolic of the modern legal framework and is widely regarded as a milestone in the practice of restorative justice. Since then, the theoretical underpinnings and practical applications of restorative justice have developed in depth. Scholars represented by John Braithwaite proposed the theory of "Reintegrative Shaming", which argues that by making the perpetrators take the responsibility of social shame and providing reintegration opportunities, the recidivism rate can be effectively reduced (Braithwaite, 1989). , 1989). In the field of environmental crime, Braithwaite emphasizes that restorative justice can be a flexible and efficient tool to combine ecological restoration with behavioral improvement (Braithwaite, 2007). Meanwhile, Daniel W. Van Ness has developed a framework theory of restorative justice that systematically explains the roles of victims, perpetrators and communities in the justice process. He emphasized that the core goal of restorative justice is to repair the damage caused by crime through negotiation and cooperation rather than relying solely on traditional penalties, and Van Ness also pointed out that this model is particularly applicable when dealing with complex environmental crimes because it can achieve a balance of multiple interests while promoting ecological restoration (Van Ness & Strong, 2014). Australian scholar Brian J. Preston further expands the application of restorative justice in his research by exploring the specific path of its implementation in the field of environmental law. He proposes that through the combination of community dialogue, consultation and ecological restoration, restorative justice can effectively bridge the deficiencies of the traditional justice system in ecological protection and improve the social acceptance of law enforcement (Preston, 2011).

As for whether restorative justice is applicable to China, scholar Peng Haiqing believes that restorative justice is conducive to dispute resolution and is also a supplement to traditional justice, and China also has the institutional basis to learn from the concept of restorative justice, which is feasible to be introduced. Scholars Wang Shuyi and Zhao Xiaojiao have a positive attitude towards whether restorative justice is applicable to crimes in the field of environmental resources, believing that the application of restorative justice to environmental criminal cases will help punish crimes and restore the environment at the same time, and that the concept of restorative justice is in line with the new requirements of the current trial of environmental criminal cases, and is a review and optimization of the problem of ineffective protection of victims' rights under the method of heavy punishment and light restoration, a correction of excessive separation and antagonism between criminal and civilian, and an institutional arrangement that conforms to the value of criminal law. In addition, scholar Li Xia also believes that ecological restorative justice can make up for the limitations and lag of traditional retributive

justice, and the use of restorative justice in environmental governance is conducive to timely environmental restoration, and proposes to improve the application of law and application procedures of restorative justice. As for the legitimacy of the application of the criminal law system in the field of ecological environment, scholar Yang Hongmei analyzed the development process of the theory of criminal justification, and believed that the introduction of ecological environment restoration in environmental criminal law is in line with the needs of the new theory of criminal justice to protect the interests of victims.

#### 1.2 Research on the application of restorative justice in the judicial practice of environmental crimes

According to the data, the world's first restorative justice case occurred in Canada in 1974 for victim-offender reconciliation proceedings. This system of reconciliation between accused and victims, which is seen as the origin of restorative justice, has been an inspiration for other countries to learn from and learn from its unexpectedly good judicial results. Since then, the restorative justice model, as an innovation and replacement for the traditional retributive punishment-based justice model, has gradually moved to the center of the stage of theory and judicial practice, shouldering the important task of filling the shortcomings of traditional judicial concepts.

In Canada, restorative justice is widely used in the judicial practice of environmental crime. Since the 1996 sentencing reforms, Canada has actively promoted the institutionalization of restorative justice in sentencing, emphasizing reparation to the victim and recognition of the harm caused to the victim as a sentencing objective. In environmental crime cases, Canadian prosecutors do not pursue a conviction and sentence. Instead, more than 80 per cent of cases are resolved through pre-charge consultations, and in the majority of cases the parties involved are not sentenced to actual penalties. This practice embodies the concept of restorative justice, prompts defendants to take the initiative to assume responsibility for environmental restoration, and reduces the problem of consuming large amounts of judicial resources without effective enforcement. However, Canada also faces challenges in moving forward with the institutionalization of restorative justice. Despite the formal recognition of reparation and acknowledgement of harm to victims as a purpose of sentencing, structural limitations in the sentencing process have prevented restorative justice tools from delivering substantial benefits to victims of crime. In addition, restorative sentencing reforms have not significantly reduced the high rate of incarceration of Aboriginal offenders. These experiences and challenges provide useful lessons for other countries in applying restorative justice in the judicial practice of environmental crime.

