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# Interdisciplinary Perspectives on the Interplay between Human Rights and Sustainability

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## Preface

The following collection of manuscripts emerged from an interdisciplinary virtual exchange held during the Winter semester of 2023/2024 at the Environmental Campus Birkenfeld, organized by Prof. Dr. Milena Valeva and Prof. Dr. Kathrin Nitschmann. Additionally, Prof. Dr. Héctor Bombiella Medina, a lecturer of anthropology in the Department of World Languages and Cultures at Iowa State University, contributed to the virtual exchange and supervised case studies 3 and 4, bringing his extensive experience in this field and facilitating the international exchange. Within the elective module on Human Rights, students from the Bachelor's programs "Nonprofit and NGO Management" and "Environmental and Business Law," as well as the Master's program "Energy and Corporate Law," explored the interconnections between human rights and sustainability.

In an era marked by unprecedented environmental challenges and profound social transformations, the intersection of human rights and the rights of nature has emerged as a critical area of inquiry and debate. Today, as we face the dual crises of climate change and biodiversity loss, the traditional boundaries between human and environmental rights are increasingly blurred. This confluence demands a fresh, interdisciplinary approach to understanding and addressing the complex and interrelated issues at hand.

Human rights, fundamental to the dignity and freedom of individuals, are deeply impacted by environmental degradation. Communities worldwide are experiencing firsthand the devastating effects of polluted air, contaminated water, and deforested landscapes, all of which undermine basic human rights to health, livelihood, and well-being. Conversely, recognizing the rights of nature – the intrinsic value of ecosystems and species – challenges us to reconsider our legal, ethical, and philosophical frameworks. It calls for a paradigm shift from an anthropocentric world-

view to one that embraces the interconnectedness of all life forms.

Engaging in robust discussions and research on these topics is essential in today's context. By exploring interdisciplinary perspectives, we can forge innovative solutions that honor both the rights of individuals and the integrity of nature. This special issue aims to contribute to this vital discourse, providing insights and fostering dialogue on how we can collectively navigate the complex landscape of human rights and environmental sustainability.

The first chapter „Human rights and SDGs in the context of democracy“ examines the significance of international human rights in today's context and links them to new value systems like sustainability.

The second chapter, the case study „Rights of Nature“ explores the concept of granting legal rights to nature itself by comparing laws from various countries to show how it combats environmental exploitation.

The third chapter, the case study „Traditional coca leaf consumption and drug trafficking in Colombia“ delves into the complex issues surrounding coca cultivation in Colombia, highlighting its economic, social, and political impacts.

The fourth chapter, the case study „The artisanal fishing community of Chorrillos, Peru“ aims to provide theoretical insights and recommendations for improving the livelihoods of artisanal fishing communities in Peru, considering legal, ethical, and environmental perspectives as well as how economic liberalization, privatization, and deregulation affect the community's socio-economic conditions.

# Prologue

**Author:** Prof. Dr. Héctor Andrés Bombiella Medina

Does the legal eradication of illicit crops in Colombia negatively impact the human rights of rural social groups living in the surrounding areas? Furthermore, can political and legal experiences of Germany contribute to this discussion? If you find these questions compelling, please keep reading. Through a set of papers, this section addresses the intricate relationship between human rights and the various policies that Colombian governments have implemented over the last few decades to eradicate illicit crops, in particular the coca plant.

This is not a straightforward conversation. The situation must be addressed from multiple perspectives. The authors are well aware of this challenge. The political and economic dimensions are in permanent feedback with the cultural and environmental aspects of the issue. In this context, discussions related to the traditional uses of coca leaves by indigenous people and the sustainability of eradication schemes, are addressed. Furthermore, the influence of United States-led geopolitics on Colombian internal decisions is a central aspect analyzed in these papers. As mentioned by Heyd, “The USA has essentially been the only country that has supported the fight on drugs from the prohibition/sanction approach.” This chapter takes an overview approach sparkling on the reader the intention to learn more about Colombia and the coca situation.

Colombia is the leading producer of cocaine in the world and has the largest cultivated area of coca plants. According to the Colombia Coca Survey of the United Nations Office on Drugs and Crime (UNODC, 2021), in 2020 there were 143 thousand hectares of coca crops throughout the territory, noting a reduction of 7 percent compared to 2019, which had 154 thousand hectares. Although there was a decline in cultivated area, cocaine production increased as the average yield per hectare rose by about 18 percent, from 6.7 kilograms in 2019 to 7.9 kilograms per hectare in 2020. Addi-

tionally, almost half of the coca plantations are located in territories with special protection, including areas of cultural, natural or eco-systemic interest, like indigenous reserves or black Afro-Colombian communities’ collective territories, natural parks or protected areas.

