

Prioritizing sustainability in high-end gastronomy: a case study using the analytic hierarchy process (AHP) and causal loop diagrams (CLD) in jre restaurants in Slovenia

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Abstract

Sustainable gastronomy is becoming an important strategic orientation in contemporary hospitality, particularly among fine dining restaurants that influence culinary trends and responsible tourism. This study examines how members of Jeunes Restaurateurs (JRE) Slovenia engage with sustainability and which practices they prioritize in their operations. The research pursues two objectives: to explore the role of JRE Slovenia in promoting sustainability-oriented transformation in gastronomy, and to identify the sustainability practices prioritized by JRE chefs in their strategic decision-making.

A mixed-methods approach is applied, combining qualitative interviews, the Analytic Hierarchy Process (AHP), and systems thinking through Causal Loop Diagrams (CLD). Semi-structured interviews with chefs from ten JRE-affiliated restaurants were used to explore their perceptions of sustainability. During the interviews, AHP pairwise comparisons were conducted to evaluate ten sustainability criteria across environmental, economic, and social dimensions. CLD modelling was then used to visualize feedback loops and interactions among key variables influencing sustainable gastronomy.

Preliminary findings suggest that environmental factors, particularly local sourcing and waste reduction are ranked highest, while economic and social dimensions vary in importance depending on the individual context of each restaurant.

The results indicate that environmental practices, particularly local sourcing and waste reduction, receive the highest priority, while economic and social factors vary depending on the context of individual restaurants. The study contributes empirical insights into sustainability practices in high-end gastronomy and demonstrates the value of combining AHP and CLD for strategic analysis in complex decision-making environments.

Keywords: sustainable gastronomy, JRE Slovenia, AHP, CLD, high-end gastronomy, sustainability priorities