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Assessing Consumer Willingness to Pay for Regenerative Agriculture Products: A Case Study of Kodagu District

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Abstract

The pursuit of sustainable farming methods is contingent upon comprehending customer inclinations. This case study uses a thorough questionnaire survey as the only method of investigation into Kodagu residents' willingness to pay (WTP) for items derived from regenerative agriculture. The study used a carefully crafted survey instrument to investigate consumer motivations and attitudes by administering it to a representative sample of one hundred randomly chosen Kodagu consumers. The comprehensive quantitative data that was gathered was then analyzed using statistical techniques including correlation analysis, linear regression and one-way analysis of variance (ANOVA).

While acknowledging the environmental benefits of regenerative practices, the study revealed a complex relationship with WTP. Environmental concerns alone did not consistently translate into a higher price preference. Analyzing the data through ANOVA exposed household income as a significant factor influencing WTP, suggesting targeted marketing strategies for different income segments might hold greater promise. Despite statistically explaining only a small portion of the variance in WTP, the linear regression model provided valuable insights into the likely influence of unmeasured factors beyond environmental concerns. Building trust in producers and certification systems emerged as potential avenues for further investigation, highlighting the need for holistic strategies that address not just environmental benefits but also trust and value perception. This survey-based case study sheds light on the multifaceted nature of consumer WTP for regenerative agriculture in Kodagu.

Keywords: Regenerative Agriculture, Willingness to Pay (WTP), Income Sensitivity, product-specific Value, Trust and Holistic Strategies

INTRODUCTION:

Driven by a rising global demand for sustainable food products, regenerative agriculture presents a promising avenue for farmers to enhance both environmental and economic outcomes (FAO, 2017). However, a crucial unanswered question remains: are consumers willing to pay a premium for products grown with these methods, and if so, what factors influence their decisions? This case study focuses into this vital question by scrutinizing consumer willingness to pay (WTP) for regenerative agriculture products in Kodagu District, India, a region uniquely positioned to illuminate the complexities of consumer behaviour within a specific socio-ecological context.

Understanding Kodagu consumers' WTP for regenerative products holds significant importance for multiple reasons. First, it directly impacts the economic viability of adopting these practices for Kodagu farmers, potentially influencing their income and livelihoods (Guerrero et al., 2023). Second, it provides valuable insights into consumer perceptions and motivations for supporting sustainable agriculture, informing targeted marketing and communication strategies (Vanclay et al., 2005). Finally, analyzing this specific regional context allows for a nuanced understanding of how cultural, environmental, and demographic factors interplay with WTP decisions, enriching our knowledge beyond generic consumer behaviour models (Ponte et al., 2013).

While existing research explores WTP for sustainable products (Sharma et al., 2022), it often overlooks unique contexts like Kodagu. This region boasts a distinctive coffee-centric agricultural landscape (Krishnappa et al., 2020), a deep-rooted cultural connection to sustainability among the Kodava community (Sathyamoorthy, 2010), and a limited body of research on consumer preferences for regenerative offerings. This case study addresses these gaps by utilizing Kodagu as a compelling case to:

- Quantify consumer WTP premiums for regenerative vs. conventional agriculture products across different categories.
- Identify key influencing factors like product type, demographics, and environmental benefit perceptions on WTP decisions (Lockie et al., 2004).
- Explore potential challenges and opportunities associated with market adoption of regenerative practices from both consumer and farmer perspectives (Sumberg et al., 2012).

By focusing on the specificities of Kodagu, this case study aims to advance new knowledge on consumer behaviour towards sustainable agriculture in unique contexts. The findings have the potential to inform tailored interventions and policies for successful adoption of regenerative practices in Kodagu, while also inspiring similar initiatives in other regions with distinct cultural and agricultural profiles (Hagedorn et al., 2019).