In the Andean region, coca cultivation for traditional, medicinal, and mystical purposes has been practiced for centuries. Today, indigenous people from various areas in Colombia, Bolivia, Ecuador, and the Peruvian mountains advocate for the ancestral use of the coca plant. Indigenous communities in Colombia that support the use of coca leaf are found in the northern Caribbean region as well as in the southern border states of Cauca, Popayan, and Nariño. This means that discussions about territory, while geographically specific, cannot be considered in isolation; any policy allowing a specific use must be reflected across all relevant areas. Furthermore, there is a wide range of traditional uses of the coca leaf. Some indigenous groups focus exclusively on its mystical use, while others, with a less strict approach, also advocate for its therapeutic and nutritional potential (Pinto-Marroquin et al. 2022). Everyday further layers of meanings and uses of the plant continue appearing.

The internal armed conflict in Colombia represents a major dimension that is often addressed separately from other issues. However, it was only after the cocaine boom in the 1980s and 1990s that the massive cultivation of coca plants became widespread. Radical left-wing guerrilla groups emerged in Colombia during the 1960s, following the betrayal and abuse of peasant communities by state security forces led by elites and large landowners. While the conflict has multiple roots, most are linked to land tenure, the capacity to exploit land, and institutional opportunities to access and enjoy basic rights. The lack of state presence and the international environment also created conditions that allowed for the consolidation and

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escalation of guerrilla groups and their eventual political counterparts. Over time, cocaine and drug trafficking resources gradually became the main source of income for guerrilla armies, making them major players in various links of the drug trafficking value chain.

Aligned with U.S. foreign policy to combat drug trafficking, the Colombian government implemented aggressive anti-narcotics campaigns, primarily through aerial spraying of glyphosate and forced eradication of coca crops. The main focus of the policy was to target the first and most vulnerable link in the cocaine trafficking network: the landless peasants, who were often presumed to be either guerrilla employees or collaborators. Assuming that peasant families were associated with armed groups made it easier for the government to justify aerial fumigation. However, this perspective only addresses the leftist guerrilla aspect of the issue and must be considered alongside the role played by paramilitary forces during this period.

In this chapter, the authors do not shy away from these complexities but embrace them, seeking alternatives for understanding the situation without overlooking relevant variables. How do you approach research that must account for historical, environmental, cultural, political, and econo-

mic dimensions? You either choose a specific topic or aspect and begin to untangle its components, or take a broader view and, using a catalyst- such as the human rights discourse- attempt a comprehensive approach. In other words, the articles allow to see the authors’ interest connecting the dots and bring the discussion back to the human rights’ predominant narrative.

In the first article, Cara-Maxine Heyd, examines the complex relationship between USA war on drug policies and their impact on human rights for Colombia. It reflects on today’s relevance of the Universal Declaration of Human Rights (1948) as a framework for identifying and defining human rights. The article briefly addresses the use of glyphosate against coca plantations and the Colombia-U.S. Free Trade Agreement. It presents data on the historical growth of coca plantations and describes the affected social groups and regions, including peasant communities and deforested areas. She examines how various strategies to control coca cultivation, including aerial spraying with glyphosate, have impacted human rights, particularly the right to adequate living conditions. The use of glyphosate has affected over 100 thousand hectares, impacting numerous social groups, including landless peasants, indigenous peoples, and displaced communities by the internal conflict. The negative effects extend beyond health and livelihood, exacerbated by the illegality and social stigma associated with coca cultivation, which complicates institutional responses.

Subsequently, the author explores how several human rights are impacted by eradication schemes related to coca cultivation. For the right to work, peasant growers, as the initial link in the cocaine value chain, face significant challenges. Government plans should focus on creating alternative job opportunities and supporting transitions to other products, including setting minimum wages and providing basic access to institutional benefits. Similarly, the right to food is compromised as new generations of peasants, born during the coca boom, have neglected traditional farming practices, leading to a loss of traditional agricultural practices and techniques agricultural. For the right to health and human dignity, glyphosate use exacerbates health issues and impacts non-coca



crops, affecting food sovereignty and security. The author notes that glyphosate, classified as “possibly carcinogenic” by the World Health Organization, has been controversially used due to political rather than scientific evidence, which could trigger a humanitarian crisis. Lastly, the right to cultural life is affected by the marginalization of traditional coca use, which holds significant traditional and spiritual value in the Andean region. Traditional practices must be aligned to modern policies.

