TOURISM INDUSTRY MEETS MINING INDUSTRY

WIN-WIN SITUATION OR UNHAPPY MARRIAGE?

Mikko Jokinen
Finnish Forest Research Institute
What mines have to do with tourism?

• Recent new mining projects in Finland are mainly located in northern and eastern part of the country
• Tourism has developed as one of the main business in the same area – some municipalities get almost 50% of their revenues from tourism*
• The key questions in terms of sustainable use of natural resources are:
  o can these livelihoods co-exist in the same area?
  o what possibilities and tools there are for reconciliation?
  o can these livelihoods even benefit each other?

*) Satokangas 2013
Two research projects

We have studied reconciliation of mining and nature-based tourism during 2011-2014 in two areas of northern Finland. Studies focus on four mining projects and tourism destinations. Data is gathered from

• On-site survey on tourists’ opinions 2012 – projects Hannukainen & Kittilä (destinations Ylläs & Levi), N=1703

• On-site survey on tourists’ opinions 2013-2104 – projects Kuusamo & Mustavaara (destinations Ruka & Syöte), N=2029

• Web survey for tourism companies in 2013, destinations Ylläs (N=67) and Ruka & Mustavaara (N=83)

• Personal interviews of tourism entrepreneurs, (N=41)
<table>
<thead>
<tr>
<th>Mining project</th>
<th>Ore</th>
<th>Specifics</th>
<th>Closest tourist destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuusamo</td>
<td>Gold, uranium</td>
<td>Expected life-cycle less than 10 years, close to important and sensitive fresh waters.</td>
<td>Ruka. Several deposits. Closest 5 kilometers.</td>
</tr>
</tbody>
</table>
Tourist destinations
- Ylläs
- Levi
- Iso-Syöte
- Ruka

Mining projects
- Hannukainen
- Kittilä
- Mustavaara
- Kuusamo
Criteria for choosing tourist destination.
Means. Four destinations. Scale: 1=not important at all... 5=very important

- Beautiful natural landscape*
- Pure clean nature**
- Tranquillity*
- Nature-watching ***
- Pristine wilderness
- Safety of the destination**
- Good transport connections
- Good food and wide range of restaurants**
- High-grade accommodation***
- Local history and culture*
- Opportunity for romance
- Wide range of program services***
- Pampering and wellness services***
- Vibrant nightlife ***

T-test for group differences

Tourists (n=1100-2576) vs. Companies (n=148)
Tourism companies. How far the mine is and should be located from your services and products?

<table>
<thead>
<tr>
<th>Location</th>
<th>Is located (km)</th>
<th>Should be located (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ruka-Kuusamo</td>
<td>12.4</td>
<td>66.4</td>
</tr>
<tr>
<td>Syöte-Taivalkoski</td>
<td>35.2</td>
<td>37.4</td>
</tr>
<tr>
<td>Ylläs</td>
<td>9.0</td>
<td>44.8</td>
</tr>
</tbody>
</table>

N = 138
F = 38.0
p = 0.000
variances
How do you think the mine would affect place’s image as nature-based tourism destination?

<table>
<thead>
<tr>
<th>Destination</th>
<th>Hinders significantly</th>
<th>Hinders a bit</th>
<th>No affect at all</th>
<th>Strengthens a bit</th>
<th>Strengthens significantly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ylläs tourists (n=992)</td>
<td>31.0 %</td>
<td>39.0 %</td>
<td>23.8 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ylläs entrepreneurs (n=67)</td>
<td>76.1 %</td>
<td>14.9 %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kuusamo tourists (n=1444)</td>
<td>52.4 %</td>
<td>32.9 %</td>
<td>10.4 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kuusamo entrepreneurs (n=59)</td>
<td>79.7 %</td>
<td>10.2 %</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Syöte-Taivalkoski tourists (n=510)</td>
<td>38.0 %</td>
<td>37.1 %</td>
<td>19.6 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syöte-Taivalkoski entrepreneurs (n=20)</td>
<td>37.5 %</td>
<td>36.6 %</td>
<td>20.4 %</td>
<td></td>
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</tr>
</tbody>
</table>

χ² test:
- Ylläs vs. Kuusamo: ***
- Ylläs vs. Syöte-Taivalkoski: ***
Please estimate how foundation of the mine would affect tourists willingness to revisit the travel destination?

