European Forest Institute
Opportunities and challenges for integrating nature conservation in managed forests across Europe - analysing practices and driving factors

Agata Konczal, Jakob Derks, Joost de Koning, Georg Winkel
Outline of the presentation

1. INFORMAR project
2. Research Part – Case Studies
3. Overview of interviews
4. Data analysis
5. Results
6. Conclusions
1. INFORMAR

Policy
Facilitate the European policy initiative "European Network Integrate"

Practice
Coordinate the network of practical demonstration and learning sites (Marteloscopes)

Research
- Review knowledge regarding driving factors of IFM
- Analyse practical implementation across Europe

Białowieża Science Initiative
1. INFORMAR

WELCOME

INFORMAR is an interdisciplinary project with the purpose to understand and demonstrate the driving forces and potential of integrated forest management approaches under conditions of climate change and related risks. The project aims at building and maintaining a learning architecture between scientists, policy makers and practitioners as a tool to combine both nature conservation and wood production.

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Białowieża Science Initiative
Prezentacja inicjatywy, omówienie rezultatów, dyskusja z uczestnikami BSI

Czym jest Białowieża Science Initiative?

Puszcza Białowieska to duży kompleks leśny ceniony ze względu na jego unikalne wartości przyrodnicze i bogatą bioróżnorodność. Puszcza znana jest także ze względu na długotrwałe konflikty dotyczące sposobów jej zarządzania i ochrony.

Białowieża Science Initiative zorganizowana przez Europejski Instytut Leśny (EFI) zgromadziła 20 naukowców reprezentujących różne punkty widzenia na kwestię konfliktów w Puszczy Białowieskiej. Zadaniem naukowców był przegląd dostępnych wiedzy naukowej dotyczącej złożonych kontrowersji, począwszy od ochrony przyrody, poprzez gospodarkę leśną, historię lasu, aspekty społeczno-ekonomiczne, aż do kwestii polityki leśnej i zarządzania.

Białowieża Science Initiative
Prezentacja inicjatywy, omówienie rezultatów, dyskusja z uczestnikami BSI

Miejsce: Wydział Biologii Uniwersytetu Warszawskiego
ul. Miecznikowa 1, 02-096 Warszawa, "Ouza Aula"
25 listopada 2019 10.00 - 13.00

10:00 Otwarcie spotkania Agata Konczal i Ewa Hermanowicz (EFI)
Jacek Hilszczanski (Instytut Badawczy Leśnictwa)
Bogdan Jaroszewicz (Białowieska Stacja Geobotaniczna, UW)

10:15 Przedstawienie Białowieża Science Initiative (BSI):
1. Cel, metody i proces, Ewa Hermanowicz (EFI)
2. Wyniki, wnioski, punkty naukowego konsensusu, brak naukowego kompromisu i otwarte kwestie, Agata Konczal (EFI)

11:00 Dyskusja plenarna: Czego możemy się nauczyć z przypadku Białowieskiej dla kwestii ochrony przyrody i wykorzystania lasów w Polsce? Jakie wnioski wyciągnąć dla obecnych i przyszłych konfliktów środowiskowych w kraju i Europie?
Moderator: Ewa Hermanowicz (EFI)
Dyskutanci: Uczestnicy BSI

12:30 Konferencja Prasowa
Jacek Hilszczanski i Bogdan Jaroszewicz
Moderacja: Ewa Hermanowicz i Agata Konczal

13:00 Początek i rozmowy kulinarne

6.11.2019 | WWW.EFI.INT
What is integrated forest management (IFM)?
2. Research Part – Case Studies

What drives the integration of nature conservation in forest management in Europe?

How we proceeded:

1. Literature review on driving forces of IFM
2. 2-day participatory workshop
3. Expert-based cooperative analysis

1 + 2 + 3 -> ‘Overview paper’

4. Defining knowledge gaps and research question for case study research
   • Q1 current and future driving forces of IFM across Europe (Facilitating vs. Impeding)
   • Q2 existing diversity of implementation practices (on a country or biogeographical level)
3. Overview of interviews

• 28 cases
• 42 in-depth interviews with foresters and experts
• 5 biogeographical regions
• 9 countries: Austria, Belgium, Denmark, France, Germany, Poland, Spain, Sweden, Switzerland
Overview of the interviews:

- Current practices of integrated forest management
- History and future of the integrated forest management
- Evaluation of the importance of different drivers of IFM

<table>
<thead>
<tr>
<th>Integration of nature conservation objectives and measures into forest management</th>
<th>strongly facilitate (1)</th>
<th>rather facilitate (2)</th>
<th>neither facilitate nor impede (3)</th>
<th>rather impedes (4)</th>
<th>strongly impede (5)</th>
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4. Data analysis

- Semi-structured interviews (qualitative)
  - Transcribed in the source language (+800 pages of transcription)
    - Coded with MAXQDA, based on STEEP categories
  - Summarised in English
    - Coded with MAXQDA, based on interview questions
- Likert-scale questionnaire (quantitative)
  - Analysed with Excel
5. Results