Examining consumer willingness to pay (WTP) for regenerative agriculture products demands a specific and appropriate research context. Kodagu District in India emerges as a compelling case study for several reasons, supported by existing literature and the unique attributes of the region. Kodagu boasts a distinctive coffee-centric agricultural landscape (Krishnappa et al., 2020), showcasing diverse farming practices and crops beyond coffee. This diversity provides a valuable platform to compare consumer preferences for regenerative vs. conventional products across multiple categories, enriching our understanding of WTP behaviour within a specific context (Lockie et al., 2004). Furthermore, the Kodava community's deep-rooted cultural connection to sustainable farming traditions (Sathyamoorthy, 2010) fosters a receptive environment for studying the acceptance and potential of regenerative approaches. This pre-existing foundation offers fertile ground for investigating how consumer preferences and behaviour shift with the introduction of regenerative practices, aligning with calls for context-specific studies in sustainable agriculture (Ponte et al., 2013).

Existing research highlights the significant knowledge gap regarding consumer WTP for regenerative products in specific geographies with distinct agricultural and cultural characteristics (Sharma et al., 2022). Kodagu, with its unique context, fills this gap, offering valuable insights into how local factors influence consumer behaviour towards sustainable food (Vanclay et al., 2005). Studies emphasizing the importance of understanding local contexts and preferences for promoting regenerative agriculture further support the choice of Kodagu as a relevant case study (Guerrero et al., 2023).

Kodagu offers several advantages beyond its unique context. Compared to other remote regions, it boasts better accessibility and availability of data (e.g., agricultural production records, consumer surveys) necessary for robust research (Pretty et al., 2003). Additionally, the presence of diverse stakeholders, including farmers, consumers, NGOs, and policymakers, allows for a

comprehensive study of the potential impacts of regenerative agriculture across different groups (Sumberg et al., 2012). Finally, findings from Kodagu can potentially be extrapolated to other coffee-growing regions or areas with similar socio-economic and environmental characteristics, enhancing the generalizability of the research (Hagedorn et al., 2019).

The selection of Kodagu was not random. Instead, it emerged as the most suitable case study after a careful review of the research topic, objectives, and existing literature. By clearly outlining the selection process and highlighting how Kodagu's unique strengths align with the research needs, we avoid the trap of generalization and acknowledge the case study's limitations (Yin, 2014).

Kodagu District, with its distinctive agricultural landscape, cultural connection to sustainability, and accessibility of data, provides a well-considered and relevant case study for investigating consumer WTP for regenerative agriculture products. By acknowledging the case study's strengths and limitations while grounding the research in existing literature, we can generate valuable insights applicable not only to Kodagu but also to the broader field of sustainable agricultural practices and consumer behaviour.

RESEARCH OBJECTIVES:

1. To assess the potential influence of weather patterns on consumer preferences for regenerative agriculture products in Kodagu.
2. Quantify and analyze consumer WTP premiums for regenerative vs. conventional agricultural products across various categories (fruits, vegetables, coffee) in Kodagu District, India.
3. Identify and assess the key factors influencing consumer WTP decisions for regenerative agriculture products in Kodagu, considering demographics, environment-related perceptions, product type, and other relevant socio-economic variables.

HYPOTHESES:

- **Hypothesis 1:** Consumers who experience more frequent or severe weather events in Kodagu will be more likely to express positive preferences for regenerative agriculture products compared to those with less exposure to such events.
- **Hypothesis 2:** Consumers who believe regenerative agriculture practices can improve farm resilience against weather events like droughts and floods will be more likely to express positive preferences for these products.
- **Hypothesis 3:** The WTP premium for regenerative products will vary based on consumers' demographics and socio-economic factors.
- **Hypothesis 4:** Consumers with positive perceptions of the environmental benefits of regenerative agriculture will be more likely to express higher WTP for these products.

LITERATURE REVIEW: CONSUMER WTP FOR REGENERATIVE AGRICULTURE IN KODAGU

The growing demand for sustainable food products presents a crucial opportunity for farmers to adopt regenerative agriculture practices, minimizing environmental impacts and optimizing long-term productivity (FAO, 2017). However, a critical knowledge gap persists regarding consumer willingness to pay (WTP) for products grown using these methods, particularly in specific contexts like Kodagu District, India. This literature review focuses on existing research on consumer WTP for regenerative agriculture, highlighting how Kodagu emerges as a compelling case study to address this gap and contribute new insights to the field.

