

Willingness to Pay for Beef with a Reduced Environmental Footprint in Cali, Colombia

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Introduction

- With 9.5% of the global anthropogenic green house gas (GHG) emissions, cattle production has a considerable environmental impact
- By introducing more sustainable production systems, it is possible to substantially reduce the sectors' carbon footprint and provide other environmental services, but adoption is hindered by investment and management costs
- To encourage livestock producers in implementing such systems, the market potential for the resulting differentiated products should be known and communicated

Objectives

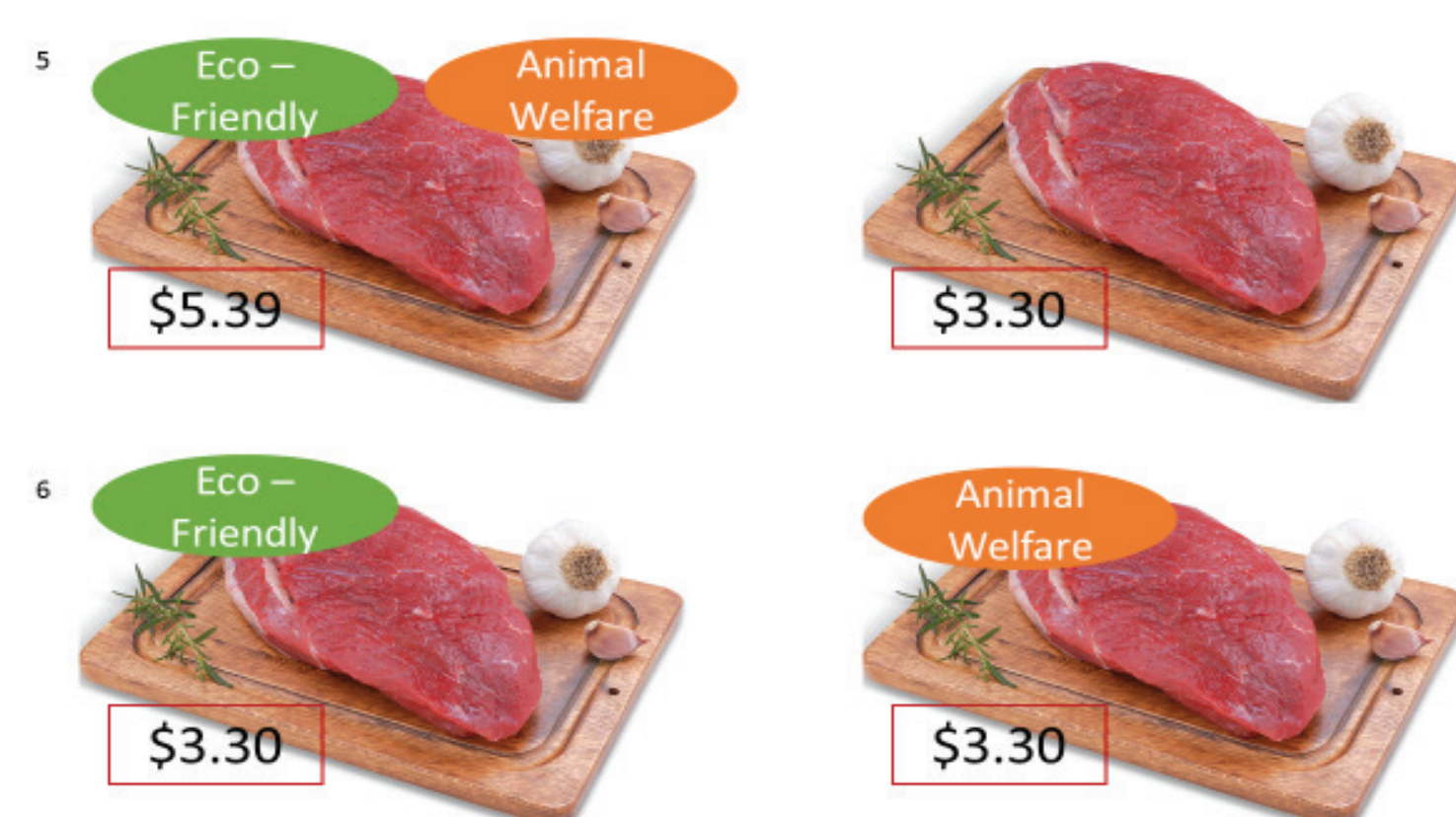
By using focus group discussions and a Discrete Choice Experiment (DCE), this study contributes to:

- Determine the consumers' Willingness to Pay (WTP) for beef with an "eco-friendly" and an "animal welfare compliance" label
- Estimate the effect of information on the WTP for eco-friendly beef identify the consumers' level of awareness of the environmental effects of beef production

Materials & Methods

This study is part of the research program "Development and implementation of forage resources for sustainable bovine production systems in the Cauca department, Colombia" between the International Center for Tropical Agriculture (CIAT) and the Cauca University, and was conducted with meat consumers from Cali (Valle del Cauca Department, Colombia)

Figure 2 Example of Choice Sets



*Prices in USD - /USD/COP XRT: 08/22/2016
Picture taken from: <http://www.tinglesa.com.uy>

1

Literature review and expert consultation to determine environmental benefits of sustainable beef production systems, particularly

2

Survey with 147 beef consumers and market exploration, to determine product characteristics, preferences and socio-demographic characteristics of a potential consumer of eco-friendly beef

3

Two focus group discussions with potential consumers (high education and income levels) to explore potential product characteristics, and to assess their awareness of environmental impacts of beef production, attitude toward iSPS and trust on information and eco-labeling

4

DCE with potential consumers and 2 treatment groups (with and without exposure to information on environmental impacts of beef production)

G1- No Info: N = 1,218 choices (87 respondents)

G2-Info: N = 1,288 (92 respondents)



Figure 1 Production system based on improved pastures in Cauca, Colombia
Picture by Neil Palmer

Results

- **Income and education** levels are significant factors for determining the profile of a potential eco-friendly beef consumer
- Potential consumers declare a need of **certifying labels** that guarantee "eco-friendly" production or "animal welfare" compliance, but they **don't fully trust** the veracity of such labels
- **There exist awareness of some environmental impacts of beef production** - Reflected by the use of technical terms such as "CO2 emissions" and "agricultural frontier expansion". Nevertheless, the knowledge level of the magnitude of impacts is low
- Potential consumers are willing to pay:

- 17.6% more for beef with an **"animal welfare compliance" label**
- 15.5% more for beef with an **"eco-friendly beef" label**
- 24.9% more for beef with an **"eco-friendly beef" label after being exposed to information**

Table 1 WTP for "eco-friendly" and "animal welfare compliance" labeled beef

Label	No information	With information
Eco-friendly	\$ 0.74	\$ 1.18
Animal Welfare	\$ 0.83	\$ 0.84

* Average WTP for conventional beef in samples: USD \$4.73/lb

** Prices in USD/lb of meat (USD/COP XRT 08/22/2016)

Conclusions

- Consumers are willing to pay price premiums for "eco-friendly" and "animal welfare compliance" labels in the city of Cali. This serves as a reference for other big cities in Colombia, revealing a potential for developing those markets
- Further research is needed to determine WTP in medium-sized cities
- Information, even in form of a brief introduction, results in a significant increase in the WTP for eco-friendly beef highlighting the importance of consumer education and information

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