This article also discusses the German constitutional right to a minimum subsistence level, which is consistent with human dignity. She explains the rationality behind this assimilation and provides context, also demonstrating how doctrine development and research conducted in different geographies can enhance the rights’ scope of protection. Therefore, coca peasants should be acknowledged as victims? The author response to this question from the decent standard of living perspective, offering an interesting approach to this communities’ situation. The author’s literature review and institutional sources detail the ambiguous legal status of coca globally and critique the reward-based system. She left several open windows to continue the investigation about where this situation is taking Colombia and the International community.

The second paper, written by Maxi-Mercedes Jahn, is in particular about the use of glyphosate as the unique pesticide product provided for aerial aspersions. She discusses the forced eradication of more than 800 thousand hectares of coca in Colombia in 10 years, between 2012 and 2022, while discussing the reasons behind an increase in cultivation during this period. Circumstances may be dynamic, but the lack of state presence and for an effective land distribution have been some of the determinants to this problem. In 2019, drug trafficking revenues reached 31 billion of Colombian pesos, or 2.9 percent of the GDP. The business has remained healthy and thriving. Yet, the glyphosate supporters remain firm. Literature review reveals a lack of significant scientific debate on the efficacy of glyphosate as the best method for eradicating coca plantations. The use of glyphosate raises not only environmental concerns but also geopoliti-

cal issues, affecting conflict resolution and peace-building attempts.

Coca cultivation is a viable business, it offers benefits such as more frequent harvests and reliable markets, enabling farmers to improve their income and living conditions in a relatively short term. Unlike other crops, coca does not require formal and legal export market. For example, while 14 kilos of Chontaduro (palm tree fruit) earn about 30 thousand Colombian pesos, a kilo of coca paste can cost 2 million pesos. This disparity highlights why substitution schemes are ineffective when drug revenues far exceed legal alternatives.

The author’s insights into these often-overlooked factors contribute significantly to the discussion. She also addresses the Colombia-FARC peace agreement, which included comprehensive crop substitution policies, but progress has been minimal. It can even be said that increase in coca cultivation directly correlates with unmet agreement commitments. As well as other issues that are highlighted in the paper. The author notes that cartels have developed new methods to produce more cocaine with fewer plants, complicating government efforts. It also discusses the impact of technological advancements and the political complexities behind eradication policies

Back to the glyphosate issue, which it thorough in the paper, it mentioned that glyphosate negatively impacts that are usually not reported in mainstream media, like destroying soil organisms such as bacteria, fungi, and mycorrhizae, which are crucial for soil health and fertility. Farmers have reported adverse effects from glyphosate, including skin irritations that lead to permanent scars and vision problems. Reports also indicate that some farmers were mistakenly targeted during glyphosate applications, leading to the loss of their crops and livelihoods. This discussion underscores how the use of glyphosate, while intended for public health purposes, infringes on human rights and affects the lives of those in the impacted areas.

Finally, the author makes a really interesting survey through the German Basic Law referring a few lessons for the Colombian case. The constitution orders the state to protect natural resources and life through prevention of harm, defense against threats, and risk assessment. The author highlights the balloon effect, linking deforestati-

on, cattle ranching, coca production, violence, and displacement. More interestingly, she describes how glyphosate use exacerbates soil exhaustion and raises agricultural costs due to increased fertilizer and pesticide use. Additionally, she provides compelling information stating that spraying one hectare of coca can cost more than 50 thousand Colombian pesos, suggesting deeper issues, such as the influence of glyphosate producers in the overall transaction.

The author concludes that broader goals of social justice, environmental stewardship, and sustainable rural development are needed. However, the discussion leaves unresolved questions about the environmental impact of glyphosate use. It emphasizes that the relationship between communities and their environment is complex, involving diverse, interdependent processes that go beyond the immediate effects of eradication efforts.

Finally, the third author, Daniel Förster, enlightens his analysis by discussing the USA-Colombia Free Trade Agreement signed in 2007. His analysis is framed through the lens of human rights, offering a fair ground for examining the issue from the German perspective. The paper seeks to propose solutions aimed at improving the living conditions of people in Colombia, reflecting a commitment to addressing both immediate and broader socioeconomic challenges.

The author begins mentioning the potential benefits of industrial-scale coca leaf cultivation emphasizing on the importance of exploring its therapeutic uses and other potential industrial-scale production business dimensions. Economically, it details the dramatic increase in coca leaf prices, from \$0.60 per kg at harvest to \$1,224.61 per kg for the final cocaine product, reflecting a dramatic value transformation through the production chain. While this might benefit some actors in the production chain, the illegal nature of the trade imposes a significant financial burden on the state, which spends more on controlling and eradicating production than it gains. This can be taken as an objective analysis that worth to be read in detail. As a follow up, the author raises concerns about the lack of viable alternatives for coca farmers, suggesting that attempts to replace

coca cultivation with other forms of agriculture often fail and may lead to human rights violations.