Regarding the application of restorative justice in the judicial practice of environmental crimes in China, Deng Xiaodong proposed in the article that environmental crimes should be deconstructed from the perspective of ecocentrism and ecological ethics. Li Zhiping believes that there are certain differences in concepts and principles between restorative justice and traditional justice, and the application of restorative measures in practice is sometimes arbitrary. There are problems such as large regional differences, inconsistent standards, and non-standard procedures. Based on the practice of restorative justice in China, Yin Lei believes that retributive punishment measures alone are not enough to achieve full protection of the ecological environment, and on this basis, he proposes that in combination with the characteristics of environmental crimes, it is necessary to add environmental restoration measures as a supplement while imposing the main punishment or supplementary punishment on the offenders. In view of the difficulties faced by the development and application of restorative justice to the governance of environmental crimes is facing practical difficulties in the characterization of the law, the application and enforcement of criminal penalties, and on this basis, he further put forward the idea of clarifying the legal basis for the application of restorative justice in China and improving and strengthening the application and enforcement of penalties for environmental crimes in the future.

#### 1.3 Research Review

At present, scholars have proposed many insightful views and suggestions on the application of restorative justice in environmental crimes, conducting research on environmental governance and restoration mechanisms from various levels and perspectives. These studies not only enrich the theoretical connotation but also provide practical guidance. However, it is evident that research on restorative justice in environmental crimes in China is still in its infancy, with several limitations



that warrant further exploration and improvement.

First, existing studies tend to focus on the conviction and sentencing of offenders, while comparatively less attention has been paid to ecological restoration. For instance, there is limited research on the effectiveness of specific ecological restoration measures, the coordination and integration of multiple restoration strategies, or the establishment of scientifically robust standards to evaluate restoration outcomes. By contrast, Canada's restorative justice practices provide valuable insights in this regard. In the case of R. v. Hydro-Québec (1997), the court emphasized environmental restoration as a key component of sentencing, highlighting the need for offenders to undertake specific measures to repair the ecological damage caused. Furthermore, Canada's environmental courts have encouraged offender participation in community-based restoration programs, offering a model for integrating ecological and social dimensions into judicial decisions.

Second, there is insufficient attention in China to supporting offenders' reintegration into society after fulfilling their restorative obligations. While minor offenders in China often face permanent criminal records, Canada has implemented mechanisms to mitigate such consequences, such as allowing first-time offenders participating in restorative justice programs to avoid a criminal record under certain conditions. For example, programs under the Youth Criminal Justice Act (2003) have successfully reintegrated young offenders while ensuring accountability for their actions, illustrating the importance of balancing punitive and rehabilitative measures in environmental crime cases.

Third, Chinese research and practice in restorative justice have largely focused on outcomes in environmental crime cases, neglecting the importance of fair and transparent restorative processes. Canada's practices emphasize procedural justice, as seen in its victim-offender mediation programs and restorative sentencing circles. These processes actively involve affected stakeholders, ensuring that both victims and communities participate in decision-making, thereby fostering trust and legitimacy in judicial outcomes.

Finally, the voluntary nature of restorative justice measures in China's environmental crime adjudication often limits their effectiveness in addressing environmental harm comprehensively. Canada's approach, as seen in cases like R. v. Imperial Oil Ltd. (1999), integrates legally enforceable restorative agreements, ensuring that offenders are held accountable for both ecological and social damages. Such practices demonstrate the value of embedding mandatory restorative measures within the judicial framework to maximize the restoration of environmental and social harm.

In light of these observations, future research in China should draw on Canada's experiences to address the gaps in ecological restoration standards, offender reintegration mechanisms, the fairness of restorative processes, and the effective implementation of restorative measures. By doing so, Chinese scholars can provide stronger theoretical and practical support for addressing environmental crimes and promoting ecological protection. In view of this, Chinese scholars should pay more attention to the research of these aspects in the future, so as to provide solid support for the governance of environmental crimes and ecological protection.

