

Comparative Analysis of Environmental Legislation of Germany and Uzbekistan

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Abstract

This article provides a comparative legal analysis of the environmental legislation of two countries: the Federal Republic of Germany and the Republic of Uzbekistan. These countries were selected due to their fundamentally different legal systems (the federal law of Germany and the mixed system of Uzbekistan), as well as by the difference in economic development and approaches to environmental protection. Germany is an example of a highly developed environmentally-oriented legal system, while Uzbekistan is at the stage of formation of modern environmental standards, which makes their comparison particularly relevant. The purpose of this research is to identify the strengths and weaknesses of the environmental legal systems of Germany and Uzbekistan, with the aim of developing practical recommendations to improve environmental legislation and the implementation of environmental policy in both countries. The significance of this study lies in the increasing global urgency of environmental challenges and the importance of cross-national learning between countries with diverse legal traditions and socio-economic contexts. To achieve this objective, the paper addresses the following tasks: 1) Analysis of the current environmental and nature protection legislation of Germany and Uzbekistan; 2) Examining the mechanisms that ensure the realization of citizens' environmental rights; 3) Reviewing the economic instruments used in environmental protection; 4) Exploring the legal foundations for the development of ecological culture.

Keywords

Environmental Situation, Ecology, Comparative Analysis, Germany, Uzbekistan

1. Introduction

The basis of German environmental law is Article 20a of the German Constitu-

tion, which imposes on the state the obligation to protect the natural foundations of life and preserve them for future generations (Anstee & Doffing, 2022).

The country has an extensive system of federal laws: nature and landscape (Bundesnaturschutzgesetz), emission protection (Bundes-Immissionsschutzgesetz), water resources (Wasserhaushaltsgesetz), as well as laws on energy efficiency and the use of renewable energy sources.

The legislative basis of the Republic of Uzbekistan in the field of ecology is formed by the laws adopted on December 9, 1992: “On Nature Protection”, “On Waste” and “On Atmospheric Air Protection”. In addition, State programs are being developed and implemented in the country, including the National Environmental Action Program for 1999-2005, the Environmental Protection Work Program for 2008-2012 and the Action Program for 2013-2017 (Urakov, 2023). This study aims to compare the environmental legal frameworks of Germany and Uzbekistan to identify their strengths, weaknesses, and opportunities for improvement, especially in the context of developing countries.

The structure of the paper is as follows: Section 1 provides a general overview of environmental legislation in both countries. Section 2 focuses on the rights of citizens in environmental matters and their legal guarantees. Section 3 explores the role of economic instruments in promoting environmental protection. Section 4 discusses the development of ecological culture and legal awareness. Finally, the conclusion presents a synthesis of the findings along with practical recommendations.

2. Analysis of the Current Environmental and Nature Protection Legislation in Germany and Uzbekistan

The Constitution of the Republic of Uzbekistan of 2023 reinforces the State’s obligation to use natural resources rationally and to protect the environment. Despite repeated attempts by Germany to introduce a unified Environmental Code, according to observation (Wandt, 2020), there is still no comprehensive normative act regulating all aspects of environmental protection. Environmental legislation continues to be fragmented, which is also characteristic of Uzbekistan. However, Uzbekistan is already actively working on the creation of a new Environmental Code, designed to unify disparate normative acts and provide comprehensive regulation of environmental protection issues. According to the Decree of the President of the Republic of Uzbekistan dated May 10, 2021 № PP-5119 “On measures to improve the system of state management in the field of ecology and environmental protection”, one of the priority tasks of the authorities is to develop a single codified act, which would systematize all existing norms and strengthen legal regulation in the field of environmental protection, The project of the Environmental Code is already at the stage of public discussions, which confirms the seriousness of the state’s intentions in this direction.

Considering the overall indicators, Germany shows a high level of activity in the adoption of environmental laws and regulations. On average, Germany

adopted approximately 21 laws and 59 regulations per year in the period 1990-2021, while in Uzbekistan the level of legislative activity in the field of environment was much lower and averaged 5 laws and 18 regulations (Stef & Ashta, 2023).

3. Study of Mechanisms Ensuring the Realization of Environmental Rights of Citizens

Germany has both administrative and judicial appeal mechanisms, and has successfully developed public hearings to facilitate dialogue between the government and non-governmental organizations (Svitlana, 2021). In addition, public associations such as NABU, Greenpeace and BUND play a significant role, participating in legislative initiatives and filing public interest lawsuits. German companies actively use standardized ESG (environmental, social and governance) disclosure tools, which increases transparency and contributes to better environmental management (Rezaee et al., 2023). In Uzbekistan, control over compliance with environmental legislation is exercised by the State Committee on Ecology, which is authorized to issue prescriptions in case of violations. Citizens have the right to file complaints and applications, but their involvement is still low. In addition, insufficient compliance with legislation has a negative impact on environmental justice (Mukti & Sobirov, 2023). The role of eco-activists in the decision-making process remains limited compared to Germany, although there are positive developments every year.

German legislation provides real-time access to environmental data, which encourages sustainable practices and prevents offenses (Turdiev, 2024). In Uzbekistan, measures are being taken to develop technologies for more transparent monitoring, but this system is still at the stage of formation. Thus, Germany has implemented more extensive mechanisms for involving citizens and environmental organizations in the environmental decision-making process, while Uzbekistan continues to work on strengthening public and judicial control, but the practical application of norms is still underdeveloped and requires further improvement of legislation.

