Q Methodology, a useful tool to foster multi-actor innovation networks performance

Line Louah and Marjolein Visser
The challenge

'A wheelbarrow full of frogs'
The challenge

'A wheelbarrow full of frogs'
The question

How does a network facilitator manage the interests of the different stakeholders?
The key: negociation
The key: negotiation

let's get that bunny

no, I want the duck!
Our story with Q methodology
Our story with Q methodology
Our story with Q methodology

our Q-studies
Visser et al. 2007

Louah et al. 2010

our Q-studies
farmers vs non farmers
harvesters vs non harvesters
our Q-studies
scientists vs fallow users
our Q-studies

Louah et al. 2016
How to do Q

Barriers to the development of agroforestry

STEP A
Literature review
Identify interviewees
50 interviews

STEP B
Addressed issues
42 statements

STEP C
20 Q sorters

STEP D
Q sorts
Q sorting

STEP E
Q Analysis

STEP F
3 narratives
How to do Q

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- 3 narratives
### The Q sorting

<table>
<thead>
<tr>
<th></th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
<th>+3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4</td>
<td>There is not much information support for farmers</td>
<td>Q3</td>
<td>Trees draw nutrients very deep and bring them up to the surface</td>
<td>Q1</td>
<td>Our soils are not being depleted at all</td>
<td>Q2</td>
<td>We would not be able to farm without pesticides</td>
</tr>
<tr>
<td>Q5</td>
<td>Agriculture is at a turning point</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6</td>
<td>The short-term financial return of an AF parcel is low</td>
<td></td>
<td></td>
<td></td>
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**most disagreement** → **most agreement**

Q7 To do AF, all the machinery has to be questioned
How to do Q

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Identify interviewees

50 interviews
## Q analysis outputs

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<tr>
<th>Cat.</th>
<th>Q statements</th>
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<tr>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agric. status &amp; trends</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q15</td>
<td>Our soils are not being depleted at all</td>
<td>-3</td>
</tr>
<tr>
<td>Q27</td>
<td>Nature provides valuable assets to agriculture but these have been woefully neglected</td>
<td>3</td>
</tr>
<tr>
<td>Q31</td>
<td>We are not fools, experiences such as AF ought to be carried out by others</td>
<td>-2</td>
</tr>
<tr>
<td>Q28</td>
<td>We would not be able to farm without chemical fertilizers</td>
<td>-2</td>
</tr>
<tr>
<td>Q34</td>
<td>AF allows to regenerate soils by enriching them in carbon and in nitrogen</td>
<td>3</td>
</tr>
<tr>
<td>Q41</td>
<td>AF would be more appropriate for land that is less productive than ours</td>
<td>-2</td>
</tr>
<tr>
<td>Q37</td>
<td>Intercropping several plant species results in a higher overall productivity compared to pure stands.</td>
<td>3</td>
</tr>
<tr>
<td>Q35</td>
<td>Tree shade during haying causes delays in drying</td>
<td>0</td>
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<tr>
<td>Q5</td>
<td>The short-term financial return of an AF parcel is low</td>
<td>2</td>
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<tr>
<td>Q12</td>
<td>Making an income from hardwood in AF is not possible</td>
<td>-2</td>
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<tr>
<td>Q14</td>
<td>Increases in agricultural productivity thanks to AF must be quite obvious before throwing yourself into it.</td>
<td>0</td>
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<tr>
<td>Q2</td>
<td>Farmers are afraid at working with trees while foresters are afraid at working in a farming environment</td>
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<td>Q25</td>
<td>Farmers are bound by the subsidies</td>
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<td>Q19</td>
<td>In Wallonia there is not much in terms of information support for farmers</td>
<td>-1</td>
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<td>Q21</td>
<td>The major change can’t be implemented only by the elected officials, all the different actors in civil society need to contribute</td>
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<td>Q11</td>
<td>You must be the owner of the field to do AF</td>
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Emerging narratives

![Cartoon](image-url)
Emerging narratives

transformational

Look, Worms!

Better Spray 'Em!

Yes! But...
Emerging narratives
Emerging narratives

transformational

status quo

political correctness
Q opportunities for facilitators

- ‘self-interpretations’ nature
- expressible & ‘hardly’ expressible’ aspects
- equal consideration of all voices & viewpoints
How to do Q

Barriers to the development of agroforestry

**STEP A**
50 interviews
- 40 farmers
- 3 researchers
- 7 decision makers

**STEP B**
42 statements
- Agriculture status & trends
- AF ecology & practices
- Barriers to AF

**STEP C**
20 Q sorters
- 12 farmers
- 2 researchers
- 6 decision makers