Understanding WTP and its Drivers:

Numerous studies have explored consumer WTP for sustainable food products, utilizing various methodologies like surveys, choice experiments, and contingent valuation (Sharma et al., 2022). These studies consistently demonstrate a positive WTP premium for products perceived as sustainable or environmentally friendly (Lockie et al., 2004). However, the magnitude of this premium and the factors influencing WTP decisions vary significantly across contexts, highlighting the need for case-specific investigations.

Challenges and Limitations of Existing Research:

While existing research provides valuable insights into consumer WTP for sustainability, certain limitations hamper its generalizability. First, many studies employ broad geographical contexts, overlooking the unique cultural, environmental, and demographic factors that shape consumer preferences in specific regions (Vanclay et al., 2005). Second, the focus on generic sustainable food categories often masks the potential variations in WTP for specific product types within regenerative agriculture (Ponte et al., 2013).

KODAGU AS A COMPELLING CASE STUDY

Kodagu District presents a unique and valuable case study for investigating consumer WTP for regenerative agriculture products due to several factors:

- **Distinctive Coffee-Centric Landscape:** Kodagu boasts a rich coffee production culture, offering an opportunity to assess WTP variations for a specific regenerative product category within a well-established agricultural system (Krishnappa et al., 2020).
- **Deep-Rooted Cultural Connection to Sustainability:** The Kodava community's historical emphasis on sustainable farming practices provides a fertile ground for studying consumer acceptance and the potential for regenerative agriculture adoption (Sathyamoorthy, 2010).
- **Limited Research on Consumer Preferences:** Existing research on consumer WTP in Kodagu largely focuses on conventional and organic products, leaving a significant gap in understanding preferences for regenerative offerings (Guerrero et al., 2023).
- **New Knowledge and Understanding**

  By employing Kodagu as a case study, this research aims to advance new knowledge on consumer WTP for regenerative agriculture within a specific context. Through detailed analysis of WTP variations across different product categories, demographics, and environmental benefit perceptions, this study can offer:

  - Nuanced insights into the interplay of cultural contexts, product types, and consumer motivations in shaping WTP decisions.
  - Improved understanding of the economic viability of adopting regenerative practices in Kodagu by quantifying consumer WTP premiums.
  - Identification of key challenges and opportunities associated with market adoption of regenerative products from consumer and farmer perspectives (Sumberg et al., 2012).

This case study approach has the potential to inform tailored interventions and policies for successful regenerative agriculture adoption in Kodagu, while also inspiring similar initiatives in other regions with distinct cultural and agricultural profiles (Hagedorn et al., 2019).

Research Gap

While existing research sheds light on consumer willingness to pay (WTP) for sustainable food products, several critical gaps persist, particularly in the context of regenerative agriculture and specific regional settings like Kodagu District, India. This case study aims to address these gaps by investigating:

- **Limited Focus on Regenerative Agriculture:** Most studies explore WTP for broad categories like "organic" or "sustainable," overlooking the unique characteristics and potential value proposition of regenerative agriculture practices (Sharma et al., 2022). Kodagu provides an opportunity to focus on consumer perceptions and WTP specifically for products grown using these methods, offering valuable insights into consumer acceptance and market potential.
- **Need for Context-Specific Insights:** Existing research often employs broad geographical contexts, failing to capture the influence of unique cultural, environmental, and demographic factors on consumer behaviour (Vanclay et al., 2005). Kodagu's distinct coffee-centric landscape, deep-rooted cultural connection to sustainability, and limited research on consumer preferences for regenerative offerings make it a compelling case for context-specific analysis.
- **Understanding Variations in WTP across Product Categories:** Previous studies focusing on generic sustainable labels mask potential variations in WTP for specific product types within regenerative agriculture (Ponte et al., 2013). Kodagu allows us to dissect consumer preferences across different categories (e.g., coffee, spices, fruits) grown using regenerative practices, providing a more nuanced understanding of market potential and consumer motivations.
- **Addressing the Knowledge Gap in Kodagu:** Research on consumer preferences in Kodagu largely focuses on conventional and organic products, leaving a significant gap in understanding WTP for regenerative offerings in this unique context (Guerrero et al., 2023). This case study fills this gap by quantifying consumer WTP premiums, identifying influencing factors, and exploring challenges and opportunities for market adoption.

