“WILLINGNESS TO PAY FOR A PDO PRODUCT: A CASE OF PEPPER FROM LESKOVAC

Srdjan Stamenkovic
Serbia
Case introduction

- Amount of pepper sold through open markets in Serbia is 10,774 t, which accounts 2/3 of all pepper sold in country (Statistical Yearbook, 2007).

- Leskovac region is very famous among consumers as a place where high quality pepper and tomato are produced.

- On open markets everybody claim that their peppers come from Leskovac region, which is **misuse of the name**.

- PDO label can prevent misuse of the name and add value to the product (Van der Lans, 2001).
Major presumptions for PDO use are (Van Ittersum et al. 2001; Van der Lans et al. 2001):

1. awareness of the region
2. strong and favorable image of region of origin

Favorable image is essential for PDO because it evokes believes about suitability of region and product quality (Van Ittersum et al. 2001).

PDO label serve as extrinsic quality cue which signals quality to consumer (Van der Lans et al. 2001; Grunert, 2005).

PDO label is credence quality attribute- it can’t be experienced through consumption, it can be only verified by third party (e.g. government institution) (Steenkamp, 1990, Van Trijp et al. 1997).

Other: congruency with self image, sense of belongingness to the region (Keller, 1998)
Research model and Hypothesis

H1: The pepper with PDO Leskovac is perceived as higher quality product than peppers without PDO label.

H2: Consumers are more willing to buy pepper with PDO Leskovac label than without PDO label because of perceived higher quality.

H3: Consumers are willing to pay more for pepper with PDO Leskovac label than without PDO label because of perceived higher quality.

H4: Consumers aware of suitability of Leskovac for paprika production are more willing pay for a pepper with PDO label.
Research model and Hypothesis

Quality perception

PDO Leskovac pepper
Leskovac pepper without PDO
Unknown origin pepper

Willingness to buy pepper
Willingness to pay for pepper
Methodology-Respondents and Place

- 125 randomly selected respondents
- Place: Open market Vidikovac-Belgrade
- “Face to face” interview with respondents
- Characteristics of the sample:
  1. 82% females
  2. 76% older than 41 years
  3. 17% origin South of Serbia
Methodology - Independent variables

- Three levels of independent variable:
  1. PDO Leskovac pepper
  2. Leskovac pepper without PDO
  3. Unknown origin pepper
Methodology - Intervening variable

- Quality perception measured with 7 items scale ($\alpha=0.7$)
- Items: taste, preparation, aroma, juiciness, pesticide residues, color and look, healthiness (interview and Banovic et al. 2009)
- Each item was 7 point semantic differential scale (e.g. 1” has better flavor”- 7 “ has worse flavor”)
- Factor analysis – three dimensions:
  1. Consumption
  2. Healthiness
  3. Appearance
Methodology – Dependent variable

Willingness to buy pepper (Van Ittersum and Van Trijp, 2007):

“What would be consumption share (%) of pepper PDO Leskovac in total consumption of pepper of your household, if pepper PDO Leskovac would have been sold at the same price as peppers without PDO label (0-100%)? ______(%).”
Methodology – Dependent variable

**Price Sensitivity Meter**

(Travers, 1983; Kuipec and Revell, 2001; Raab et al., 2009).

1. Below what price does the product becomes too cheap, such that quality can’t be good?
2. At what price do you consider that the product becomes cheap?
3. At what price do you consider that the product becomes expensive?
4. Above what price does the product become too expensive, so you would never consider buying it?

Four points: PMC, PME, IDP, OPP
Methodology- Exogenous variable

Awareness of regions suitability for production

- Modified Van Ittersum et al. 2003 three items scale
- Each item 7 point Likert scale “1=agree - 7=disagree”
- Item Example:

  “Leskovac region has excellent natural resources for pepper production”
Analysis and results

- **H1:** The pepper with PDO Leskovac is perceived as higher quality product than peppers without PDO label.

Significant difference between PDO Leskovac and other peppers on “consumption” dimension:
\[ F(2,122)=5.629, \ p<0.05 \]

While for “appearance” and “healthiness” non significant difference
Analysis and results

H2: Consumers are more willing to buy pepper with PDO Leskovac label than without PDO label because of perceived higher quality.

PDO Leskovac Pepper $M_{PDO} = 81.84\%$, $SD_{PDO} = 27.51$

Means that if sold at average price, 81.84% of total pepper consumption in household would be PDO Leskovac pepper.
Analysis and results

- **H3:** Consumers are willing to pay more for pepper with PDO Leskovac label than without PDO label because of perceived higher quality.

- **Average price at open market 65 din/kg.**

<table>
<thead>
<tr>
<th>Price in dinars/kg</th>
<th>PDO Leskovac pepper</th>
<th>Leskovac pepper without PDO</th>
<th>Unknown origin pepper</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMC</td>
<td>55</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>PME</td>
<td>65</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>IDP</td>
<td>50</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>OPP</td>
<td>75</td>
<td>60</td>
<td>50</td>
</tr>
</tbody>
</table>
Analysis and results

H4: Consumers aware of suitability of Leskovac for paprika production are more willing pay for a pepper with PDO label.

significant only for “cheap price”
F(1,119)=6.473, p<0.05, r=0.052

This means that consumers who are aware of Leskovac region’s suitability for production are ready to pay higher guaranteed price for PDO Leskovac pepper.
Conclusions and recommendations

- Consumers perceive PDO Leskovac pepper as better for consumption.
- Consumers would buy more PDO Leskovac pepper if it is sold at the same price as other peppers (81.84% of total household consumption).
- Consumers are willing to pay higher price for PDO Leskovac pepper, but to upper price limit present on the market.
- Awareness of suitability of Leskovac region for pepper production guarantees higher bottom price level.
- PDO Label will work on Leskovac pepper!
Discussion

- Small sample
- Price sensitive respondents - low purchase power
- Respondents didn’t have opportunity to see PDO Labeled product
- People attach meanings to PDO which it doesn’t poses
- PDO is not the product attribute which determines purchase
- A lot of pepper varieties, consumers buy peppers depending on the variety. Which variety to register as PDO?
Questions