1. Quantitative results
   • < Likert-scale questionnaire

2. Qualitative results
   • < Interview coding
   • < Summary coding
Driving factors

• Deducted from
  • Summary coding
  • Interview coding
## Questionnaire results

<table>
<thead>
<tr>
<th>Facilitating factors</th>
<th>Average score</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal attitude and commitment of forest managers</td>
<td>1,61</td>
<td>0,62</td>
</tr>
<tr>
<td>Environmental goals of forest organisations</td>
<td>1,68</td>
<td>0,52</td>
</tr>
<tr>
<td>Attitude and commitment of the forestry organisations</td>
<td>1,93</td>
<td>0,76</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impeding factors</th>
<th>Average Score</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanisation of forest management</td>
<td>3,88</td>
<td>0,67</td>
</tr>
<tr>
<td>Demands of the wood market and the wood industry</td>
<td>3,57</td>
<td>1,74</td>
</tr>
<tr>
<td>General forest use trends (increasing management intensity)</td>
<td>3,14</td>
<td>1,46</td>
</tr>
</tbody>
</table>
5.1. Most facilitating: intrinsic motivation, law and economy
1. Forest-related legislation

I see [the changes during last 10 years], partly positively because of the introduction of Natura2000. Partly negatively, because there are not so many more strictly protected areas in forests. Natura2000 is supposed to reconcile nature protection with forest management, and this is in no way a ‘strict protection’. And Natura2000 was fatally introduced (PL_JH)
2. The intrinsic motivation of forest managers

‘If [our foresters] see the effects of the change in behavior and see the effects of their work, it motivates them.’ (PL_ET)
3. Economic considerations

‘On the one hand [the economy] makes it possible to guarantee the sustainability of the system itself. It even gives us hope for an improvement in the soil and its fertility and therefore, in the long term, it means guaranteeing sustained production. This normally means guaranteed savings, and a good long-term economic situation.’ (FR_HZ)
5.2. Most ambivalent: social pressure
• Relationships with other stakeholders (nature NGOs)
• Increasing social awareness and knowledge on environmental topics
• Competing social demands
• Demographic trends: land abandonment and urbanisation

‘The urban side, let's say the urban hipsters of course will see the forests as something worthwhile maintaining it, nothing to do with, you just like looking at it. Rural people maybe have a more direct relationship with forests.’ (CH_DA)
Social pressure seems to be related to changes in both forestry and society
[P]eople do not have the ability to visualize the forest in a time perspective and often value our work only through the appearance of the forest immediately after thinning and tending. Although in our regions the forest never disappears from the surface, because the cuts are point, local, small. Therefore, people are looking through the prism of the present state, they cannot imagine what it will be like in two-three years. If they bothered to enter the forest in that time, the forest would be completely different. People are often unable to recognize the same place.’ (PL_ET).
Other ambivalent factors

• Technological factors

To some extent, the mechanization of forest management processes [impedes the integration of nature conservation into forest management], probably to some extent only. It is more difficult, because this mechanization is often carried out from a position of high-tonnage machinery and it loses the perspective of an old worker, who was aware of that was around him, and with big machinery it is possible to overlook some important elements. In addition, the preparation of technological processes for these large machines also requires the preparation of operational routes, which can also be a threat. Generally speaking, it is not possible to say that machines are a threat, but their inappropriate use is bad’ (PL_SK).

• Certification schemes

The certification, absolutely facilitates but sometimes when the market wants something quick. It can be the opposite. It's the rules on the system are not prepared and the market is too quick (SE_EKS).
5.3. Most impeding: market demands and lack of incentives
• One-sided market demands (biomass, homogenous timber)
• Lack of incentives
• Trade-offs between production and protection
• Economic vs. financing protection

Foresters feel that they have to resolve difficult trade-offs between economic, ecological and social functions of forests by themselves, on the ground
Further observation: biodiversity and resilience

- Biodiversity and resilience are seen as interlinked
- Resilience is a strong driver of IFM
6. What can be learnt?

1. IFM is not a strict system, it is a spectrum
   - Scale matters! (degree of integration; stand/landscape)

2. There is a need to re-think “environmental/forest education”

*Today we have contact with the public on a daily basis, and we are able to react very quickly to the problems that arise. With 20,000 hectares and a million people, these really small problems are growing very quickly to the rank of very big conflicts, so it is very important for us to communicate quickly (PL_LP).*
What can be learnt?

3. New challenges require new tools and strategies

4. Connection between biodiversity and resilience needs more attention

Integrated forest management has the potential to become an approach which accommodates, and balances different forest related needs, market and social expectations. Its potential was acknowledged by foresters and experts across Europe, indicating a good vantage for its further improvement and development.
Planning and Follow-up

- 31st October 2019 – presentation for the Integrate network
- Feedback from participants
- Preparation of the final version of the report
- Sharing the final version (February 2020)
- Discussion during the Policy Day of INFORMAR Final Conference (February 2020)
- Simultaneously – preparation of the scientific peer-reviewed paper
Thank you!

For more information:
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Integrated Forest Management Learning Architecture
www.informar.eu

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