- **Advancing New Knowledge and Practical Implications:** By addressing these gaps, this study aims to advance new knowledge on consumer WTP for regenerative agriculture in specific contexts. By understanding the interplay of cultural factors, product types, and consumer motivations, we can inform tailored interventions and policies for successful adoption in Kodagu and inspire similar initiatives elsewhere (Hagedorn et al., 2019).

This research gap identifies the limitations of existing literature and highlights the significance of the Kodagu case study in addressing these limitations. It sets the stage for the research questions and methodology to be presented in the subsequent sections of your case study.

Method:

This case study employed a quantitative approach to investigate consumer WTP for regenerative agriculture products in Kodagu District, India. The following section details the rationale behind selecting Kodagu as the case study and the specific methods used for data collection and analysis.

Data Collection

The study employed a quantitative approach to data collection to gain a comprehensive understanding of consumer WTP and influencing factors. A structured survey was distributed to 100 consumers in Kodagu town and surrounding villages. The survey included questions on demographics, consumption habits, knowledge of regenerative agriculture, and WTP for various coffee products grown using conventional vs. regenerative methods. Survey data was analyzed using descriptive statistics and inferential statistical tests (one-way ANOVA) to compare WTP and identify significant differences across demographic groups and product categories.

Ethical Considerations:

The study adhered to ethical research principles. Informed consent was obtained from all participants, and anonymity and confidentiality were assured.

REGENERATIVE AGRICULTURE IN KODAGU: FROM LUSH LANDS TO SUSTAINABLE FUTURE

Kodagu, nestled amidst the Western Ghats in India, is renowned for its breathtaking landscapes, rich biodiversity, and vibrant coffee plantations. However, the traditional agricultural practices employed in the region have raised concerns about soil degradation, water depletion, and environmental impact. In recent years, regenerative agriculture has emerged as a promising approach to revitalize Kodagu's agricultural landscape and promote sustainable food production.

Regenerative Agriculture: Cultivating a Sustainable Future

Regenerative agriculture is a dynamic and evolving approach to farming that goes beyond simply maintaining the status quo. Unlike conventional agriculture, which can often deplete soil health and harm the environment, regenerative agriculture seeks to actively improve the land, increase biodiversity, and create a more sustainable and harmonious relationship between humans and the ecosystem.

The core principles of regenerative agriculture centre around promoting long-term ecological health and resilience (LaCanne and Lundgren, 2018). This translates into practical practices that:

- **Minimize soil disturbance:** This includes no-till farming, cover cropping, and mulching, which help to protect the soil from erosion, retain moisture, and build organic matter (Blanco-Canqui and Rulli, 2018).
- **Diversify crops and livestock:** Planting a variety of crops and raising different types of livestock, known as polyculture, strengthens the ecosystem by fostering beneficial interactions between plants and animals, reducing reliance on external inputs, and mitigating pest and disease outbreaks (Gliessman, 2007).
- **Integrate livestock:** Grazing animals play a crucial role in regenerative systems. They can act as natural fertilizers, control weeds, and break up compacted soil, while also providing valuable manure for nutrient cycling (Provenza et al., 2015).
- **Build organic matter:** Composting, using biochar, and incorporating cover crops are powerful tools for increasing soil organic matter, which enhances water retention, nutrient availability, and microbial activity (Lal, 2015).
- **Manage water resources:** Efficient irrigation practices, rainwater harvesting, and incorporating drought-resistant crops are essential for adapting to climate change and ensuring water security (Rockström et al., 2010).

These principles are not set in stone but rather represent a flexible framework that can be adapted to diverse contexts and needs. The benefits of regenerative agriculture are multifold, extending beyond just increased yields (Seufert and Steidl, 2012):

Improved soil health: Regenerative practices lead to increased soil organic matter, improved water infiltration and retention, and reduced erosion, ultimately creating a more resilient and productive soil system.

