

Global Practices of Climate Justice

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A SUMMARY BY SAHAR SADRAFSHARI

As the world gets warmer, coffee will get more expensive.

The Intertwined Destinies of Climate Justice and Coffee

This panel discussed global practices of climate justice in the context of coffee from various perspectives. The journey of a coffee bean around the earth begins from cultivation to consumption, and all of this functions within an intertwined global value chain. Coffee is the leading agricultural commodity in the global markets in terms of value. This complex system is increasingly threatened by climate change, as coffee plants are sensitive to higher temperatures and a changing climate in the cultivation areas, which can lead to reduced yields and increased vulnerability to diseases. Even in regions away from the direct effects of climate risks, market unpredictability shows itself in the rise in prices that affect vulnerable smallholder farmers. The panel also covered the fair solution in the global coffee industry.

Introduction

Since the 1990s, global coffee production has grown by 60%. Particularly, between 2000 and 2019, coffee production and consumption increased by an average of 2% annually, and forecasts based on demographic growth predict a doubling or tripling of demand by 2050 (Valade, 2022). From the lush fields where coffee cherries grow to the blissful cups enjoyed in cozy cafes, the changing climate impacts every step of coffee production (Khurana, 2024). Besides all the complexities, 70% of the world's production is exported, mostly from developing countries towards countries of the North. Although producing countries have a general upward production and consumption trend, in the short

term, global economic and climate conditions and shocks create numerous variable factors in the supply and demand of coffee, reflected by a very variable price (Valade, 2022).

The coffee industry's vulnerability to climate change is worrisome. According to climate simulations, areas suitable for coffee crops could shrink by 50% by 2050 (Killen, 2016; Grüter et al, 2022). And a loss of about 65-100% by 2080 for some coffee types (David et al, 2012). Coffee plants only develop in specific climate zones: temperatures between 18 °C and 23 °C at altitudes between 1,000 and 2,000 m for arabica, which makes up 70% of global production; temperatures between 22 °C and 30 °C at altitudes below 800 m for robusta, although the optimal temperature was recently reevaluated at around 20.5 °C (Kath, 2020).

The vulnerability mentioned necessitates mitigation strategies, such as reducing greenhouse gas emissions in coffee production, for example, reducing carbon-intensive inputs, and carbon sequestration on farms can be applied as part of the mitigation plans. Meanwhile, adaptation efforts at the farm level, like transitioning to higher altitudes and climate-resilient varieties, are also vital. However, many corporate initiatives prioritize the resilience of the coffee supply system to ensure its future supply.

Procedural climate justice is fundamentally about processes for making decisions about the impacts of and responses to climate change that are fair, accountable, and transparent (Newell et al., 2021). Based on what was also mentioned in the panel, the intersection of climate change and coffee can be followed in the context of climate justice, which raises critical ethical and political questions. Various conflict models exist, such as the

environment versus big business and individual workers versus corporations, highlighting different facets of injustice. The concept of justice itself is multifaceted, including justice in distribution (fair allocation of burdens and benefits), generational justice, justice in acknowledgment of diverse needs, and environmental and animal justice. Applying these concepts to the coffee industry reveals that many corporate companies mostly focus on “resilient supply chains, “which can prioritize their stability and survival over the well-being of producing communities, potentially creating pressure on environmental and social standards. A more just approach involves relational value chains with co-investment and risk sharing. In addition, South-South trade offers a potential pathway to decolonize coffee markets and foster more equitable systems, aiming to challenge traditional North-South power dynamics. However, regulatory issues and the immediate need for cash among producers can still favor local markets over international exports. Ultimately, to have a meaningful influence, one way could be that business leaders of powerful corporations

may be able to carry out more sustainable and equitable business practices within their spheres of influence (Hochachka, 2023).

Conclusion

Achieving climate justice in the coffee sector necessitates a commitment to transparency and genuine risk sharing. meaning it needs to become a matter of compliance and regulation, particularly regarding prices at each stage. This price transparency is crucial for informed consumer choices and understanding the distribution of economic benefits. Resilience should involve carrying risks together, with buyers investing in funds to help producers recover from losses and regenerate their land. Furthermore, localized consumption by buying directly from producers can be a more direct way to support them. Lastly, addressing climate justice in coffee requires a holistic approach that integrates environmental sustainability, economic equity, and a fundamental re-evaluation of power dynamics across the global value chain.

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