#### 2 The current application of restorative justice in China's environmental crime judicial practice

In recent years, the Chinese authorities have realized that the application of restorative justice is conducive to the governance of environmental crimes and the alleviation of social conflicts. For example, in recent years, China's criminal law has changed some environmental crimes from consequential offenders to dangerous offenders, focusing on the protection of ecological legal interests. In addition, Article 338 of the Eighth Amendment to the Criminal Law of the People's Republic of China lowers the applicable standards and expands the scope of application, which reflects the importance that China attaches to environmental protection in the criminal field. (Bai, 2024) However, restorative justice, as a new thing in the field of environmental crime in China, still faces many difficulties when applied to environmental crime cases.

#### 2.1 Restorative justice has insufficient legal basis for the application of environmental crimes

As mentioned above, there is currently only one guiding opinion on the application of restorative justice to environmental crimes and one judicial interpretation only for environmental pollution crimes, and there is a legislative gap at the legal level. Moreover, both documents only encourage and stipulate the application of restorative justice in the field of environmental crimes at the macro level, resulting in the lack of uniform practices in judicial practice, the lack of uniformity

in discretionary standards, and the phenomenon of different judgments and different punishments for the same crime in the same case, which not only violates the uniformity and fairness of the application of the law, but also greatly increases the risk of judicial power getting out of control due to excessive discretion of judges.(Table 1)

Table 1 Key Documents Related to Restorative Justice in Environmental Crimes		
Date	Issuing Authority	Document Name
March 2020	General Office of the CPC Central Committee,	Guiding Opinions on Building a Modern Environmental
	General Office of the State Council	Governance System
August 2023	Supreme People's Court, Supreme People's	Interpretation on Several Issues Concerning the Application of
	Procuratorate	Law in Handling Criminal Cases of Environmental Pollution

Table 1 Key Documents Related to Restorative Justice in Environmental Crimes

2.2 The nature of restorative justice in the context of the application of environmental crimes is unclear

At present, there are three main ways to apply restorative justice in the judicial practice of environmental crimes in China, namely the sentencing circumstance model, the main body of the judgment model, and the criminal attached civil liability model. (Liang, 2020) However, the above practices are more or less problematic in the current criminal law system.

As sentencing circumstances, there are two main models in China, one is statutory and the other is discretionary. Obviously, in the absence of a law that clearly classifies it as a statutory sentencing circumstance, it can only be regarded as a discretionary sentencing circumstance, but here we need to think about how to grasp the standard and range of discretion. In judicial practice, there are two types of determinations: mitigating and mitigating, which leads to different judgments and different punishments for the same case and the same crime.

As a judgment, it is necessary to consider whether the principle of legality has been violated. At present, China's criminal law does not include ordering the restoration of the ecological environment as a type of punishment, and this practice is debatable.

It is necessary to think about whether the restoration of the ecological environment is only a civil liability. Criminal law is only responsible for punishing crimes? Therefore, the author believes that simply assuming civil liability attached to criminal cases is not enough to meet the needs of the current development of criminal law.

#### 2.3 The scope of restorative justice is too narrow when applied to environmental crimes

At present, the concept of restorative justice has taken root in China, but the scope of application is still too narrow in judicial practice.

# The application of restorative justice in first-instance cases of environmental crimes in 2023

Other crimes of impairing the protection of environment and resources cases Ecological restoration funds Reforestation and greening Stock enhancement and release Land reclamation Soil remediation Carbon offset subscription Stock enhancement and release, 115, 4.21% Land reclamation. 11.0.40% Other crimes of Soil remediation , impairing the protection 3, 0.11% of environment and resources cases 2550,93.44% Carbon offset subscription, 5, 0.18% Ecological restoration funds. Reforestation and greening 43. 1.58% 2. 0.07%



As can be seen from the figure, the proportion of cases in which restorative justice is applied to environmental crimes in China is relatively small, and there is also an uneven application of specific restorative measures. At present, the application of restorative justice in environmental crime cases in China is mainly concentrated in the trial stage, and the pre-trial investigation and prosecution stage and the post-trial enforcement supervision stage are less widely used, and the effective application is not high.(Al-Alosi, Hadeel, and Hamilton, Mark, 2021) Through case search, it is found that most of the current restoration measures correspond to the damaged environmental elements, that is, which environmental element is damaged and which environmental element is restored, and is not considered from the perspective of overall ecosystem restoration. Restorative justice is a "foreign product" in China, and all sectors of Chinese society do not have a deep understanding of it, and traditional criminal justice concepts are still dominant.

