Can We Predict with Tourist Opinions?

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My expertise & recent research topics
• social & cultural sustainability in nature use
• reconciliation of different land uses
• nature-based tourism
• Saami issues in land use management
Mining boom - projects in northern Finland

Some are located close to tourist destinations and national parks
NEED FOR RECONCILIATION

- Nature-based tourism is major business in many municipalities in north
- Mining operations have great impacts on nature and natural landscape → possible negative effects to other nature users and objectives
- Great need for reconciliation of different objectives, great need for knowledge how to do it
RESEARCH PROJECT

• DILACOMI (Different Land-Uses and Local Communities in Mining Projects) research project studies the best practices for socially sustainable mining

• Joint project between Universities of Lapland, Oulu and Finnish Forest Research Institute METLA

• Focus on Hannukainen iron-ore mine and Kittilä gold mine and Ylläsjärvi and Levi tourist destinations in Finnish Lapland
TOURISM STUDY - DATA

Data was gathered through on-site survey in Ylläs-Levi district 2012

N=1703

springtime 1126
autumn 577

<table>
<thead>
<tr>
<th>Location</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport</td>
<td>738</td>
<td>43.3</td>
</tr>
<tr>
<td>Kellokas Nature Centre</td>
<td>530</td>
<td>31.1</td>
</tr>
<tr>
<td>Railroad station</td>
<td>16</td>
<td>0.9</td>
</tr>
<tr>
<td>Various cafes (N=13)</td>
<td>419</td>
<td>24.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1703</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
What does Lapland mean to you? N=1496

- Beautiful landscape, pure nature: 38.9%
- Silence, peaceful, tranquillity: 17.8%
- Outdoor sports and activities: 13.3%
- Leisure time and rest: 11.5%
- Special, exotic, unique: 9.8%
- Intact wilderness: 5.3%
- Other: 3.4%
Important attraction factors in a tourism destination
 Means Scale: 1= not important at all... 5= very important.  n=1649-1670

- *** beautiful natural landscape
- *** opportunities to do sports
- *** pristine wilderness
- safety of the destination
- *** good transportation connections
- *** good food and restaurants
- *** high-grade accommodation
- *** local history and culture
- *** wide of range program services
- opprtunity for romance
- *** pampering and wellness services
- *** vibrant nightlife

Significance t-test
Main impacts of mining in Levi and Ylläs area? n=1610-1637

Tourists in Ylläs see impacts of mining more negatively than tourists in Levi - significance $\chi^2$, p=0.000-0.001

<table>
<thead>
<tr>
<th>Category</th>
<th>Very Negative</th>
<th>Fairly Negative</th>
<th>No Impact</th>
<th>Fairly Positive</th>
<th>Very Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>38.0</td>
<td>44.5</td>
<td>13.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wilderness close to Ylläs and Levi</td>
<td>35.2</td>
<td>40.6</td>
<td>20.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature experience</td>
<td>30.5</td>
<td>35.2</td>
<td>29.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Image of Ylläs and Levi</td>
<td>25.2</td>
<td>38.5</td>
<td>27.7</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>Tourism business</td>
<td>22.4</td>
<td>32.9</td>
<td>29.9</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Nature use of local people</td>
<td>21.4</td>
<td>43.9</td>
<td>26.1</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>Business and local economics</td>
<td>5.0</td>
<td>8.8</td>
<td>12.0</td>
<td>49.4</td>
<td>24.8</td>
</tr>
<tr>
<td>Contribution to national economy</td>
<td>4.4</td>
<td>6.3</td>
<td>14.9</td>
<td>47.8</td>
<td>26.6</td>
</tr>
</tbody>
</table>
How do you feel about present mining activities taking place near Levi and Ylläs? n=1499

Ylläs tourists, women and older people feel more negative towards mining activities \( \chi^2, p=0.000 \)

Levi tourists

- very negative
- fairly negative
- neutral
- fairly positive
- very positive
Did you know prior to your trip about…? n=1689-1690

**Tourists of Ylläs are more aware about mining projects** ($\chi^2$, p=0.000)

- **Hannukainen project**
  - No: 49.8%
  - I have heard about it: 41.7%
  - I have familiarized myself with it: 8.6%

- **Kittilä operating mine**
  - No: 29.5%
  - I have heard about it: 59.2%
  - I have familiarized myself with it: 11.3%
How do you feel about present mining activities taking place near Levi and Ylläs? n=1499

KNOWLEDGE BASE ON HANNUKAINEN PROJECT

- Never heard about the mining project:
  - Negative: 38.0%
  - Neutral: 51.7%
  - Positive: 10.3%

- I have heard about the mining project:
  - Negative: 40.4%
  - Neutral: 42.0%
  - Positive: 17.6%

- I have familiarized myself with it:
  - Negative: 31.8%
  - Neutral: 23.5%
  - Positive: 44.7%

Significance: $\chi^2$, $p=0.000$
Impacts of expansion of mining on the image of Levi and Ylläs as nature-based tourism destinations? n=1640

Significance - $\chi^2$, p=0.000
How would the possible expansion of mining affect your willingness to revisit Levi and Ylläş area? n=1457

Ylläş tourists:
- Reduces significantly: 16.9%
- Reduces a little: 26.6%
- No affection: 54.4%
- Increases a little: 5.9%
- Increases significantly: 2.4%

Levi tourists:
- Reduces significantly: 5.9%
- Reduces a little: 26.4%
- No affection: 64.8%
- Increases a little: 5.9%
- Increases significantly: 2.4%

Significance $\chi^2$, p=0.000
How would the possible expansion of mining affect your willingness to revisit Levi and Ylläs area? n=1646

- **Foreign Tourists**
  - Reduces significantly: 17.2%
  - Reduces a little: 32.1%
  - No affection: 43.9%
  - Increases a little: 5.0%

- **Domestic Tourists**
  - Reduces significantly: 12.1%
  - Reduces a little: 25.7%
  - No affection: 59.9%
  - Increases a little: 0.0%

Significance $\chi^2$, p=0.000
JUST OPINIONS?

• We know what are the tourist opinions on mining
• We do know what they say about willingness to revisit area
• Impacts of new mining projects on the environment are somewhat unclear
• In consequence, tourists actual reactions to environmental changes difficult to evaluate
USE OF OUR RESULTS?

• Results describe synergies and potential conflicts between mining and tourism

• Mining has negative impact on tourism if located nearby - the strength of impact depends of the final environmental effects of mining operations

• Tourism is business highly based on mental images and wilderness brand → images and opinions are worth to study and worth to take care of

• New mine in Ylläs (Hannukainen) is a potential risk for nature-based tourism in the area
• Nature is main pulling force in tourism in Lapland (nature-based tourism)

• (Especially in Hannukainen case, it is obvious that there are possible risks for tourism if mining takes place) POIS

• For reconciliation and social sustainability it is important to
  ➢ keep planning and decision-making open and transparent
  ➢ define best & worst case scenarios for public
  ➢ seek best techniques to minimize negative impacts
  ➢ conduct comprehensive cost-benefits assessment of new industrial mining projects that includes valuation of negative externalities to tourism (largely dependent of environmental quality)
  ➢ ensure that allocation of costs and benefits overlaps
thanks.

ulapland.fi/dilacomi

Photo: Aki Ollikainen