Then, the paper outlines Colombia’s institutional structure and the context of its internal conflict, which turned out valuable in particular for a German audience. It connects the rise of guerrilla groups in rural areas during the 1960s with the emergence of paramilitary forces in the 1980s and 1990s, which aimed to eliminate the guerrillas, protect landowners, and dominate the drug trafficking industry. The discussion extends to the peace process, highlighting the political concessions made to guerrilla leaders, including their integration into Congress. This background is crucial for understanding the interplay between political dynamics and coca cultivation policies. It illustrates how the expansion of coca plantations and efforts to replace illicit economies are intertwined with Colombia’s political landscape and peace commitments. The connection shows the relevance of addressing coca cultivation within the larger context of Colombia’s historical and current political challenges.

As a conclusion, the author highlights a critical challenge: “the difficulty lies in the implementation of global resolutions, which tend to be wide, general and future-oriented, aiming to set directions and define common ground”. The FTA holds, nevertheless, substantial untapped potential for informing the peace process and addressing coca cultivation issues in Colombia. As mentioned by the author, there is no a silver bullet or simple solution to the drug trafficking problem, and balancing the coca plant’s cultural significance with global anti-cocaine efforts remains complex. Legal frameworks and international policies have struggled with this dual challenge, and Colombia’s efforts -including military actions and crop substitution aerial or manual- have found significant obstacles.

Ultimately, a comprehensive and integrated approach is necessary to achieve lasting change, reduce coca cultivation, and improve living conditions sustainably. In this chapter, the authors clearly express their intention to incorporate perspectives beyond traditional approaches, encouraging readers to see deeper into the issue. The added value of these studies lies in their interdisciplinary approach, combining insights from law and

public policy with perspectives from nonprofit and non-governmental organizations. Contributing to this chapter are students from the Environmental Campus Birkenfeld at Trier University of Applied Sciences, including those pursuing degrees in law, a master's in law and non-profit and NGO management.



**Prof. Dr. Héctor Andrés Bombiella Medina**

has conducted extensive fieldwork with social groups in condition of poverty and disadvantage, grassroots organizations and the public as well as private-sector in the United States, Colombia and Peru. He is a teacher and researcher on topics dealing with human rights, public policy and sustainability. He is currently advising on and promoting policies to empower peasants and solidarity-based economies at the Colombian National Training Agency (Servicio Nacional de Aprendizaje, SENA).

## Affected Human Rights by the destruction of coca plantations

Author: Cara-Maxine Heyd

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### 1 Introduction

The Coca-plant has been cultivated on a large scale in plantations in some South American countries for almost 100 years. Colombia, for example, is one of the countries in South America with the highest sales of cocaine cultivation. The coca plant, from which cocaine is produced, has been cultivated in Colombia since the 1960s, especially in the more remote areas of the Andes, in order to make progress in the field of medicine. Ever since Albert Niemann produced the drug cocaine from the coca plant in 1860, the cultivation of the coca plant from Colombia has also been used to produce cocaine. When Alberto Sicilia Falcon promoted the mass production of cocaine in the 1980s, Colombia became one of the largest cocaine-producing countries in the world and continues to import cocaine worldwide to this day. With the help of the US government, the "Plan Colombia" was developed, which aims to destroy the plantations and, as a result, to maintain social and economic programs to preserve sources of income. However, the destruction of the plantations still leads to socio-economic, corrupt and violent conflicts to this day, as the drug trade has shifted to other count-

ries and has not really disappeared in Colombia. In addition, the destruction of cocaine plantations can restrict human rights, especially if it is not carried out in accordance with the rule of law and human rights standards.

The following elaboration is based on the human rights of the UDHR (Universal Declaration of Human Rights) and their possible restriction or violation and in the final consideration the prospects in German law.

The Universal Declaration of Human Rights of 1948 is the best-known human rights document and forms the cornerstone of international human rights protection. Before the Second World War, human rights were mainly regulated nationally. The horrors of war led to a rethink. The UN Charter of 1945 instructed the international community to promote human rights for all. The breakthrough came with the adoption of the UDHR by the UN General Assembly in December 1948, following a two-year discussion process. The UDHR is not a legally binding document but has great political and moral significance. It influenced the development of the UN human rights conventions from the 1950s onwards. The Universal Declaration of

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