In view of the high technical and professional requirements for the trial of environmental crime cases, and the lack of environmental professionalism of judges in this regard, it is inevitable that there will be mistakes in the trial of environmental crime cases. According to statistics from Chinese scholars, many defendants only carried out ecological restoration in exchange for a reduction in punishment during the appeal period, which indirectly reflects their weak awareness of ecological environmental restoration.

#### 3 Refine the recommendations: reference to the Canadian experience

China is a country that strives to make progress, and the Chinese government is a proactive and people-centered government. The author believes that the Communist Party of China (CPC) will lead the people to actively explore, promote judicial reform, and improve the socialist rule of law system with Chinese characteristics. The author would like to make a few suggestions:

#### 3.1 Supplement the legal norms of restorative justice in the application of environmental crimes

Canada has developed a robust framework for restorative justice, which is often integrated into the sentencing process, particularly in environmental offenses. For example, Section 718.2 of the Criminal Code of Canada emphasizes the importance of considering restorative principles in sentencing, such as repairing harm to victims and communities. Consideration may be given to adding the method of "ordering the restoration of the ecological environment" to the existing non-criminal punishment methods in article 37 when the Criminal Law is amended next time, to clarify the basis for the application of restorative justice.( Hamilton, Mark, 2021.) In addition, existing judicial interpretations should also be amended to provide clear guidance and basis for judicial practice. For example, the judicial interpretation issued in 2023 only targets the crime of polluting the environment, and cannot be applied to the crime of illegal logging. Therefore, the provisions of Article 6 of the above-mentioned judicial interpretation can be extended to apply to all crimes that can be used for ecological restoration, so as to become the legal basis for the application of restorative justice in environmental criminal cases. At the same time, judicial interpretations related to sentencing should be refined, so as to provide a clear legal basis for practice. (Boyd, Carrie C. ,2011)

The ecological and environmental code is the most complete form of written law, and its formulation can provide a comprehensive and systematic normative basis and guidance for the modernization of ecological and environmental governance. (Chen, 2021) In view of the current compilation of the Ecological and Environmental Code in China, the author also believes that the provisions for environmental crimes can be provided for in the ecological and environmental liability section of the Code, so as to improve the legal system. (Feng, 2024)

Canada's approach to restorative justice in environmental offenses often involves community participation in ecological restoration projects. For instance, offenders in pollution cases may be ordered to fund or directly participate in restoration activities under judicial supervision. China could take a similar approach by revising judicial interpretations to allow broader applicability of restorative justice, extending beyond specific crimes like polluting the environment to encompass other offenses such as illegal logging or wildlife trafficking.

#### 3.2 Legal Liability as a Regulatory Tool

In Canada, courts often use innovative sentencing measures for environmental crimes, such as imposing fines directed

toward environmental restoration funds or requiring offenders to conduct public education campaigns. For example, in R. v. Bata Industries Ltd. (1992), the court ordered the company to finance clean up efforts as part of its penalty. Such measures balance punitive and restorative aspects effectively. With regard to the nature of the dispute, the author believes that the advantages of various practices should be absorbed to form an application model that combines "sentencing circumstances + the main text of the judgment". (Preston, Brian J. 2011) Criminals who voluntarily admit guilt and accept punishment and take the initiative to restore the ecological environment may be given leniency at sentencing, while criminals who refuse to repent may be ordered to restore the ecological environment by supplementing the judgment with non-criminal punishment.

#### 3.3 Expand the scope of restorative justice when applied to environmental crimes

Canada's experience with expanding restorative justice underscores its potential in addressing environmental harm. The Environmental Enforcement Act (2010) allows alternative measures agreements for certain environmental offenses, which prioritize ecological restoration over traditional punitive measures. These agreements often involve offenders working closely with government agencies and local communities to restore damaged ecosystems. Taking into account the modest requirements of criminal law and the trend of lenient punishment, the application of restorative justice in environmental crimes can help restore the ecological environment, help offenders reintegrate into society, and promote conflict resolution. (XU and Zhong, 2022) In the future, when applicable, it may be considered to expand the scope of application to a limited extent under appropriate circumstances, so as to achieve effective restoration of the ecological environment caused by criminal acts.