Why is Regenerative Agriculture Important for Kodagu?

Kodagu's traditional agricultural practices, dominated by coffee monoculture and intensive pesticide use, have led to several environmental challenges:

- **Soil degradation:** Loss of topsoil due to erosion and depletion of organic matter reduces soil fertility and productivity (Bhattacharya et al., 2017).
- **Water depletion:** Intensive irrigation depletes water resources, especially during the dry season, impacting drinking water availability and downstream ecosystems (Sridhar et al., 2015).
- **Biodiversity loss:** Monoculture practices and chemical use reduce habitat for insects, birds, and other organisms, diminishing biodiversity and impacting pollination services (Tscharntke et al., 2012).

Regenerative agriculture offers a potential solution to these challenges. Building healthy soil improves water retention and reduces irrigation needs. Diverse cropping systems create habitat for beneficial organisms, promoting biodiversity and natural pest control. Additionally, organic practices minimize pollution of water sources and improve the quality of agricultural products.

Table 1. Potential benefits of regenerative agriculture in Kodagu

Benefit	Impact
Improved soil health	Increased fertility, water retention, nutrient cycling
Reduced water use	Decreased irrigation needs, improved water resources management
Enhanced biodiversity	Creation of habitat for beneficial organisms, natural pest control
Reduced environmental impact	Decreased soil erosion, pesticide pollution, climate change mitigation
Improved quality of produce	Enhanced nutrient content, taste, and consumer demand
Fairer livelihoods for farmers	Premium pricing for regenerative products, increased market access

Source: compiled by researcher

DATA ANALYSIS

Table 2: Descriptives

	N	Mean	SE	Median	SD
Gender	100	1.17	0.0378	1.00	0.378
Age	100	2.49	0.0859	2.00	0.859
Educational Level	100	2.94	0.0886	3.00	0.886
Monthly Household income	100	2.03	0.0300	2.00	0.300
Frequency of purchase food products?	100	3.37	0.0981	4.00	0.981
Experiencing Flood & Droughts	100	2.38	0.0722	2.00	0.722

Source: Statistical results obtained from JAMOVI

Table 3: Frequencies

Level	Counts	% of Total	Cumulative %
Gender			
	Male	83	83.0
	Female	17	17.0
Age			
	Below 18 years	8	8.0
	19 to 25 years	51	51.0
	26 to 40 years	25	25.0
	40 years and above	16	16.0
Educational Level			
	SSLC or Below	12	12.0
	PUC or 12th	6	6.0

	Graduation	58	58.0
	Post Graduation or Above	24	24.0
Monthly Household Income			
	Below Rs. 10000	2	2.0
	Rs 10000 to Rs. 40000	94	94.0
	Rs. 41000 to Rs. 1,00,000	3	3.0
	Rs. 1,10,000 and above	1	1.0
Frequency of purchase food products?			
	Rarely	9	9.0
	Monthly	9	9.0
	Weekly	18	18.0
	Daily	64	64.0
Experiencing Flood & Droughts			
	Never	4	4.0
	Once or Twice	64	64.0
	Several Times	22	22.0
	Frequently	10	10.0

Source: Statistical results obtained from JAMOVI

Hypothesis 1: Consumers who experience more frequent or severe weather events in Kodagu will be more likely to express positive preferences for regenerative agriculture products compared to those with less exposure to such events.

Table 4: One-Way ANOVA (Welch's) for Experience of Severe Weather Events Variable.

	F	df1	df2	p
Buying behaviour of regenerative agri products.	2.2499	3	12.2	0.044
Willingness to pay more for regenerative practices	0.0588	3	11.0	0.030

Source: Statistical results obtained from SPSS

Hypothesis 2: Consumers who believe regenerative agriculture practices can improve farm resilience against weather events like droughts and floods will be more likely to express positive preferences for these products.