Ylläs tourists (n=992)
- I would not come due to mine: 16.9%
- Reduce significantly: 26.6%
- Reduce a bit: 54.4%

Ylläs entrepreneurs (n=67)
- I would not come due to mine: 20.9%
- Reduce significantly: 52.2%
- Reduce a bit: 13.4%
- No affect at all: 10.4%

Kuusamo tourists (n=1443)
- I would not come due to mine: 12.7%
- Reduce significantly: 33.3%
- Reduce a bit: 23.1%
- No affect at all: 27.8%

Kuusamo entrepreneurs (n=61)
- I would not come due to mine: 31.1%
- Reduce significantly: 47.5%
- Reduce a bit: 14.8%

Syöte-Taivalkoski tourists (n=511)
- I would not come due to mine: 12.9%
- Reduce significantly: 23.7%
- Reduce a bit: 21.9%
- No affect at all: 38.2%

Syöte-Taivalkoski entrepreneurs (n=19)
- I would not come due to mine: 15.8%
- Reduce significantly: 52.6%
- Reduce a bit: 10.5%
- No affect at all: 10.5%

Option “I would (not) come due to mine” was not available.
If Hannukainen mine takes place, what kind of affects it has on your business? Ylläs tourism companies, N=65-66
Scale: 0 = no emotion at all, 10 = strongest possible emotion.

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Kuusamo</th>
<th>Ylläs</th>
<th>Mustavaara</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joy (***)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Adoration (***)</td>
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<tr>
<td>Enthuasim (***)</td>
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<tr>
<td>Trust for future (***)</td>
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<tr>
<td>Safety (***)</td>
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<tr>
<td>Uncertainty (***)</td>
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<tr>
<td>Anguish (***)</td>
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<tr>
<td>Fear (***)</td>
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<td></td>
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<tr>
<td>Sadness (***)</td>
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<td></td>
<td></td>
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<tr>
<td>Anger **</td>
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</tbody>
</table>

Mining project/tourism destination:  🟢 Kuusamo  🟥 Ylläs  🟠 Mustavaara
Tourism entrepreneurs. What is your attitude against neighboring mining projects? Means. Scale: -2 (very negative) … +2 (very positive)

N = 149
F = 19.06
p = 0.000

- Syöte-Taivalkoski/Mustavaara (n=20)
- Ylläs/Hannukainen (n=67)
- Kuusamo (n=62)
<table>
<thead>
<tr>
<th>Mining project</th>
<th>Relationship to tourism</th>
<th>Critical factors</th>
<th>Possible win-win situation?</th>
</tr>
</thead>
</table>
| Hannukainen (iron, copper, gold) | Difficult               | • close location  
• large open pit mine (2.5 km)                                               | hardly                      |
| Kittilä (gold)                  | Neutral                 | • location far enough  
• main product gold fits in to brand of Lapland  
• cyanide                                                                | yes, slight one             |
| Mustavaara (vanadium, titanium, iron) | Fairly neutral          | • location far enough  
• no serious chemicals used in processes                                           | perhaps                    |
| Kuusamo (gold, uranium?)        | Difficult               | • close location  
• uranium in deposits  
• short lifecycle                                                             | hardly                      |
win-win situation or unhappy marriage?

Every mining case is unique, analogies are easily invalid

Best-worst scenario building is crucial for impact assessment

Fair cost-benefit allocation is key to SLO → taxes, royalties, funds

In some cases happy co-existence is not possible
Thank you for your attention.

acknowledgements: Harri Silvennoinen

Sound Mining in the North
A Guide to Environmental Regulation and Best Practices Supporting Social Sustainability
Kai Kallio, Annina Oksanen, Sonja Hietanen, Hanna J. Heikkilä, Heiko-Liisa Heestad, Mikko Johinen, Teresia Komu, Monika Kunnari, Elise Löpp, Leena Sautipää, Aksa Sukkari and Leena Suopajärvi

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