#### 3.4 Reshape the concept of cognition

Ideas will influence people's behavior to a large extent. Ideas will influence people's behavior to a large extent. In the future, it is necessary to continuously improve the professional level of the contingent of judges through education and training. At the same time, as a general prevention, it is necessary to actively publicize the concept of ecological environmental protection in the society, popularize the law with cases, and cultivate the public's awareness and ability of environmental protection; As a special precaution, corrections and education should be carried out for offenders through methods such as giving lectures and ordering the environment to be restored, so as to reduce the likelihood of recidivism. In the future, it is necessary to continuously improve the professional level of the concept of ecological environmental protection in the society, popularize the law with cases, and cultivate the public's through education and training. At the same time, as a general prevention, it is necessary to actively publicize the concept of ecological environmental protection in the society, popularize the law with cases, and cultivate the public's awareness and ability of environmental protection; As a special prevention, it is necessary to actively publicize the concept of ecological environmental protection; As a special prevention, corrections and education should be carried out for offenders through methods such as giving lectures and ordering the environment to be restored, so as to reduce the likelihood of necidivism.

#### 4 Conclusion

The application of restorative justice in environmental crimes is of great significance for the effective restoration of the ecological environment, the promotion of the return of offenders to society, and the alleviation of social contradictions. Drawing on experiences from countries like Canada, the integration of restorative justice principles into environmental governance offers valuable insights for China. By improving legal systems, standardizing judicial practices, and fostering public and professional education, restorative justice can achieve the dual goals of environmental protection and social justice. The application of restorative justice in environmental crimes is of great significance for the effective restoration of the ecological environment, the promotion of the return of offenders to society, and the alleviation of social contradictions.

In conclusion, the effective application of restorative justice in environmental crimes requires multi-party coordination among law, justice and society. By improving the legal system, standardizing judicial practice, and strengthening concept education, we can give full play to the advantages of restorative justice and achieve the dual goals of environmental protection and social justice. The author believes that under the leadership of the Communist Party of China and through the joint efforts of the whole society, restorative justice will play a greater role in the governance of environmental crime in China, and at the same time promote the construction of ecological civilization in China to a new level.



Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Confulict of Interest: The author(s) declare(s) no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Author Contributions: Writing - original draft - review & editing.

References

- Al-Alosi, Hadeel, and Hamilton, Mark. 2021. The Potential of Restorative Justice in Promoting Environmental Offenders' Acceptance of Responsibility. University of New South Wales Law Journal. 44(2): 642–671.
- Bai, H., 2024. On Protection of Legal Interests of Environmental Crimes—A Case Study of Environmental Pollution Offenses. Journal of Western Studies 22, 99–102. https://doi.org/10.16721/j.cnki.cn61-1487/ c.2024.22.020.
- Boyd, Carrie C. 2011. Expanding the Arsenal for Sentencing Environmental Crimes: Would Therapeutic Jurisprudence and Restorative Justice Work?. William & Mary Environmental Law and Policy Review. 36(1): 241–274.
- Chen, H., 2021. Normative Structure and Codification Expression of the Ecological Environment Governance System. Journal of Soochow University (Law Edition) 8(4), 27–41. https://doi.org/10.19563/j.cnki. sdfx.2021.04.003
- Feng, H., 2024. On the Realization of Environmental Criminal Responsibility under the Vision of Ecological Environmental Code. Journal of Jiangsu University (Social Science Edition) 26(5), 42–55. https://doi. org/10.13317/j.cnki.jdskxb.2024.44
- Hamilton, Mark. 2021. Restorative Justice Conferencing in Australia and New Zealand: Application and Potential in an Environmental and Aboriginal Cultural Heritage Protection Context. The International Journal of Restorative Justice. 4(1): 81–97. DOI: 10.5553/TIJRJ.000064.
- Liang, Y., 2020. The Localization of "Repairing Ecological Environment" in Criminal Law from the Perspective of the Green Principle of the Civil Code. Chinese Journal of Criminal Law 6, 20–38. https://doi.org/10.19430/j.cnki.3891.2020.06.002.
- Preston, Brian J. 2011. The Use of Restorative Justice for Environmental Crime. Criminal Law Journal. 35(3): 136–153.
- Xu, J., Zhong, Y., 2022. The positioning and reconstruction of restorative justice in ecological environment penalties. Environmental Pollution and Prevention 44(4), 552–556. https://doi.org/10.15985/ j.cnki.1001-3865.2022.04.024.