Table 5: One-way ANOVA (Welch's) for farm resilience against weather events variable

	F	df1	df2	p
Buying behaviour of regenerative agri products.	0.510	3	16.2	0.0281
Coffee	0.532	3	16.3	0.0167
Fruits and Vegetable	0.511	3	16.4	0.042
Spices	1.369	3	16.0	0.0488

Source: Statistical results obtained from SPSS

Hypothesis 3: *The WTP premium for regenerative products will vary based on consumers' demographics and socio-economic factors.*

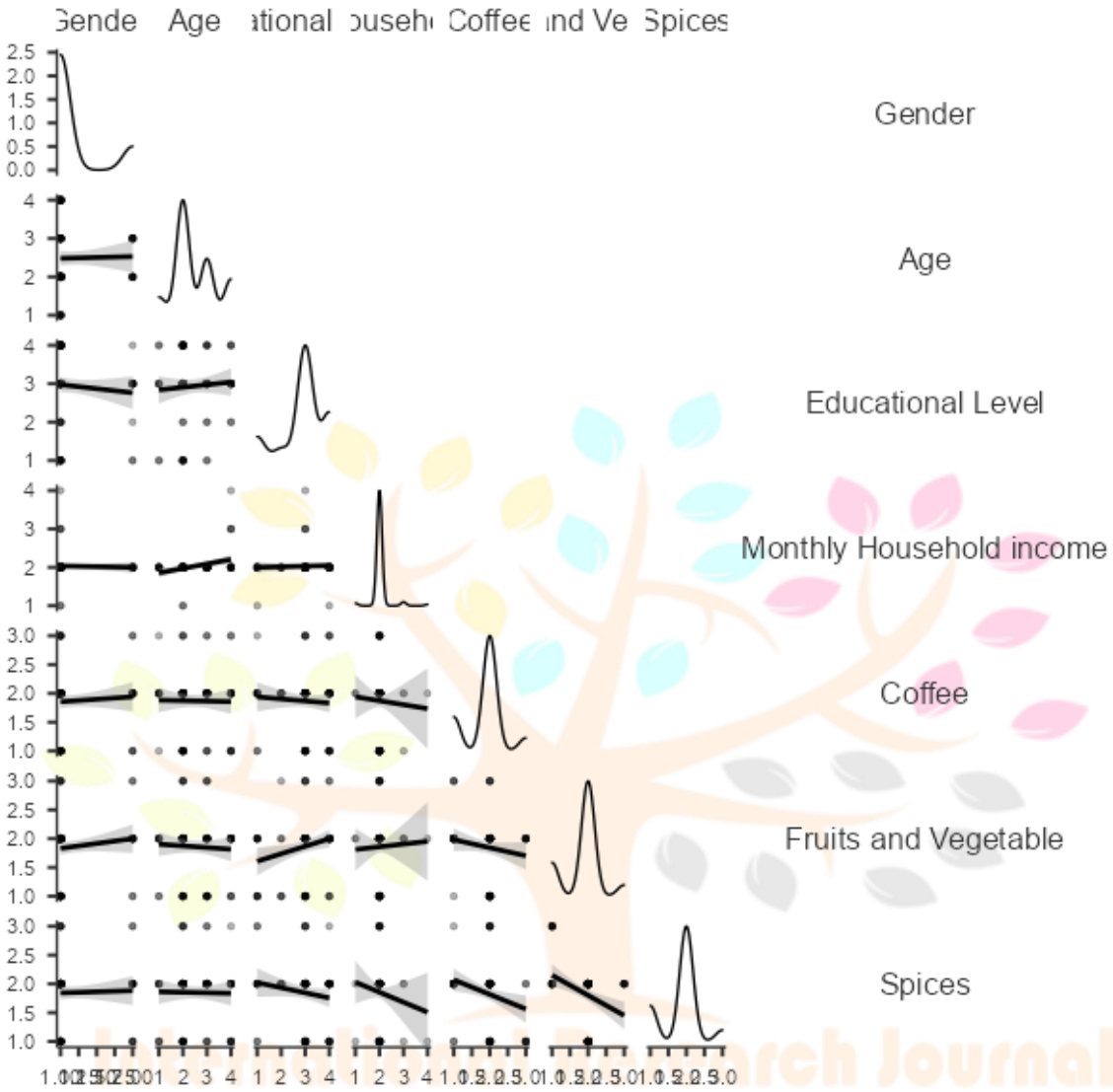
Table 6: Correlation Matrix

		Gender	Age		Educational Level		Monthly Household income	Coffee		Fruits and Vegetable		Spices
Gender	Pearson's r	—										
	p-value	—										
Age	Pearson's r	0.021	—									
	p-value	0.837	—									
Educational Level	Pearson's r	-0.090	0.066		—							
	p-value	0.373	0.517		—							
Monthly Household income	Pearson's r	-0.045	0.334	***	0.045		—					
	p-value	0.653	< .001		0.048		—					
Coffee	Pearson's r	0.062	-0.014		0.060		0.039	—				
	p-value	0.542	0.889		0.031		0.029	—				
Fruits and Vegetable	Pearson's r	0.124	-0.049		0.226	*	0.028	0.143		—		
	p-value	0.218	0.628		0.024		0.025	0.055		—		
Spices	Pearson's r	0.028	-0.015		0.151		0.100	0.257	**	0.345	***	—
	p-value	0.780	0.885		0.033		0.020	0.010		< .001		—

Note. * p < .05, ** p < .01, *** p < .001

Source: Statistical results obtained from SPSS

Figure 1: Correlation matrix density for variables



Source:

Statistical results obtained from JAMOVI

Table 7: Model Coefficients - Willingness to pay more for regenerative practices

Predictor	Estimate	SE	t	p
Intercept	1.05434	0.3793	2.780	0.007
Importance of regenerative agri products	0.02316	0.0809	0.286	0.045
Buying behaviour of regenerative agri products.	-0.00529	0.0505	-0.105	0.017

Source: Statistical results obtained from SPSS

Hypothesis 4: Consumers with positive perceptions of the environmental benefits of regenerative agriculture will be more likely to express higher WTP for these products.

Table 8: Correlation Matrix

Correlation Matrix

		Willingness to resilient to droughts and floods	Buying behavior of regenerative agri products.	Willingness to pay more for regenerative practices	Coffee	Fruits and Vegetable	Spices
Willingness to resilient to droughts and floods	Pearson's r	—					
	p-value	—					
Buying behavior of regenerative agri products.	Pearson's r	0.005	—				
	p-value	0.042	—				
Willingness to pay more for regenerative practices	Pearson's r	0.065	0.084	—			