4. Consideration of Economic Instruments Applied in the Field of Environmental Protection

Germany has a “polluter pays” principle with high fines for environmental offenses and a system of fees for emissions and discharges of pollutants. In addition, market-based instruments, including emissions trading, are widely used to incentivize environmental transformation (Finkeldey et al., 2024). A notable example is the Greenhouse Gas Reduction Quota (GHGMQ), which requires fossil fuel distributors to reduce average greenhouse gas emissions from diesel and gasoline fuels by a certain percentage. The quota level gradually increases from 8% in 2023 to 25% in 2030 (Liepold et al., 2024). Other measures include incentivizing renewable energy legislation (Umarani, 2024), and tax incentives for the use of environmentally friendly transportation (Wang et al., 2023).

In Uzbekistan, on the contrary, economic instruments in the field of environmental protection are only beginning to be actively developed. Although legislation also provides for fines and fees for environmental offenses, their size and practical implementation are often less effective than in Germany.

At the same time, the government is taking steps to attract investors in the construction of solar and wind power plants, in particular, by reducing the tax burden for participants in such projects. Renewable energy sources, mainly solar and hydropower, are already beginning to gain momentum in Uzbekistan (Merner et al., 2023), while Germany has long used wind and solar power.

It is worth to note that Germany has a more rigid and differentiated system of economic instruments with high efficiency of control. In Uzbekistan, however, such mechanisms are in the stage of active development and require further improvement and integration into the general economic policy. In addition, there is a lack of state funding and additional benefits for participants of environmentally oriented projects.

5. Study of the Legal Basis for the Formation of Environmental Culture

In Uzbekistan, the recycling institute is still at a low level and requires further development. On the contrary, Germany has an effective system of waste return and recycling, which contributes to a significant reduction of waste volumes in landfills (Ren, 2024). Uzbekistan can learn a lot from Germany in this domain.

The role of green education in German environmental law is no less important. In school textbooks, especially in geography, environmental aspects permeate the entire educational material, shaping students' environmental outlook and interest in environmental information. The German Government produces a variety of informational materials to improve environmental literacy. Meanwhile, Uzbekistan pays special attention to reforestation in the Aral Sea region. The country is implementing projects to improve the environment, including planting trees to combat sandstorms near the shoaling Aral Sea (Bujdei-Tebeica, 2024). These projects involve active participation of local residents within the framework of community work. Environmental education is being developed in schools and universities, but the normative anchoring of the environmental component in curricula still needs to be improved.

In Germany, environmental culture is supported by a developed infrastructure of education and close interaction between the state, business and society. Uzbekistan is also making efforts to foster environmental culture, considering the cultural and economic peculiarities of the region. However, to ensure sustainable development, even more attention should be paid to training and education of citizens (Schmitt, 2024).

6. Conclusion

A comparative analysis of environmental legislation in Germany and Uzbekistan

shows that both states are striving to develop an effective system of environmental law and implementation mechanisms. Germany's systems demonstrate differences in transboundary environmental initiatives, which may be useful for Uzbekistan to consider/moreover, Germany has more detailed, multi-level legislation and developed law enforcement practice, which together ensure high efficiency of environmental protection measures. Uzbekistan, in its turn, is at the stage of large-scale reform of the environmental sector: the regulatory framework is being improved, the Environmental Code is being formed, economic incentives and new approaches to environmental education are being introduced. The current legislation and scientific works in Germany are dominated by precise legal norms and an extensive body of scientific research, while in Uzbekistan there is an active process of updating the legislative base considering the results of local and international research.

Uzbekistan is gradually strengthening its economic levers, and in this context, particular attention needs to be paid to attracting foreign investment in the green energy sector. An important step will be the introduction of tax privileges for companies actively using renewable energy sources, which will contribute to the sustainable development of the industry and environmental safety.

The legal basis for the formation of environmental culture in Germany is based on broad state and public support for environmental education, while Uzbekistan is making the first significant steps in the formation of long-term educational programs and projects. Based on the practical experience of Germany, Uzbekistan should develop environmental education programs from an early age, focusing on fostering a sense of responsibility towards the environment and sustainability. These programs should be integrated into school curricula to ensure that future generations are equipped with the knowledge and motivation to protect natural resources. Moreover, introducing a deposit return system similar to the German Pfand system for plastic bottles could significantly reduce waste and encourage recycling. By implementing this system, Uzbekistan could encourage consumers to return bottles and containers, which would be cleaned, reused, or recycled, reducing litter and the overall environmental impact. Such initiatives would not only promote environmental awareness but also help drive a circular economy, where resources are reused, contributing to long-term ecological sustainability.

Thus, Germany's experience can serve as a reference point for Uzbekistan in terms of detailed regulation of environmental standards, development of economic incentives, strengthening of judicial and administrative mechanisms, and improvement of the system of environmental education and culture. At the same time, Uzbekistan, considering its specific natural and climatic conditions and socio-economic objectives, is shaping its own way of developing environmental law based on international experience and national priorities.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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