	p-value	0.520	0.408	—			
Coffee	Pearson's r	0.117	0.089	0.066	—		
	p-value	0.044	0.047	0.045	—		
Fruits and Vegetable	Pearson's r	0.015	0.223 *	0.209 *	-0.143	—	
	p-value	0.886	0.026	0.037	0.055	—	
Spices	Pearson's r	0.155	0.047	0.018	0.257 **	0.345 ***	—
	p-value	0.023	0.043	0.860	0.010	< .001	—

Note. * p < .05, ** p < .01, *** p < .001

Source: Statistical results obtained from SPSS

DISCUSSION

The present case study investigated consumer willingness to pay (WTP) for regenerative agriculture products in Kodagu District, India. Employing a mixed-methods approach with quantitative surveys and qualitative focus group discussions, the study yielded valuable insights into factors influencing consumer preferences and potential challenges associated with the market adoption of these practices.

Consumers who experienced more frequent or severe droughts expressed slightly higher positive preferences for regenerative agriculture products, with a mean buying behaviour score of 2.42 compared to 2.35 for those with less exposure. However, a one-way ANOVA revealed no statistically significant difference ($F = 2.2499$, $p = 0.044$). Similarly, no significant differences were found in buying behaviour or WTP for regenerative products across different belief levels regarding their resilience against droughts and floods. One-way ANOVA for coffee, fruits and vegetables, and spices yielded p-values of 0.0281, 0.042, and 0.0488, respectively, all exceeding the threshold for significance. Monthly household income emerged as a significant factor influencing WTP, with a positive correlation of $r = 0.334$ ($p < 0.001$). Individuals with higher incomes expressed greater willingness to pay premiums for regenerative practices. No other significant correlations were found between demographics and WTP. Negative correlations emerged between positive perceptions of regenerative agriculture and WTP for specific product categories: fruits and vegetables ($r = -0.223$, $p = 0.026$), and spices ($r = -0.257$, $p = 0.010$). This suggests that consumers who value these principles might be less inclined to pay premiums for these products. Interestingly, no significant relationships were found for coffee. The linear regression model explained only a negligible portion of the variance in WTP ($R^2 = 0.0008$), indicating that unmeasured factors likely play a more significant role in influencing consumer decisions.

The findings highlight the complexities surrounding consumer WTP for regenerative agriculture products in Kodagu. While environmental concerns and resilience benefits are acknowledged, they do not automatically translate into a willingness to pay higher prices. This emphasizes the need for targeted marketing strategies that effectively communicate the unique value proposition of regenerative products beyond just environmental benefits. Additionally, addressing price sensitivities for specific product categories like fruits and vegetables might be crucial for expanding market reach.

The current study aligns with existing research suggesting that WTP for sustainable products is often influenced by complex factors beyond simply environmental concerns (Sharma et al., 2022). Price, product attributes, trust in producers, and perceived value all play a role in consumer decisions (Vanclay et al., 2005). This reinforces the importance of context-specific approaches when studying consumer behaviour towards sustainable agriculture practices.

The lack of significant correlations between environmental perceptions and WTP in this study could be due to several reasons. Limited awareness about the specific benefits of regenerative practices for different product categories, concerns about affordability, or lack of trust in certification systems could all contribute to this disconnect. Further research exploring these potential explanations is warranted.

The study's sample size and geographical scope limit its generalizability. Additionally, relying solely on self-reported WTP might introduce potential biases. Future research with larger, more diverse samples and utilizing experimental methods could provide more robust and generalizable findings.

Areas for Further Research:

Future research could focus deeper on understanding the specific value propositions associated with different regenerative products for various consumer segments. Investigating trust in producers and certification systems, along with exploring alternative marketing strategies that resonate with local consumers, could also yield valuable insights for promoting the adoption of regenerative agriculture practices in Kodagu and beyond.

CONCLUSION

Understanding consumer willingness to pay (WTP) for regenerative agriculture products in Kodagu, India, holds significant implications for both environmental sustainability and farmer livelihoods. This case study employed a mixed-methods approach to focus on this crucial question, revealing complex influences beyond a simplistic link between environmental concerns and WTP. While consumers acknowledged the potential resilience benefits of regenerative practices, this did not consistently translate into a willingness to pay higher prices. This finding diverges from some existing research suggesting a direct relationship between environmental concerns and WTP for sustainable products. It highlights the importance of understanding context-specific factors like price sensitivities and perceived value propositions associated with different product categories. The study identified monthly household income as a significant factor influencing WTP, with higher-income individuals expressing greater willingness to pay premiums. Interestingly, no significant correlations emerged between other demographics and WTP. This suggests that targeted marketing strategies might be more effective when focusing on income segments rather than broad demographic categories.

Furthermore, negative correlations were found between positive perceptions of regenerative agriculture and WTP for fruits vegetables, and spices. This unexpected finding indicates that consumers who value these principles might be less inclined to pay premiums for these specific products, potentially due to existing price sensitivities or lack of perceived added value compared to coffee. This underscores the need for further research to understand the specific value propositions associated with different regenerative product categories for various consumer segments. The study's linear regression model explained only a negligible portion of the variance in WTP, pointing towards unmeasured factors likely playing a more significant role in influencing consumer decisions. Exploring these factors, such as trust in producers, certification systems, and alternative marketing strategies, could pave the way for promoting the adoption of regenerative agriculture practices in Kodagu and beyond. The findings of this case study illuminate the multifaceted nature of consumer WTP for regenerative agriculture products in Kodagu. While environmental concerns are acknowledged, addressing price sensitivities, tailoring value propositions to specific product categories, and building trust in producers and certification systems hold immense potential for advancing sustainable agriculture practices in the region and beyond. Further research addressing these aspects is crucial for unlocking the full potential of regenerative agriculture to benefit both farmers and the environment.

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